

**ACERACEAE****Acer L., 1753****Acer glabrum Torrey**

TORRE27; HARRI54. Type: "Rocky Mountains", James (NY). Actually, Sheep Mt., SW of Waterton, Jefferson Co., fide GOODM95. Type specimen from Colorado.

*Acer glabrum* Torrey forma *trisetum* Sargent.

*Acer glabrum* Torrey subsp. *neomexicanum* (Greene) E. Murray.

*Acer glabrum* Torrey var. *neomexicanum* (Greene) Kearney & Peebles. HARRI54.

*Acer glabrum* Torrey var. *tripartitum* (Nuttall) Pax. HARRI54.

**Acer grandidentatum Nuttall ex Torrey & Gray**

RYDBE06; HARRI54. Known only from Montezuma Co.: N rim of Mesa Verde. Rydberg's report from "Pikes Peak" was an error.

*Acer saccharum* H. Marshall subsp. *grandidentatum* (Torrey & Gray) Desmoulins.

**Negundo Boehmer ex Ludwig, 1760****Negundo aceroides (L.) Moench subsp. interius (Britton & Shafer) Löve & Löve**

TORRE27; LOVE82B.

*Acer negundo* L. var. *interius* (Britton & Shafer) Sargent. HARRI54.

*Rulac texanum* (Pax) Small. RYDBE06.

**Negundo aceroides (L.) Moench subsp. violaceus (Kirchner in Petzold & Kirchner) W. A. Weber**

WEBER82. Alien.

*Acer negundo* L. var. *violaceum* Kirchner in Petzold & Kirchner. HARRI54.

*Rulac negundo* (L.) A. S. Hitchcock. RYDBE06.

**ACORACEAE****Acorus L., 1753****Acorus calamus L.**

HARRI54; GRAYU87 [family status].

**ADIANTACEAE****Adiantum L., 1753****Adiantum aleuticum (Ruprecht) C. A. Paris**

FNA93. Ouray Co.

**Adiantum capillus-veneris L.**

HARRI54. Baca, Montezuma, and Montrose counties.

**Adiantum pedatum L.**

WEBER55; FNA93. Erroneous Report.

**ADOXACEAE****Adoxa L., 1753****Adoxa moschatellina L.**

TORRE24,27; RYDBE06; HARRI54.

**AGAVACEAE****Yucca L., 1753****Yucca angustissima Engelmann ex Trelease**

HARRI54. Colorado reports apply to *Y. harrimaniae*.

**Yucca baccata Torrey**

HARRI54.

**Yucca filamentosa Willdenow**

TORRE27. Misidentification of *Y. glauca*.

**Yucca glauca Nuttall in Fraser**

HARRI54. The common Eastern Slope species.

*Yucca angustifolia* Pursh. PORTE74. The name is taken up by CORRE70. However, see also *Y. baileyi*.

*Yucca baileyi* Wooton & Standley. WEBBE53; CRONQ72. Reveal, in CRONQ72, maintains that Colorado plants belong to *Y. baileyi*, intimating that *Y. glauca* is a more eastern species.

*Yucca neomexicana* Wooton & Standley. WEBBE53.

*Yucca standleyi* McKelvey. HARRI54.

***Yucca harrimaniae* Trelease**

HARRI54. The common Western Slope species.

**AIZOACEAE**

***Sesuvium* L., 1753**

***Sesuvium verrucosum* Rafinesque**

HARRI54. Alien. San Luis Valley.

*Sesuvium sessile* Persoon. RYDBE06.

**ALISMATACEAE**

***Alisma* L., 1753**

***Alisma gramineum* Lejeune**

HITCH55; CRONQ72.

*Alisma geyeri* Torrey. HARRI54.

***Alisma plantago-aquatica* L.**

TORRE27; RYDBE06; TUTIN64. A European species.

***Alisma triviale* Pursh**

BJORK67; CRONQ72.

*Alisma brevipes* Greene. Type: Archuleta Co.: Piedra, 12 July 1899, Baker s.n.. Type specimen from Colorado.

*Alisma plantago-aquatica* L. subsp. *brevipes* (Greene) Samuelsson. HARRI54.

***Sagittaria* L., 1753**

***Sagittaria brevirostra* Mackenzie & Bush**

Haynes annotations.

***Sagittaria cuneata* Sheldon**

HARRI54.

*Sagittaria arifolia* Nuttall ex J. G. Smith. RYDBE06.

***Sagittaria graminea* Michaux**

Las Animas Co.: Mesa de Maya, 17 Sept. 1994, [D. Clark 559].

***Sagittaria latifolia* Willdenow**

TORRE27; HARRI54.

*Sagittaria variabilis* Engelman in A. Gray. PORTE74.

***Sagittaria longiloba* Engelman ex Torrey**

RYDBE06; HARRI54; BOGIN55. Type from "Upper Arkansas," probably not Colorado.

***Sagittaria montevidensis* Chamisso & Schlechtendal subsp. *calycina* (Engelmann) Bogin**

BOGIN55. Jackson, Weld counties.

*Sagittaria calycina* Engelman. HARRI54.

**ALLIACEAE**

***Allium* L., 1753**

***Allium acuminatum* Hooker**

HARRI54.

***Allium brandegei* S. Watson**

HARRI54.

***Allium brandegei* S. Watson forma *viviparum* W. A. Weber**

WEBER89B. Type: Routt Co.: Fish Creek/Long Lake trail, Jennings (COLO 442565). Type specimen from Colorado.

***Allium brevistylum* S. Watson**

HARRI54.

**Allium cernuum Roth**

PORTE74; HARRI54.

Allium cernuum Roth subsp. obtusum (Cockerell) Traub &amp; Ownbey. TRAUB67.

Allium neomexicanum Rydberg. RYDBE06.

Allium recurvatum Rydberg. RYDBE06.

*Allium drummondii Regel*GREAT77. Maps from several eastern counties. Jennings has examined the specimens; they are *A. textile*.**Allium geyeri S. Watson**

HARRI54; OWNBE55.

Allium dictyotum Greene. OWNBE55. Type: La Plata Co.: Cumberland Mine, La Plata Mts., 10,500 ft., Greene 479. Type specimen from Colorado.

Allium pikeanum Rydberg. OWNBE55. Type: El Paso Co.: Halfway House, Pikes Peak, 3 July 1896, Shear 3721 (NY). Type specimen from Colorado.

**Allium macropetalum Rydberg**

HARRI54; OWNBE55. Type: Mesa Co.: Palisade, 14 May 1898, Crandall 4082 (NY). Type specimen from Colorado.

**Allium nevadense S. Watson**

HARRI54.

*Allium nuttallii S. Watson*RYDBE06. Misidentification of *A. textile*.**Allium rubrum Osterhout**HARRI54; OWNBE55. Ownbey considers it a race of *A. geyeri* (var. *tenerum* Jones).Allium arenicola Osterhout. non Small, *ibid.* p. 276.1900.Allium geyeri S. Watson var. *tenerum* Jones. OWNBE55.Allium sabulicola Osterhout. (new name for *A. arenicola* Osterhout, non Small. Type from Chama, N.M.**Allium sativum L.**

Alien. Boulder Co.: Lanham.

**Allium schoenoprasum L. var. sibiricum (L.) C. J. Hartman**

HARRI54, as the species.

Allium sibiricum L.. RYDBE06.

*Allium stellatum Ker*

JACOB78. Jacobsen reports from Clear Creek, El Paso, Fremont, Kit Carson, and Larimer counties, but we have not checked the material.

GREAT86 does not allow beyond eastern Nebraska. We believe all Colorado material is *A. cernuum*.**Allium textile Nelson & Macbride**

HARRI54; OWNBE55. Diploid and tetraploid races occur, evidently separated ecologically but with no known morphological distinction.

Allium reticulatum Fraser. PORTE74; RYDBE06.

**Triteleia Lindley****Triteleia grandiflora Lindley**

Montezuma Co.: Bogy Draw area, May, 1998, L. Stewart s.n. 2,000 plants on a 20 acre site.

**ALSINACEAE****Alsinanthe Reichenbach, 1841****Alsinanthe macrantha (Rydberg) W. A. Weber**

WEBER82. Endemic.

Alsinopsis macrantha Rydberg. Type: La Plata Co.: Little Kate Basin, La Plata Mts., 14 July 1898, Baker, Earle &amp; Tracy 678 (NY). Type specimen from Colorado.

Arenaria macrantha (Rydberg) A. Nelson in Coulter &amp; Nelson. HARRI54.

Minuartia macrantha (Rydberg) House. WEBER67.

**Alsinanthe stricta (Swartz) Reichenbach**

Alsinopsis quadrivalvis (R. Brown) Rydberg. RYDBE06.

Arenaria quadrivalvis R. Brown. RYDBE06.

Arenaria rossii Harrington, non R. Brown.

Arenaria uliginosa Schleicher.

Minuartia quadrivalvis (R. Brown) House.

Minuartia stricta (Swartz) Hiern. WEBER61, WEBER66, LOVE71.

**Alsine L., 1753****Alsine media L.**

Alien.

Stellaria media (L.) Cyrillo. HARRI54.

**Arenaria L., 1753***Arenaria filiorum Maguire*MAGUI51; WEBER67. Colorado report is a misidentification of *Alsinanthe macrantha*.**Arenaria serpyllifolia L.**

HARRI54. Alien. Harrington ms. reports a specimen from Clear Creek Co. (CS). No specimen found.

**Cerastium L., 1753***Cerastium arvense L.*HARRI54. See *C. strictum*.**Cerastium beeringianum Chamisso & Schlechtendal subsp. earlei (Rydberg) Hultén**

HARRI54.

Cerastium earlei Rydberg. Type: La Plata Co.: La Plata P.O., 14 July 1898, Baker, Earle &amp; Tracy 472 (NY). Type specimen from Colorado.

Cerastium pilosum Rydberg. RYDBE06. Ouray Co.: Mountains above Ouray, 10 Aug. 1901, Baker 745 (NY). Type specimen from Colorado.

Cerastium pulchellum Rydberg. Type: County?: Hayden Peak, 14 July 1898, Baker, Earle &amp; Tracy 573 (NY). Type specimen from Colorado.

Cerastium vulgatum L. var. beeringianum (Chamisso &amp; Schlechtendal) A. Gray. PORTE74.

**Cerastium fontanum Baumgartner**

TUTIN64. Alien.

Cerastium vulgatum L. var. hirsutum E. Fries. HARRI54.

**Cerastium nutans Rafinesque var. brachypodum Engelmann ex A. Gray**

HITCH55.

Cerastium brachypodum (Engelmann ex A. Gray) B. L. Robinson. RYDBE06; HARRI54.

*Cerastium nutans Rafinesque var. nutans*

HARRI54. Erroneous Report.

Cerastium longipedunculatum Mühlenberg. RYDBE06.

**Cerastium strictum L. emend. Haenke**ROTHM76; DOSTA82; JANCH63. *C. arvense* of Colo. reports. *C. arvense* is diploid, 2n=36; *C. strictum* and *beeringianum* are tetraploid, 2n=72, fide Love, Arctic Flora.

Cerastium arvense L. var. alpicola Fenzl.

Cerastium arvense L. var. alpinum Schur.

Cerastium campestre Greene. RYDBE06.

Cerastium occidentale Greene. Type: Jefferson Co.: Bear Cr., W of Denver, July 1899, Greene (ND-G). Type specimen from Colorado.

Cerastium oreophilum Greene. Type: LR: foothills near Ft. Collins, 7 May 1896, Baker (ND-G). Type specimen from Colorado.

Cerastium scopulorum Greene. Type: La Plata Mts., Baker, Earle &amp; Tracy 497, 664, 892 (type not designated). Type specimen from Colorado.

Cerastium strictum L. emend. Haenke subsp. ciliatum (Waldstein &amp; Kitaibel) Janchen.

**Drymaria Willdenow, 1819****Drymaria effusa A. Gray var. depressa (Greene) Duke**

DUKE61; WILKE78. Alien.

Drymaria depressa Greene. WILKE78.

*Drymaria leptophylla (Chamisso & Schlechtendal) Fenzl ex Rohrbach*

DUKE61. Reported by Duke, but no specimen cited, probably an error.

**Eremogone Fenzl, 1833****Eremogone congesta (Nuttall ex Torrey & Gray) Ikonnikov**

IKONN73.

Arenaria congesta Nuttall ex Torrey &amp; Gray. RYDBE06; HARRI54.

**Eremogone fendleri (A. Gray) Ikonnikov**

IKONN73.

*Arenaria burkei* J. T. Howell. RYDBE06.

*Arenaria fendleri* A. Gray. HARRI54.

*Arenaria fendleri* A. Gray var. *diffusa* T. C. Porter in Porter & Coulter. Type: Teller Co.: Ute Pass, Porter. Type specimen from Colorado.

*Arenaria fendleri* A. Gray var. *porteri* Rydberg. Type: Clear Creek Co.: Gray's Peak, 29 Aug. 1878, Jones 716 (NY). Type specimen from Colorado.

*Arenaria fendleri* A. Gray var. *subcongesta* S. Watson. PORTE74.

*Arenaria fendleri* A. Gray var. *tweedyi* (Rydberg) Maguire. HARRI54. Minor high altitude variant.

*Arenaria subcongesta* (S. Watson) Rydberg. RYDBE06.

*Arenaria tweedyi* Rydberg. Type: La Plata Co.: La Plata Mts., 15 July 1896, Tweedy s.n. (NY). Type specimen from Colorado.

***Eremogone hookeri* (Nuttall ex Torrey & Gray) W. A. Weber subsp. *desertorum* (Maguire) W. A. Weber**

WEBER81.

*Arenaria hookeri* Nuttall ex Torrey & Gray var. *desertorum* Maguire. MAGUI51.

***Eremogone hookeri* (Nuttall ex Torrey & Gray) W. A. Weber subsp. *hookeri***

WEBER81.

*Arenaria hookeri* Nuttall ex Torrey & Gray. RYDBE06; HARRI54.

***Eremogone hookeri* (Nuttall ex Torrey & Gray) W. A. Weber subsp. *pinetorum* (A. Nelson) W. A. Weber**

WEBER81.

*Arenaria hookeri* Nuttall ex Torrey & Gray var. *pinetorum* (A. Nelson) Maguire. MAGUI51.

*Arenaria pinetorum* A. Nelson. RYDBE06.

***Eremogone kingii* (S. Watson) Ikonnikov subsp. *uintahensis* (A. Nelson) W. A. Weber**

WEBER81.

*Arenaria eastwoodiae* Rydberg. Type: Mesa Co.: Grand Junction, May 1892, Eastwood s.n. (NY). Type specimen from Colorado.

*Arenaria fendleri* A. Gray var. *eastwoodiae* (Rydberg) Harrington. HARRI54; WELSH86A. Welsh's combination was superfluous.

*Arenaria kingii* (S. Watson) Jones subsp. *uintahensis* (A. Nelson) Maguire. MAGUI51.

*Arenaria uintahensis* A. Nelson. RYDBE06.

**Holosteum L., 1753**

***Holosteum umbellatum* L.**

WEBER87B. Alien.

**Lidia Löve & Löve, 1976**

***Lidia biflora* (L.) Löve & Löve**

WEBER87B. Depauperate plants of *L. obtusiloba* (including reports of *Arenaria sajanensis*, *Minuartia biflora*).

*Alsine biflora* (L.) Wahlenberg. PORTE74.

*Arenaria alpina* L. sensu T. C. Porter. PORTE74.

*Minuartia biflora* (L.) Schinz & Thellung.

***Lidia obtusiloba* (Rydberg) Löve & Löve**

LOVE76.

*Alsinoopsis obtusiloba* Rydberg. RYDBE06.

*Arenaria arctica* Steven var. *obtusa* Torrey & Gray. PORTE74.

*Arenaria obtusa* Torrey, non Allioni. TORRE27. Type: El Paso Co.: Pikes Peak, James fide GOODM95. Type specimen from Colorado.

*Arenaria obtusiloba* (Rydberg) Fernald.

*Minuartia obtusiloba* (Rydberg) House.

***Minuopsis* W. A. Weber, 1989**

***Minuopsis nuttallii* (Pax) W. A. Weber**

WEBER85,89B.

*Arenaria nuttallii* Pax.

**Moehringia L., 1753**

***Moehringia lateriflora* (L.) Fenzl**

*Arenaria lateriflora* L.. HARRI54.

***Moehringia macrophylla* (Hooker) Torrey**

*Arenaria macrophylla* Hooker. HARRI54.

***Paronychia* P. Miller, 1754 CORE41**

***Paronychia jamesii* Torrey & Gray**

HARRI54.

*Paronychia depressa* (Torrey & Gray) A. Nelson. HARRI54.

*Paronychia dichotoma* Torrey, non Nuttall. Type: "On the Arkansa," James. Type specimen from Colorado.

*Paronychia diffusa* A. Nelson. RYDBE06.

*Paronychia jamesii* Torrey & Gray var. *depressa* Torrey & Gray.

*Paronychia wardii* Rydberg. RYDBE06.

#### ***Paronychia pulvinata* A. Gray**

HARRI54. Endemic. Type: Hall & Harbour 66. Type specimen from Colorado.

*Paronychia sessiliflora* Nuttall subsp. *pulvinata* (A. Gray) W. A. Weber. WEBER61. Incorrect; misinterpretation of cultivar in greenhouse.

#### ***Paronychia sessiliflora* Nuttall**

RYDBE06; HARRI54.

*Paronychia brevispina* (A. Nelson) Rydberg. RYDBE06.

*Paronychia sessiliflora* Nuttall var. *brevispina* A. Nelson. RYDBE06.

#### ***Pseudostellaria* Pax, 1934**

#### ***Pseudostellaria jamesiana* (Torrey) Weber & Hartman**

WEBER79.

*Alsine jamesiana* (Torrey) Heller. RYDBE06.

*Arenaria jamesiana* (Torrey) Shinners.

*Stellaria jamesiana* Torrey. TORRE27; HARRI54. Rocky Mts., James (NY). Type specimen from Colorado.

#### ***Sagina* L., 1753 CROW78**

#### ***Sagina apetala* Arduino**

HICKM93. Alien. Boulder Co. Also, adventive in California and in eastern U.S.

#### ***Sagina nivalis* (Lindblad) E. Fries**

RYDBE06. Misidentification, probably not *Sagina*.

#### ***Sagina saginoides* (L.) Karsten**

HARRI54.

*Sagina decumbens* Torrey & Gray. PORTE74.

*Sagina linnaei* K. Presl. PORTE74.

*Sagina saginoides* (L.) Karsten var. *hesperia* Fernald. Type: Larimer Co.: Chambers Lake, 9500 ft., Crandall 89 (GH). Type specimen from Colorado.

#### ***Spergula* L., 1753**

#### ***Spergula arvensis* L.**

HARRI54. Alien.

#### ***Spergularia* J. & K. Presl ROSSB40**

#### ***Spergularia marina* (L.) Grisebach**

HARRI54; ROSSB40. Alien.

*Spergularia sparsiflora* (Greene) A. Nelson in Coulter & Nelson. ROSSB40.

*Tissa sparsiflora* Greene. RYDBE06.

#### ***Spergularia media* (L.) K. Presl**

HARRI54; ROSSB40.

#### ***Spergularia rubra* (L.) J. & K. Presl**

HARRI54; ROSSB40. Alien.

#### ***Spergulastrum* Michaux, 1803**

#### ***Spergulastrum lanuginosum* Michaux subsp. *saxosum* (A. Gray) W. A. Weber**

WEBER81.

*Arenaria confusa* Rydberg. RYDBE06; HARRI54.

*Arenaria lanuginosa* (Michaux) Rohrbach subsp. *saxosa* (A. Gray) Maguire. MAGUI51.

*Arenaria polycaulos* Rydberg. Type: San Juan Co.: Silverton, 3 July 1898, collector? (NY). Type specimen from Colorado.

*Arenaria saxosa* A. Gray. HARRI54.

#### ***Stellaria* L., 1753**

*Stellaria borealis* Bigelow

PORTE74; HARRI54. Rabeler (1986) annotations eliminate alleged collections in COLO.

*Alsine borealis* (Engelmann) Britton. RYDBE06.

**Stellaria calycantha (Ledebour) Bongard**

HARRI54, as *S. borealis*.

*Alsine calycantha* (Ledebour) Rydberg. RYDBE06.

*Stellaria simcoei* (T. J. Howell) C. L. Hitchcock. WEBER76B. Rabeler includes in *S. calycantha*.

**Stellaria crassifolia Ehrhart**

HARRI54.

*Alsine crassifolia* (Ehrhart) Britton. RYDBE06.

**Stellaria graminea L.**

HARRI54. Alien.

**Stellaria irrigua Bunge**

WEBER61A. Disjunct from Altai; In Asia known from type collection at mouth of Chuya River!

*Alsine polygonoides* Greene ex Rydberg. RYDBE06. Archuleta Co.: Pagosa Peak, Aug. 1899, Baker 307 (NY). Type specimen from Colorado.

**Stellaria longifolia Mühlenberg ex Willdenow**

HARRI54.

*Alsine longifolia* (Mühlenberg) Britton. RYDBE06.

**Stellaria longipes Goldie**

HARRI54; CHINN91,92.

*Alsine laeta* (Richardson) Rydberg. RYDBE06.

*Alsine longipes* (Goldie) Coville. RYDBE06.

*Alsine longipes* (Goldie) Coville var. *stricta* (Richardson) Rydberg. RYDBE06.

*Stellaria laeta* Richardson. TORRE27.

*Stellaria longipes* Goldie var. *laeta* (Richardson) S. Watson.

*Stellaria longipes* Goldie var. *monantha* (Hultén) Welsh. WELSH86A.

*Stellaria monantha* Hultén.

**Stellaria obtusa Engelmann**

HARRI54.

*Alsine obtusa* (Engelmann) Rose. RYDBE06.

**Stellaria umbellata Turczaninow ex Karilin & Kirilow**

HARRI54; BOIVI56. Boivin restricts this to Asia. His distinctions seem to be trivial.

*Alsine baicalensis* Coville. RYDBE06.

*Stellaria gonomischa* Boivin. BOIVI56. Type: Boulder Co.: University Camp, between Nederland and Ward, 9,600 ft. alt., 14 July 1950, Weber 5687 (DAO). Type specimen from Colorado.

*Stellaria weberi* Boivin. BOIVI56. Type: Clear Creek Co.: Gray's Peak, Weber 5621 (DAO); a succulent alpine modification. Type specimen from Colorado.

**Tryphane Reichenbach, 1841****Tryphane rubella (Wahlenberg) Reichenbach**

WEBER87B.

*Alsinopsis propinqua* (Richardson) Rydberg. RYDBE06.

*Arenaria rubella* (Wahlenberg) J. E. Smith. HARRI54.

*Arenaria verna* L. var. *aequicaulis* A. Nelson. Type: Larimer Co.: Mountains of Estes Park, 1897, Osterhout (NY). Type specimen from Colorado.

*Arenaria verna* L. var. *hirta* Fenzl. PORTE74.

*Minuartia rubella* (Wahlenberg) Graebner in Ascherson & Graebner. WEBER67.

**AMARANTHACEAE****Amaranthus L., 1753****Amaranthus albus L.**

GOODM95; HARRI54. Alien. ELIAS88 reviews the genera from morphological data.

**Amaranthus arenicola I. M. Johnston**

SAUER55.

*Amaranthus torreyi* (A. Gray) Bentham. HARRI54.

***Amaranthus blitoides* S. Watson**

TUTIN64; CORRE70.

*Amaranthus graecizans* auctt., non L.. RYDBE06; HARRI54.

***Amaranthus hybridus* L.**

RYDBE06; HARRI54. 2 reports, doubtfully correct.

***Amaranthus palmeri* S. Watson**

RYDBE06; WEBER66. Alien. Recent collections from Boulder, Cheyenne, and Prowers counties.

***Amaranthus powellii* S. Watson**

RYDBE06; HARRI54. Harrington gave as a glabrous form of *A. retroflexus*; a good species.

***Amaranthus pubescens* (Uline & Bray) Rydberg**

WEBER66. Alien.

***Amaranthus retroflexus* L.**

HARRI54. Alien.

***Amaranthus tamariscinus* Nuttall**

HARRI54; SAUER55. Does not occur west of central Nebraska.

*Acnida tamariscina* (Nuttall) Wood. RYDBE06.

*Montelia tamariscina* (Nuttall) A. Gray. PORTE74.

***Amaranthus tuberculatus* (Moquin) Sauer**

HARRI54; SAUER55. Does not occur west of central Nebraska.

*Acnida altissima* Riddell.

***Amaranthus wrightii* S. Watson**

Verified specimens: Arkansas Valley, J. Wolf; Otero Co., D. Hess (COLO).

**Cladotrix S. Watson, 1880**

***Cladotrix lanuginosa* (Nuttall ex Moquin) Bentham & Hooker**

RYDBE06. As *Cladotrix*.

*Tidestromia lanuginosa* (Nuttall ex Moquin) Standley. HARRI54.

**Froelichia Moench, 1794**

***Froelichia floridana* (Nuttall) Moquin var. *campestris* (Small) Fernald**

PORTE74, as the species; HARRI54.

*Froelichia campestris* Small. RYDBE06.

***Froelichia gracilis* (Hooker) Moquin**

RYDBE06; HARRI54.

**Guilleminea Humboldt, Bonpland, & Kunth, 1823**

***Guilleminea densa* (Willdenow ex Roemer & Schultes) Moquin**

Baca County: mouth of Gallinas Canyon, 1 June 1991, Wittmann & Weber 18168 (COLO).

*Brayulinea densa* (Willdenow ex Roemer & Schultes) Small.

**ANACARDIACEAE**

**Rhus L., 1753**

***Rhus aromatica* Aiton subsp. *pilosissima* (Engelmann) W. A. Weber**

WEBER81.

*Rhus trilobata* Nuttall ex Torrey & Gray var. *pilosissima* Engelmann.

*Schmaltzia pubescens* Osterhout. Type: Bent Co.: Rule Creek, 9 June 1910, Osterhout 4306 (RM). Type specimen from Colorado.

***Rhus aromatica* Aiton subsp. *trilobata* (Nuttall ex Torrey & Gray) W. A. Weber**

WEBER89B.

*Rhus aromatica* Aiton subsp. *trilobata* (Nuttall ex Torrey & Gray) W. A. Weber forma *simplicifolia* (Greene) W. A. Weber.

WEBER82B.

*Rhus aromatica* Aiton var. *trilobata* (Nuttall ex Torrey & Gray) A. Gray. PORTE74.

*Rhus trilobata* Nuttall ex Torrey & Gray.

*Rhus trilobata* Nuttall ex Torrey & Gray var. *simplicifolia* (Greene) F. Barkley.

*Schmaltzia bakeri* Greene. Type: Larimer Co.: Ft. Collins, 1896, Baker (ND-G). Type specimen from Colorado.



*Schmaltzia cognata* Greene. Type: La Plata Co.: Durango, 1898, Baker, Earle & Tracy 525 (ND-G). Type specimen from Colorado.  
*Schmaltzia oxyacanthoides* Greene. Type: Mesa Co.: Grand Junction, 27 Aug. 1896, Greene (ND-G). Type specimen from Colorado.  
*Schmaltzia subpinnata* Greene. Type: Fremont Co.: Cañon City, 7 Sept. 96, Greene (ND-G). Type specimen from Colorado.  
*Schmaltzia trilobata* (Nuttall ex Torrey & Gray) Small. RYDBE06.

***Rhus glabra* L.**

HARRI54.

*Rhus cismontana* Greene.*Rhus cismontana* Greene forma *flavescens* D. M. Andrews. Type: Boulder Co.: Boulder (cultivar). Specimen not located. Type specimen from Colorado.*Rhus glabra* L. forma *flavescens* (D. M. Andrews) Rehder.*Rhus glabra* L. var. *cismontana* (Greene) Cockerell. DANIE11. Cockerell did not specify category.*Schmaltzia glabra* (L.) Small. RYDBE06.***Toxicodendron* P. Miller, 1754 GILLI71*****Toxicodendron rydbergii* (Small ex Rydberg) Greene**

GILLI71.

*Rhus rydbergii* Small ex Rydberg. RYDBE06.*Rhus toxicodendron* L. sensu T. C. Porter. TORRE27; PORTE74. not the eastern *T. radicans*.*Toxicodendron radicans* (L.) Kuntze var. *rydbergii* (Small) Erskine.**APIACEAE*****Aletes* Coulter & Rose, 1888 THEOB64*****Aletes acaulis* (Torrey) Coulter & Rose**

HARRI54. Type from New Mexico. Distributed from Colorado to west Texas and Chihuahua.

*Aletes obovata* Rydberg. Type: Jefferson Co.: near Morrison, 27 July 1889, Greene (NY). Rydberg should have used *obovatus*. Type specimen from Colorado.*Seseli hallii* A. Gray. PORTE74.***Aletes anisatus* (A. Gray) Theobald & Tseng**

THEOB64. Endemic.

*Cymopterus anisatus* A. Gray. Type: Probably collected in the lower Platte Canyon near Bailey, Hall & Harbour (GH). Type specimen from Colorado.*Pseudocymopterus aletifolius* Rydberg. Type: El Paso Co.: Minnehaha, 16-22 June 1901, Clements & Clements 94 (NY). Type specimen from Colorado.*Pseudocymopterus anisatus* (A. Gray) Coulter & Rose. RYDBE06.*Pteryxia anisata* (A. Gray) Mathias & Constance. HARRI54.***Aletes eastwoodiae* (Coulter & Rose) W. A. Weber**

WEBER84. Endemic.

*Cynomarathrum eastwoodiae* Coulter & Rose. Type: Mesa Co.: Grand Junction, May 1892, Eastwood (US). Type specimen from Colorado.*Lomatium eastwoodiae* (Coulter & Rose) Macbride. HARRI54.***Aletes humilis* Coulter & Rose**

HARRI54. Endemic. Type: Larimer Co.: Dale Creek, 19 July 1899, Osterhout 6 (US). Type specimen from Colorado.

***Aletes latilobus* (Rydberg) W. A. Weber**WEBER84, as *latiloba*.*Lomatium latilobum* (Rydberg) Mathias. HARRI54.***Aletes lithophilus* (Mathias) W. A. Weber**WEBER84 (as *lithophila*); OKANE88. Endemic. O'Kane gives additional records from Chaffee, Comejos, and Rio Grande Counties.*Neoparrya lithophila* Mathias. WEBER58. Type: Huerfano Co.: on rocks, Huerfano Mts., Parry 83. Mathias erroneously considered the type locality to be in New Mexico. Type specimen from Colorado.***Aletes macdougallii* Coulter & Rose subsp. *breviradiatus* Theobald & Tseng**

THEOB64. Endemic. Holotype: Montezuma Co.: sandstone rim, Wetherill Mesa, Mesa Verde Nat. Park, 6-8,000 ft., 31 May 1969, Erdman s.n. (COLO). Type specimen from Colorado.

***Aletes nuttallii* (A. Gray) W. A. Weber**

WEBER87A; DORN88A.

*Aletes megarrhizus* (A. Nelson) W. A. Weber. WEBER84, as *megarrhiza*.*Lomatium megarrhizum* (A. Nelson) Mathias. WEBER79.

*Neoparrya megarrhiza* (A. Nelson) W. A. Weber. WEBER79.

***Aletes petraeus* (Jones) W. A. Weber**

WEBER84, as *petraea*.

*Cymopterus petraeus* Jones. WEBER79.

***Aletes sessiliflorus* Theobald & Tseng**

annotations by Hartman, 1989.

***Aletes tenuifolius* (Nuttall ex Torrey & Gray) W. A. Weber**

WEBER91A.

*Musineon tenuifolium* Nuttall ex Torrey & Gray. HARRI54.

**Angelica L., 1753**

***Angelica ampla* A. Nelson**

RYDBE06; HARRI54. Very close relative of Altai *Archangelica decurrens*. Strictly a species of *Archangelica* if that genus is maintained. The generic disposition depends on typification of *Angelica* and *Archangelica*.

***Angelica grayi* (Coulter & Rose) Coulter & Rose**

RYDBE06; HARRI54.

*Selinum grayi* Coulter & Rose. Type: Park Co.: Weston Pass, 3,450 m, Coulter. Type specimen from Colorado.

***Angelica lucida* L.**

PORTE74. A maritime species.

*Angelica gmelinii* De Candolle. PORTE74. Report applies to *Angelica ampla*. Potentially a member of the genus, *Archangelica*, but generic typification is unclear.

***Angelica pinnata* S. Watson**

RYDBE06; HARRI54.

***Angelica roseana* L. Henderson**

MATHI44; HARRI54. One doubtful record (source?).

**Berula Besser, 1826**

***Berula erecta* (Hudson) Coville**

HARRI54. Alien.

**Bupleurum L., 1753**

***Bupleurum triradiatum* Adams subsp. *arcticum* (Regel) Hultén**

*Bupleurum americanum* Coulter & Rose. WEBER79.

**Carum L.1753**

***Carum carvi* L.**

RYDBE06, as *C. carui*; HARRI54. Alien.

**Cicuta L., 1753**

***Cicuta douglasii* (De Candolle) Coulter & Rose**

HARRI54.

*Cicuta occidentalis* Greene. RYDBE06; MATHI44. Type: no specimen cited. Type specimen from Colorado.

***Cicuta maculata* L.**

PORTE74. Report applies to *C. douglasii*.

**Conioselinum G. Hoffmann, 1814**

***Conioselinum scopulorum* (A. Gray) Coulter & Rose**

RYDBE06; HARRI54.

*Conioselinum coloradense* Osterhout. Type: Larimer Co.: Chambers Lake, 13 Sept. 1907, Osterhout 3659 (RM). Type specimen from Colorado.

*Ligusticum affine* A. Nelson. RYDBE06.

*Ligusticum scopulorum* A. Gray. PORTE74.

**Conium L., 1753**

***Conium maculatum* L.**

HARRI54. Alien.

**Cymopterus Rafinesque, 1819**

**Cymopterus acaulis (Pursh) Rafinesque**

RYDBE06; HARRI54.

*Cymopterus lucidus* Osterhout. Type: Bent Co.: E of Las Animas, 16 June 1909, Osterhout 3905. Type specimen from Colorado.*Cymopterus parryi* (Coulter & Rose) Jones. RYDBE06.**Cymopterus bulbosus A. Nelson**

HARRI54.

*Cymopterus utahensis* Jones var. *eastwoodiae* Jones. MATHI44. Type: La Plata Co.: Durango, 2 June 1890, Eastwood. Type specimen from Colorado.*Phellopterus purpurascens* (A. Gray) Jones var. *eastwoodiae* (Jones) Coulter & Rose. RYDBE06.**Cymopterus duchesnensis Jones**

WEBER81.

**Cymopterus fendleri A. Gray**

RYDBE06; HARRI54.

*Cymopterus hendersonii* (Coulter & Rose) Cronquist

Erroneous Report.

*Pteryxia hendersonii* (Coulter & Rose) Mathias & Constance. HARRI54. erroneous report.*Cymopterus longilobus* (Rydberg) W. A. Weber

WEBER76. Name does not apply to Colorado plants.

*Pseudopteryxia longiloba* Rydberg.*Cymopterus longipes* S. WatsonHARRI54. Misidentifications of *C. planosus*, yellow phase.*Aulospermum longipes* (S. Watson) Coulter & Rose. RYDBE06.**Cymopterus montanus Torrey & Gray**

HARRI54.

*Cymopterus glomeratus* De Candolle. PORTE74.*Phellopterus camporum* Rydberg. Type: Pueblo Co.: mesas near Pueblo, 14 May 1900, Rydberg & Vreeland 5825 (NY). Type specimen from Colorado.*Phellopterus macrocarpus* Osterhout. Type: Bent Co.: Las Animas, 16 June 1909, Osterhout 3906 (RM). Type specimen from Colorado.*Phellopterus montanus* Nuttall. RYDBE06.*Cymopterus multinervatus* (Coulter & Rose) Tidestrom

HARRI54 (expected). According to Hartman, our plant, so called, is undescribed.

*Cymopterus newberryi* (S. Watson) JonesRYDBE06. "Westwater." No specimen has been located at NY, where Rydberg would have seen it. *C. fendleri* was also cited from Westwater, so this might represent a plant of that species with broader leaf segments.**Cymopterus planosus (Osterhout) Mathias**

HARRI54. Endemic.

*Aulospermum angustum* Osterhout. MATHI44. Type: Routt Co.: Bear River between Steamboat Springs and Hayden, 17 June 1903, Osterhout 2783 (RM). MATHI44 incorrectly synonymized this with *C. longilobus*. Type specimen from Colorado.*Aulospermum planosum* Osterhout. MATHI44. Type: Eagle Co.: Minturn, 5 June 1902, Osterhout 2572. Type specimen from Colorado.**Cymopterus purpurascens (A. Gray) Jones**

HARRI54.

**Cymopterus purpureus S. Watson**

HARRI54.

*Aulospermum bethelii* Osterhout. MATHI44. Type: Mesa Co.: DeBeque, 29 June 1909, Bethel. Type specimen from Colorado.*Aulospermum purpureum* (S. Watson) Coulter & Rose. RYDBE06.**Cymopterus terebinthinus (Hooker) Torrey & Gray var. calcareus (Jones) Cronquist***Pteryxia foeniculacea* Nuttall. RYDBE06.*Pteryxia terebinthina* (Hooker) Coulter & Rose var. *calcareus* (Jones) Mathias. HARRI54.**Daucus L., 1753****Daucus carota L.**

HARRI54. Alien.

**Eryngium L., 1753****Eryngium planum L.**

HARRI54. Alien. Known from only one collection, Denver, possibly a garden plant.

**Harbouria Coulter & Rose, 1888**

**Harbouria trachypleura (A. Gray) Coulter & Rose**

RYDBE06; HARRI54. Endemic.

*Thaspium trachypleurum* A. Gray. Type: Hall & Harbour 215 (GH). Type specimen from Colorado.

**Heracleum L., 1753**

**Heracleum sphondylium L. subsp. montanum (Schleicher ex Gaudin) Briquet in Schinz & Thellung**

BRUMM71.

*Heracleum lanatum* Michaux. RYDBE06; HARRI54.

**Levisticum J. Hill, 1756**

**Levisticum officinale W. Koch**

Alien. Cultivated for medicinal uses in the San Luis Valley and possibly escaped.

**Ligusticum L., 1753**

*Ligusticum apiifolium* Bentham & Hooker

PORTE74. Species of Pacific Northwest. Report applies to *L. porteri*.

**Ligusticum porteri Coulter & Rose**

HARRI54; MATHI44. Lectotype: Headwaters of the Platte, near Denver, Coulter. Type specimen from Colorado.

**Ligusticum tenuifolium S. Watson**

Type: Hall & Harbour 216 p.p. (GH). Hartman annotations. Type specimen from Colorado.

*Ligusticum filicinum* S. Watson var. *tenuifolium* (S. Watson) Mathias & Constance. HARRI54; MATHI44. Hartman annotations.

**Lomatium Rafinesque, 1819**

**Lomatium bicolor (S. Watson) Coulter & Rose var. leptocarpum (Nuttall ex Torrey & Gray) Schlessman**

SCHLE84.

*Lomatium leptocarpum* (Nuttall ex Torrey & Gray) Coulter & Rose. RYDBE06; HARRI54.

**Lomatium concinnum (Osterhout) Mathias**

HARRI54. Endemic.

*Cogswellia concinna* Osterhout. Type: Delta Co.: Paonia, 21 May 1911, Osterhout 4515 (RM). Type specimen from Colorado.

**Lomatium dissectum (Nuttall) Mathias & Constance var. multifidum (Nuttall) Mathias & Constance**

HARRI54.

*Leptotaenia eatonii* Coulter & Rose. RYDBE06.

*Leptotaenia multifida* Nuttall. RYDBE06.

**Lomatium foeniculaceum (Nuttall) Coulter & Rose subsp. foeniculaceum**

HARRI54.

**Lomatium foeniculaceum (Nuttall) Coulter & Rose subsp. macedougalii (Coulter & Rose) Theobald**

WEBER81.

**Lomatium grayi Coulter & Rose**

RYDBE06; HARRI54.

**Lomatium juniperinum (Jones) Coulter & Rose**

WEBER61.

**Lomatium macrocarpum (Hooker & Arnott) Coulter & Rose**

RYDBE06; HARRI54.

**Lomatium orientale Coulter & Rose**

HARRI54. Type: Denver, May, 1895, Bethel (US). Type specimen from Colorado.

*Peucedanum nudicaule* Nuttall. PORTE74; MATHI44. non *Smyrnum nudicaule* Pursh.

**Lomatium triternatum (Pursh) Coulter & Rose subsp. platycarpum (Torrey) Cronquist**

HITCH55.

*Lomatium simplex* (Nuttall) Macbride. HARRI54.

**Musineon Rafinesque, 1820**

**Musineon divaricatum (Pursh) Rafinesque var. divaricatum**

COULT95; RYDBE06; HARRI54.

*Musineon greenei* A. Gray. PORTE74.

Musineon trachyspermum Nuttall. PORTE74.

**Musineon divaricatum (Pursh) Rafinesque var. hookeri Torrey & Gray**

HARRI54.

Musineon angustifolium Nuttall. RYDBE06.

**Oreoxis Rafinesque, 1830**

**Oreoxis alpina (A. Gray) Coulter & Rose subsp. alpina**

RYDBE06; HARRI54.

Cymopterus alpinus A. Gray. Type: Clear Creek Co.: headwaters of Clear Cr. Parry. Type specimen from Colorado.

**Oreoxis alpina (A. Gray) Coulter & Rose subsp. puberulenta W. A. Weber**

Endemic. Type: Gunnison Co.: S of Almont, 8,500 ft., 2 Aug. 1955, Weber 9379 (COLO). Type specimen from Colorado.

**Oreoxis bakeri Coulter & Rose**

HARRI54. Endemic. Type: Mineral Co.: mts. near Pagosa Peak, 3600 m, 23 Aug. 1899, Baker 12 (US). Type specimen from Colorado.

**Oreoxis humilis Rafinesque in Seringe**

HARRI54. Endemic. Type: El Paso Co.: Pikes Peak, James. Type specimen from Colorado.

**Orogenia S. Watson, 1871**

**Orogenia linearifolia S. Watson**

RYDBE06; HARRI54.

Orogenia linearifolia S. Watson var. lata Payson. Type: Montrose Co.: Tabeguache Basin, 8000 ft., 1 June 1914, Payson 369 (RM). Type specimen from Colorado.

**Osmorhiza Rafinesque, 1819 CONST48**

**Osmorhiza chilensis Hooker & Arnott**

HARRI54.

**Osmorhiza depauperata Philippi**

CONST48.

Washingtonia obtusa Coulter & Rose. RYDBE06.

**Osmorhiza longistylis (Torrey) De Candolle**

HARRI54.

Washingtonia longistylis (Torrey) Britton. RYDBE06.

**Osmorhiza occidentalis (Nuttall) Torrey**

HARRI54. According to CONST48, this anomalous species is most closely related to a Chilean one.

Glycosma occidentalis Nuttall. RYDBE06.

**Oxypolis Rafinesque, 1825**

**Oxypolis fendleri (A. Gray) Heller**

RYDBE06; HARRI54.

Archemora fendleri A. Gray. PORTE74; RYDBE06.

**Pastinaca L., 1753**

**Pastinaca sativa L.**

RYDBE06; HARRI54. Alien.

**Perideridia Reichenbach, 1837**

**Perideridia gairdneri (Hooker & Arnott) Mathias subsp. borealis Chuang & Constance**

HARRI54.

Carum gairdneri (Hooker & Arnott) A. Gray. RYDBE06.

**Podistera S. Watson, 1887**

**Podistera eastwoodiae (Coulter & Rose) Mathias & Constance**

HARRI54. Endemic.

Ligusticum eastwoodiae Coulter & Rose. Type: La Plata Co.: Cumberland Basin, La Plata Mts., 1890-1892, Eastwood (US). Type specimen from Colorado.

**Pseudocymopterus Coulter & Rose, 1888**

**Pseudocymopterus montanus (A. Gray) Coulter & Rose**

RYDBE06; HARRI54.

Cymopterus lemmonii (Coulter & Rose) Dorn.

*Ligusticum montanum* A. Gray. PORTE74.

*Pseudocymopterus montanus* (A. Gray) Coulter & Rose var. *mu[ll]tifidus* Rydberg. Type: not given; specimens cited from Colorado and New Mexico. Type specimen from Colorado.

*Pseudocymopterus purpureus* (Coulter & Rose) Rydberg. RYDBE06.

*Pseudocymopterus sylvaticus* A. Nelson. RYDBE06.

*Pseudocymopterus tenuifolius* (A. Gray) Rydberg. RYDBE06.

*Thaspium montanum* A. Gray. PORTE74.

### **Sanicula L., 1753 SHAN51**

#### **Sanicula marilandica L.**

RYDBE06; HARRI54.

### **Sium L., 1753**

#### *Sium angustifolium* L.

PORTE74. Report applies to *S. suave*.

#### **Sium suave** Walter

HARRI54.

*Sium cicutifolium* Schrank. RYDBE06.

*Sium latifolium* Am. auctt., non L.. TORRE27. According to GOODM95, James collected this in Adams Co. just N of Denver along Clear Creek, a very unlikely locality.

### ***Thaspium Nuttall, 1818***

Erroneous Report

#### *Thaspium trifoliatum* A. Gray

PORTE74. Species of eastern U.S. Report applies to *Zizia aptera*.

### **Zizia W. Koch, 1825**

#### **Zizia aptera (A. Gray) Fernald**

HARRI54.

#### *Zizia cordata* (Walter) K. Koch

RYDBE06. Colorado material is *Z. aptera*.

## **APOCYNACEAE**

### **Amsonia** Walter, 1788: WOODS28

#### *Amsonia ciliata* Walter var. *texana* (A. Gray) Coulter

WOODS28. A species of SE U.S. and Texas.

*Amsonia angustifolia* Michaux var. *texana* A. Gray. RYDBE06.

*Amsonia texana* (A. Gray) Heller. RYDBE06. Misidentification of *A. jonesii*.

#### **Amsonia jonesii** Woodson

HARRI54.

### **Apocynum L., 1753 WOODS28; ROSAT89**

#### **Apocynum androsaemifolium** L.

RYDBE06; HARRI54.

*Apocynum ambigens* Greene. Type: Montrose Co.: Black Canyon, 20 June 1901 Baker 202. Type specimen from Colorado.

*Apocynum androsaemifolium* L. var. *glabrum* Macoun. HARRI54.

*Apocynum scopulorum* Greene ex Rydberg. Archuleta Co.: Pagosa Springs, 17 July 1899, Baker (NY). Type specimen from Colorado.

#### **Apocynum cannabinum** L.

HARRI54; ROSAT89. Alien.

*Apocynum cannabinum* L. var. *glaberrimum* A. De Candolle.

*Apocynum cannabinum* L. var. *pubescens* (R. Brown) A. De Candolle.

*Apocynum cannabinum* L. var. *suksdorfii* Beguinot & Belozersky.

*Apocynum suksdorfii* Greene.

#### **Apocynum medium** Greene

HARRI54. Hybrid, *A. androsaemifolium* x *A. cannabinum*. Hybrid.

*Apocynum lividum* Greene. Type: Gunnison Co.: Black Canyon, Baker (ND-G). Type specimen from Colorado.

*Apocynum medium* Greene var. *floribundum* (Greene) Woodson.

*Apocynum medium* Greene var. *lividum* (Greene) Woodson.

**Apocynum sibiricum Jacquin**

ROSAT89. Alien.

*Apocynum hypericifolium* Aiton. RYDBE06; ROSAT89.

*Apocynum sibiricum* Jacquin var. *salignum* (Greene) Fernald.

**ARALIACEAE**

**Aralia L., 1753**

**Aralia nudicaulis L.**

TORRE27; RYDBE06; HARRI54.

**Aralia racemosa L. subsp. bicrenata (Wooton & Standley) Welsh & Atwood**

TORRE27; JAMES23; OKANE88.

*Aralia bicrenata* Wooton & Standley. Type from New Mexico.

*Aralia racemosa* L. subsp. *racemosa*

Ours is subsp. *bicrenata*.

**ASCLEPIADACEAE**

**Asclepias L., 1753 WOODS54**

**Asclepias arenaria Torrey**

RYDBE06; HARRI54.

**Asclepias asperula (Decaisne) Woodson subsp. asperula**

WOODS54.

*Asclepias asperula* (Decaisne) Woodson subsp. *capricornu* (Woodson) Woodson

Not the Colorado race.

*Acerates decumbens* (Nuttall) Decaisne in De Candolle. PORTE74.

*Asclepias capricornu* Woodson. HARRI54.

*Asclepiodora decumbens* (Nuttall) A. Gray. RYDBE06.

*Asclepias brachystephana* Engelmann ex Torrey

PORTE74; RYDBE06; WOODS54. Reports apply to *A. uncialis*.

**Asclepias cryptoceras S. Watson**

RYDBE06; HARRI54.

**Asclepias engelmanniana Woodson**

HARRI54.

*Acerates auriculata* Engelmann. PORTE74; RYDBE06; WOODS54.

**Asclepias hallii A. Gray**

HARRI54. Type: [locality?], E. Hall 480 (MO). Type specimen from Colorado.

**Asclepias incarnata L.**

RYDBE06; HARRI54.

**Asclepias involucrata Engelmann ex Torrey**

WEBER55.

**Asclepias latifolia (Torrey) Rafinesque**

RYDBE06; HARRI54.

*Asclepias jamesii* Torrey. PORTE74; RYDBE06; WOODS54. Type: El Paso Co.: south of Fountain, 15 July 1820, James fide GOODM95. Type specimen from Colorado.

*Asclepias obtusifolia* Michaux var. *latifolia* Torrey. RYDBE06; WOODS54. Type: El Paso Co.: south of Fountain, 15 July 1820, James. Type specimen from Colorado.

*Asclepias longifolia* Michaux

TORRE27. Misidentification of *A. subverticillata*.

**Asclepias macrosperma Eastwood**

WEBER66.

**Asclepias macrotis Torrey**

HARRI54.

*Asclepias mexicana* Cavanilles

WOODS54. Erroneous Report.

*Asclepias galioides* Humboldt, Bonpland, & Kunth. RYDBE06; WOODS54. Misinterpretation of *A. subverticillata*.***Asclepias oenotheroides* Chamisso & Schlechtendal**

WEBER61.

*Asclepias ovalifolia* Decaisne in De CandollePORTE74. Report probably applies to *A. hallii*.***Asclepias pumila* (A. Gray) Vail**

TORRE27; RYDBE06; HARRI54.

***Asclepias rusbyi* (Vail) Woodson**

WOODS54. Two records, Mesa Co., Archuleta Co.

***Asclepias speciosa* Torrey**

RYDBE06; HARRI54. Type: probably from Nebraska, fide GOODM95.

***Asclepias stenophylla* A. Gray**

HARRI54.

*Acerates angustifolia* (Nuttall) Decaisne. RYDBE06; WOODS54.***Asclepias subverticillata* (A. Gray) Vail**

HARRI54.

*Asclepias tuberosa* L. subsp. *interior* Woodson

HARRI54; WOODS54. Erroneous Report.

***Asclepias tuberosa* L. subsp. *terminalis* Woodson**

TORRE27, as the species; WOODS54.

***Asclepias uncialis* Greene**

RYDBE06; HARRI54.

*Asclepias verticillata* L.PORTE74; RYDBE06; WOODS54. Older reports apply to *A. subverticillata*.***Asclepias viridiflora* Rafinesque**

TORRE27; HARRI54.

*Acerates viridiflora* (Rafinesque) Pursh ex A. Eaton. RYDBE06.**Funastrum Fournier LIEDE96*****Funastrum crispum* (Bentham) Schlechtendal**

LIEDE96.

*Sarcostemma crispum* Bentham. HARRI54; HOLM50; LIEDE96.**ASPARAGACEAE*****Asparagus* L., 1753*****Asparagus officinalis* L.**

HARRI54. Alien.

**ASPIDIACEAE*****Dryopteris* Adanson, 1763*****Dryopteris expansa* (K. Presl) Fraser-Jenkins & Jermy***Dryopteris assimilis* Walker. WALKER64.*Dryopteris dilatata* sensu Harrington, non (Hoffmann) A. Gray. HARRI54.***Dryopteris filix-mas* (L.) Schott**

HARRI54.

*Aspidium filix-mas* (L.) Swartz. PORTER74.***Polystichum* Roth, 1799*****Polystichum lonchitis* (L.) Roth**

HARRI54.

***Polystichum scopulinum* (D. C. Eaton) Maxon**



KELLE89. Moffat Co.: E side Cross Mountain, T6N R98W S1, 6200 ft., 16 Sept. 1982, J. Parks 914 (CS).

## ASPLENIACEAE

### *Asplenium* L., 1753

#### *Asplenium adiantum-nigrum* L.

HARRI54.

*Asplenium andrewsii* A. Nelson. NELSO04; MAXON12; SHIVA69. Type: Boulder Co.: White Rocks, Andrews (RM 48232). Type specimen from Colorado.

#### *Asplenium platyneuron* (L.) Britton, Sterns, & Poggenberg

HARRI54. Authorship according to LELLI85.

*Asplenium ebeneum* Aiton. PORTE74.

#### *Asplenium resiliens* Kunze

WEBER55.

#### *Asplenium septentrionale* (L.) Hoffmann

HARRI54.

*Belvisia septentrionalis* (L.) Mirbel. RYDBE06.

#### *Asplenium trichomanes* L.

HARRI54.

#### *Asplenium viride* Hudson

HARRI54.

*Asplenium ramosum* L.. ZIMME94. Rejected in favor of *A. viride*, St. Louis Congress, 1999.

*Asplenium trichomanes-ramosum* L.. LELLI81. See also ICBN (Tokyo Code) Art. 23, ex. 14.

## ASTERACEAE

### *Acanthoxanthium* (A. De Candolle) Fourreau, 1869

#### *Acanthoxanthium spinosum* (L.) Fourreau

LOVE75B. Alien.

*Xanthium spinosum* L.. HARRI54.

### *Achillea* L., 1753

#### *Achillea lanulosa* Nuttall

RYDBE06; HARRI54.

*Achillea alpicola* (Rydberg) Rydberg. RYDBE06.

*Achillea lanulosa* Nuttall subsp. *alpicola* (Rydberg) Keck. HARRI54.

*Achillea lanulosa* Nuttall var. *alpicola* Rydberg. RYDBE06.

*Achillea millefolium* L. subsp. *lanulosa* (Nuttall) Piper. HITCH55.

*Achillea millefolium* L. subsp. *lanulosa* (Nuttall) Piper var. *alpicola* (Rydberg) Garrett. HITCH55.

*Achillea subalpina* Greene. Type: Mt. Ouray, 20 Aug. 1901, Baker 842 (ND-G). Type specimen from Colorado.

#### *Achillea millefolium* L.

PORTE74; HARRI54. Alien. Porter's reports all apply to *A. lanulosa*. However, this is a polyploid complex, and some authors include *A. lanulosa* as a geographical race of this.

### *Acosta Adanson*, 1763

#### *Acosta diffusa* (Lamarck) Sojak

SOJAK72. Alien.

*Centaurea diffusa* Lamarck.

#### *Acosta maculosa* (L.) Holub

Alien.

*Centaurea maculosa* L.. WEBER79.

### *Acroptilon* Cassini, 1827

#### *Acroptilon repens* (L.) De Candolle

Alien.

*Centaurea picris* Pallas. HARRI54.

*Centaurea repens* L..

**Ageratina Spach, 1841 KING87****Ageratina herbacea (A. Gray) King & Robinson**

KING70B.

Eupatorium herbaceum (A. Gray) Greene. HARRI54.

**Ageratina occidentalis (Hooker) King & Robinson**

KING87. Erroneous Report.

Eupatorium berlandieri De Candolle. PORTE74. Report applies to *Ageratina herbacea*.**Agoseris Rafinesque, 1819****Agoseris aurantiaca (Hooker) Greene**

RYDBE06; HARRI54.

*Agoseris arachnoidea* Rydberg. Type: La Plata Co.: Grayback Mining Camp and Placer Gulch, 25-27 June 1900, Rydberg & Vreeland 5553 (NY). Annotated by Q. Jones. Type specimen from Colorado.

*Agoseris arizonica* Greene. RYDBE06; HARRI54.

*Agoseris attenuata* Rydberg. Type: Mountains west of North Park, 27 Aug. 1900, Osterhout 2248 (NY). Isotype (NY, !WAW) annotated by Q. Jones. Type specimen from Colorado.

*Agoseris aurantiaca* (Hooker) Greene subsp. *purpurea* (A. Gray) G. Douglas. DOUGL86.

*Agoseris aurantiaca* (Hooker) Greene var. *purpurea* (A. Gray) Cronquist.

*Agoseris elongata* Greene. RYDBE06.

*Agoseris gracilens* (A. Gray) Greene. RYDBE06.

*Agoseris greenii* (A. Gray) Rydberg. RYDBE06.

*Agoseris humilis* Rydberg. Type: Ouray Co.: Ironton Park, 9 mi. S of Ouray, 11 Sept. 1901, Underwood & Selby 308 (NY). Type annotated by Q. Jones. Type specimen from Colorado.

*Agoseris montana* Osterhout. Type: Routt Co.?: Mountains west of North Park, 3000 m, 2 Sept. 1899, Osterhout 2009 (RM). Isotype (NY) annotated by Q. Jones. Type specimen from Colorado.

*Agoseris purpurea* (A. Gray) Greene. RYDBE06.

*Agoseris roseata* Rydberg. Type: Routt Co.: Bear River, 20 mi below Steamboat Springs, 30 Aug. 1899, Osterhout s.n. (NY). Annotated by Q. Jones. Type specimen from Colorado.

*Agoseris rostrata* Rydberg. Type: Boulder Co.: Lower Boulder Canyon, 25 June 1901, Osterhout 2478 (NY). Type annotated by Q. Jones. Type specimen from Colorado.

*Macrorrhynchus troximoides* Torrey & Gray. PORTE74.

*Troximon aurantiacum* Hooker. RYDBE06.

*Troximon aurantiacum* Hooker var. *purpureum* A. Gray. RYDBE06.

*Troximon gracilens* A. Gray.

*Troximon gracilens* A. Gray var. *greenii* A. Gray. RYDBE06.

**Agoseris elata (Nuttall) Greene**

HARRI54. A species of the Pacific states.

*Troximon nuttallii* A. Gray. RYDBE06.

**Agoseris glauca (Pursh) Greene var. glauca**

TORRE27; HITCH55. "Five varieties, fairly well defined on the diploid level, but confluent through the tetraploids." See key in HITCH55 5:27.

*Agoseris agrestis* Osterhout. Type: Larimer Co.: Estes Park, 20 July 1900, Osterhout 2215 (RM). Type specimen from Colorado.

*Agoseris frondifera* Osterhout. Type: Boulder Co.: Camp Pitts, 9600 ft., Clokey 3114 (RM). Type specimen from Colorado.

*Agoseris glauca* (Pursh) Rafinesque var. *parviflora* (Nuttall) Rydberg.

*Agoseris leontodon* Rydberg. RYDBE06.

*Agoseris leptocarpa* Osterhout. Type: Coulter P.O., Middle Park, 29 June 1895, Osterhout 2972 (RM). Isotype (NY) annotated by Q. Jones. Type specimen from Colorado.

*Agoseris longissima* Greene. Type: Little Cimarron R., 29 Aug. 1896, Greene s.n. (ND-G). Probably *A. glauca* but flower color not mentioned. Type specimen from Colorado.

*Agoseris maculata* Rydberg. Type: Clear Creek Co.: Silver Plume, 24 Aug. 1895, Shear 4605 (NY). Annotated by Q. Jones. Type specimen from Colorado.

*Agoseris parviflora* (Nuttall) D. Dietrich. RYDBE06.

*Agoseris rosea* (Nuttall) D. Dietrich. RYDBE06.

*Macrorrhynchus glaucus* (Nuttall) D. C. Eaton var. *dasycephalus* Torrey & Gray. PORTE74.

*Macrorrhynchus glaucus* (Pursh) D. C. Eaton. PORTE74.

*Troximon glaucum* (Pursh) Nuttall var. *parviflorum* A. Gray. RYDBE06.

*Troximon glaucum* Nuttall. RYDBE06.

**Agoseris glauca (Pursh) Rafinesque var. agrestis (Osterhout) Q. Jones ex Cronquist**

HITCH55.

*Agoseris agrestis* Osterhout. Type: Larimer Co.: Estes Park, 20 July 1900, Osterhout 2215 (RM). Type specimen from Colorado.

*Agoseris frondifera* Osterhout. Type: Boulder Co.: Camp Pitts, 9600 ft., Clokey 3114 (RM). Type specimen from Colorado.

*Agoseris glauca* (Pursh) Rafinesque var. *parviflora* (Nuttall) Rydberg.

*Agoseris leontodon* Rydberg. RYDBE06.

*Agoseris leptocarpa* Osterhout. Type: Coulter P.O., Middle Park, 29 June 1895, Osterhout 2972 (RM). Isotype (NY) annotated by Q. Jones. Type specimen from Colorado.

*Agoseris longissima* Greene. Type: Little Cimarron R., 29 Aug. 1896, Greene s.n. (ND-G). Probably *A. glauca* but flower color not mentioned. Type specimen from Colorado.

*Agoseris maculata* Rydberg. Type: Clear Creek Co.: Silver Plume, 24 Aug. 1895, Shear 4605 (NY). Annotated by Q. Jones. Type specimen from Colorado.

*Agoseris parviflora* (Nuttall) D. Dietrich. RYDBE06.

*Agoseris rosea* (Nuttall) D. Dietrich. RYDBE06.

*Macrorrhynchus glaucus* (Nuttall) D. C. Eaton var. *dasycephalus* Torrey & Gray. PORTE74.

*Macrorrhynchus glaucus* (Pursh) D. C. Eaton. PORTE74.

*Troximon glaucum* (Pursh) Nuttall var. *parviflorum* A. Gray. RYDBE06.

*Troximon glaucum* Nuttall. RYDBE06.

**Agoseris glauca (Pursh) Rafinesque var. dasycephala (Torrey & Gray) Jepson**

HARRI54.

*Agoseris agrestis* Osterhout. Type: Larimer Co.: Estes Park, 20 July 1900, Osterhout 2215 (RM). Type specimen from Colorado.

*Agoseris frondifera* Osterhout. Type: Boulder Co.: Camp Pitts, 9600 ft., Clokey 3114 (RM). Type specimen from Colorado.

*Agoseris glauca* (Pursh) Rafinesque var. *parviflora* (Nuttall) Rydberg.

*Agoseris leontodon* Rydberg. RYDBE06.

*Agoseris leptocarpa* Osterhout. Type: Coulter P.O., Middle Park, 29 June 1895, Osterhout 2972 (RM). Isotype (NY) annotated by Q. Jones. Type specimen from Colorado.

*Agoseris longissima* Greene. Type: Little Cimarron R., 29 Aug. 1896, Greene s.n. (ND-G). Probably *A. glauca* but flower color not mentioned. Type specimen from Colorado.

*Agoseris maculata* Rydberg. Type: Clear Creek Co.: Silver Plume, 24 Aug. 1895, Shear 4605 (NY). Annotated by Q. Jones. Type specimen from Colorado.

*Agoseris parviflora* (Nuttall) D. Dietrich. RYDBE06.

*Agoseris rosea* (Nuttall) D. Dietrich. RYDBE06.

*Macrorrhynchus glaucus* (Nuttall) D. C. Eaton var. *dasycephalus* Torrey & Gray. PORTE74.

*Macrorrhynchus glaucus* (Pursh) D. C. Eaton. PORTE74.

*Troximon glaucum* (Pursh) Nuttall var. *parviflorum* A. Gray. RYDBE06.

*Troximon glaucum* Nuttall. RYDBE06.

**Agoseris glauca (Pursh) Rafinesque var. laciniata (D. C. Eaton) Smiley**

HARRI54.

*Agoseris agrestis* Osterhout. Type: Larimer Co.: Estes Park, 20 July 1900, Osterhout 2215 (RM). Type specimen from Colorado.

*Agoseris frondifera* Osterhout. Type: Boulder Co.: Camp Pitts, 9600 ft., Clokey 3114 (RM). Type specimen from Colorado.

*Agoseris glauca* (Pursh) Rafinesque var. *parviflora* (Nuttall) Rydberg.

*Agoseris leontodon* Rydberg. RYDBE06.

*Agoseris leptocarpa* Osterhout. Type: Coulter P.O., Middle Park, 29 June 1895, Osterhout 2972 (RM). Isotype (NY) annotated by Q. Jones. Type specimen from Colorado.

*Agoseris longissima* Greene. Type: Little Cimarron R., 29 Aug. 1896, Greene s.n. (ND-G). Probably *A. glauca* but flower color not mentioned. Type specimen from Colorado.

*Agoseris maculata* Rydberg. Type: Clear Creek Co.: Silver Plume, 24 Aug. 1895, Shear 4605 (NY). Annotated by Q. Jones. Type specimen from Colorado.

*Agoseris parviflora* (Nuttall) D. Dietrich. RYDBE06.

*Agoseris rosea* (Nuttall) D. Dietrich. RYDBE06.

*Macrorrhynchus glaucus* (Nuttall) D. C. Eaton var. *dasycephalus* Torrey & Gray. PORTE74.

*Macrorrhynchus glaucus* (Pursh) D. C. Eaton. PORTE74.

*Troximon glaucum* (Pursh) Nuttall var. *parviflorum* A. Gray. RYDBE06.

*Troximon glaucum* Nuttall. RYDBE06.

**Agoseris heterophylla (Nuttall) Greene**

WEBER73A.

Supported at genus level by Nesom

**Almutaster pauciflorus (Nuttall) Löve & Löve**

LOVE82B; NESOM94.

Aster pauciflorus Nuttall. RYDBE06; HARRI54.

Erigeron paucipetalus Osterhout. Type: Grand Co.: Around the sulphur springs, 16 Aug. 1905, Osterhout 3051 (RM). !A. G. Jones as Aster pauciflorus). Type specimen from Colorado.

**Ambrosia L., 1753 PAYNE64****Ambrosia acanthicarpa Hooker**

PAYNE64.

Franseria acanthicarpa (Hooker) Coville. HARRI54.

Franseria hookeriana Nuttall. PORTE74; RYDBE06.

Gaertneria acanthicarpa (Hooker) Britton. RYDBE06.

**Ambrosia artemisiifolia L. var. elatior (L.) Descourtils**

RYDBE06, as the species. Alien.

Ambrosia elatior L. HARRI54.

Ambrosia media Rydberg. GREAT84. Type: Larimer Co.: Ft. Collins, 27 Aug. 1885, Crandall s.n. (NY). Type specimen from Colorado.

**Ambrosia confertiflora De Candolle**

PAYNE64.

Franseria confertiflora (De Candolle) Rydberg. HARRI54.

Franseria tenuifolia A. Gray. PORTE74.

Gaertneria tenuifolia (A. Gray) Kuntze. HARRI54.

**Ambrosia grayi (A. Nelson) Shinnars**

PAYNE64.

Franseria grayi A. Nelson.

Franseria tomentosa A. Gray, non Nuttall. PORTE74; HARRI54.

Gaertneria grayi (A. Nelson) A. Nelson. RYDBE06.

**Ambrosia linearis (Rydberg) Payne**

PAYNE64. Endemic. Type specimen from Colorado.

Franseria linearis (Rydberg) Rydberg. HARRI54.

Gaertneria linearis Rydberg. Type: El Paso Co.: Calhan, July 1893, Saunders s.n. (NY). Type specimen from Colorado.

**Ambrosia psilostachya De Candolle var. coronopifolia (Torrey & Gray) Farwell**

RYDBE06, as the species; FERNA50.

Ambrosia coronopifolia Torrey &amp; Gray. HARRI54.

**Ambrosia tomentosa Nuttall**

PAYNE64.

Franseria discolor Nuttall. PORTE74; HARRI54.

Gaertneria tomentosa (Nuttall) Heller. RYDBE06.

**Ambrosia trifida L.**

RYDBE06; HARRI54. Alien.

Ambrosia striata Rydberg. GREAT54. Type: Weld Co.: Windsor, Aug. 1901, Osterhout 2338 (NY). Payne says this is intermediate between A. trifida and A. aptera. Type specimen from Colorado.

Ambrosia trifida L. var. integrifolia (Mühlenberg) Torrey &amp; Gray. RYDBE06.

**Anaphalis De Candolle, 1838****Anaphalis margaritacea (L.) Bentham & Hooker**

HARRI54.

Anaphalis margaritacea (L.) Bentham &amp; Hooker var. subalpina A. Gray. RYDBE06. Type: "Colorado", 1862, Parry 421 (GH). Type specimen from Colorado.

Anaphalis subalpina (A. Gray) Rydberg. RYDBE06.

**Antennaria Gaertner, 1791 BAYER93***Antennaria alpina* L.

PORTE74; HARRI54. Mentioned under A. umbrinella. Does not occur in America. Porter reports apply to A. media.

*Antennaria aromatica* Evert

OKANE88A; EVERT84; BAYER87,89C. All specimens were judged A. rosea by Bayer; Evert determined one as A. media and the other two as Antennaria sp..

**Antennaria corymbosa E. Nelson**

RYDBE06; HARRI54; BAYER87.

Antennaria nardina Greene. BAYER88A,B. Lectotype: Lake Co.: Mt. Massive, 11,000 ft., 22 Aug. 1899, Holm (ND-G). Type specimen from Colorado.

**Antennaria dimorpha (Nuttall) Torrey & Gray**

HARRI54; BAYER87.

*Antennaria dioica Gaertner*PORTE74. A European species. Reports apply to *A. rosea*.**Antennaria howellii Greene subsp. neodioica (Greene) Bayer**

BAYER89B.

Antennaria neodioica Greene. BAYER89A,B.

Antennaria obovata E. Nelson. HARRI54. Type: Larimer Co.: Soldier Canon, 20 June 1895, Cowan (RM 12981). Type specimen from Colorado.

**Antennaria luzuloides Torrey & Gray**

HARRI54; BAYER87.

Antennaria oblanceolata Rydberg. RYDBE06; HARRI54.

**Antennaria marginata Greene**

RYDBE06; WEBER87B; BAYER87; BAYER88A,B (map). Colls from Montezuma Co.

**Antennaria media Greene**RYDBE06; HARRI54; BAYER87. Reports of *A. alpina* belong here.

Antennaria alpina (L.) Gaertner var. *media* (Greene) Jepson.

**Antennaria microphylla Rydberg**HARRI54; BAYER87; BAYER88A,B (map). The earlier *A. microphylla* Gandoger was illegitimate.

Antennaria oxyphylla Greene. RYDBE06. !Bayer.

**Antennaria neglecta Greene**

HARRI54.

**Antennaria parvifolia Nuttall**

HARRI54; BAYER87.

Antennaria aprica Greene. Type: none designated; might not be a Colorado coll. Type specimen from Colorado.

Antennaria holmii Greene. Type: Larimer Co.: Long's Peak, 10,000 ft., 8 July 1899, Holm. Status verified by Bayer, 1991. Type specimen from Colorado.

**Antennaria pulcherrima (Hooker) Greene subsp. anaphaloides (Rydberg) W. A. Weber**

RYDBE06, as the species; WEBER73A; BAYER87.

Antennaria anaphaloides Rydberg. RYDBE06; HARRI54.

**Antennaria pulcherrima (Hooker) Greene subsp. pulcherrima**

Gunnison Co.: Near Crested Butte, Bayer (personal communication).

Antennaria carpathica R. Brown var. *pulcherrima* Hooker. PORTE74.

**Antennaria rosea Greene**

HARRI54; BAYER87,89A.

Antennaria arida E. Nelson subsp. *viscidula* E. Nelson. Bayer, in litt., 1991.

Antennaria bracteosa Rydberg. RYDBE06. !Bayer.

Antennaria concinna E. Nelson. RYDBE06; BAYER89A.

Antennaria formosa Greene. BARRE69; BAYER89A. Lectotype: Gunnison Watershed, 24 July 1901 Baker 580 (ND-G 058172). Type specimen from Colorado.

Antennaria imbricata E. Nelson. RYDBE06. !Bayer.

Antennaria rosea Greene subsp. *arida* (E. Nelson) Bayer. Bayer, in litt., 1991.

Antennaria sordida Greene. BAYER89A. Lectotype: Clear Creek Co.: Clear Creek Canyon, 10,500 ft., 11 Sept. 1899, Holm s.n. (ND-G 058639). Type specimen from Colorado.

Antennaria viscidula (E. Nelson) Rydberg. RYDBE06. Interpretation by Bayer, 1991, in litt.

**Antennaria rosulata Rydberg**

RYDBE06; HARRI54; BAYER87; BAYER88A,B (map).

Antennaria sierrae-blancae Rydberg. BAYER88A,B. Type: Costilla Co.: Sierra Blanca, 12-13,500 ft., 1877, Hooker & Gray s.n. (GH). Type specimen from Colorado.

**Antennaria umbrinella Rydberg**

HARRI54; BAYER87.

*Antennaria flavescens* Rydberg. RYDBE06. !Bayer.

*Antennaria reflexa* E. Nelson. HARRI54. !Bayer.

### **Anthemis L., 1753**

#### ***Anthemis arvensis* L.**

HARRI54. Alien.

#### ***Anthemis cotula* L.**

RYDBE06; HARRI54. Alien.

### **Arctium L., 1753**

#### ***Arctium lappa* L.**

WEBER79. Alien.

#### ***Arctium minus* (J. Hill) Bernhardt**

HARRI54. Alien.

#### ***Arctium tomentosum* P. Miller**

WEBER82A. Alien.

### **Arnica L., 1753 MAGUI43**

#### ***Arnica alpina* (L.) Olin & Ladau subsp. *angustifolia* (M. Vahl) Maguire**

A subspecies of Canada and the Arctic.

*Arnica angustifolia* M. Vahl. PORTE74. Report probably applies to a mixture of species.

#### ***Arnica alpina* (L.) Olin & Ladau subsp. *tomentosa* (Macoun) Maguire**

WEBER85A.

#### ***Arnica chamissonis* Lessing subsp. *foliosa* (Nuttall) Maguire**

PORTE74, as the species; HARRI54.

*Arnica celsa* A. Nelson. RYDBE06.

*Arnica foliosa* Nuttall. RYDBE06.

*Arnica lanulosa* Greene. MAGUI43. Type: Gunnison Co.: Crested Butte, Baker 336 (ND-G). Type specimen from Colorado.

*Arnica macilentata* Greene. Type: Shetland Ranch, mountains of N Colo, 12 July 1896, Baker s.n. (ND-G). Type specimen from Colorado.

*Arnica rhizomata* A. Nelson. RYDBE06.

#### ***Arnica cordifolia* Hooker**

RYDBE06; HARRI54.

*Arnica parvifolia* Greene. MAGUI43. Type: Marshall Pass, 10,000 ft., 19 July 1901, Baker 515 (ND-G). Type specimen from Colorado.

*Arnica pumila* Rydberg. MAGUI43. Type: Clear Creek Co.: Gray's Peak, Aug., Sept. 1872, Torrey s.n. (NY). Type specimen from Colorado.

#### ***Arnica fulgens* Pursh**

RYDBE06; HARRI54.

*Arnica monocephala* Rydberg. RYDBE06.

*Arnica pedunculata* Rydberg. RYDBE06.

*Arnica pedunculata* Rydberg var. *tubularis* Cockerell. Type: Boulder Co.: Boulder, June 1915, W. Cockerell (GH). Type specimen from Colorado.

#### ***Arnica latifolia* Bongard**

HARRI54.

*Arnica platyphylla* A. Nelson. RYDBE06.

#### ***Arnica longifolia* D. C. Eaton**

RYDBE06; HARRI54.

*Arnica polycephala* A. Nelson. RYDBE06.

#### ***Arnica mollis* Hooker**

HARRI54.

*Arnica coloradensis* Rydberg. MAGUI43. Type: 1872, Parry s.n. (NY). Type specimen from Colorado.

*Arnica subplumosa* Greene. MAGUI43. Lectotype: Ouray Co.: Ouray, 10 Aug. 1901, Baker 760 (ND-G). Type specimen from Colorado.

*Arnica sylvatica* Greene. MAGUI43. Type: Pitkin Co.: Ruby, 8 July 1901, Baker 715 (ND-G). Type specimen from Colorado.

#### ***Arnica montana* L.**

TORRE27. Misidentification of *A. fulgens*.

#### ***Arnica parryi* A. Gray**

RYDBE06; HARRI54. Type: Clear Creek Co.: headwaters of Clear Creek, 1861, Parry 10 (GH). Type specimen from Colorado.

*Arnica angustifolia* M. Vahl var. *eradiata* A. Gray. PORTE74. Syntypes: [Hall & Harbour 338, Parry 10, Coulter s.n.]. Type specimen from Colorado.

*Arnica parryi* A. Gray var. *crinita* Osterhout. MAGUI43. Type: Larimer Co.: Mt. Cameron, 15 Aug. 1908, Osterhout 3814 (RM). Type specimen from Colorado.

***Arnica rydbergii* Greene**

RYDBE06; HARRI54.

*Arnica lasiosperma* Greene. Type: Larimer Co.: Base of Long's Peak, Estes Park, 26 Aug. 1895, Osterhout. Type specimen from Colorado.

*Arnica tenuis* Rydberg. RYDBE06.

***Artemisia* L., 1753 HALL23; KECK46**

***Artemisia abrotanum* L.**

HARRI54. Alien. A garden escape, nowhere naturalized.

***Artemisia absinthium* L.**

HARRI54. Alien.

***Artemisia annua* L.**

WEBER61A. Alien. Only one record of this in Boulder.

***Artemisia arctica* Lessing subsp. *saxicola* (Rydberg) Hultén**

PORTE74, as the species; HULTE54.

*Artemisia saxicola* (Besser) Rydberg. RYDBE06.

***Artemisia biennis* Willdenow**

RYDBE06; HARRI54. Alien.

***Artemisia bigelovii* A. Gray**

RYDBE06; HARRI54.

***Artemisia borealis* Pallas**

HARRI54. Our plants are *Oligosporus groenlandicus*.

***Artemisia carruthii* Wood ex Carruth**

HARRI54; MCGRE82.

*Artemisia coloradensis* Osterhout. Type: Larimer Co.: Dale Cr., 7 Sept. 1899, Osterhout 2010 (RM). Type specimen from Colorado.

*Artemisia kansana* Britton. RYDBE06.

*Artemisia stenoloba* Rydberg. RYDBE06. Assignment tentative.

***Artemisia franserioides* Greene**

RYDBE06; HARRI54.

***Artemisia frigida* Willdenow**

RYDBE06; HARRI54.

***Artemisia laciniata* Willdenow subsp. *parryi* (A. Gray) W. A. Weber**

WEBER85B.

*Artemisia parryi* A. Gray. HARRI54. Type: Huerfano Co.: Huerfano Mts., "N. Mex.", Sept., 1867, Parry. [actually Sangre De Cristo Pass, W of Walsenburg]. Type specimen from Colorado.

***Artemisia longifolia* Nuttall**

KECK46. San Luis Valley, Ramaley 14500, Creede, Stewart 1351.

***Artemisia ludoviciana* Nuttall subsp. *albula* (Wooton) Keck**

HARRI54.

***Artemisia ludoviciana* Nuttall subsp. *incompta* (Nuttall) Keck**

HARRI54.

*Artemisia incompta* Nuttall. RYDBE06.

***Artemisia ludoviciana* Nuttall subsp. *ludoviciana***

RYDBE06; HARRI54.

*Artemisia argophylla* Rydberg. Type: Near Long's Peak, Clements s.n. (NY). Type specimen from Colorado.

*Artemisia bakeri* Greene. Type: Montrose Co.: Cimarron, Aug. 1896, Baker 698 (ND-G). Type specimen from Colorado.

*Artemisia brittonii* Rydberg. Type: Jefferson Co.: Golden, 8 Oct. 1882, Britton s.n. (NY). Type specimen from Colorado.

*Artemisia cuneata* Rydberg. Type: Clear Creek Co.: Idaho Springs, 27 Aug. 1895, Shear 4617 (NY). Type specimen from Colorado.

*Artemisia diversifolia* Rydberg. RYDBE06.

*Artemisia elatior* (Torrey & Gray) Rydberg. RYDBE06.

- Artemisia gnaphaloides* Nuttall. RYDBE06.  
*Artemisia ludoviciana* Nuttall var. *gnaphalodes* (Nuttall) Torrey & Gray. PORTE74.  
*Artemisia ludoviciana* Nuttall var. *latiloba* Nuttall. PORTE74.  
*Artemisia natronensis* A. Nelson. RYDBE06.  
*Artemisia pabularis* (A. Nelson) Rydberg. RYDBE06.  
*Artemisia pudica* Rydberg. Type: Gunnison Co.: Gunnison, 24 July 1901, Baker 573 (NY). Type specimen from Colorado.  
*Artemisia rhizomata* A. Nelson. RYDBE06.  
*Artemisia rhizomata* A. Nelson var. *pabularis* A. Nelson. RYDBE06.  
*Artemisia silvicola* Osterhout. Type: Larimer Co.: MacIntyre Cr., Laramie R., 24 Aug. 1900, Osterhout 2242 (RM). Type specimen from Colorado.  
*Artemisia underwoodii* Rydberg. Type: Ouray Co.: SE of Ouray, 7 Sept. 1901, Underwood & Selby 74 (NY). Type specimen from Colorado.  
*Artemisia wrightii* A. Gray. RYDBE06.

***Artemisia ludoviciana* Nuttall subsp. *mexicana* (Willdenow) Keck**

HARRI54.

- Artemisia ludoviciana* Nuttall var. *mexicana* A. Gray. PORTE74.

***Artemisia michauxiana* Besser in Hooker**

HARRI54.

- Artemisia discolor* Douglas ex De Candolle. PORTE74. Authority given as Pallas.

***Artemisia norvegica* E. Fries**HARRI54. Ours is *A. arctica*.***Artemisia pattersonii* A. Gray**

HARRI54; WIENS62; LOVE71. Type: Clear Creek Co.: Gray's Peak and vicinity, 1885, Patterson 74), vicinity, 1885, justified Gray's raising to species rank.  $2n=14$ ; the scopulorum group is  $2n=18$ . A new genus should be based on this species. Type specimen from Colorado.

- Artemisia monocephala* Heller. A name proposed under the old rule of absolute priority. Non Rydberg, 1900. Type specimen from Colorado.

*Artemisia pattersonii* A. Gray var. *glabrior* L. Kelso. Type: Clear Creek Co.: Mt. Evans, 12-13000 ft., 23 Aug. 1934, L. Kelso 105 (hb. Kelso). Type specimen from Colorado.

*Artemisia scopulorum* A. Gray var. *monocephala* A. Gray. HALL23. Type: 1862, Parry. Type specimen from Colorado.

***Artemisia scopulorum* A. Gray**

HARRI54. Type: Rocky Mts., 1862, Parry. Type specimen from Colorado.

*Artemisia scopulorum* A. Gray var. *aggregata* L. Kelso. Type: Clear Creek Co.: Mt. Evans, 13000 ft., 23 Aug. 1934, Kelso 104 (hb. Kelso). Type specimen from Colorado.

***Askellia* W. A. Weber, 1984 WEBER84*****Askellia nana* (Richardson) W. A. Weber**

WEBER84.

- Crepis nana* Richardson. RYDBE06; HARRI54.

***Aster* L., 1753 NESOM94*****Aster alpinus* L. var. *vierhapperi* (Onno) Cronquist**

RYDBE06, as the species; WEBER73,89C; NESOM94. CC, Grand Co., ML. This is the only Old-World Aster in America.

*Aster culminis* A. Nelson in Coulter & Nelson. Type: Berthoud Pass, 12000 ft., Tweedy 5797 (RM). Type specimen from Colorado.

***Aster integrifolius* Nuttall**

HARRI54; NESOM94. Report was based on a vague statement in Tidestrom & Kittell; no specimens have ever been seen from Colorado.

***Baccharis* L., 1753*****Baccharis emoryi* A. Gray in Torrey**

RYDBE06; HARRI54. Reports apply to *B. salicina*.

***Baccharis glutinosa* Persoon**

RYDBE06; HARRI54. Reports apply to *B. salicina*.

***Baccharis salicina* Torrey & Gray**

TORRE27; PORTE74; RYDBE06; HARRI54; GOODM95.

***Baccharis wrightii* A. Gray**

RYDBE06; HARRI54.

***Bahia Lagasca*, 1816 ELLIS64**



**Bahia dissecta (A. Gray) Britton**

RYDBE06; HARRI54.

Bahia chrysanthemoides (A. Gray) A. Gray. RYDBE06.

Villanova chrysanthemoides A. Gray. PORTE74.

**Balsamita Desfontaines, 1792****Balsamita major Desfontaines, non L.**

TUTIN64. Alien. Cultivar and only sparingly escaped.

Chrysanthemum balsamita (L.) Baillon. HARRI54.

**Balsamorhiza Nuttall, 1841 SHARP35****Balsamorhiza hispidula W. M. Sharp**

HARRI54; SHARP35.

**Balsamorhiza sagittata (Pursh) Nuttall**

RYDBE06; HARRI54; SHARP35.

**Berlandiera A. De Candolle, 1836****Berlandiera lyrata Bentham**

HARRI54.

**Bidens L., 1753 SHERF55****Bidens bigelovii A. Gray**

RYDBE06; HARRI54.

*Bidens bipinnata L.*

PORTE74; HARRI54. Alien. "Ute Pass, Porter." Reports doubtful according to Harrington.

**Bidens cernua L.**

HARRI54. Alien.

Bidens glaucescens Greene. RYDBE06.

Bidens prionophylla Greene. RYDBE06.

**Bidens comosa (A. Gray) Wiegand**

RYDBE06; HARRI54.

**Bidens frondosa L. var. frondosa**

RYDBE06; HARRI54. Alien.

**Bidens frondosa L. var. puberula Wiegand**

HITCH55. Alien.

Bidens vulgata Greene. RYDBE06; HARRI54. Probably distinct from B. frondosa only at the varietal level.

*Bidens heterosperma A. Gray*

HARRI54. "listed for southern Colorado".

*Bidens laevis (L.) Britton, Sterns, & Poggenberg*

SHERF55. A species of eastern U.S. Report applies to B. comosa.

Bidens chrysanthemoides Michaux. PORTE74.

*Bidens polylepis S. F. Blake*

HARRI54. "reported from Colorado".

Coreopsis involucreta Nuttall. PORTE74; SHERF55. "Plains, Parry 31".

**Bidens tenuisecta A. Gray**

PORTE74; RYDBE06; HARRI54.

**Bolophyta Nuttall, 1841****Bolophyta alpina Nuttall**

WEBER87B. Endemic.

Parthenium alpinum (Nuttall) A. Gray. WILKE78.

**Bolophyta ligulata (Jones) W. A. Weber**

WEBER87B. Endemic.

Parthenium ligulatum (Jones) Barneby. WEBER79.

**Bolophyta tetraeuris (Barneby) W. A. Weber**

WEBER79A. Endemic.

*Parthenium alpinum* (Nuttall) Torrey & Gray var. *tetraneuris* (Barneby) Rollins. HARRI54.

*Parthenium tetraneuris* Barneby. Type: Fremont Co.: Portland, Ripley & Barneby 7662 (CA). Type specimen from Colorado.

### **Brachyactis Ledebour, 1845 NESOM84**

Nesom would place this in *Symphyotrichum* Section *Conyzopsis*. We disagree

*Brachyactis ciliata* (Ledebour) Ledebour subsp. *ciliata*

The Eurasian subspecies.

### **Brachyactis ciliata Ledebour subsp. angusta (Lindley) A. Jones**

*Aster angustus* (Lindley) Torrey & Gray. PORTE74; RYDBE06.

*Aster brachyactis* S. F. Blake. HARRI54.

*Brachyactis angusta* (Lindley) Britton. RYDBE06; HARRI54.

*Tripolium angustum* Lindley.

### **Brachyactis frondosa (Nuttall) A. Gray**

RYDBE06.

*Aster frondosus* (Nuttall) Torrey & Gray. RYDBE06; HARRI54.

*Brachyactis hybrida* Greene. Type: Gunnison Co.: Gunnison, 27 Aug. 1901, Baker 937 (ND-G). Type specimen from Colorado.

*Symphyotrichum frondosum* (Nuttall) Nesom. NESOM94.

### **Breea Lessing, 1832 HARA82**

Kitamura states: "Breea is segregated from *Cirsium* on account of its unisexual florets and partial dioecy."

### **Breea arvensis (L.) Lessing**

Alien.

*Carduus arvensis* (L.) B. L. Robinson. RYDBE06.

*Cirsium arvense* (L.) Scopoli. HARRI54.

*Cirsium arvense* (L.) Scopoli var. *integrifolium* Wimmer & Graebner. HARRI54.

*Cirsium arvense* (L.) Scopoli var. *vestitum* Wimmer & Graebner. HARRI54.

*Cirsium incanum* (S. G. Gmelin) Fischer ex Bieberstein. WEBER79A.

*Cnicus arvensis* (L.) Roth. RYDBE06. With Hoffmann as author.

*Serratula arvensis* L..

### **Brickellia Elliott, 1823 ROBIN17**

*Brickellia atractyloides* A. Gray

Erroneous Report.

*Coleosanthus atractyloides* (A. Gray) Kuntze. RYDBE06. "Southwestern Colorado." Far out of range; Misidentification.

### **Brickellia brachyphylla A. Gray**

HARRI54.

*Coleosanthus brachyphyllus* (A. Gray) Kuntze. ROBIN17.

### **Brickellia californica (Torrey & Gray) A. Gray**

HARRI54.

*Coleosanthus albicaulis* Rydberg. Type: El Paso Co.: Manitou, 1900, Clements s.n. (NY). Type specimen from Colorado.

*Coleosanthus californicus* (Torrey & Gray) Kuntze. ROBIN17.

### **Brickellia eupatorioides (L.) Shinnars**

*Kuhnia eupatorioides* L.. HARRI54.

*Kuhnia eupatorioides* L. var. *gracilis* Torrey & Gray. PORTE74.

### **Brickellia grandiflora (Hooker) Nuttall**

HARRI54.

*Brickellia grandiflora* (Hooker) Nuttall var. *minor* A. Gray. ROBIN17. Syntypes: 1862, Parry 423; 1862, Hall & Harbour 313 (GH). Type specimen from Colorado.

*Coleosanthus congestus* A. Nelson. ROBIN17.

*Coleosanthus grandiflorus* (Hooker) Kuntze. RYDBE06.

*Coleosanthus minor* (A. Gray) Daniels. ROBIN17.

*Coleosanthus umbellatus* Greene. RYDBE06.

### **Brickellia longifolia S. Watson**

HARRI54.

### **Brickellia microphylla (Nuttall) A. Gray subsp. scabra (A. Gray) W. A. Weber**

WEBER83A.

*Brickellia microphylla* (Nuttall) A. Gray var. *scabra* A. Gray. Type: Southern Colo, Parry (first cited specimen). Type specimen from Colorado.

*Brickellia scabra* (A. Gray) A. Nelson ex B. L. Robinson. HARRI54.

*Coleosanthus scaber* Greene. Mesa Co.: Grand Junction, 27 Aug. 1896, Greene (ND-G). Was Greene unaware of Gray's earlier proposal of this as a variety under *B. microphylla*?. Type specimen from Colorado.

### ***Brickellia oblongifolia* Nuttall**

HARRI54.

*Brickellia linifolia* D. C. Eaton. RYDBE06.

*Brickellia oblongifolia* Nuttall var. *linifolia* (D. C. Eaton) B. L. Robinson. ROBIN17.

*Coleosanthus humilis* Greene. ROBIN17. Type: Archuleta Co.: Arboles, 21 June 1899, Baker 657 (ND-G). Type specimen from Colorado.

*Coleosanthus linifolius* (D. C. Eaton) Kuntze. ROBIN17.

*Coleosanthus oblongifolius* (Nuttall) Kuntze. ROBIN17.

### ***Brickellia rosmarinifolia* (Ventenat) W. A. Weber subsp. *chlorolepis* (Wooton & Standley) W. A. Weber**

WEBER83.

*Brickellia chlorolepis* (Wooton & Standley) Shinnars.

*Kuhnia chlorolepis* Wooton & Standley. HARRI54.

*Kuhnia gooddingii* A. Nelson. Type: Larimer Co: West Dry Cr., 28 Aug. 1900 Goodding 8202 (RM). Type specimen from Colorado.

*Kuhnia rosmarinifolia* (Ventenat) W. A. Weber var. *chlorolepis* (Wooton & Standley) S. F. Blake.

## **Carduus L., 1753**

### ***Carduus acanthoides* L.**

WEBER66. Alien.

### *Carduus leiophyllus* Petrovic ex Bornmüller

WEBER67. Our plant is *C. nutans*.

### ***Carduus nutans* L. subsp. *macrolepis* (Peterman) Kazmi**

WEBER55; KAZMI64. Alien.

## **Carthamus L., 1753**

### ***Carthamus tinctorius* L.**

HARRI54. Alien. Probably only occurs in cultivation.

## **Chaenactis De Candolle, 1836 STOCK40**

### ***Chaenactis alpina* (A. Gray) Jones**

HARRI54.

*Chaenactis alpina* (A. Gray) Jones var. *leucopsis* (Greene) Cockerell. HARRI54; STOCK40. Involucre more lanate, hardly meriting taxonomic status.

*Chaenactis douglasii* (Hooker) Hooker & Arnott var. *alpina* A. Gray. RYDBE06.

*Chaenactis leucopsis* Greene. Type: Needle Mts., 11,500 ft., 14 June 1901, Cross (US). Type specimen from Colorado.

*Chaenactis pedicularia* Greene. Type: La Plata Co.: Mountains above La Plata, 16 July 1898, Baker, Earle & Tracy 536 (ND-G). Type specimen from Colorado.

### ***Chaenactis douglasii* (Hooker) Hooker & Arnott**

RYDBE06; HARRI54.

*Chaenactis angustifolia* Greene. HARRI54.

*Chaenactis douglasii* (Hooker) Hooker & Arnott var. *achilleifolia* (Hooker & Arnott) A. Nelson. HARRI54.

*Chaenactis humilis* Rydberg. STOCK40. Gunnison Co.: Sapinero, Wheeler 416 (COLO) and Schedin, Dome Rock, Platte R, cited. A minor variation with slender reddish stems, narrower heads.

### ***Chaenactis stevioides* Hooker & Arnott**

RYDBE06; HARRI54.

## **Chaetopappa deCandolle 1836**

### ***Chaetopappa ericoides* (A. Gray) Nesom**

NESOM88; CRONQ94. This disposition was adopted by Cronquist in Intermountain Flora.

*Aster arenosus* (Heller) S. F. Blake. HARRI54.

*Aster ericaefolius* Rothrock. RYDBE06.

*Aster ericaefolius* Rothrock var. *hirtella* A. Gray. RYDBE06.

*Aster ericaefolius* Rothrock var. *tenuis* A. Gray. RYDBE06.

*Diplopappus ericoides* Torrey & Gray. PORTE74.

Leucelene alsinoides Greene. RYDBE06.  
 Leucelene arenosa Heller. RYDBE06.  
 Leucelene ericoides (Torrey & Gray) Greene.  
 Leucelene hirtella (A. Gray) Rydberg. RYDBE06.  
 Leucelene serotina (Greene) Rydberg. RYDBE06.

#### **Chamaechaenactis Rydberg, 1906**

##### **Chamaechaenactis scaposa (Eastwood) Rydberg**

RYDBE06; HARRI54.

Chaenactis scaposa Eastwood. Type: Mesa Co.: mesa across Gunnison River near Grand Junction, 17 May 1891, Eastwood. Type specimen from Colorado.

#### **Chlorocrepis Grisebach, 1853**

##### **Chlorocrepis albiflora (Hooker) W. A. Weber**

WEBER82.

Hieracium albiflorum Hooker. RYDBE06; HARRI54.

##### **Chlorocrepis fendleri (Schultz-Bipontinus) W. A. Weber**

WEBER82.

Hieracium fendleri Schultz-Bipontinus. RYDBE06; HARRI54.

##### **Chlorocrepis tristis (Willdenow ex Sprengel) Löve & Löve subsp. gracilis (Hooker) W. A. Weber**

WEBER82.

Hieracium gracile Hooker. RYDBE06; HARRI54.

Hieracium triste Willdenow. PORTE74, as the species.

#### **Chrysanthemum L., 1753**

##### **Chrysanthemum coccineum Willdenow**

WEBER85A. Alien. A garden escape, probably not naturalized.

##### **Chrysanthemum coronarium L.**

HARRI54. Alien. A garden escape; probably not naturalized.

#### **Chrysothamnus Nuttall, 1841 HALL23; ANDER86**

##### **Chrysothamnus depressus Nuttall**

RYDBE06; HARRI54.

Bigelovia depressa (Nuttall) A. Gray. PORTE74; RYDBE06.

##### **Chrysothamnus greenei (A. Gray) Greene subsp. filifolius (Rydberg) Hall & Clements**

HARRI54.

Chrysothamnus filifolius Rydberg. Type: Granite, 1896, Clements 390 (NY). Type specimen from Colorado.

##### **Chrysothamnus greenei (A. Gray) Greene subsp. greenei**

RYDBE06; HARRI54.

Bigelovia greenei A. Gray. Type: Huerfano Co.: Huerfano Plains, 1872, Greene. Type specimen from Colorado.

Chrysothamnus pumilus Nuttall var. acuminatus A. Nelson. HALL23. Type: Huerfano Co.: La Veta, 21 Aug. 1897, Crandall (RM). Type specimen from Colorado.

Chrysothamnus scoparius Rydberg. Type: Huerfano Co.: La Veta, 9 Oct. 1900, Vreeland 698 (NY). Type specimen from Colorado.

##### **Chrysothamnus linifolius Greene**

RYDBE06; ANDER64.

Chrysothamnus viscidiflorus (Hooker) Nuttall subsp. linifolius (Greene) Hall & Clements. HARRI54.

##### **Chrysothamnus nauseosus (Pallas ex Pursh) Britton subsp. bigelovii (A. Gray) Hall & Clements**

HARRI54.

Bigelovia bigelovii A. Gray. RYDBE06.

Chrysothamnus bigelovii (A. Gray) Greene. RYDBE06.

##### **Chrysothamnus nauseosus (Pallas ex Pursh) Britton subsp. consimilis (Greene) Hall & Clements**

Anderson annotations; San Luis Valley.

##### **Chrysothamnus nauseosus (Pallas ex Pursh) Britton subsp. graveolens (Nuttall) Piper**

HARRI54.

Bigelovia graveolens A. Gray. PORTE74.

Chrysothamnus formosus Greene. Payson in Bot. Gaz. 60:381.1925 (descr. ampl.). Type: Mesa Co.: Grand Junction, 27 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

*Chrysothamnus graveolens* (Nuttall) Greene. RYDBE06; HALL23.

*Chrysothamnus nivecaulis* A. Nelson. Type: Montrose Co.: Coventry, 2 Sept. 1912, Walker 541 (RM). Type specimen from Colorado.

*Chrysothamnus patens* Rydberg. Type: 1873, Wolf 452 (NY). Type specimen from Colorado.

*Chrysothamnus virens* Greene. Type: Fremont Co.: Cañon City, Greene (ND-G). Type specimen from Colorado.

***Chrysothamnus nauseosus* (Pallas ex Pursh) Britton subsp. *hololeucus* (A. Gray) Hall & Clements**

Alien. Jefferson Co.: Green Mountain trailhead, 20 Oct. 1992, [Yeatts 3400. Evidently brought in with road-building.

***Chrysothamnus nauseosus* (Pallas ex Pursh) Britton subsp. *leiospermus* (A. Gray) Hall & Clements**

Annotations by Anderson (Mesa Co., Moffat Co., Montezuma Co.).

***Chrysothamnus nauseosus* (Pallas ex Pursh) Britton subsp. *nauseosus***

HARRI54.

*Chrysothamnus collinus* Greene. RYDBE06; HALL23.

*Chrysothamnus frigidus* Greene. RYDBE06; HALL23.

*Chrysothamnus plattensis* Greene. RYDBE06; HALL23.

*Chrysothamnus nauseosus* (Pallas ex Pursh) Britton subsp. *pinifolius* (Greene) Hall & Clements

HARRI54. No specimens so annotated by Anderson.

*Chrysothamnus confinis* Greene. RYDBE06; HALL23.

*Chrysothamnus pinifolius* Greene. RYDBE06.

*Chrysothamnus nauseosus* (Pallas ex Pursh) Britton subsp. *speciosus* (Nuttall) Hall & Clements

HARRI54. No annotations by Anderson.

*Chrysothamnus pulcherrimus* A. Nelson. RYDBE06; HALL23.

***Chrysothamnus parryi* (A. Gray) Greene subsp. *affinis* (A. Nelson) L. C. Anderson**

Anderson annotations in COLO; Sida 3:46.1970, n. comb..

*Chrysothamnus affinis* A. Nelson. Type: Park Co.: Jefferson, 29 Aug. 1896, Cowen (RM). Type specimen from Colorado.

***Chrysothamnus parryi* (A. Gray) Greene subsp. *attenuatus* (Jones) Hall & Clements**

HARRI54.

*Chrysothamnus newberryi* Rydberg. RYDBE06; HALL23.

***Chrysothamnus parryi* (A. Gray) Greene subsp. *howardii* (Parry ex A. Gray) Hall & Clements**

HARRI54.

*Bigelovia howardii* Parry ex A. Gray. PORTE74.

*Chrysothamnus howardii* (Parry ex A. Gray) Greene. RYDBE06.

***Chrysothamnus parryi* (A. Gray) Greene subsp. *parryi***

RYDBE06; HARRI54.

*Bigelovia parryi* A. Gray. PORTE74.

*Chrysothamnus wyomingensis* A. Nelson. RYDBE06; HALL23.

*Linosyris parryi* A. Gray. Type: Hall & Harbour 293 (and Parry 425). Type specimen from Colorado.

***Chrysothamnus pulchellus* (A. Gray) Greene subsp. *baileyi* (Wooton & Standley) Hall & Clements**

RYDBE06, as the species; HARRI54.

*Bigelovia pulchella* A. Gray. RYDBE06.

***Chrysothamnus vaseyi* (A. Gray) Greene**

RYDBE06; HARRI54.

*Bigelovia vaseyi* A. Gray. Type: Grand Co.: Middle Park, 1868, Vasey. Type specimen from Colorado.

***Chrysothamnus viscidiflorus* (Hooker) Nuttall subsp. *axillaris* (Keck) L. C. Anderson**

ANDER64B.

***Chrysothamnus viscidiflorus* (Hooker) Nuttall subsp. *elegans* (Greene) Hall & Clements**

HARRI54.

*Chrysothamnus elegans* Greene. RYDBE06.

***Chrysothamnus viscidiflorus* (Hooker) Nuttall subsp. *lanceolatus* (Nuttall) Hall & Clements**

HARRI54.

*Chrysothamnus lanceolatus* Nuttall. RYDBE06.

***Chrysothamnus viscidiflorus* (Hooker) Nuttall subsp. *latifolius* (D. C. Eaton) Hall & Clements**

HALL23.

*Bigelovia douglasii* A. Gray var. *latifolia* A. Gray. PORTE74.

*Chrysothamnus latifolius* Rydberg. RYDBE06.

***Chrysothamnus viscidiflorus* (Hooker) Nuttall subsp. *puberulus* (D. C. Eaton) Hall & Clements**

HARRI54.

*Chrysothamnus puberulus* (D. C. Eaton) Greene. RYDBE06.

***Chrysothamnus viscidiflorus* (Hooker) Nuttall subsp. *pumilus* (Nuttall) Hall & Clements**

HARRI54.

***Chrysothamnus viscidiflorus* (Hooker) Nuttall subsp. *stenophyllus* (A. Gray) Hall & Clements**

HARRI54.

*Bigelovia douglasii* A. Gray var. *stenophylla* A. Gray. PORTE74.

***Chrysothamnus viscidiflorus* (Hooker) Nuttall subsp. *viscidiflorus***

HALL23.

*Bigelovia douglasii* A. Gray. PORTE74.

*Bigelovia douglasii* A. Gray var. *serrulata* A. Gray. PORTE74.

*Bigelovia douglasii* A. Gray var. *tortifolia* A. Gray. PORTE74.

*Chrysothamnus serrulatus* (Torrey) Rydberg. RYDBE06.

*Linosyris serrulata* Torrey. RYDBE06.

***Cichorium* L., 1753**

***Cichorium intybus* L.**

RYDBE06; HARRI54. Alien.

***Cirsium* P. Miller, 1754**

***Cirsium barnebyi* Welsh & Neese**

WEBER89C. Rio Blanco Co.

***Cirsium calcareum* (Jones) Wooton & Standley**

MOORE74.

*Carduus bipinnatus* (Eastwood) Heller. RYDBE06.

*Carduus pulchellus* Greene ex Rydberg. Type: Archuleta Co.: Piedra, 13 July 1899, Greene. (NY, !WAW) is the form with tomentose underside of leaves. Type specimen from Colorado.

*Carduus truncatus* Greene ex Rydberg. Montezuma Co.: Mancos, 8 July 1898, Baker, Earle & Tracy 401 (NY). Type specimen from Colorado.

*Cirsium bipinnatum* (Eastwood) Rydberg. HARRI54; MOORE74.

*Cirsium pulchellum* (Greene ex Rydberg) Wooton & Standley. HARRI54; MOORE74.

*Cnicus drummondii* A. Gray var. *bipinnatus* Eastwood. Type: Montezuma Co.: Johnston Canyon at Mancos R., Sept. 1892 Eastwood. Type specimen from Colorado.

***Cirsium canescens* Nuttall**

HARRI54; OWNBE52.

*Carduus canescens* Nuttall. RYDBE06.

*Carduus plattensis* Rydberg. RYDBE06.

*Cirsium plattense* (Rydberg) Fernald. HARRI54.

***Cirsium centaureae* (Rydberg) K. Schumann**

HARRI54.

*Carduus americanus* (A. Gray) Rydberg. RYDBE06.

*Carduus centaureae* Rydberg. Type: Larimer Co.: 19 Aug. 1895, Cowen (NY) !WAW. Type specimen from Colorado.

*Carduus laterifolius* Osterhout. Type: Larimer Co.: Thompson R. Canyon, 16 Aug. 1895, Osterhout 3090 (RM). Isotype (NY) !WAW. Type specimen from Colorado.

*Carduus modestus* Osterhout. Type: Larimer Co.: Thomson R below Estes Park, 23 Aug. 1912, Osterhout 4803 (RM). Isotype (NY) !WAW. Type specimen from Colorado.

*Cirsium americanum* (A. Gray) Daniels, non K. Schumann. HITCH55.

*Cnicus americanus* (A. Gray) A. Gray.

*Cnicus carlinoides* (Fischer ex Schrank) var. *americanus* A. Gray. Type: Rocky Mts., Hall & Harbour 342. Type specimen from Colorado.

***Cirsium chellyense* Moore & Frankton**

WEBER82A. Misidentification of *C. ownbeyi*.

***Cirsium eatonii* (A. Gray) B. L. Robinson**

HARRI54.

*Carduus araneosus* Osterhout, non Steudel. Type: Eagle Co.: Red Cliff, 26 June 1900, Osterhout 2169 (RM). Isotype (!NY) has arachnoid cilia and lateral spines on phyllaries. Type specimen from Colorado.

*Cirsium araneans* Rydberg. RYDBE22. Isotype (NY) seen; Moore annotated but not clear whether he recognizes it as a species. We are

tentatively putting this with *C. eatonii*. Type specimen from Colorado.

***Cirsium flodmanii* (Rydberg) Arthur**

WEBER72. Incorrectly synonymized under *C. canescens* by HARRI54.

*Carduus flodmanii* Rydberg. RYDBE06.

*Carduus oblanceolatus* Rydberg. Type: Lake Co.: Twin Lakes, 1896, Clements 385 (NY). Isotype (NY) annotated by G. Ownbey. Type specimen from Colorado.

*Cirsium flodmanii* (Rydberg) Arthur forma *oblanceolatum* (Rydberg) D. Löve & Bernard.

*Cirsium foliosum* (Hooker) De Candolle

PORTE74; MOORE67. A Canadian species.

***Cirsium hesperium* (Eastwood) Petrak**

WEBER85A.

*Carduus hesperius* (Eastwood) Heller. RYDBE06.

*Carduus hookerianus* (Nuttall) Heller var. *hesperius* (Eastwood) A. Nelson. HARRI54.

*Cnicus hesperius* Eastwood. Type: La Plata Co.: Mt. Hesperus, Bear Cr. Divide, Aug. 1892, Eastwood (CSA). The diagnostic "pubescence" of the anthers is mold. Type specimen from Colorado.

***Cirsium neomexicanum* A. Gray**

HARRI54.

*Carduus leucopsis* Greene. RYDBE06.

*Carduus neomexicanus* (A. Gray) Greene. RYDBE06.

*Cnicus neomexicanus* A. Gray. RYDBE06.

***Cirsium ochrocentrum* A. Gray**

PORTE74; HARRI54.

*Carduus ochrocentrus* (A. Gray) Greene. RYDBE06.

*Cnicus ochrocentrus* A. Gray. RYDBE06.

***Cirsium osterhoutii* (Rydberg) Petrak**

Status uncertain; type not examined.

*Carduus osterhoutii* Rydberg. Type; Eagle Co.: Red Cliff, 17 July 1902, Osterhout 2706 (NY, !WAW). Type specimen from Colorado.

***Cirsium ownbeyi* Welsh**

WEBER87B,89C. Moffat Co..

***Cirsium pallidum* Wootton & Standley**

HARRI54. Related and possibly synonymous with *C. parryi*.

***Cirsium parryi* (A. Gray) Petrak**

HARRI54; SCHAA90.

*Carduus parryi* (A. Gray) Greene. RYDBE06.

*Cnicus parryi* A. Gray. RYDBE06. Syntypes: "Rocky Mountains of Colorado, 8-9,000 ft., 1861 Parry 34; July 1873, Wolf & Rothrock 460 (GH). Type specimen from Colorado.

***Cirsium perplexans* (Rydberg) Petrak**

HARRI54.

*Carduus perplexans* Rydberg. Type: Montrose Co.: Cimarron, 29 June 1901, Baker 286 (NY). Type specimen from Colorado.

*Carduus vernalis* Osterhout. Type: Mesa Co.: DeBeque, 26.v.1910, Osterhout 4225 (RM). Type specimen from Colorado.

*Cirsium vernale* (Osterhout) Cockerell. WEBER87B.

*Cirsium rothrockii* (A. Gray) Petrak

Reports apply to *C. calcareum*.

***Cirsium scapanolepis* Petrak**

Ownbey annotations in COLO, but the status is doubtful; probably in the *C. eatonii* complex.

*Carduus spathulatus* Osterhout. Type: Jackson Co.: North Park, 24-27 Aug. 1900, Osterhout 2254 (RM). Isotype (NY, !WAW) has phyllaries floccose on margins, not fimbriate. Type specimen from Colorado.

*Cirsium spathulifolium* Rydberg.

***Cirsium scariosum* Nuttall**

CRONQ94. See Cronquist's discussion for explanation of treatment.

*Carduus acaulescens* (A. Gray) Rydberg. RYDBE06. MOORE67 considered this a separate species.

*Carduus coloradensis* Rydberg. Archuleta Co.: Pagosa Springs, 28 July 1899, Baker 644 (NY). Isotype (NY) is the tall form !WAW. Type specimen from Colorado.

*Carduus erosus* Rydberg. Type: La Plata Co.: Durango, 25 July 1896, Tweedy 517 (US). Isotype (NY) annot. by Moore as hybrid *C. coloradense* X *C. acaulescens*. Type specimen from Colorado.

*Carduus foliosus* Hooker. RYDBE06.

*Carduus oreophilus* Rydberg. Type: Clear Creek Co.: Georgetown, Aug. 1895, Rydberg (NY, !WAW). Type specimen from Colorado.

*Carduus scariosus* (Nuttall) Heller. RYDBE06; MOORE67.

*Cirsium acaule* Allioni var. *americanum* A. Gray. Type: [probably South Park], Hall & Harbour (GH). Type specimen from Colorado.

*Cirsium coloradense* (Rydberg) Cockerell. MOORE67. DORN89 synonymizes this with *C. tioganum* (Congdon) Petrak.

*Cirsium drummondii* Torrey & Gray. PORTE74; HARRI54; MOORE67.

*Cirsium drummondii* Torrey & Gray var. *acaulescens* (A. Gray) Macbride.

*Cirsium tioganum* (Congdon) Petrak. MOORE67. Alleged by MOORE67 to be here, but probably reports are misidentifications of *C. coloradense*. Dorn considers *C. coloradense* to be synonymous with this.

*Cnicus drummondii* Torrey & Gray var. *acaulescens* A. Gray. RYDBE06.

*Cnicus scariosus* (Nuttall) A. Gray. RYDBE06.

### ***Cirsium scopulorum* (Greene) Cockerell**

HARRI54.

*Carduus scopulorum* Greene. RYDBE06.

*Cirsium eriocephalum* A. Gray, non Wallroth. Lectotype: [probably Park Co.]: Georgia Pass, Hall & Harbour 341 (GH). Type specimen from Colorado.

*Cnicus eriocephalus* (A. Gray) A. Gray. RYDBE06.

### ***Cirsium tracyi* (Rydberg) Petrak**

WEBER87B.

*Carduus acutatus* Osterhout. Type: Delta Co.: N Fork Gunnison R. at Paonia, 23 July 1911, Osterhout 4612. Isotype (NY) annotated by G. Ownbey. Type specimen from Colorado.

*Carduus floccosus* Rydberg. Type: Eagle Co.: Wolcott, 11 July 1902, Osterhout 2652 (NY). !G. Ownbey. Type specimen from Colorado.

*Carduus griseus* Rydberg. Type: San Miguel Co.: Telluride, Aug. 1894, Tweedy 321 (US). Isotype (NY) consists of a few upper lvs and one capitulum; phyllaries have a few spines at base, not floccose; leaves not decurrent. No flowers visibl. Type specimen from Colorado.

*Carduus tracyi* Rydberg. Type: Montezuma Co.: Mancos, 24 June 1898, Baker, Earle & Tracy 90 (NY, !WAW). This is the small-headed "*C. undulatum*" of the western slope. Type specimen from Colorado.

### ***Cirsium tweedyi* (Rydberg) Petrak**

WEBER87B. Status uncertain; probably in the *eatonii* complex.

### ***Cirsium undulatum* (Nuttall) Sprengel**

HARRI54.

*Carduus megacephalus* Nuttall. RYDBE06.

*Carduus undulatus* Nuttall. RYDBE06.

*Cirsium megacephalum* (A. Gray) Cockerell in Daniels. HARRI54.

*Cnicus undulatus* (Nuttall) A. Gray. RYDBE06.

*Cnicus undulatus* (Nuttall) A. Gray var. *megacephalus* A. Gray. RYDBE06.

### ***Cirsium virginianum* Michaux**

PORTE74. A species of SE U.S. Report seems to apply to *C. flodmanii*.

### ***Cirsium vulgare* (Savi) Tenore**

TUTIN64. Alien.

*Cirsium lanceolatum* (L.) Scopoli, non J. Hill. HARRI54; TUTIN64.

## ***Conyza* Lessing, 1832**

### ***Conyza canadensis* (L.) Cronquist**

HARRI54. Alien.

*Erigeron canadense* L.. PORTE74; RYDBE06.

*Erigeron divaricatus* Michaux. PORTE74.

*Leptilon canadense* (L.) Britton. RYDBE06.

### ***Conyza coulteri* A. Gray**

PORTE74; HARRI54.

*Eschenbachia coulteri* (A. Gray) Rydberg. RYDBE06.

### ***Conyza schiedeana* (Lessing) Cronquist**

HARRI54. Alien.

## ***Coreopsis* L., 1753 SHERF55**

### ***Coreopsis lanceolata* L.**

RYDBE06; HARRI54. Alien.



**Coreopsis tinctoria Nuttall**

RYDBE06; HARRI54.

**Cosmos Cavanilles, 1791****Cosmos bipinnatus Cavanilles**

HARRI54. Alien. Cultivar, not established.

**Cosmos parviflorus (Jacquin) Humboldt, Bonpland, & Kunth**

HARRI54. Alien.

**Crepis L., 1753 BABCO38****Crepis capillaris (L.) Wallroth**

OKANE88. Alien. Larimer Co.

**Cyclachaena Fresenius ex De Candolle, 1838****Cyclachaena xanthifolia (Nuttall) Fresenius**

SCHIS59.

Iva xanthifolia Nuttall. RYDBE06; HARRI54.

**Dicoria Torrey & Gray, 1859****Dicoria brandegei A. Gray**

HARRI54. "sands of San Juan R. near Utah line, southwestern Colorado, 1875," Brandege 1170 (NY)!.

Dicoria paniculata Eastwood. Type came from "sandy flats along San Juan R., near junction of McElmo [and Recapture] Cr." (CAS).

**Dugaldia Cassini, 1828 BIERN74,94****Dugaldia hoopesii (A. Gray) Rydberg**

RYDBE06; BIERN74,94.

Helenium hoopesii A. Gray. HARRI54. Type: Hall &amp; Harbour 272 [Hoopes, acc. to A. Gray], S Park and W of Pikes Peak (GH). Type specimen from Colorado.

**Dyssodia Cavanilles, 1803****Dyssodia papposa (Ventenat) A. S. Hitchcock**

HARRI54.

Boebera papposa (Ventenat) Rydberg. RYDBE06.

Dyssodia chrysanthemoides Lagasca. PORTE74; RYDBE06.

**Echinacea Moench, 1794****Echinacea angustifolia De Candolle**

HARRI54.

Brauneria angustifolia (De Candolle) Heller. RYDBE06.

**Echinacea purpurea (L.) Moench**

Alien. Boulder Co.: Enchanted Mesa, 29 Aug. 1992, [Hogan 1983]. Introduced in a reseeding operation. Not definitely established.

**Echinops L., 1753****Echinops sphaerocephalus L.**

HARRI54. Alien. A single record of an escaped plant in Boulder. Not seen again.

**Enceliopsis A. Nelson, 1909****Enceliopsis nudicaulis (A. Gray) A. Nelson**

OKANE89. Moffat Co.: Dinosaur Nat. Mon., O'Kane 3035.

**Enceliopsis nutans (Eastwood) A. Nelson**

HARRI54. Endemic. Colo. and adj. Utah.

Encelia nutans Eastwood. Type: Mesa Co.: Orchard Mesa, Grand Junction, 17 May 1891, Eastwood. Type specimen from Colorado.

**Engelmannia A. Gray ex Nuttall, 1841****Engelmannia peristenia (Rafinesque) Goodman & Lawson**

GOODM95.

Engelmannia pinnatifida A. Gray ex Nuttall. HARRI54.

Silphium peristenium Rafinesque. TORRE27. Atlantic J. 1:146.1832. "[Silphium] anon. T[orrey]. 239. Type collected by James.

***Ericameria Nuttall, 1841***

## Erroneous Report

*Ericameria linearifolia* (De Candolle) Urbatsch & Wussow

Erroneous Report.

Haplopappus linearifolius De Candolle subsp. interior (Coville) Hall. HARRI54.

Stenotopsis linearifolia (De Candolle) Rydberg. WEBER66. Collected once, by Purpus, along Surface Creek, Grand Mesa. The locality is so far out of range and ecology that it is most likely to have been a case of mixed labels.

**Erigeron L., 1753 CRONQ47; NESOM89B***Erigeron argentatus* A. Gray

RYDBE06. CRONQ47. Misidentifications of *E. utahensis*.

*Wyomingia argentata* (A. Gray) A. Nelson. CRONQ47.

*Erigeron armerifolius* Turczaninov ex De Candolle

PORTE74. Report applies to *Trimorpha elongata*, of which this may be a synonym.

**Erigeron bellidiastrum Nuttall**

RYDBE06; HARRI54.

*Erigeron bellidiastrum* Nuttall var. *robustus* Cronquist. HARRI54.

**Erigeron caespitosus Nuttall**

RYDBE06; HARRI54.

*Erigeron subcanescens* Rydberg. RYDBE06.

**Erigeron canus A. Gray**

RYDBE06; HARRI54.

*Wyomingia cana* (A. Gray) A. Nelson. CRONQ47.

**Erigeron colo-mexicanus A. Nelson**

Nesom in herb.

*Erigeron cinereus* A. Gray, non Hooker & Arnott. RYDBE06.

*Erigeron divergens* Torrey & Gray var. *cinereus* (A. Gray) A. Gray. HARRI54. Nesom in herb.

*Erigeron nudiflorus* Buckley. RYDBE06.

**Erigeron compactus Blake**

CRONQ94.

*Erigeron consimilis* Cronquist. WEBER73; CRONQ94.

*Erigeron pulvinatus* Rydberg. CRONQ94. Rydberg (1917) non Weddell (1857).

**Erigeron compositus Pursh**

RYDBE06; HARRI54.

*Erigeron compositus* Pursh var. *discoideus* A. Gray. HARRI54. Syntypes: Colorado, 1861, Parry 5, 33 (GH). Type specimen from Colorado.

*Erigeron compositus* Pursh var. *glabratus* Macoun. HARRI54.

*Erigeron compositus* Pursh var. *prasinus* Macbride & Payson. Type: Jackson Co.: Spicer, 10 July 1903, Goodding 1509 (RM). Type specimen from Colorado.

*Erigeron multifidus* Rydberg. RYDBE06.

*Erigeron trifidus* Hooker. PORTE74; RYDBE06.

*Erigeron trifidus* Hooker var. *prasinus* Macbride & Payson. Type: Jackson Co.: "The Bluffs," Spicer, 10 July 1903, Goodding 1509. Type specimen from Colorado.

**Erigeron concinnus (Hooker & Arnott) Torrey & Gray**

RYDBE06; NESOM83.

*Distasis concinnus* Hooker & Arnott.

*Erigeron aphanactis* (A. Gray) Greene. RYDBE06; HARRI54; WEBER87B; NESOM83. A rayless variant found at Grand Junction.

*Erigeron brandegei* A. Gray. HARRI54. Type: Adobe plains, S.W. Colorado, 1875, Brandegee (GH). Type specimen from Colorado.

*Erigeron concinnus* (Hooker & Arnott) Torrey & Gray var. *aphanactis* A. Gray. RYDBE06.

*Erigeron concinnus* (Hooker & Arnott) Torrey & Gray var. *condensatus* D. C. Eaton. NESOM83. A monocephalous, scapose form usually less than 10 cm tall, occurring sporadically in the westernmost counties. We consider it a trivial variant.

*Erigeron pumilus* Nuttall var. *concinnoideus* Cronquist. HARRI54.

*Erigeron setulosus* Greene. NESOM83. Type from New Mexico, San Juan Co.: Aztec, Baker 664 (ND-G).

**Erigeron coulteri T. C. Porter**

HARRI54. Type: Park Co.: Weston Pass, 10,000 ft., 19 July, Coulter. Type specimen from Colorado.

**Erigeron divergens Torrey & Gray**

RYDBE06; HARRI54.

*Erigeron wootonii* Rydberg. RYDBE06.

***Erigeron eatonii* A. Gray var. *eatonii***

HARRI54; STROT88.

*Erigeron microlonchus* Greene. CRONQ47. Type: Larimer Co.: Dale Cr. ("Wyo."), June 1896, Greene (ND-G). Type specimen from Colorado.

***Erigeron elatior* (A. Gray) Greene**

HARRI54. The spelling *elatior* is incorrect and not the spelling of the basionym. But there is an *E. elatus* with which *elatius* might be confused, so perhaps the incorrect spelling is worth keeping.

*Erigeron grandiflorus* Hooker var. *elatius* A. Gray. PORTE74; RYDBE06. Type: Clear Creek Co.: Headwaters of Clear Creek, 1861, Parry (GH). Type specimen from Colorado.

***Erigeron engelmannii* A. Nelson**

RYDBE06; HARRI54.

*Erigeron simulans* Greene. CRONQ47. Type: Montrose Co.: Cimarron, 6 June 1901, Baker 40 (ND-G). Type specimen from Colorado.

***Erigeron eximius* Greene**

WEBER73. Type: Marshall Pass, Greene (ND-G). Type specimen from Colorado.

*Erigeron macranthus* Nuttall subsp. *mirus* A. Nelson. Type: Boulder Co.: Shaded mountain slope, 1904, Andrews (RM). Assignment tentative, cf. description. Type specimen from Colorado.

*Erigeron superbus* Greene ex Rydberg. HARRI54. Type: Mineral Co.: Pagosa Peak, 15 Aug. 1899 Baker 679 (NY).

***Erigeron flagellaris* A. Gray**

HARRI54.

*Erigeron peasei* Rydberg. CRONQ47. Type: Hinsdale Co.: Lake City, 10 June 1878, Pease s.n. (NY). Type specimen from Colorado.

*Erigeron stolonifer* Greene. Type: no specimens cited. Greene felt that this was distinct from *E. flagellaris* (Fendler's type) and described it as having flagelliform but not stoloniferous branches. Type specimen from Colorado.

***Erigeron flagellaris* A. Gray forma *breviligulatus* W. A. Weber**

WEBER79. Endemic. Type specimen from Colorado.

***Erigeron formosissimus* Greene var. *formosissimus***

HARRI54.

*Erigeron glabellus* var. *mollis* Gray. Type: Hall & Harbour 239. Type specimen from Colorado.

***Erigeron formosissimus* Greene var. *viscidus* (Rydberg) Cronquist**

HARRI54.

*Erigeron iodanthus* Greene. CRONQ47. Type: "Some mountain in S Colo.", 1903, Knowlton. Type specimen from Colorado.

*Erigeron rubicundus* Greene. CRONQ47. Type: San Juan Co.: Silverton, June 1899, Eastwood. Type specimen from Colorado.

*Erigeron smithii* Rydberg. CRONQ47. Type: Gunnisobn Co.: Parlin, 16 Aug. 1901, Smith 118 (NY). Type specimen from Colorado.

*Erigeron viscidus* Rydberg. Type: La Plata Co.: Grayback Mining Camps and Placer Gulch, 25-27 June 1900, Rydberg & Vreeland 5416 (NY). Type specimen from Colorado.

***Erigeron glabellus* Nuttall**

PORTE74; RYDBE06; HARRI54.

*Erigeron asper* Nuttall. LIVIN52. Name used by Livingston as species.

*Erigeron consobrinus* Greene. RYDBE06.

*Erigeron earlei* Rydberg. Type: Conejos Co.: Antonito, 19 July 1898, Earle s.n. (NY). Type specimen from Colorado.

*Erigeron glabellus* Nuttall subsp. *pubescens* (Hooker) Cronquist. HARRI54.

*Erigeron leptophyllus* Greene. Type: Clear Creek Co.: Mt. Evans, 1875, Greene (ND-G). Type specimen from Colorado.

***Erigeron grandiflorus* Hooker**

PORTE74; WEBER79A.

***Erigeron humilis* R. Graham**

WEBER55.

***Erigeron katchinensis* Welsh & Moore**

WEBER79A.

***Erigeron lanatus* Hooker**

WEBER55.

***Erigeron leiomerus* A. Gray**

HARRI54. Syntypes: 1872, Parry 3, Hall & Harbour 242 (GH). Type specimen from Colorado.

*Erigeron spathulifolius* Rydberg. RYDBE06.

***Erigeron melanocephalus* A. Nelson**

RYDBE06; HARRI54.

**Erigeron nematophyllus Rydberg**

HARRI54. Type: Larimer Co.: Dale Cr., 27 May 1897, Osterhout s.n. (NY). Type specimen from Colorado.

*Erigeron ochroleucus Nuttall*

WILKE78. Specimen (CS) is *E. engelmannii* (!WAW).

**Erigeron peregrinus (Banks ex Pursh) Greene subsp. callianthemus (Greene) Cronquist**

HARRI54. Probably this is more closely related to *Aster alpinus* than to any *Erigeron*.

*Aster glacialis* Nuttall. PORTE74.

*Aster salsuginosus* Richardson. PORTE74.

*Erigeron callianthemus* Greene. Type: none cited, but probably those from Little Ouray Mt., below Marshall Pass, 1896, Greene (ND-G). Type specimen from Colorado.

*Erigeron peregrinus* (Banks ex Pursh) Greene forma *dentatus* Cronquist. Type: Jackson Co.: mts. W of North Park, 2 Sept. 1899, Osterhout (NY). Type specimen from Colorado.

*Erigeron salsuginosus* (Richardson) A. Gray. RYDBE06.

*Erigeron salsuginosus* (Richardson) A. Gray var. *glacialis* (Nuttall) A. Gray. RYDBE06.

**Erigeron philadelphicus L.**

RYDBE06; HARRI54.

*Erigeron fraternus* Greene. Type: Gunnison Co.: Gunnison R., 1 Sept. 1896, Greene (ND-G). Name overlooked by Cronquist. Type specimen from Colorado.

*Tessenia philadelphica* (L.) Lunell. CRONQ47. Possibly generic segregation of this group is warranted.

**Erigeron pinnatisectus (A. Gray) A. Nelson**

HARRI54.

*Erigeron compositus* Pursh var. *pinnatisectus* A. Gray. RYDBE06. Syntype: 1873, Wolf & Rothrock 496 (GH). Type specimen from Colorado.

**Erigeron pulcherrimus Heller**

HARRI54.

**Erigeron pumilus Nuttall var. pumilus**

RYDBE06; HARRI54.

**Erigeron simplex Greene**

HARRI54.

*Erigeron leucotrichus* Rydberg. RYDBE06.

**Erigeron speciosus (Lindley) De Candolle var. macranthus (Nuttall) Cronquist**

HARRI54.

*Erigeron macranthus* Nuttall. PORTE74; RYDBE06.

**Erigeron speciosus (Lindley) De Candolle var. speciosus**

RYDBE06; HARRI54.

*Erigeron salicinus* Rydberg. CRONQ47. Type: Archuleta Co.: Pagosa Springs, 31 July 1899, Baker 670 (NY). Type specimen from Colorado.

**Erigeron subtrinervis Rydberg**

RYDBE06; HARRI54.

*Erigeron conspicuus* Rydberg. RYDBE06.

*Erigeron glabellus* Nuttall var. *mollis* A. Gray. Type: Hall & Harbour 239. Type specimen from Colorado.

*Erigeron incanescens* Rydberg. RYDBE06.

**Erigeron uintahensis Cronquist**

WEBER66.

*Erigeron uniflorus* L.

PORTE74; RYDBE06. A Eurasian species. Ours is *E. simplex*.

**Erigeron ursinus D. C. Eaton**

RYDBE06; HARRI54.

**Erigeron utahensis A. Gray var. sparsifolius (Eastwood) Cronquist**

CRONQ47; HARRI54.

**Erigeron utahensis A. Gray var. tetrapleuris (A. Gray) Cronquist**

CRONQ47; HARRI54.

**Erigeron vagus Payson**

HARRI54.

**Erigeron vetensis Rydberg**

HARRI54. Type: Huerfano Co.: La Veta Pass, 20 June 1900, Rydberg & Vreeland 5427 (NY). Type specimen from Colorado.

*Erigeron porteri* S. F. Blake. CRONQ47.

**Erigeron vreelandii Greene**

Type: Huerfano Co.: Wahatoya Cr., 7 July 1900, Rydberg & Vreeland 5414 (NY). Nesom (corresp.) says this is an earlier name for *E. platyphyllus* Greene. Type specimen from Colorado.

**Erigeron wilkenii O'Kane**

OKANE90. Moffat Co.: Dinosaur Nat. Mon., Pool Canyon, 1 June 1987, O'Kane 3014 (COLO). CRONQ94 considers this synonymous with *E. nematophyllus*. Type specimen from Colorado.

**Eucephalus Nuttall, 1841 NESOM94****Eucephalus elegans Nuttall**

NESOM94.

*Aster perelegans* Nelson & Macbride. CRONQ94; NESOM94. Nom. nov. for *Aster elegans* (Nuttall) Torey & Gray, not Willdenow 1803.

*Eucephalus perelegans* (Nelson & Macbride) W. A. Weber. WEBER66; CRONQ94; NESOM94.

**Eucephalus engelmianii (D. C. Eaton) Greene**

RYDBE06; WEBER78B.

*Aster elegans* (Nuttall) Torrey & Gray var. *engelmianii* D. C. Eaton. PORTE74.

*Aster engelmianii* (D. C. Eaton) A. Gray. HARRI54. as *engelmianii*.

**Eucephalus glaucus Nuttall**

RYDBE06; WEBER87B; NESOM94.

*Aster glaucodes* S. F. Blake. HARRI54. Nom. nov. for *A. glaucus* (Nuttall) Torrey & Gray, non Nees.

*Aster glaucodes* S. F. Blake var. *formosus* (Greene) Kittell. HARRI54; NESOM94.

*Aster glaucus* (Nuttall) Torrey & Gray. PORTE74; RYDBE06. non *A. glaucus* Nees 1818.

*Eucephalus formosus* Greene. Type: Mineral Co.: Pagosa Peak, 23 Aug. 1899, Baker (ND-G). Type specimen from Colorado.

*Eurybia glauca* (Nuttall) Nesom. NESOM96.

**Eupatorium L., 1753 KING87****Eupatorium maculatum L. subsp. bruneri (A. Gray) G. W. Douglas**

HARRI54. E. E. Lamont annotations; the subspecies not found in Gray Herb. Index! This is the Rocky Mountain subspecies.

*Eupatoriadelphus maculatus* (L.) King & Robinson. KING70C.

*Eupatorium bruneri* A. Gray. HARRI54. Type: Larimer Co.: Fort Collins, 21 Au. 1881, L. Bruner (GH).

*Eupatorium maculatum* L. var. *bruneri* (A. Gray) Breitung.

***Eupatorium purpureum* L.**

PORTE74. Report applies to *E. maculatum*.

**Euthamia Nuttall, 1818****Euthamia graminifolia (L.) Nuttall**

Taylor in herb. 1975.

*Solidago graminifolia* (L.) Salisbury. PORTE74; HARRI54.

**Euthamia gymnospermoides Greene**

C. Taylor in herb. 1975.

*Euthamia camporum* Greene. Type: Logan Co.: Platte R. at Sterling, Sept. 1896, Greene (ND-G). C. Taylor (corresp.) believes this to be extinct at the type locality. Type specimen from Colorado.

**Euthamia occidentalis Nuttall**

RYDBE06. C. Taylor in herb. 1975.

*Solidago occidentalis* (Nuttall) Torrey & Gray. PORTE74; RYDBE06; HARRI54.

**Evax Gaertner, 1791****Evax prolifera Nuttall ex De Candolle**

RYDBE06; HARRI54.

*Diaperia prolifera* (Nuttall ex De Candolle) Nuttall. PORTE74.

*Filago prolifera* (Nuttall ex De Candolle) Britton. RYDBE06.

**Flaveria Jussieu, 1789*****Flaveria angustifolia* (Cavanilles) Persoon**

RYDBE06. Misinterpretation of *F. campestris*.

**Flaveria campestris J. R. Johnston**

HARRI54. Syntype: Pueblo Co.: Pueblo. 1882, Woodward s.n. (GH). Type specimen from Colorado.

**Gaillardia Fougereux, 1786 BIDDU44****Gaillardia aristata Pursh**

RYDBE06; HARRI54.

**Gaillardia pinnatifida Torrey**

RYDBE06; HARRI54.

**Gaillardia pulchella Fougereux**

HARRI54.

**Gaillardia spathulata A. Gray**

WEBER85A.

**Galinsoga Ruiz & Pavon, 1794****Galinsoga parviflora Cavanilles**

HARRI54. Alien.

**Galinsoga quadriradiata Ruiz & Pavon**

CANNE77. Alien.

Galinsoga ciliata (Rafinesque) S. F. Blake. HARRI54; CANNE77.

**Gnaphalium L., 1753 JEFFR79****Gnaphalium palustre Nuttall**

RYDBE06; HARRI54.

Filaginella palustris (Nuttall) Holub. HOLUB76.

**Gnaphalium uliginosum L.**

RYDBE06; HARRI54.

Filaginella uliginosa (L.) Opiz.

Gnaphalium angustifolium A. Nelson. RYDBE06.

Gnaphalium exilifolium A. Nelson. HARRI54.

Gnaphalium strictum A. Gray. PORTE74; RYDBE06.

**Grindelia Willdenow, 1807****Grindelia acutifolia Steyermark**

HARRI54; STEYE34. Wetter in herb. (specimens from New Mexico only), 1984.

**Grindelia aphanactis Rydberg**

HARRI54. Type: La Plata Co.: Durango, 21 July 1898, Baker, Earle & Tracy 526 (NY). Type specimen from Colorado.

**Grindelia arizonica A. Gray var. stenophylla Steyermark**

HARRI54; STEYE34.

**Grindelia decumbens Greene var. decumbens**

Type: Montrose Co.: Cimarron, 30 Aug. 1896, Greene (ND-G). Wetter in herb. 1984 allows only var subincisa in Colorado, and that on the eastern slope. What does he do with the species proper?. Type specimen from Colorado.

**Grindelia decumbens Greene var. subincisa (Greene) Steyermark**

HARRI54; STEYE34.

**Grindelia fastigiata Greene**

HARRI54. Type: Mesa Co.: Grand Junction, 27 Aug. 1996, Greene (ND-G). Type specimen from Colorado.

**Grindelia inornata Greene**

HARRI54. Type: Fremont Co.: Cañon City, Greene (ND-G). Type specimen from Colorado.

Grindelia inornata Greene var. angusta Steyermark. HARRI54; STEYE34.

**Grindelia lanceolata Nuttall**

CORRE70. Restricted to Texas.

Grindelia texana Scheele. RYDBE06. "Lower Boulder Canyon." Misidentification of *G. squarrosa*.

**Grindelia revoluta Steyermark**

HARRI54; STEYE34.

**Grindelia squarrosa (Pursh) Dunal var. nuda (Wood) A. Gray**

HARRI54.

**Grindelia squarrosa (Pursh) Dunal var. quasiperennis Lunell**

M. Wetter in herb.

*Grindelia perennis* A. Nelson. RYDBE06; HARRI54.

**Grindelia squarrosa (Pursh) Dunal var. serrulata (Rydberg) Steyermark**

HARRI54; STEYE34. M. Wetter in herb., 1984. The common Colorado race.

*Grindelia serrulata* Rydberg. Type: Larimer Co.: Fort Collins, 10 Aug. 1891, Cowen s.n. (NY). Type specimen from Colorado.

***Grindelia squarrosa (Pursh) Dunal var. squarrosa***

RYDBE06; HARRI54. M. Wetter, in herb. 1984, does not allow for COLO.

**Grindelia subalpina Greene**

RYDBE06; HARRI54; STEYE34.

*Grindelia erecta* A. Nelson. RYDBE06.

*Grindelia subalpina* Greene var. *erecta* (A. Nelson) Steyermark. HARRI54; STEYE34.

**Grossheimia Sosnowsky & Takhtajan, 1945 GROSS49****Grossheimia macrocephala (Mussin-Puschkin ex Willdenow) Sosnowsky & Takhtajan**

GROSS49. Alien.

*Centaurea macrocephala* Mussin-Puschkin ex Willdenow.

**Gutierrezia Lagasca, 1816 LANE85****Gutierrezia microcephala (De Candolle) A. Gray**

LANE85.

*Gutierrezia glomerella* Greene. RYDBE06.

*Gutierrezia lucida* (Greene) Greene. HARRI54.

*Gutierrezia sarothrae* (Pursh) Britton & Rusby var. *microcephala* (De Candolle) L. Benson. HARRI54.

*Xanthocephalum lucidum* Greene. LANE85.

*Xanthocephalum microcephalum* (De Candolle) Shinnars. HARRI54.

**Gutierrezia sarothrae (Pursh) Britton & Rusby**

LANE85.

*Gutierrezia divaricata* (Nuttall) Torrey & Gray. RYDBE06.

*Gutierrezia diversifolia* Greene. RYDBE06.

*Gutierrezia euthamiae* (Nuttall) Torrey & Gray. PORTE74; RYDBE06.

*Gutierrezia fasciculata* Greene. Type: Mesa Co.: Grand Junction, 26 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

*Gutierrezia filifolia* Greene. RYDBE06.

*Gutierrezia juncea* Greene. RYDBE06.

*Gutierrezia lepidota* Greene. Type: Mesa Co.: Grand Junction, 27 Aug. 1899, Greene (ND-G). Type specimen from Colorado.

*Gutierrezia linearis* Rydberg. RYDBE06.

*Gutierrezia longifolia* Greene. RYDBE06.

*Gutierrezia scoparia* Rydberg. Type: El Paso Co.: Manitou, 7 Sept. 1901, Clements & Clements 16 (NY). Type specimen from Colorado.

*Xanthocephalum sarothrae* (Pursh) Shinnars. CORRE70.

***Haploesthes A. Gray, 1849***

Erroneous Report

***Haploesthes greggii A. Gray***

RYDBE06; HARRI54; WEBER66. No basis for the report.

**Helenium L., 1753****Helenium autumnale L. var. montanum (Nuttall) Fernald**

HARRI54.

*Helenium montanum* Nuttall. RYDBE06.

**Helenium microcephalum DeCandolle**

Las Animas Co.: Mesa de Maya, Sept., 1994, D. Clark 554.

**Helianthella Torrey & Gray, 1842 WEBER52C****Helianthella microcephala (A. Gray) A. Gray**

RYDBE06; HARRI54; WEBER52C.

*Helianthella scabra* Payson. WEBER52C. Type: Montrose Co.: Naturita, 11 Aug. 1914, Payson 591 (RM). Type specimen from Colorado.

**Helianthella parryi A. Gray**

HARRI54; WEBER52C. Type: Middle [South] Park, near foot of Pikes Peak, 1863, Parry. Type specimen from Colorado.

**Helianthella quinquenervis (Hooker) A. Gray**

HARRI54; WEBER52C.

**Helianthella uniflora (Nuttall) Torrey & Gray**

HARRI54; WEBER52C.

**Helianthus L., 1753 HEISE69***Helianthus altissimus L.*

TORRE27. Misidentification of *H. petiolaris* fide GOODM95.

**Helianthus annuus L.**

HARRI54.

*Helianthus aridus* Rydberg. RYDBE06.

*Helianthus lenticularis* Douglas. RYDBE06.

**Helianthus ciliaris De Candolle**

HARRI54. Alien. Alamosa Co.: San Luis Valley.

*Helianthus giganteus L.*

PORTE74; RYDBE06. Misidentifications of *H. nuttallii*.

*Helianthus grosseserratus Martens*

RYDBE06; HEISE69. Misidentifications of *H. nuttallii*.

**Helianthus maximiliani Schrader**

RYDBE06; HARRI54.

**Helianthus nuttallii Torrey & Gray**

HARRI54.

*Helianthus coloradensis* Cockerell. Type: Boulder Co.: E of Boulder, Cockerell 1 (US). Type specimen from Colorado.

*Helianthus coloradensis* Cockerell var. *andrewsii* Cockerell. Type: Boulder Co.: Boulder, Cockerell 2 (US). Type specimen from Colorado.

*Helianthus fascicularis* Greene. Type: Montrose Co.: Cimarron, 3 Aug. 1896, Greene (first coll. cited) (ND-G). Type specimen from Colorado.

**Helianthus petiolaris Nuttall**

RYDBE06; HARRI54.

**Helianthus pumilus Nuttall**

RYDBE06; HARRI54.

**Helianthus rigidus (Cassini) Desfontaines subsp. subrhomboideus (Rydberg) Heiser**

HARRI54; HEISE69.

*Helianthus subrhomboideus* Rydberg. RYDBE06; HEISE69.

*Helianthus salicifolius A. Dietrich*

HARRI54; HEISE69. "Clear Creek, Parry in 1861," a case of misplaced labels, fide HEISE69. The specimen in herb. Parry (ISU) evidently was collected, with [Boltonia] at the mouth of the Kansas River in Kansas.

*Helianthus orgyalis* De Candolle. PORTE74; RYDBE06; HEISE69. Report by A. Gray in 1884 unsubstantiated fide HEISE69.

**Helianthus tuberosus L.**

HARRI54. Alien.

**Heliomeris Nuttall, 1848****Heliomeris multiflora Nuttall**

HEISE69.

*Gymnolomia multiflora* (Nuttall) Benth & Hooker. RYDBE06.

*Heliomeris multiflora* Nuttall var. *latifolia* T. C. Porter. Type: El Paso Co.: foothills near Colorado Springs, Porter. Type specimen from Colorado.

*Viguiera multiflora* (Nuttall) S. F. Blake. HARRI54.

**Heliopsis Persoon, 1807****Heliopsis helianthoides (L.) Sweet var. scabra (Dunal) Fernald**

*Heliopsis laevis* Pursh. PORTE74.

*Heliopsis scabra* Dunal. RYDBE06; HARRI54.



**Herrickia Wooton & Standley, 1913 NESOM94****Herrickia horrida Wooton & Standley**

WEBER79A; NESOM94.

*Aster horridus* (Wooton & Standley) S. F. Blake. NESOM94.

*Eurybia horrida* (Wooton & Standley) Nesom. NESOM94.

**Heterosperma Cavanilles, 1795****Heterospermum pinnatum Cavanilles**

Las Animas Co.: Mesa de Maya, Sept., 1994, D. Clark 549).

**Heterotheca Cassini, 1817 SEMPL96; NESOM97***Heterotheca canescens* (De Candolle) Shinnery

WEBER73; SEMPL96. Not in Colorado (Kansas, Mo., Okla., N.Mex., Texas).

**Heterotheca fulcrata (Greene) Shinnery var. amplifolia (Rydberg) Semple**

SEMPLE96.

*Chrysopsis amplifolia* Rydberg. SEMPL96. Type: Boulder Co.: Longmont, July, 1902, Tweedy 4898 (NY). Type specimen from Colorado.

*Chrysopsis caudata* Rydberg. SEMPL96. Type: El Paso Co.: Ruxton Dell, 2 Aug. 1901, Clements 143 (NY). Type specimen from Colorado.

**Heterotheca fulcrata (Greene) Shinnery var. fulcrata**

SEMPLE87,96. Type from New Mexico.

*Chrysopsis elata* Osterhout. SEMPL87,96. Type: Eagle Co.: Red Cliff, 16 Aug. 1906, Osterhout 3335 [3359] (RM). Type specimen from Colorado.

*Chrysopsis fulcrata* Greene var. *fulcrata*. HARRI54; SEMPL96. Type from New Mexico.

*Chrysopsis resinolens* A. Nelson. RYDBE06; SEMPL96.

*Chrysopsis resinolens* A. Nelson var. *ciliata* A. Nelson. RYDBE06; SEMPL96. Given by Rydberg as var. *obtusata*.

**Heterotheca latifolia Buckley**

SEMPLE96. Baca Co.: Cimarron River, Weber, Harms 1963. This belongs in Sect. *Heterotheca*, fide SEMPL96.

**Heterotheca pumila (Greene) Semple**

SEMPLE87,96.

*Chrysopsis alpicola* Rydberg. SEMPL87,96. Lectotype: Clark's Peak, 11,700 ft., 1 Aug. 1896, Baker s.n. (NY). Type specimen from Colorado.

*Chrysopsis alpicola* Rydberg var. *glomerata* A. Nelson. SEMPL87,96. Type: Larimer Co.: Estes Park, Aug. 1904, Cooper 174 (RM). Type specimen from Colorado.

*Chrysopsis cooperi* A. Nelson. SEMPL87,96. Type: Boulder Co.: Long's Peak, 11 Aug. 1904, Cooper 50 (RM). Type specimen from Colorado.

*Chrysopsis pumila* Greene. SEMPL87,96. Type: high mountains toward headwaters of Bear Cr., 1889, Greene (NDG-053930). Type specimen from Colorado.

**Heterotheca stenophylla (A. Gray) Shinnery var. angustifolia (Rydberg) Semple**

SEMPLE96. Kit Carson, Lincoln, Phillips, Yuma.

*Chrysopsis angustifolia* Rydberg. SEMPL96.

**Heterotheca stenophylla (A. Gray) Shinnery var. stenophylla**

SEMPLE96. Yuma Co.: Wray, Osterhout 4033, Schantz s.n..

*Chrysopsis hispida* (Hooker) De Candolle var. *stenophylla* A. Gray. SEMPL96.

**Heterotheca villosa (Pursh) Nuttall var. minor (Hooker) Semple**

SEMPLE96.

*Chrysopsis arida* A. Nelson in Coulter & Nelson. RYDBE06; SEMPL96. Type from Wyoming.

*Chrysopsis asprella* Greene. SEMPL90,96. Type: Montrose Co.: Black Canyon, 8 Aug. 1901, Baker 379 (ND-G). Type specimen from Colorado.

*Chrysopsis bakeri* Greene. SEMPL87,90,96. Lectotype: Archuleta Co.: Pagosa Springs, 23 Aug. 1899, Baker 649 (ND-G). Type specimen from Colorado.

*Chrysopsis compacta* Greene. SEMPL90,96. Type: Gunnison Co.: Jack's Cabin, 26 July 1901, Baker 608 (ND-G). Type specimen from Colorado.

*Chrysopsis floribunda* Greene. SEMPL90,96. Type: Montrose Co.: Gunnison R. near Cimarron, 27 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

*Chrysopsis hirsutissima* Greene. SEMPL90,96. Type: Archuleta Co.: Dry rocky declivities leading to the mesas, Arboles, 5 June 1899, Baker (ND-G). A well-marked variety with silvery-appressed foliage pubescence and hirsute stems. Type specimen from Colorado.

*Chrysopsis hispida* (Hooker) De Candolle. RYDBE06; HARRI54; HARMS74; SEMPL90,96.

***Heterotheca villosa* (Pursh) Shinnery var. *foliosa* (Nuttall) Harms**

SEMP96.

*Chrysopsis foliosa* Nuttall. SEMPL96.

*Chrysopsis imbricata* A. Nelson. SEMPL96. Type: El Paso Co.: Pike's Peak, 1 Sept. 1901, Nelson (RM). Type specimen from Colorado.

***Heterotheca villosa* (Pursh) Shinnery var. *hispida* (Hooker) V. Harms**

HARMS74; SEMPL90,96.

*Chrysopsis arida* A. Nelson in Coulter & Nelson. RYDBE06; SEMPL96. Type from Wyoming.

*Chrysopsis asprella* Greene. SEMPL90,96. Type: Montrose Co.: Black Canyon, 8 Aug. 1901, Baker 379 (ND-G). Type specimen from Colorado.

*Chrysopsis bakeri* Greene. SEMPL87,90,96. Lectotype: Archuleta Co.: Pagosa Springs, 23 Aug. 1899, Baker 649 (ND-G). Type specimen from Colorado.

*Chrysopsis compacta* Greene. SEMPL90,96. Type: Gunnison Co.: Jack's Cabin, 26 July 1901, Baker 608 (ND-G). Type specimen from Colorado.

*Chrysopsis floribunda* Greene. SEMPL90,96. Type: Montrose Co.: Gunnison R. near Cimarron, 27 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

*Chrysopsis hirsutissima* Greene. SEMPL90,96. Type: Archuleta Co.: Dry rocky declivities leading to the mesas, Arboles, 5 June 1899, Baker (ND-G). A well-marked variety with silvery-appressed foliage pubescence and hirsute stems. Type specimen from Colorado.

*Chrysopsis hispida* (Hooker) De Candolle. RYDBE06; HARRI54; HARMS74; SEMPL90,96.

***Heterotheca villosa* (Pursh) Shinnery var. *nana* (A. Gray) Semple**

SEMP96.

*Chrysopsis canescens* (DeCandolle) Torrey & Gray var. *nana* A. Gray. SEMPL96.

*Chrysopsis horrida* Rydberg. SEMPL90,96. Type: Weld Co.: New Windsor, 8 Aug. 1900, Osterhout 2326 (NY). Type specimen from Colorado.

*Heterotheca horrida* (Rydberg) V. Harms. HARMS68; SEMPL90,96.

***Heterotheca villosa* (Pursh) Shinnery var. *pedunculata* (Greene) V. Harms ex Semple**

SEMP87,96. Short appressed cauline hairs and elongated peduncles with few small heads.

*Chrysopsis pedunculata* Greene. SEMPL87; SEMPL90,96. Type: Archuleta Co.: Pagosa Springs, 20 July 1899, Baker (ND-G). Type specimen from Colorado.

***Heterotheca villosa* (Pursh) Shinnery var. *villosa***

SEMP90,96.

*Amellus villosus* Pursh. SEMPL90,96.

*Chrysopsis villosa* (Pursh) Nuttall ex De Candolle. HARRI54; SEMPL96.

*Diplopappus villosus* (Pursh) Hooker. SEMPL96.

*Inula villosa* (Pursh) Nuttall. SEMPL96.

***Heterotheca viscida* (A. Gray) V. Harms**

HARRI54; SEMPL96. Not in Colorado (southern N.M. & Ariz., W. Tex.).

*Chrysopsis villosa* (Pursh) Nuttall var. *viscida* A. Gray. SEMPL96. Erroneous Report.

**Hieracium L., 1753**

***Hieracium aurantiacum* L.**

WEBER85A. Alien.

***Hieracium cynoglossoides* Arvet-Touvet**

RYDBE06. "Breckenridge;" misidentification of *Chlorocrepis tristis*.

**Hymenopappus L'Heritier, 1788 TURNE56**

***Hymenopappus filifolius* Hooker var. *cinereus* (Rydberg) I. M. Johnston**

RYDBE06, as the species; TURNE56.

*Hymenopappus arenosus* Heller. HARRI54.

*Hymenopappus cinereus* Rydberg. HARRI54. Type: Huerfano Co.: Walsenburg, 5 June 1900, Rydberg & Vreeland 5479 (NY). Type specimen from Colorado.

*Hymenopappus ochroleucus* Greene. TURNE56. Lectotype: Montrose Co.: Cimarron, June 1901, Baker 269 (ND-G). Type specimen from Colorado.

***Hymenopappus filifolius* Hooker var. *lugens* (Greene) B. Turner**

TURNE56. Utah, Ariz, Calif.

*Hymenopappus lugens* Greene. RYDBE06; HARRI54; TURNE56.

***Hymenopappus filifolius* Hooker var. *luteus* (Nuttall) B. Turner**

TURNE56.

*Hymenopappus luteus* Nuttall. HARRI54.

***Hymenopappus filifolius* Hooker var. *megacephalus* B. Turner**

TURNE56.

***Hymenopappus filifolius* Hooker var. *parvulus* (Greene) B. Turner**

TURNE56.

*Hymenopappus parvulus* Greene. TURNE56. Lectotype: Gunnison Co.: Gunnison, 17 July 1901, Baker 449 (ND-G). Type specimen from Colorado.

***Hymenopappus filifolius* Hooker var. *pauciflorus* (I. M. Johnston) B. Turner**

TURNE56.

***Hymenopappus filifolius* Hooker var. *polycephalus* (Osterhout) B. Turner**

TURNE56.

*Hymenopappus polycephalus* Osterhout. Type: Larimer Co.: N of Livermore, 11 Aug. 1917, Osterhout 5680 (RM). Type specimen from Colorado.

***Hymenopappus flavescens* A. Gray**

TURNE56.

***Hymenopappus newberryi* (A. Gray) I. M. Johnston**

TURNE56.

*Leucampyx newberryi* A. Gray in Porter & Coulter. PORTE74; RYDBE06; HARRI54. Type: Archuleta Co.: La Pagosa, 29 July 1860, Newberry (GH). Type specimen from Colorado.

*Hymenopappus scabiosaeus* L'Heritier

TURNE56. Erroneous Report.

*Hymenopappus corymbosus* Torrey & Gray. HARRI54. Harrington's reports are incorrect.

***Hymenopappus tenuifolius* Pursh**

PORTE74; HARRI54; TURNE56. Porter's old reports are probably all *H. filifolius*.

**Hypochaeris L., 1753**

***Hypochaeris radicata* L.**

HARRI54. Alien.

**Isocoma Nuttall, 1841**

***Isocoma drummondii* (Torrey & Gray) Greene**

*Haplopappus drummondii* (Torrey & Gray) S. F. Blake. WEBER61.

*Isocoma pluriflora* (Torrey & Gray) Greene

RYDBE06. All known reports are *I. drummondii*. Eastern slope report (James) probably of a specimen collected in New Mexico or Oklahoma (GOODM95).

*Bigelovia pluriflora* A. Gray. RYDBE06.

*Bigelovia wrightii* (A. Gray) Rydberg. RYDBE06.

*Haplopappus pluriflorus* (Torrey & Gray) Hall. WEBER66.

*Isocoma wrightii* (A. Gray) Rydberg. RYDBE06.

**Iva L., 1753**

*Iva annua* L.

Not found in Colorado. Erroneous Report.

*Iva ciliata* Willdenow. PORTE74. Report (Hall & Harbour 262), if correctly named, probably was collected in Nebraska.

***Iva axillaris* Pursh**

RYDBE06; HARRI54.

**Jacea P. Miller, 1754**

***Jacea pratensis* Lamarck**

Alien.

*Centaurea jacea* P. Miller. WEBER79A.

**Krigia Schreber, 1791 SHINN47**

***Krigia biflora* (Walter) S. F. Blake**

HARRI54.

*Adopogon virginicum* (L.) Kuntze. RYDBE06.

*Cynthia virginica* (L.) D. Don. PORTE74.  
*Krigia amplexicaulis* Nuttall. RYDBE06.  
*Tragopogon virginicum* L.. Not *Krigia virginica* (L.) Willdenow.

### **Lactuca L., 1753**

#### **Lactuca biennis (Moench) Fernald**

FERNA50. Alien.  
*Lactuca leucophaea* A. Gray. RYDBE06.  
*Lactuca spicata* (Lamarck) A. S. Hitchcock. HARRI54.

#### **Lactuca canadensis L.**

RYDBE06; HARRI54.

#### **Lactuca graminifolia Michaux**

RYDBE06; HARRI54.

#### **Lactuca ludoviciana (Nuttall) Riddell**

RYDBE06; HARRI54.

#### **Lactuca serriola L.**

Alien.  
*Lactuca scariola* L.. HARRI54. *Scariola* was a later spelling.  
*Lactuca serriola* L. var. *integrata* Grenier & Godron. HARRI54. Sporadic mutant in normal populations.  
*Lactuca virosa* L.. RYDBE06.

#### **Lactuca tatarica (L.) C. A. Meyer subsp. pulchella (Pursh) Stebbins**

HARRI54.

### **Lapsana L.**

#### **Lapsana communis L.**

HARRI54. Alien.

### **Lepidotheca Nuttall, 1841**

#### **Lepidotheca suaveolens (Pursh) Nuttall**

NUTTA41; WEBER87B.  
*Chamomilla suaveolens* (Pursh) Rydberg.  
*Matricaria matricarioides* (Lessing) T. C. Porter. HARRI54.

### **Leucacantha Nieuwland & Lunell, 1917**

#### **Leucacantha cyanus (L.) Nieuwland & Lunell**

WEBER78B. Alien.  
*Centaurea cyanus* L..

### **Leucantha Löve & Löve**

#### **Leucantha solstitialis (L.) Löve & Löve**

LOVE61. Alien. Recent collections from Montrose, Ouray and Boulder counties.  
*Calcitrapa solstitialis* (L.) Lamarck. SOJAK72.  
*Centaurea solstitialis* L.. HARRI54.

### **Leucanthemum P. Miller, 1754**

#### **Leucanthemum maximum (Ramond) DeCandolle**

Alien. Pitkin Co.: Naturalized in Roaring Fork Valley.

#### **Leucanthemum vulgare Lamarck**

Alien.  
*Chrysanthemum leucanthemum* L. var. *pinnatifidum* Lecoq & Lamotte. RYDBE06, as the species; HARRI54.

### **Liatris Gaertner, 1791 GAISE46**

#### *Liatris aspera* Michaux

GAISE46. Erroneous Report.  
*Laciniaria scariosa* (Willdenow) J. Hill. RYDBE06. RYDBE06 noted that all Colorado specimens so named belonged to *L. ligulistylis*.

#### *Liatris cylindracea* Michaux

TORRE27. Misidentification of *L. punctata*, as "*cylindrica*" fide GOODM95.

#### **Liatris lancifolia (Greene) Kittell**

HARRI54; GAISE46.

***Liatris ligulistylis* (A. Nelson) K. Schumann**

HARRI54; GAISE46.

*Laciniaria formosa* Greene. Type: Gunnison Co.: Jack's Cabin, 26 July 1901, Baker 610 (ND-G). Type specimen from Colorado.

*Laciniaria ligulistylis* A. Nelson. RYDBE06.

***Liatris punctata* Hooker**

HARRI54; GAISE46.

*Laciniaria punctata* (Hooker) Kuntze. RYDBE06.

*Liatris punctata* Hooker forma *coloradensis* Gaiser. Type not designated; many syntypes (GH). Type specimen from Colorado.

***Liatris scariosa* Willdenow**

PORTE74. Erroneous Report.

*Laciniaria scariosa* (Willdenow) J. Hill. RYDBE06. RYDBE06 noted that all Colorado specimens so named belonged to *L. ligulistylis*.

***Liatris squarrosa* (L.) Michaux var. *glabrata* (Rydberg) Gaiser**

HARRI54; GAISE46.

***Ligularia* Cassini, 1816 HANDE38**

***Ligularia amplexens* (A. Gray) W. A. Weber**

WEBER73.

*Senecio amplexens* A. Gray. HARRI54. Type: Clear Creek Co.: foot of the Snowy Range [headwaters of Clear Creek], Parry (GH). See Greene's emended description, *Pittonia* 4:119.1900. Type specimen from Colorado.

*Senecio lactucinus* Greene. Mineral Co.: near Pagosa Peak, 6 [9?] Aug. 1800, Baker 70. Not listed by BARKL78. Greene considered this distinct from either *L. amplexens* or *L. holmii*. Type specimen from Colorado.

*Senecio pagosanus* Heller. nom. nov. for *S. lactucinus* Greene (1900), non Greene (1893). Not listed by BARKL78. Type specimen from Colorado.

***Ligularia bigelovii* (A. Gray) W. A. Weber var. *bigelovii***

WEBER73; BARKL78. Central and southern New Mexico and Arizona.

*Senecio bigelovii* A. Gray. HARRI54.

***Ligularia bigelovii* (A. Gray) W. A. Weber var. *hallii* (A. Gray) W. A. Weber**

WEBER73.

*Senecio accedens* Greene. Type: Marshall Pass, 4 Sept. 1896, Greene (ND-G). Type specimen from Colorado.

*Senecio bigelovii* A. Gray in Torrey subsp. *hallii* A. Gray. HARRI54. Type: Hall & Harbour 321 (GH). Type specimen from Colorado.

*Senecio bigelovii* A. Gray in Torrey var. *monocephalus* Rothrock. Type: Lake Co.: Twin Lakes, Rothrock 587, 674 (GH). Type specimen from Colorado.

*Senecio chloranthus* Greene. Type: Mineral Co.: Pagosa Peak, 15 Aug. 1899, Baker 703 (ND-G). Not listed by BARKL78. Type specimen from Colorado.

*Senecio contristatus* Greene. Type: Gunnison Co.: Kebler Pass, 10,000 ft., 14 Aug. 1901, Baker 787 (ND-G). Not listed by BARKL78. Type specimen from Colorado.

*Senecio scopulina* Greene. RYDBE06.

***Ligularia holmii* (Greene) W. A. Weber**

WEBER73. Endemic.

*Senecio amplexens* A. Gray var. *holmii* (Greene) Harrington. HARRI54.

*Senecio holmii* Greene. Type: Clear Creek Co.: Gray's Peak, Patterson 81 (ND-G). Type specimen from Colorado.

***Ligularia porteri* (Greene) W. A. Weber**

WEBER82. Endemic.

*Senecio porteri* Greene. HARRI54.

*Senecio renifolius* T. C. Porter, non Schultz-Bipontinus. Type: Ouray Co.: White House Mt., 13,000 ft., Aug. 1873 Coulter. Type specimen from Colorado.

***Ligularia pudica* (Greene) W. A. Weber**

WEBER73.

*Senecio cernuus* A. Gray, non L. f.. Type: Clear Creek Co.: headwaters of Clear Creek, Parry 52 (GH). Type specimen from Colorado.

*Senecio pudicus* Greene. RYDBE06; HARRI54.

***Ligularia soldanella* (A. Gray) W. A. Weber**

WEBER73. Endemic.

*Senecio soldanella* A. Gray. HARRI54. Type: Clear Creek Co.: Gray's Peak, Hall & Harbour 319 (GH). Type specimen from Colorado.

***Ligularia taraxacoides* (A. Gray) W. A. Weber**

WEBER73. Endemic.

*Senecio amplexans* A. Gray var. *taraxacoides* A. Gray. Type: locality not stated, Parry 28 (GH). Type specimen from Colorado.

*Senecio taraxacoides* (A. Gray) Greene. RYDBE06; HARRI54.

*Senecio taraxacoides* (A. Gray) Greene var. *nudatus* Osterhout. Type: Larimer/Grand Co.: 19 Aug. 1926 Osterhout 6650 (RM). Type specimen from Colorado.

### **Lygodesmia D. Don, 1829 TOMB80**

#### **Lygodesmia arizonica Tomb**

TOMB80.

#### **Lygodesmia doloresensis Tomb**

TOMB80. Endemic. Type: Mesa Co.: 6.4 km S of Gateway, 12 June 1970, Tomb 648 (TEX). Type specimen from Colorado.

#### **Lygodesmia grandiflora (Nuttall) Torrey & Gray**

RYDBE06; HARRI54.

#### **Lygodesmia juncea (Pursh) D. Don**

RYDBE06; HARRI54. Tomb gave Hooker as the author!.

*Prenanthes juncea* Pursh in Torrey. TORRE27. Type from between Julesburg and Crook, fide GOODM95. Type specimen from Colorado.

### **Machaeranthera Nees, 1832 TURNE87; CRONQ94**

#### **Machaeranthera bigelovii (A. Gray) Greene**

RYDBE06; TURNE87; CRONQ94. We disagree in that we maintain *M. pattersonii* distinct.

*Aster bigelovii* A. Gray. RYDBE06; HARRI54.

*Machaeranthera canescens* (Pursh) A. Gray var. *latifolia* A. Gray. PORTE74.

*Machaeranthera rubricaulis* Rydberg. TURNE87. Type: Huerfano Co.: La Veta, 26 Sept. 1900, Vreeland 681 (NY). Type specimen from Colorado.

*Machaeranthera viscosula* Rydberg. TURNE87. Huerfano Co.: La Veta Pass, 15 July 1896, Shear 3655 (NY). Type specimen from Colorado.

#### **Machaeranthera canescens (Pursh) A. Gray var. ambigua B. Turner**

TURNE87. Archuleta Co., Huerfano Co., LP.

#### **Machaeranthera canescens (Pursh) A. Gray var. aristata (Eastwood) B. Turner**

TURNE87.

#### **Machaeranthera canescens (Pursh) A. Gray var. canescens**

RYDBE06; CRONQ57,94; TURNE87.

*Aster canescens* Pursh.

*Aster leucanthemifolius* Greene. CRONQ94.

*Aster rubrotinctus* S. F. Blake in Tidestrom. TURNE87 does not mention.

*Machaeranthera cichoriacea* Greene. TURNE87. Type: Mesa Co.: canyon bottom, Deer Run, 4700 ft., Baker 918 (ND-G). CRONQ94 recognizes this as *M. rigida*. Type specimen from Colorado.

*Machaeranthera glabella* Greene ex Rydberg. CRONQ94. Fl. Colorado 356-358. 1906. Montrose Co.: Cerro Summit, 1 Aug. 1901, Baker 701 (NY).

*Machaeranthera leucanthemifolia* (Greene) Greene. TURNE87; CRONQ94. Type from Nevada.

*Machaeranthera linearis* Greene. CRONQ94. Cronquist recognizes this as a species.

*Machaeranthera pulverulenta* (Nuttall) Greene. PORTE74; RYDBE06. Authorship, Nees, given by Porter, was incorrect.

*Machaeranthera pulverulenta* (Nuttall) Greene var. *vacans* A. Nelson. Type: Montrose Co.: Paradox, 1 Aug., Walker 360 (RM). CRONQ94 recognizes this as *M. rigida* Greene. Type specimen from Colorado.

*Machaeranthera ramosa* A. Nelson. RYDBE06.

*Machaeranthera rigida* Greene. CRONQ94. Cronquist gives this specific rank.

*Machaeranthera selbyi* Rydberg. TURNE87. Type: Ouray Co.: Ouray, 7 Sept. 1901, Underwood & Selby 93a (NY). Type specimen from Colorado.

#### **Machaeranthera canescens (Pursh) A. Gray var. glabra A. Gray**

TURNE87. said to intergrade with *M. bigelovii* and var. *nebraskana*.

#### **Machaeranthera coloradoënsis (A. Gray) Osterhout var. brandegei (Rydberg) T. J. Watson ex R. L. Hartman**

HARTM90. Endemic.

*Xylorhiza brandegei* Rydberg. Type: San Juan Pass of Sierra Madre, Sept. 1875, Brandege (GH). Type specimen from Colorado.

#### **Machaeranthera coloradoënsis (A. Gray) Osterhout var. coloradoënsis**

Endemic. T. J. Watson ined..

*Aster coloradoënsis* A. Gray. HARRI54. Lectotype: Park Co.: South Park, near Hamilton, 4 Aug. 1875, Greene 679 fide A. G. Jones (1984) (GH). Type specimen from Colorado.

*Haplopappus coloradoënsis* (A. Gray) R. L. Hartman ex Dorn. DORN88C.

*Xylorhiza coloradoënsis* (A. Gray) Rydberg. RYDBE06.

***Machaeranthera gracilis* (Nuttall) Shinnery**

CORRE70.

*Haplopappus gracilis* (Nuttall) A. Gray. HARRI54.

*Sideranthus gracilis* (Nuttall) Rydberg. RYDBE06; HALL28.

***Machaeranthera grindelioides* (Nuttall) Shinnery**

*Haplopappus nuttallii* Torrey & Gray. HARRI54.

*Sideranthus grindelioides* (Nuttall) Britton. RYDBE06; HALL28.

***Machaeranthera parviflora* A. Gray**

CRONQ57.

*Aster parvulus* S. F. Blake in Tidestrom. HARRI54.

***Machaeranthera pattersonii* (A. Gray) Greene**

*Aster pattersonii* A. Gray. HARRI54. Syntypes: Clear Creek Co.: Clear Cr. drainage between Gray's and Torrey's Peaks, 1872, Parry (GH); Aug. 1876, Patterson 4 (GH). Type specimen from Colorado.

*Aster pattersonii* A. Gray var. *hallii* A. Gray. TURNE87, listed incorrectly as *Machaeranthera*. Lectotype: Hall & Harbour 285 (GH). Type specimen from Colorado.

*Aster townshendii* Hooker f. Type: S. Colorado, 1877, Townshend (KEW).

*Machaeranthera aspera* Greene. Type: no specimens mentioned, but Colorado is given as the only area. Type specimen from Colorado.

*Machaeranthera bigelovii* (A. Gray) Greene var. *commixta* (Greene) Turner.

*Machaeranthera canescens* (Pursh) A. Gray var. *alpina* T. C. Porter. Type: "alpine, Parry, 1872". Type specimen from Colorado.

*Machaeranthera canescens* (Pursh) A. Gray var. *commixta* (Greene) Welsh.

*Machaeranthera commixta* Greene. Type from Henry Mts., Utah.

*Machaeranthera fremontii* Rydberg. Type: "Platte waters," 1844, Frémont 421 (NY). Assignment tentative. Type specimen from Colorado.

*Machaeranthera spectabilis* Greene. Type: Marshall Pass, 20 Aug. 1901, Baker 873 (ND-G). Type specimen from Colorado.

*Machaeranthera varians* Greene. Type: Mineral Co.: Pagosa Peak, 8,000 ft., 30 Aug. 1899, Baker s.n. (ND-G). Type specimen from Colorado.

***Machaeranthera pinnatifida* (Hooker) Shinnery var. *glaberrima* (Rydberg) Turner & Hartman**

TURNE76.

*Haplopappus spinulosus* (Pursh) De Candolle subsp. *glaberrimus* (Rydberg) Hall. HARRI54.

*Sideranthus glaberrimus* Rydberg. RYDBE06; HALL28.

***Machaeranthera pinnatifida* (Hooker) Shinnery var. *paradoxa* Turner & Hartman**

TURNE76.

***Machaeranthera pinnatifida* (Hooker) Shinnery var. *pinnatifida***

TURNE76B.

*Haplopappus australis* Greene. RYDBE06; HALL28.

*Haplopappus spinulosus* (Pursh) De Candolle. PORTE74; RYDBE06; HARRI54.

*Haplopappus spinulosus* (Pursh) De Candolle subsp. *australis* (Greene) Hall. HARRI54.

*Haplopappus spinulosus* (Pursh) De Candolle subsp. *scabrellus* (Greene) Hall. HARRI54.

*Machaeranthera australis* (Greene) Shinnery. CORRE70. CORRE79 recognizes this as a branching plant, but claims much intergradation. Colorado material needs to be re-evaluated.

*Sideranthus australis* (Greene) Rydberg. RYDBE06; HALL28.

*Sideranthus puberulus* Rydberg. RYDBE06; HALL28. Type: Chaffee Co.: Salida, Mrs. C. B. Clarke 174 (NY). Type specimen from Colorado.

*Sideranthus spinulosus* Sweet. RYDBE06; HALL28. Nomen nudum.

***Machaeranthera tanacetifolia* (Humboldt, Bonpland, & Kunth) Nees**

CRONQ57.

*Aster tanacetifolius* Humboldt, Bonpland, & Kunth. HARRI54.

**Macronema Nuttall, 1841**

***Macronema discoideum* Nuttall**

RYDBE06.

*Ericameria discoidea* (Nuttall) Nesom. NESOM90.

*Haplopappus macronema* A. Gray. HARRI54.

*Macronema obtusum* Rydberg. Type: Chaffee Co: South Cottonwood Gulch, 14 July 1892, Sheldon 5838 (NY). Type specimen from

Colorado.

**Madia Molina, 1781**

**Madia glomerata Hooker**

RYDBE06; HARRI54. Alien.

**Malacothrix De Candolle, 1838**

**Malacothrix sonchoides (Nuttall) Torrey & Gray**

RYDBE06; HARRI54.

**Malacothrix torreyi A. Gray**

WILKE78. W. S. Davis in herb, 1973.

**Matricaria L., 1753**

**Matricaria perforata Merat**

TUTIN64. Alien.

Matricaria inodora L. HARRI54; TUTIN64. Nomen illegit., fide TUTIN64.

Tripleurospermum inodorum (L.) Schultz-Bipontinus.

**Melampodium L., 1753**

*Melampodium cinereum De Candolle*

PORTE74; HARRI54; STUES72. A species of Texas and Mexico.

**Melampodium leucanthum Torrey & Gray**

RYDBE06; STUES72.

*Melampodium strigosum Stuessy*

STUES72. Collection of M. E. Jones, probably incorrect label data.

**Microseris D. Don, 1832 CHAMB57**

**Microseris nutans (Geyer ex Hooker) Schultz-Bipontinus**

CHAMB57.

Calais nutans (Geyer ex Hooker) A. Gray.

Ptilocalais nutans (Geyer ex Hooker) Greene. RYDBE06; HARRI54.

Ptilocalais tenuifolia Osterhout. Type: Grand Co.: Sulphur Springs, 28 June 1905, Osterhout 2998 (RM). Type specimen from Colorado.

**Nothocalais (A. Gray) Greene, 1886**

**Nothocalais cuspidata (Pursh) Greene**

RYDBE06; CHAMB57.

Microseris cuspidata (Pursh) Schultz-Bipontinus.

Troximon cuspidatum Pursh. PORTE74; RYDBE06.

**Oligoneuron J. K. Small, 1903**

**Oligoneuron rigidum (L.) Small**

We regard this as distinct a genus as Petradoria.

Oligoneuron canescens Rydberg. RYDBE06.

Solidago parvirigida Beaudry. Type specimen from Colorado.

Solidago rigida L. HARRI54.

Solidago rigida L. var. humilis T. C. Porter. Type: not stated, several colls. cited. Type specimen from Colorado.

**Oligosporus Cassini, 1817**

*Oligosporus canadensis (Michaux) Poljakov*

POLJA61. Erroneous Report.

Artemisia canadensis Michaux. PORTE74. Misidentification, probably of *O. caudatus*.

**Oligosporus caudatus (Michaux) Poljakov**

POLJA61.

Artemisia campestris L. subsp. caudata (Michaux) Hall & Clements.

Artemisia caudata Michaux. HARRI54.

Artemisia forwoodii S. Watson. RYDBE06.

Oligosporus campestris (L.) Cassini subsp. caudatus (Michaux) W. A. Weber. WEBER84B.

**Oligosporus dracunculus (L.) Poljakov subsp. dracunculinus (S. Watson) W. A. Weber**



WEBER89B. Southernmost counties.

*Artemisia dracunculus* L. subsp. *dracunculina* (S. Watson) Hall & Clements.

*Oligosporus dracunculinus* (S. Watson) Poljakov. POLJA61.

*Oligosporus dracunculus* (L.) Poljakov subsp. *dracunculus*

Eurasian race.

*Artemisia dracunculus* L. subsp. *dracunculus*. HARRI54.

***Oligosporus dracunculus* (L.) Poljakov subsp. *glaucus* (Pallas) Löve & Löve**

*Artemisia aromatica* A. Nelson. RYDBE06.

*Artemisia dracunculoides* Pursh. PORTE74; RYDBE06.

*Artemisia dracunculoides* Pursh var. *wolfii* Rydberg. Type: Lake Co.: Twin Lakes, 1873, Wolf 530 (NY). Type specimen from Colorado.

*Artemisia dracunculus* L. subsp. *glauca* (Pallas) Hall & Clements. HARRI54.

*Artemisia glauca* Pallas ex Willdenow. RYDBE06.

*Oligosporus glaucus* (Pallas ex Willdenow) Poljakov. POLJA61.

***Oligosporus filifolius* (Torrey) Poljakov**

POLJA61; WEBER89B.

*Artemisia filifolia* Torrey. RYDBE06; HARRI54.

***Oligosporus groenlandicus* (Hornemann) Löve & Löve**

LOVE75C.

*Artemisia borealis* Pallas subsp. *purshii* (Besser in Hooker) Hultén. LOVE75C.

*Artemisia spithamea* Pursh. RYDBE06; HARRI54.

***Oligosporus pacificus* (Nuttall) Poljakov**

POLJA61.

*Artemisia campestris* L. subsp. *pacifica* (Nuttall) Hall & Clements.

*Artemisia pacifica* Nuttall. HARRI54.

*Artemisia scouleriana* (Besser) Rydberg. RYDBE06.

*Oligosporus campestris* (L.) Cassini subsp. *pacificus* (Nuttall) W. A. Weber. WEBER84B.

***Oligosporus pedatifidus* (Nuttall) Poljakov**

POLJA61; WEBER84B.

*Artemisia pedatifida* Nuttall. HARRI54.

**Onopordum L., 1753**

***Onopordum acanthium* L.**

HARRI54. Alien.

***Onopordum tauricum* Willdenow**

HARRI54. Alien.

**Oönopsis (Nuttall) Greene, 1896**

***Oönopsis engelmannii* (A. Gray) Greene**

RYDBE06.

*Bigelovia engelmannii* A. Gray. Syntypes: Lincoln Co.: Hugo, 1874, Engelmann & Parry; Hugo, 1875, Patterson (GH). Type specimen from Colorado.

*Haplopappus engelmannii* (A. Gray) Hall. HARRI54.

***Oönopsis foliosa* (A. Gray) Greene**

RYDBE06; HALL28. If *Haplopappus* is maintained for this taxon, *H. foliosus* cannot be used because it is a later homonym of *H. foliosus* De Candolle. However, in *Oonopsis* it is acceptable.

*Haplopappus fremontii* A. Gray. PORTE74; HARRI54.

*Haplopappus fremontii* A. Gray subsp. *monocephalus* (A. Nelson) Hall.

*Oönopsis monocephala* A. Nelson. Type: Huerfano Co.: Berwind, 1900, Archibald 257 (RM). Type specimen from Colorado.

*Pyrocoma foliosa* A. Gray. HALL28. Type locality not given (either Kansas or Colorado). Type specimen from Colorado.

***Oreochrysum* Rydberg, 1906**

***Oreochrysum parryi* (A. Gray) Rydberg**

RYDBE06.

*Haplopappus parryi* A. Gray. HARRI54. Type: Clear Creek Co.: hillsides and pine woods, Upper Clear Cr., 1861 Parry 51 (GH). Type specimen from Colorado.

***Oxytenia* Nuttall, 1848**

**Oxytenia acerosa Nuttall**

RYDBE06; HARRI54.

**Packera Löve & Löve, 1976**Chromosome base number in *Packera* is  $2n=46$ **Packera cana (Hooker) Weber & Löve**

WEBER81B.

*Cineraria integrifolia* Torrey, non Willdenow. TORRE27; GOODM95. There is no such Willdenow species. Possibly Torrey was referring to *Willkomm*, and a plant of the Pyrenees.

*Packera cana* (Hooker) Weber & Löve forma *eradiata* (D. C. Eaton) Weber & Löve. WEBER81B; WEBER84B.

*Senecio canus* Hooker. HARRI54.

*Senecio hallii* A. Gray var. *discoideus* W. A. Weber. WEBER55. Type: Saguache Co.: Cochetopa Pass, 28 July 1950 Weber 5800 (COLO). Type specimen from Colorado.

*Senecio harbourii* Rydberg. HARRI54. Type: Boulder Co.: mountains S of Ward, 18 July 1901, Osterhout 2424 (NY). Type specimen from Colorado.

*Senecio purshianus* Nuttall. RYDBE06; HARRI54.

**Packera crocata (Rydberg) Weber & Löve**

WEBER81B.

*Senecio aureus* L. var. *croceus* A. Gray. Type: "Middle Park, etc.," Hall & Harbour 332 (GH). Type specimen from Colorado.

*Senecio crocatus* Rydberg. HARRI54; BARKL78. Type: "Middle Park, etc.," Hall & Harbour 332 (GH). Type specimen from Colorado.

*Senecio crocatus* Rydberg var. *wolfii* (Greenman) Greenman.

*Senecio pyrrochrous* Greene. Type: Gunnison Co.: Jack's Cabin, 26 Aug. 21901 Baker 612 (ND-G). Type specimen from Colorado.

*Senecio wolfii* Greenman. Type: Park Co.: South Park, 1873, Wolf & Rothrock 582, 586 (GH). Type specimen from Colorado.

**Packera debilis (Nuttall) Weber & Löve**

WEBER81B. Jackson Co.: North Park, Osterhout 5183.

*Senecio debilis* Nuttall. HARRI54.

**Packera dimorphophylla (Greene) Weber & Löve subsp. dimorphophylla**

WEBER81B.

*Senecio dimorphophyllus* Greene. RYDBE06, as *S. crocatus*; HARRI54; BARKL78. Lectotype: Mineral Co.: Pagosa Peak, Baker 705 (ND-G). Type specimen from Colorado.

*Senecio heterodoxus* Greene ex Rydberg. Type: La Plata Co.: Little Kate Mine, Baker, Earle, & Tracy 569 (NY). Type specimen from Colorado.

**Packera dimorphophylla (Greene) Weber & Löve subsp. intermedia (T. Barkley) Weber & Löve**

WEBER81B.

*Senecio tracyi* Rydberg. Type: La Plata Co.: Bob Creek, W of Mt. Hesperus, Baker, Earle, & Tracy 276 (NY). The isotype at CS is clearly this, and not *S. crocatus*, as claimed by Barkley earlier. Type specimen from Colorado.

**Packera fendleri (A. Gray) Weber & Löve**

WEBER81B.

*Senecio canovirens* Rydberg. RYDBE06.

*Senecio fendleri* A. Gray. RYDBE06; HARRI54.

*Senecio fendleri* A. Gray var. *lanatus* Osterhout. Type: Eagle Co.: Wolcott, Osterhout 2667 (NY). Type specimen from Colorado.

*Senecio fendleri* A. Gray var. *molestus* Greenman. Type: Colorado, Hall & Harbour 333 (GH). Type specimen from Colorado.

*Senecio lanatifolius* Osterhout. BARKL78. Nom. nov. *S. lanatus* was preoccupied. Type specimen from Colorado.

*Senecio rosulatus* Rydberg. Type: Clear Creek Co.: Georgetown, July 1885, Patterson 79 (NY). Type specimen from Colorado.

*Senecio rosulatus* Rydberg forma *primulinus* Cockerell. Type: Larimer Co.: Estes Park as "mut." (probably no specimen kept). Type specimen from Colorado.

*Senecio salicinus* Rydberg. Type: Larimer Co.: 3 June 1895, Cowen s.n. (NY). Type specimen from Colorado.

**Packera multilobata (Torrey & Gray ex A. Gray) Weber & Löve**

WEBER81B.

*Senecio multilobatus* Torrey & Gray ex A. Gray. RYDBE06; HARRI54.

*Senecio uintahensis* (A. Nelson) Greene. HARRI54.

**Packera neomexicana (A. Gray) Weber & Löve**

WEBER81B.

*Packera neomexicana* (A. Gray) Weber & Löve var. *mutabilis* (Greene) Weber & Löve. WEBER81B.

*Senecio mutabilis* Greene. HARRI54; BARKL78. Lectotype: Archuleta Co.: Arboles & Los Pinos, Baker 712 (US). Type specimen from Colorado.

*Senecio neomexicanus* A. Gray. HARRI54.

*Packera obovata* (Mühlenberg ex Willdenow) Weber & Löve

A species of eastern U.S.

*Senecio aureus* L. var. *obovatus* Torrey & Gray. PORTE74. It is not clear to what species the report applies.

**Packera oödes (Rydberg) W. A. Weber**

WEBER84B.

*Senecio oödes* Rydberg. Type: Chaffee Co.: Mt. Harvard, 1896, Clements 39 (NY). Type specimen from Colorado.

**Packera pauciflora (Pursh) Löve & Löve**

WEBER89C. Park Co.: South Park: calcareous fen, High Creek, 15 July 1989, Weber & Cooper 18016.

*Senecio fedifolius* Rydberg. Type: Park Co.: South Park, Canby s.n. (NY). Barkley synonymizes with *S. debilis*, incorrectly. Type specimen from Colorado.

*Senecio nephrophyllus* Rydberg. RYDBE06.

*Senecio pauciflorus* Pursh.

**Packera paupercula (Michaux) Löve**

WEBER81B.

*Senecio pauperculus* Michaux. BARKL62.

**Packera plattensis (Nuttall) Weber & Löve**

WEBER81B.

*Senecio plattensis* Nuttall. RYDBE06; HARRI54.

**Packera pseudaura (Rydberg) Weber & Löve subsp. flavula (Greene) Weber & Löve**

WEBER81B.

*Senecio flavovirens* Rydberg. RYDBE06.

*Senecio flavulus* Greene. HARRI54. Lectotype: Archuleta Co.: Arboles, 15 June 1899 Baker 707 (ND-G). Type specimen from Colorado.

*Senecio pseudaura* Rydberg subsp. *flavulus* (Greene) Douglas & R.-Douglas.

*Senecio pseudaura* Rydberg var. *flavulus* (Greene) Greenman.

**Packera pseudaura (Rydberg) Weber & Löve subsp. pseudaura**

WEBER81B.

*Senecio pseudaura* Rydberg. RYDBE06; HARRI54.

**Packera streptanthifolia (Greene) Weber & Löve**

WEBER81B.

*Senecio aureus* L. var. *borealis* Torrey & Gray. PORTE74.

*Senecio cognatus* Greene. Type: Archuleta Co.: Piedra, Baker s.n. (NY). Type specimen from Colorado.

*Senecio cymbalarioides* Nuttall. HARRI54.

*Senecio longipetiolatus* Rydberg. RYDBE06; BARKL78.

*Senecio streptanthifolius* Greene. HARRI54.

*Senecio subcuneatus* Rydberg. Type: Grizzly Creek, Baker s.n. (NY). Type specimen from Colorado.

**Packera tridenticulata (Rydberg) Weber & Löve**

WEBER81B.

*Senecio acutidens* Rydberg. HARRI54; BARKL78.

*Senecio aurellus* Rydberg. Type: Montezuma Co.: Mancos, Baker, Earle & Tracy 998 (NY). Type specimen from Colorado.

*Senecio oblanceolatus* Rydberg. Type: Park Co.: Como, 1 Aug. 1885, Crandall s.n. (NY). Not listed by BARKL78. Type specimen from Colorado.

*Senecio tridenticulatus* Rydberg. BARKL78. Type: Chaffee Co.: Cottonwood Cr., Buena Vista, 4 July 1892, Sheldon 5832 (NY). Type specimen from Colorado.

**Packera wernerifolia (A. Gray) Weber & Löve**

WEBER81B.

*Senecio aureus* L. var. *wernerifolius* A. Gray. BARKL78. Type: Colorado, Hall & Harbour 331 (not 313) (GH). Type specimen from Colorado.

*Senecio molinarius* Greenman. Archuleta Co.: Pagosa Springs, Smith s.n. (MO). Type specimen from Colorado.

*Senecio pentodontus* Greene. Type: Hinsdale Co.: Carson, Baker 309 (ND-G). Type specimen from Colorado.

*Senecio perennans* A. Nelson. RYDBE06.

*Senecio petraeus* Klatt, non Boissier & Reuter. BARKL78. Type: Hall & Harbour 329.

*Senecio petrocallis* Greene. nom. nov..

*Senecio petrophilus* Greene, non Klatt. Type: Colorado, Hall & Harbour 329. Type specimen from Colorado.

*Senecio saxosus* Klatt. nom. nov.. Type specimen from Colorado.

*Senecio turbinatus* Rydberg. Type: Hinsdale Co.: Lake City, 3 May 1878, Pease s.n. (NY). Type specimen from Colorado.

*Senecio wernerifolius* (A. Gray) A. Gray. RYDBE06; HARRI54.

*Senecio wernerifolius* (A. Gray) A. Gray var. *incertus* Greenman. Type: Clear Creek Co.: Georgetown, Greene s.n. (GH). Type specimen from Colorado.

### **Palafoxia Lagasca, 1816 TURNE76A**

*Palafoxia hookeriana* Torrey & Gray

A Texas endemic.

*Polypteris hookeriana* (Torrey & Gray) A. Gray. RYDBE06. Misinterpretation of *P. sphacelata*.

**Palafoxia rosea (Bush) Cory var. macrolepis (Rydberg) B. Turner**

TURNE76A.

*Othake macrolepis* Rydberg. Type: Bent Co.: Rule Cr., 18 Aug. 1909, Osterhout 4097 (NY). Type specimen from Colorado.

*Palafoxia macrolepis* (Rydberg) Cory. HARRI54.

**Palafoxia sphacelata (Nuttall ex Torrey) Cory**

HARRI54.

*Stevia sphacelata* Nuttall ex Torrey. TORRE27. Type: from southeastern Colorado, James, fide GOODM95. Type specimen from Colorado.

### **Parthenice A. Gray, 1853**

Erroneous Report

*Parthenice mollis* A. Gray

RYDBE06; HARRI54;. "Southern Colorado." No locality given.

### **Pectis L., 1759**

**Pectis angustifolia Torrey**

RYDBE06; HARRI54.

### **Pericome A. Gray, 1853 POWEL73**

**Pericome caudata A. Gray var. caudata**

RYDBE06; HARRI54; POWEL73.

**Pericome caudata A. Gray var. glandulosa (Goodman) Harrington**

HARRI54; POWEL73.

### **Petasites P. Miller, 1754**

**Petasites sagittatus (Banks ex Pursh) A. Gray**

RYDBE06; HARRI54.

*Nardosmia sagittata* (Banks ex Pursh) Hooker. PORTE74.

### **Petradoria Greene, 1895**

**Petradoria pumila (Nuttall) Greene**

RYDBE06; ANDER64.

*Chrysoma pumila* Nuttall. The type species of *Chrysoma* is *C. solidaginoides*, a shrub endemic to Florida. *IC. pumila* was published in the same paper.

*Solidago petradoria* S. F. Blake. HARRI54.

*Solidago pumila* (Nuttall) Torrey & Gray. PORTE74; RYDBE06.

### **Picradenia Hooker, 1833 COCKE04**

**Picradenia helenioides Rydberg**

BIERN94. Type: Costilla Co.: Sangre de Cristo Cr., 2 July 1900, Rydberg & Vreeland 5495 (NY). Hybrid, *P. richardsonii* and *Dugaldia hoopesii*. Type specimen from Colorado.

*Hymenoxys helenioides* (Rydberg) Cockerell. RYDBE06; HARRI54.

**Picradenia odorata (De Candolle) Britton**

Endemic.

*Hymenoxys chrysanthemoides* De Candolle subsp. *osterhoutii* (Cockerell) Cockerell. Type specimen from Colorado.

*Hymenoxys multiflora* (Buckley) Rydberg. RYDBE06.

*Hymenoxys multiflora* (Buckley) Rydberg var. *osterhoutii* (Cockerell) Rydberg. RYDBE06.

*Hymenoxys odorata* De Candolle. HARRI54.

*Phileozeroa multiflora* Buckley. RYDBE06.

*Picradenia multiflora* (Buckley) Greene. RYDBE06.

*Picradenia odorata* (De Candolle) Britton subsp. *osterhoutii* Cockerell. Otero Co.: Apishapa Cr, 9 June 1900, Osterhout 2041 (RM). Type specimen from Colorado.

***Picradenia richardsonii* Hooker subsp. *floribunda* (A. Gray) W. A. Weber**

WEBER95.

*Actinella richardsonii* (Hooker) Nuttall var. *floribunda* A. Gray. RYDBE06.

*Hymenoxys earlei* (Cockerell) Cockerell. RYDBE06.

*Hymenoxys floribunda* (A. Gray) Cockerell. RYDBE06.

*Hymenoxys richardsonii* (Hooker) Cockerell var. *floribunda* (A. Gray) Parker. HARRI54.

*Picradenia earlei* Cockerell. Type: Montezuma Co.: Mancos, 8 July 1898, Baker, Earle & Tracy 409 (RM, Isotype NY). Type specimen from Colorado.

*Picradenia floribunda* Greene. RYDBE06.

*Picradenia floribunda* Greene subsp. *utilis* Cockerell. Type: Chaffee Co.: near Buena Vista, Cockerell (NY isotype). Type specimen from Colorado.

***Picradenia richardsonii* Hooker subsp. *richardsonii***

*Actinella richardsonii* (Hooker) Nuttall. PORTE74.

*Hymenoxys macrantha* (A. Nelson) Rydberg. RYDBE06.

*Hymenoxys pumila* (Greene) Rydberg. RYDBE06.

*Hymenoxys richardsonii* (Hooker) Cockerell. HARRI54.

*Hymenoxys richardsonii* (Hooker) Cockerell var. *pumila* (Greene) Cockerell. RYDBE06.

*Picradenia macrantha* A. Nelson. RYDBE06.

*Picradenia pumila* Greene. RYDBE06.

***Picradeniopsis* Rydberg ex Britton, 1901**

***Picradeniopsis oppositifolia* (Nuttall) Rydberg**

RYDBE06.

*Bahia oppositifolia* (Nuttall) De Candolle. PORTE74; RYDBE06; HARRI54.

*Trichophyllum oppositifolium* Nuttall. TORRE27.

***Picradeniopsis woodhousei* (A. Gray) Rydberg**

*Bahia woodhousei* A. Gray. HARRI54.

***Picrothamnus* Nuttall, 1841**

***Picrothamnus desertorum* Nuttall**

RYDBE06; RYDBE16.

*Artemisia spinescens* D. C. Eaton. HARRI54.

***Platyschkuhria* Rydberg, 1906 ELLIS71**

***Platyschkuhria integrifolia* (A. Gray) Rydberg var. *oblongifolia* (A. Gray) Ellison**

RYDBE06, as the species; ELLIS71.

*Bahia nudicaulis* A. Gray. RYDBE06; HARRI54.

*Bahia oblongifolia* A. Gray. RYDBE06.

*Platyschkuhria oblongifolia* (A. Gray) Rydberg. RYDBE06.

***Pluchea Cassini*, 1817**

Erroneous Report

***Pluchea sericea* (Nuttall) Coville**

Erroneous Report.

*Berthelotia sericea* (Nuttall) Rydberg. RYDBE06. "Grand Canyon." Far out of range.

*Pluchea borealis* A. Gray. RYDBE06.

*Polypappus sericeus* Nuttall. RYDBE06.

***Podospermum* A. De Candolle, 1805**

***Podospermum laciniatum* (L.) De Candolle**

Alien.

*Scorzonera laciniata* L.. WEBER66.

***Prenanthes* Rydberg, 1906**

***Prenanthes exigua* (A. Gray) Rydberg**

RYDBE06.

*Lygodesmia exigua* A. Gray. RYDBE06; HARRI54.

**Prenanthes L., 1753****Prenanthes racemosa Michaux**

HARRI54.

Nabalus racemosus (Michaux) De Candolle. PORTE74; RYDBE06.

**Prionopsis Nuttall, 1841 LANE96**

Trans. Amer. Phil. Soc. (2)7:329.1841

**Prionopsis ciliata (Nuttall) Nuttall**RYDBE06; CORRE70; LANE96. LANE96 does not agree with Johnston in placing this in *Grindelia*.*Donia ciliata* Nuttall.*Grindelia ciliata* (Nuttall) Nuttall.*Haplopappus ciliatus* (Nuttall) De Candolle. HARRI54.**Pseudognaphalium Kirpichnikov, 1950 JEFFR79****Pseudognaphalium canescens (De Candolle) W. A. Weber**

WEBER91. Alien.

*Gnaphalium albatum* Osterhout. Type: Larimer Co.: Thompson R. Canyon, 16 Aug. 1905, Osterhout 3158 (RM). Type specimen from Colorado.*Gnaphalium canescens* De Candolle. CORRE70.*Gnaphalium wrightii* A. Gray. RYDBE06; HARRI54.**Pseudognaphalium stramineum (Humboldt, Bonpland & Kunth) W. A. Weber**

WEBER91. Alien.

*Gnaphalium chilense* Sprengel. HARRI54; MCVAU84.*Gnaphalium luteoalbum* L. var. *sprengelii* De Candolle. PORTE74.*Gnaphalium stramineum* Humboldt, Bonpland, & Kunth. CORRE70; MCVAU84.*Gnaphalium sulphurescens* Rydberg. RYDBE06.**Pseudognaphalium viscosum (HBK) W. A. Weber**

WEBER91. Alien. This is Mexican only, fide MCVAU72.

*Gnaphalium decurrens* Ives. PORTE74; RYDBE06.*Gnaphalium decurrens* Ives var. *glandulosum* Osterhout. Type: Larimer Co.: Estes Park, Aug. 1895, Osterhout 547 (RM). Type specimen from Colorado.*Gnaphalium macounii* Greene. HARRI54; MCVAU72. MCVAU72 claims this is not the same as *viscosum*. Studies needed.*Gnaphalium viscosum* Humboldt, Bonpland, & Kunth. HITCH55; MCVAU72.**Psilochenia Nuttall, 1841 BABCO38****Psilochenia acuminata (Nuttall) W. A. Weber**

WEBER83A.

*Crepis acuminata* Nuttall. RYDBE06; HARRI54.*Crepis acuminata* Nuttall subsp. *pluriflora* Babcock & Stebbins. HARRI54. Type: Delta Co.: Cedaredge, Baker 243 (UC). Type specimen from Colorado.*Crepis angustata* Rydberg. Type: Jackson Co.: North Park, 28 July 1896, Baker s.n. (NY). Type specimen from Colorado.**Psilochenia atribarba (Heller) W. A. Weber**

WEBER83A.

*Crepis atribarba* Heller. HARRI54.*Crepis exilis* Osterhout. Type: Grand Co.: Sulphur Springs, 28 June 1905, Osterhout 2979 (RM). Type specimen from Colorado.*Crepis occidentalis* Torrey & Gray var. *gracilis* D. C. Eaton. PORTE74.**Psilochenia intermedia (A. Gray) W. A. Weber**

WEBER83A.

*Crepis intermedia* A. Gray. RYDBE06; HARRI54.**Psilochenia modocensis (Greene) W. A. Weber**

WEBER83A.

*Crepis modocensis* Greene. HARRI54.*Crepis pumila* Rydberg. RYDBE06. See discussion concerning Rydberg's Colorado specimens in BABCO38.*Crepis scopulorum* Coville. RYDBE06.**Psilochenia occidentalis (Nuttall) Nuttall subsp. costata (A. Gray) W. A. Weber**

WEBER83A.

*Crepis occidentalis* Nuttall subsp. *costata* (A. Gray) Babcock & Stebbins. HARRI54.

***Psilochenia occidentalis* (Nuttall) Nuttall subsp. *occidentalis***

WEBER83A.

*Crepis occidentalis* Nuttall. RYDBE06; HARRI54.

***Psilochenia runcinata* (James ex Torrey) Löve & Löve**

LOVE82B.

*Crepis alpicola* A. Nelson. Type: Larimer Co.: Long's Peak, 11,000 ft., 3 Aug. 1904, Cooper 218) (RM). Type specimen from Colorado.

*Crepis denticulata* Rydberg. Type: Jackson Co.: Lake John, North Park, 19 Aug. 1898, Shear & Bessey 4004 (NY). Type specimen from Colorado.

*Crepis glauca* Rydberg. Type: El Paso Co.: Ruxton Dell, 1901, Clements 342 (NY). Type specimen from Colorado.

*Crepis glauca* Rydberg. RYDBE06.

*Crepis lancifolia* Greene. Type: Marshall Pass, 4 Sept. 1896, Greene (ND-G). Type specimen from Colorado.

*Crepis perplexa* Rydberg. RYDBE06.

*Crepis petiolata* Rydberg. Type: Routt Co.: Bear R., 5 mi E Hayden, 1899, Osterhout 21 (NY). Type specimen from Colorado.

*Crepis riparia* A. Nelson. RYDBE06.

*Crepis runcinata* (James ex Torrey) Torrey & Gray. RYDBE06; HARRI54.

*Crepis runcinata* (James ex Torrey) Torrey & Gray subsp. *glauca* (Nuttall) Babcock & Stebbins. HARRI54.

*Crepis runcinata* (James ex Torrey) Torrey & Gray subsp. *hispidulosa* (T. J. Howell) Babcock & Stebbins. HARRI54.

*Crepis tomentulosa* Rydberg. Type: El Paso Co.: Ruxton Dell, 18 July 1901, Clements & Clements 342 (NY). Type specimen from Colorado.

*Hieracium runcinatum* James ex Torrey. TORRE27. Type from Nebraska.

***Psilostrophe* De Candolle, 1838**

***Psilostrophe bakeri* Greene**

RYDBE06; HARRI54; BROWN78. Lectotype: Montrose Co.: Montrose, Baker 14 (ND-G). Type specimen from Colorado.

*Psilostrophe pumila* A. Nelson. RYDBE06.

*Riddellia tagetina* Nuttall var. *pumila* Jones. Type: Mesa Co.: Grand Junction, 21 June 1894, Jones 5474 (RSA). Type specimen from Colorado.

***Psilostrophe tagetina* (Nuttall) Greene**

RYDBE06. Alien. Lincoln Co.: Mile 50, Hwy 71, south of Punkin Center, Aug., 1994, Clark.

*Riddellia tagetina* Nuttall. *Riddellia* Nuttall is a later homonym of *Riddellia Rafinesque*. The type locality was "Southern range of the Rocky Mts. toward the sources of the Platte." Probably in north Texas.

***Pyrrhopappus* A. De Candolle, 1838**

Erroneous Report

***Pyrrhopappus grandiflorus* (Nuttall) Nuttall**

PORTE74. "plains of eastern Colorado, Dr. Bell." Error. Has never been found in Colorado.

***Pyrrocomma* Hooker, 1833**

***Pyrrocomma clementis* Rydberg**

Type: Chaffee Co.: Mt. Harvard, 1896, Clements 44 (NY). Type specimen from Colorado.

*Haplopappus clementis* (Rydberg) S. F. Blake. HARRI54.

*Pyrrocomma calendulacea* Greene. Type: Union Creek Pass, 10,000-11,000 ft., 1873, Wolf. Type specimen from Colorado.

***Pyrrocomma crocea* (A. Gray) Greene**

*Haplopappus croceus* A. Gray. HARRI54. Type: Subalpine, Middle Park, Hall & Harbour 257. Type specimen from Colorado.

***Pyrrocomma integrifolia* (T. C. Porter ex A. Gray) Greene**

RYDBE06. A northern Rocky Mt. species. "Rabbit Ears Range" undoubtedly a misidentification.

*Haplopappus integrifolius* T. C. Porter ex A. Gray. HARRI54.

***Pyrrocomma lanceolata* (Hooker) Greene**

*Haplopappus lanceolatus* (Hooker) Torrey & Gray. HARRI54.

*Haplopappus lanceolatus* (Hooker) Torrey & Gray var. *vaseyi* Parry in D. C. Eaton. RYDBE06; HALL28. Type: Grand Co.: Middle Park, 1868, Vasey 273 (GH). Type specimen from Colorado.

*Pyrrocomma lagopus* Rydberg. RYDBE06; HALL28.

*Pyrrocomma vaseyi* (Parry) Rydberg. RYDBE06.

***Pyrrocomma uniflora* (Hooker) Greene**

RYDBE06.

*Haplopappus inuloides* (Nuttall) Torrey & Gray. PORTE74.

Haplopappus uniflorus (Hooker) Torrey & Gray. HARRI54.  
Homopappus inuloides Nuttall. RYDBE06; HALL28.  
Pyrrocoma inuloides (Hooker) Greene. RYDBE06; HALL28.

### **Ratibida Rafinesque, 1817**

#### **Ratibida columnifera (Nuttall) Wooton & Standley**

HARRI54; SHARP35.  
Lepachys columnaris (Sims) Torrey & Gray. PORTE74; RYDBE06.  
Ratibida columnaris (Sims) D. Don. RYDBE06.  
Ratibida columnaris (Sims) D. Don var. pulcherrima (De Candolle) D. Don. RYDBE06.  
Ratibida columnifera (Nuttall) Wooton & Standley var. appendiculata Cockerell. Type: Boulder Co.: Flagstaff Hill, 8 July 1916 (probably no specimen kept). Teratological. Type specimen from Colorado.  
Ratibida columnifera (Nuttall) Wooton & Standley var. incisa Cockerell. Type: Boulder Co.: Boulder, 8 Aug. 1915 (probably no specimen kept). Teratological. Type specimen from Colorado.  
Ratibida columnifera (Nuttall) Wooton & Standley var. tubularis Cockerell. Type: Boulder Co.: Flagstaff Hill, 19 July 1914 (probably no specimen kept). Teratological. Type specimen from Colorado.

#### **Ratibida tagetes (James) Barnhart**

RYDBE06; HARRI54; SHARP35.  
Lepachys columnaris (Sims) Torrey & Gray var. tagetes A. Gray. PORTE74.  
Lepachys tagetes A. Gray. RYDBE06.  
Rudbeckia tagetes James. GOODM95. Type from near Rocky Ford, James. Type specimen from Colorado.

### **Rayjacksonia Hartman & Lane LANE96**

#### **Rayjacksonia annua (Rydberg) Hartman & Lane**

LANE96.  
Haplopappus phyllocephalus De Candolle subsp. annuus (Rydberg) Hall.  
Sideranthus annuus Rydberg. RYDBE06; HALL28; LANE96. Lectotype: Lincoln Co.: Platte Valley, Julesburg, 28 Aug. 1891, Rydberg 145. Type specimen from Colorado.

#### **Rayjacksonia phyllocephala (DeCandolle) Hartman & Lane**

LANE96. Type from Mexico: Tamaulipas.  
Haplopappus rubiginosus Torrey & Gray. PORTE74.  
Machaeranthera phyllocephala (De Candolle) Shinnars. CORRE70.

### **Rudbeckia L., 1753**

#### **Rudbeckia ampla A. Nelson**

RYDBE06; JONES57. Type: not specified; cited from Colorado and Wyoming. Type specimen from Colorado.  
Rudbeckia laciniata L. subsp. ampla (A. Nelson) W. A. Weber. RYDBE06, as the species; WEBER82B.  
Rudbeckia laciniata L. var. ampla (A. Nelson) Cronquist. HITCH55.

#### **Rudbeckia hirta L.**

HARRI54.  
Rudbeckia flava Greene. Type: not specified; colls. cited from Wyoming and Colorado. Type specimen from Colorado.

#### **Rudbeckia occidentalis Nuttall var. montana (A. Gray) Perdue**

PERDU62.  
Rudbeckia montana A. Gray. RYDBE06; HARRI54.

#### **Rudbeckia triloba L.**

WEBER81B. Alien.

### **Rydbergia Greene, 1898**

#### **Rydbergia brandegei (T. C. Porter) Rydberg**

RYDBE06.  
Actinella brandegei T. C. Porter ex A. Gray. Based on A. grandiflora var. glabrata Porter. Type specimen from Colorado.  
Actinella grandiflora Torrey & Gray var. glabrata T. C. Porter. Type: alpine, Sangre de Cristo Pass [not the present one, but a pass over the Sangre de Cristo Mts.]. Type specimen from Colorado.  
Hymenoxys brandegei (T. C. Porter) Parker. HARRI54.  
Rydbergia glabrata (T. C. Porter) Greene.

#### **Rydbergia grandiflora (Torrey & Gray) Greene**

RYDBE06.  
Actinella grandiflora Torrey & Gray. PORTE74; RYDBE06. Type: Colorado, Fremont (GH). Type specimen from Colorado.



*Actinella grandiflora* Torrey & Gray var. *glabrata* Porter. Sangre de Cristo Pass, Aug. 1872, Brandegee 722. Type specimen from Colorado.

*Hymenoxys grandiflora* (Torrey & Gray) Parker. HARRI54.

**Saussurea De Candolle, 1810 LIPSC79**

*Saussurea alpina* De Candolle

HARRI54. Reports apply to *S. weberi*.

**Saussurea weberi** Hultén

HULTE59A; LIPSC79. Type: Park Co.: Mt. Lincoln, 14 Aug. 1905, Huestis s.n. (COLO). Lipschitz errs in synonymizing this with *S. densa* Rydberg. Type specimen from Colorado.

**Scabrethia W. A. Weber WEBER99**

**Scabrethia scabra** (Hooker) W. A. Weber subsp. *canescens* (W. A. Weber) W. A. Weber

WEBER99.

*Wyethia scabra* Hooker var. *canescens* W. A. Weber. HARRI54; WEBER46.

**Scabrethia scabra** (Hooker) W. A. Weber subsp. *scabra*

WEBER99.

*Wyethia scabra* Hooker var. *scabra*. RYDBE06; HARRI54; WEBER46; WEBER99.

**Schkuhria A. W. Roth**

**Schkuhria multiflora** Hooker & Arnott

HEISE45.

*Achyropappus neomexicanus* (A. Gray) A. Gray. RYDBE06.

*Achyropappus neomexicanus* (A. Gray) Rydberg.

*Bahia neomexicana* A. Gray. HARRI54; HEISE45.

*Cephalobombix neomexicanus* Rydberg. N. Amer. Flora 34:46.1914.

*Schkuhria neomexicana* A. Gray.

**Senecio L., 1753 BARKL78**

**Senecio atratus** Greene

HARRI54. Type: not designated, no specimens cited. Chromosome base number in *Senecio*  $2n=40$ . Type specimen from Colorado.

*Senecio atratus* Greene var. *milleflorus* (Greene) Greenman.

*Senecio lugens* Richardson var. *foliosus* A. Gray. RYDBE06.

*Senecio milleflorus* Greene. Type: Archuleta Co.: Pagosa Springs, 27 July 1899 Baker 711 (ND-G). Type specimen from Colorado.

**Senecio crassulus** A. Gray

HARRI54. Syntype: 1861-2, Parry 24 (GH). Type specimen from Colorado.

*Senecio lapathifolius* Greene. Type: Ouray Co.: Between Ouray and Telluride, Baker 738 (ND-G). Type specimen from Colorado.

*Senecio semiamplexicaulis* Rydberg. RYDBE06.

*Senecio douglasii* De Candolle subsp. *longilobus* (Bentham) W. A. Weber

WEBER85A. Erroneous Report.

*Senecio filifolius* Nuttall. TORRE27; RYDBE06; GOODM95. According to GOODM95, the type was actually collected by James.

*Senecio filifolius* Nuttall var. *jamesii* Torrey & Gray. PORTE74.

*Senecio longilobus* Bentham. HARRI54.

**Senecio eremophilus** Richardson subsp. *kingii* (Rydberg) Douglas & R.-Douglas

*Senecio ambrosioides* Rydberg var. *indivisus* Greenman ex E. Graham. Type: Garfield Co.: Baxter Pass, Graham 10166 (CM). Type specimen from Colorado.

*Senecio ambrosioides* Rydberg, non Martius. HARRI54; BARKL78. Type: El Paso Co.: Green Mt. Falls, 2 Aug. 92, Sheldon (NY). Type specimen from Colorado.

*Senecio eremophilus* Richardson var. *kingii* (Rydberg) Greenman.

*Senecio macdougallii* Heller. RYDBE06.

**Senecio flaccidus** Lessing var. *douglasii* (DeCandolle) Turner & Barkley

TURN90.

*Senecio filifolius* Nuttall. TORRE27; RYDBE06; GOODM95. According to GOODM95, the type was actually collected by James.

*Senecio filifolius* Nuttall var. *jamesii* Torrey & Gray. PORTE74.

*Senecio longilobus* Bentham. HARRI54.

**Senecio fremontii** Torrey & Gray subsp. *blitoides* (Greene) W. A. Weber

WEBER83A.

*Senecio andinus* Nuttall. PORTE74.

*Senecio blitoides* Greene. Type: Lake Co.: Mt. Elbert, Holm s.n. (ND-G). Type specimen from Colorado.

*Senecio carthamoides* Greene. Type: Marshall Pass, Greene s.n. (ND-G). Type specimen from Colorado.

*Senecio fremontii* Torrey & Gray var. *blitoides* (Greene) Cronquist. HITCH55.

*Senecio invenustus* Greene. Type: Mineral Co.: Pagosa Peak, Baker s.n. (ND-G). Type specimen from Colorado.

*Senecio hartianus* Heller

RYDBE06; BARKL78. Misidentification of *Packera pseudaura*.

**Senecio hydrophilus** Nuttall

RYDBE06; HARRI54.

**Senecio integerrimus** Nuttall

RYDBE06; HARRI54.

*Senecio atriapiculatus* Rydberg. RYDBE06.

*Senecio columbianus* Greene. RYDBE06.

*Senecio condensatus* Greene. RYDBE06.

*Senecio flintii* Rydberg. BARKL78. Type: Southwestern Colorado, Flint s.n. (NY). Type specimen from Colorado.

*Senecio hookeri* (D. C. Eaton) Torrey & Gray. RYDBE06.

*Senecio lugens* Richardson var. *exaltatus* D. C. Eaton. PORTE74.

*Senecio lugens* Richardson var. *hookeri* D. C. Eaton. PORTE74.

*Senecio lugens* Richardson var. *parryi* D. C. Eaton. PORTE74.

**Senecio multicapitatus** Greenman in Rydberg

HARRI54. Type: Huerfano Co.: Huerfano River Valley near Gardner, Sept. 1900, Vreeland 651 (NY). Type specimen from Colorado.

**Senecio rapifolius** Nuttall

RYDBE06; HARRI54.

**Senecio riddellii** Torrey & Gray

RYDBE06; HARRI54.

*Senecio douglasii* De Candolle var. *normalis* Kuntze. BARKL78. Type: Colorado, Kuntze 3035 (NY). Type specimen from Colorado.

*Senecio filifolius* Nuttall var. *fremontii* Torrey & Gray.

*Senecio fremontii* Rydberg, non Torrey & Gray. RYDBE06.

*Senecio kuntzei* Rydberg. Type: Colorado, Sept. 1874, Kuntze 3033 (NY). Type specimen from Colorado.

**Senecio serra** Hooker var. *admirabilis* (Greene) A. Nelson

*Senecio admirabilis* Greene. Type: "Higher mountains of Colorado", Greene (ND-G). With larger heads and more florets than in the species. Type specimen from Colorado.

**Senecio serra** Hooker var. *serra*

RYDBE06; HARRI54.

**Senecio spartioides** Torrey & Gray

RYDBE06; HARRI54.

*Senecio douglasii* De Candolle var. *sublanceolatus* Kuntze. Type: Colorado, Kuntze 3034 (NY). Type specimen from Colorado.

*Senecio sphaerocephalus* Greene

HARRI54; GREEN18. GREEN18 p.102. "CC: Graymont, 23 July 1885, Letterman (MO)." Evidently a misidentification, since Barkley does not allow for Colorado.

**Senecio triangularis** Hooker

RYDBE06; HARRI54.

**Senecio vulgaris** L.

HARRI54. Alien.

**Senecio wootonii** Greene

HARRI54.

*Senecio anacletus* Greene. RYDBE06.

**Seriphidium Poljakov, 1961 WARD53; WEBER84B; TORRE99**

Torrell, et al. consider the American woody sagebrushes to be an endemic clad of *Atrémisia*, distinct from the Asiatic *Seriphidium*

**Seriphidium arbusculum** (Nuttall) W. A. Weber subsp. *arbusculum*

*Artemisia arbuscula* Nuttall. RYDBE06; HARRI54.

**Seriphidium arbusculum** (Nuttall) W. A. Weber subsp. *longilobum* (Osterhout) W. A. Weber

WEBER84B.

*Artemisia longiloba* (Osterhout) Beetle. BEETL60.

*Artemisia spiciformis* Osterhout var. *longiloba* Osterhout. Type: Grand Co.: Sulphur Springs, 8 Aug. 1907, Osterhout 3592 (RM). Type specimen from Colorado.

***Seriphidium canum* (Pursh) W. A. Weber**

WEBER84B.

*Artemisia cana* Pursh. HARRI54.

***Seriphidium novum* (A. Nelson) W. A. Weber**

WEBER84B.

*Artemisia nova* A. Nelson. HARRI54.

*Artemisia tridentata* Nuttall subsp. *nova* (A. Nelson) Hall & Clements.

***Seriphidium pygmaeum* (A. Gray) W. A. Weber**

WEBER84B.

*Artemisia pygmaea* A. Gray. WEBER82A.

***Seriphidium rothrockii* (A. Gray) W. A. Weber**

WEBER84B. Erroneous Report.

*Artemisia rothrockii* A. Gray. HARRI54. Colorado reports refer to hybrids, *Seriphidium canum* x *S. tridentatum*.

***Seriphidium tridentatum* (Nuttall) W. A. Weber subsp. *tridentatum***

WEBER84B.

*Artemisia tridentata* Nuttall. RYDBE06; HARRI54.

***Seriphidium tridentatum* (Nuttall) W. A. Weber subsp. *wyomingensis* (Beetle & Young) W. A. Weber**

WEBER84B.

*Artemisia tridentata* Nuttall subsp. *wyomingensis* Beetle & Young.

***Seriphidium tripartitum* (Rydberg) W. A. Weber**

WEBER84B.

*Artemisia trifida* Nuttall, non Turczaninov. RYDBE06.

*Artemisia tripartita* Rydberg. RYDBE06. WARD53 cited Beetle 2340, Routt Co.: 12 mi S Oak Cr. (CAS).

***Seriphidium vaseyanum* (Rydberg) W. A. Weber**

WEBER85B.

*Artemisia spiciformis* Osterhout. Type: Jackson Co.: North Park, 1 Sept. 1899, Osterhout 2011 (RM). Type specimen from Colorado.

*Artemisia tridentata* Nuttall subsp. *vaseyana* (Rydberg) Beetle.

*Artemisia tridentata* Nuttall subsp. *vaseyana* (Rydberg) Beetle forma *spiciformis* (Osterhout) Beetle.

*Artemisia vaseyana* Rydberg. Type from Washington, 1889. Vasey 480 (NY).

**Shinersoseris Tomb, 1973**

***Shinersoseris rostrata* (A. Gray) Tomb**

*Lygodesmia juncea* (Pursh) D. Don var. *rostrata* A. Gray. Type: "on the plains", Hall & Harbour 347. Type specimen from Colorado.

*Lygodesmia rostrata* (A. Gray) A. Gray. PORTE74; RYDBE06; HARRI54.

**Silphium L., 1753**

***Silphium integrifolium* Michaux**

HARRI54.

***Silphium laciniatum* L.**

HARRI54. Alien.

**Solidago L., 1753**

***Solidago canadensis* L.**

RYDBE06; HARRI54.

*Solidago altissima* L. HARRI54.

*Solidago canadensis* L. var. *gilvocanescens* Rydberg. RYDBE06; HARRI54.

*Solidago canadensis* L. var. *procera* A. Gray. RYDBE06.

*Solidago canadensis* L. var. *salebrosa* (Piper) Cronquist. HITCH55.

*Solidago canadensis* L. var. *scabriuscula* T. C. Porter. RYDBE06.

*Solidago gilvocanescens* (Rydberg) Rydberg. RYDBE06.

*Solidago lepida* De Candolle var. *elongata* (Nuttall) Fernald. HARRI54.

*Solidago lepida* De Candolle var. *fallax* Fernald. HARRI54.

*Solidago polyphylla* Rydberg. HARRI54. Type: Fremont Co.: Cañon City, 1896, Clements 295 (NY). Type specimen from Colorado.

*Solidago scabriuscula* (T. C. Porter) Rydberg. RYDBE06.

*Solidago serra* Rydberg. Type: Routt Co.: Yampa, 4 Aug. 1898, Shear & Bessey 5274 (NY). Leaves said to be glabrous. Type specimen from Colorado.

### ***Solidago gigantea* Aiton**

CRONQ94. The species has an array of polyploid numbers; the presence or lack of hairs on the veins is geographically correlated but probably of little taxonomic value.

*Solidago gigantea* Aiton var. *leiophylla* Fernald. HARRI54.

*Solidago gigantea* Aiton var. *serotina* (Kuntze) Cronquist. HITCH55.

*Solidago pitcheri* Nuttall. RYDBE06.

*Solidago serotina* Aiton, non Retzius.

*Solidago serotinoides* Löve & Löve. LOVE82B; CRONQ94.

### ***Solidago missouriensis* Nuttall**

RYDBE06; HARRI54.

*Solidago concinna* A. Nelson. RYDBE06.

*Solidago glaberrima* Martens. RYDBE06.

*Solidago missouriensis* Nuttall var. *extraria* A. Gray. RYDBE06; HITCH55. Syntypes: 1861, Parry 17, Aug. 1877, Greene 1123 (GH). Type specimen from Colorado.

*Solidago viscidula* Rydberg. Type: Grand Co.: Grand Lake, 2 Aug. 1888, Holway s.n. (NY). Type specimen from Colorado.

### ***Solidago mollis* Bartling**

RYDBE06; HARRI54.

*Solidago nemoralis* Aiton var. *mollis* (Bartling) T. C. Porter. PORTE74.

### ***Solidago multiradiata* Aiton**

CRONQ94.

*Solidago multiradiata* Aiton var. *scopulorum* A. Gray. HITCH55; CRONQ94.

*Solidago scopulorum* (A. Gray) A. Nelson. CRONQ94; RYDBE06. "Cordilleran plants are often called var. *scopulorum* A. Gray but they are scarcely to be separated from plants of Labrador (the type locality for the species), Newfoundland, and Quebec."

### ***Solidago nana* Nuttall**

RYDBE06; HARRI54.

*Solidago pulcherrima* A. Nelson. RYDBE06; HARRI54.

*Solidago radulina* Rydberg. RYDBE06; HARRI54.

### ***Solidago nemoralis* Aiton var. *longipetiolata* (Mackenzie & Bush) Palmer & Steyermark**

WEBER81B. !C. Taylor.

### *Solidago simplex* Humboldt, Bonpland, & Kunth subsp. *randii* (Porter) S. G. Ringius

This is an eastern subspecies.

### ***Solidago simplex* Humboldt, Bonpland, & Kunth var. *nana* (A. Gray) G. S. Ringius**

CRONQ94. Lectotype from Washington.

*Solidago decumbens* Greene. HARRI54. Lectotype (Shinners): Marshall Pass, 5 Sept. 1896, Greene (ND-G). Type specimen from Colorado.

*Solidago humilis* Pursh.

*Solidago spathulata* De Candolle var. *nana* (A. Gray) Cronquist. HITCH55.

*Solidago virgaurea* L. var. *alpina* Bigelow. PORTE74. as to Colorado plants.

*Solidago virgaurea* L. var. *humilis* (Pursh) A. Gray. PORTE74.

*Solidago virgaurea* L. var. *humilis* A. Gray forma *pattersonii* Gandoger. Type: Clear Creek Co.: Patterson 275. Type specimen from Colorado.

### ***Solidago simplex* Humboldt, Bonpland, & Kunth var. *simplex***

CRONQ1994. This earlier name found by Ringius, *Phytologia* 70:397.1991. Cronquist's citation (p.244) is incorrect.

*Solidago decumbens* Greene var. *oreophila* (Rydberg) Fernald. HARRI54.

*Solidago glutinosa* Nuttall. HARRI54.

*Solidago oreophila* Rydberg. RYDBE06.

*Solidago spathulata* De Candolle var. *neomexicana* (A. Gray) Cronquist. HITCH55.

### ***Solidago speciosa* Nuttall var. *pallida* T. C. Porter**

RYDBE06; HARRI54.

*Solidago guiradonis* A. Gray var. *spectabilis* D. C. Eaton. PORTE74.

*Solidago pallida* (T. C. Porter) Rydberg. RYDBE06; HARRI54.

*Solidago spectabilis* (D. C. Eaton) T. C. Porter, non A. Gray. RYDBE06.

**Solidago velutina De Candolle**

C. Taylor annotations in herb.

*Solidago sparsiflora* A. Gray. HARRI54.

*Solidago trinervata* Greene. Lectotype (Shinners): Gunnison Canyon, 28 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

**Solidago wrightii A. Gray var. adenophora S. F. Blake**

Baca Co.: E Carrizo Cr., 5 mi SW of Kirkwell, Weber 5098, 5124, !C. Taylor.

**Sonchus L., 1753****Sonchus arvensis L.**

RYDBE06; HARRI54. Alien.

**Sonchus asper (L.) J. Hill**

RYDBE06; HARRI54. Alien.

**Sonchus oleraceus L.**

RYDBE06; HARRI54. Alien.

**Sonchus uliginosus Bieberstein**

WEBER76B. Alien.

*Sonchus arvensis* L. subsp. *glabrescens* Guenther. HARRI54.

**Sphaeromeria Nuttall, 1841****Sphaeromeria argentea Nuttall**

*Tanacetum nuttallii* Torrey & Gray. HARRI54.

**Sphaeromeria capitata Nuttall**

WEBER87B.

**Stenactis Cassini, 1825****Stenactis strigosa (Mühlenberg ex Willdenow) De Candolle**

Alien.

*Erigeron ramosus* (Walter) Britton, Sterns, & Poggenberg, non Rafinesque. RYDBE06.

*Erigeron strigosus* Mühlenberg ex Willdenow. HARRI54.

**Stenotus Nuttall, 1841****Stenotus acaulis Nuttall**

RYDBE06.

*Haplopappus acaulis* (Nuttall) A. Gray. HARRI54.

**Stenotus armerioides Nuttall**

RYDBE06.

*Haplopappus armerioides* (Nuttall) A. Gray. HARRI54.

**Stephanomeria Nuttall, 1841****Stephanomeria exigua Nuttall**

HARRI54.

*Ptiloria exigua* (Nuttall) Greene. RYDBE06.

**Stephanomeria pauciflora (Torrey) A. Nelson**

HARRI54.

*Jamesia pauciflora* (Torrey) Nees. GOODM95.

*Prenanthes? pauciflora* Torrey. TORRE27. Type from Jefferson Co., James, fide GOODM95. Type specimen from Colorado.

*Ptiloria pauciflora* (Torrey) Rafinesque. RYDBE06.

**Stephanomeria runcinata Nuttall**

WEBER73A.

**Stephanomeria tenuifolia (Rafinesque) H. M. Hall**

CRONQ94.

*Lygodesmia minor* Hooker.

*Lygodesmia tenuifolia* (Rafinesque) Shinners.

*Prenanthes? tenuifolia* Torrey, non L.. TORRE27; GOODM95. Goodman argues that the Torrey's name is preoccupied in *Prenanthes* by Linnaeus'. But Cronquist accepts Torrey's name (because of the questionmark?) and accepts Rafinesque's name as basionym.

*Ptiloria ramosa* Rydberg. RYDBE06; HARRI54.

*Ptiloria tenuifolia* Rafinesque. Type: "foot of Rocky Mts., James (NY). Type specimen from Colorado.

*Ptiloria virgata* (Benth) Greene. RYDBE06. "Grand Junction;" misidentification.  
*Stephanomeria minor* (Hooker) Nuttall. TORRE95; PORTE74.  
*Stephanomeria tenuifolia* (Torrey) Hall. HARRI54.  
*Stephanomeria wrightii* A. Gray.

*Stephanomeria virgata* Benth

RYDBE06. Misidentification.

**Symphotrichum Nees NESOM94**

Includes most American asters

*Aster ciliolatus* Lindley in Hooker

HITCH55. Occurs north of our area.

*Aster lindleyanus* Torrey & Gray. RYDBE06. Misidentification, probably of *A. lanceolatus*.

*Aster praealtus* Poiret

HARRI54. Misidentifications of *Virgulastrum ascendens* and *Aster lanceolatus*.

**Symphotrichum amethystinum (Nuttall) Nesom**

NESOM94.

*Aster amethystinum* Nuttall.

*Virgulus amethystinus* (Nuttall) Reveal & Keener. WEBER82A. Hybrid, *V. falcatus* and a species with colored rays.

**Symphotrichum ascendens (Lindley) Nesom**

NESOM94.

*Aster adsurgens* Greene. JONES75. Type: Montrose Co.: Cimarron, 30 Aug. 1896, Greene (ND-G, 5 sheets). Type specimen from Colorado.

*Aster armeriifolius* Greene. Type: Marshall Pass, 4 Sept. 1896, Greene (ND-G). Type specimen from Colorado.

*Aster ascendens* Lindley in Hooker. HARRI54; SEMPL89. Original spelling "ascendens", not "adscendens".

*Aster ascendens* Lindley var. *ciliatifolius* Torrey & Gray. PORTE74.

*Aster ascendens* Lindley var. *parryi* D. C. Eaton. PORTE74. Syntype: Colorado, 1862, Parry 417 (GH) [A. G. Jones annotations in 1984 re authorship and lectotypification at GH]. Type specimen from Colorado.

*Aster chilensis* Nees subsp. *ascendens* (Lindley ex Hooker) Cronquist. A. Jones (personal comm.).

*Aster distichophyllus* Greene. Type: Marshall Pass, 4 Sept. 1896, Greene (ND-G). Assignment tentative, judged from description. Type specimen from Colorado.

*Aster fulcratus* Greene. Type: Mineral Co.: near Pagosa Peak, 9,000 ft., 12 Aug. 1899, [Baker 638] (NDF-G). Assignment tentative. Type specimen from Colorado.

*Aster griseolus* Rydberg. Type: Chaffee Co.: Mt. Harvard, 1896, Clements 37 (NY). Type specimen from Colorado.

*Aster griseus* Greene. Type: Jefferson Co.: Bear Cr., W of Denver, Greene (ND-G). Type specimen from Colorado.

*Aster majusculus* Greene. Type: Montrose Co.: wooded summits above Cimarron, Sept. 1886, Greene. Assignment tentative, judged by description. Type specimen from Colorado.

*Aster nelsonii* Greene. RYDBE06.

*Aster nuttallii* Torrey & Gray. RYDBE06.

*Aster orthophyllus* Greene. Type: Gunnison Co.: Gunnison, 23 July 1900, Baker 570 (ND-G). Type specimen from Colorado.

*Aster oxyphyllus* Greene. Type: Mesa Co.: Colorado R. at Grand Junction, 16 Aug. 1896 (ND-G). Assignment tentative, judged by description. Type specimen from Colorado.

*Aster pratincola* Greene. Type: Gunnison Co.: meadows, Gunnison, 1 Sept. 1896, Greene (ND-G). Assignment tentative, judged by description. Type specimen from Colorado.

*Aster spithameus* Greene. Type: Gunnison Co.: dry mountainside above Gunnison, 10 Sept. 1890, Greene (ND-G). Type specimen from Colorado.

*Aster underwoodii* Rydberg. Type: Outay Co.: Ironton Park, 9 mi S of Ouray, 11 Sept. 1901, Underwood & Selby 318 (NY). Type specimen from Colorado.

*Aster vallicola* Greene. RYDBE06. Cited collections from Pine Valley, Nevada, but the following was marked Holotype in ND-G: Archuleta Co.: Pagosa Springs, 30 Aug. 1899, Greene. Type specimen from Colorado.

*Aster violaceus* Greene. RYDBE06. Type: base of Little Ouray Mt. E of Marshall Pass, 4 Sept. 1896, Greene (ND-G). Type specimen from Colorado.

*Virgulastrum ascendens* (Lindley ex Hooker) Semple. SEMPL89; ALLEN85. An amphiploid species, n=13, probably derived from *Aster occidentalis* and *Virgulus falcatus*.

**Symphotrichum boreale (Torrey & Gray) Löve & Löve**

NESOM94.

*Aster junciformis* Rydberg. HARRI54.

*Aster laxiflorus* Lindley var. *borealis* Torrey & Gray. NESOM94.

**Symphotrichum bracteolatum (Nuttall) Nesom**

NESOM94.

Aster bracteolatus Nuttall. DORN88.

Aster eatonii (A. Gray) T. J. Howell. RYDBE06; HARRI54.

Aster foliaceus Lindley ex De Candolle var. eatonii A. Gray. RYDBE06.

Aster lonchophyllus Greene. Lectotype: Gunnison Co.: Crested Butte, 13 Aug. 1901, Baker 805 (ND-G). A. G. Jones annotation at GH, =A. cf. eatonii or near it. Type specimen from Colorado.

**Symphotrichum campestre (Nuttall) Nesom**

NESOM94.

Aster andrewsii A. Nelson. Type: Boulder Co.: Eldora, 9500 ft., Andrews (RM). Type specimen from Colorado.

Aster campestris Nuttall. RYDBE06; HARRI54.

Virgulus campestris (Nuttall) Reveal &amp; Keener. REVEA81.

***Symphotrichum ciliolatum (Lindley) Löve & Löve***

NESOM94. Erroneous Report.

Aster lindleyanus Torrey & Gray. RYDBE06. Misidentification, probably of *A. lanceolatus*.**Symphotrichum ericoides (L.) Nesom**

NESOM94.

Aster cordineri A. Nelson. Type: Larimer Co.: Estes Park, Cooper 151 (RM). Assignment tentative, judged from description. Type specimen from Colorado.

Aster ericoides L. HARRI54.

Aster ericoides L. forma exiguus Fernald. FERNA50.

Aster ericoides L. subsp. pansus (S. F. Blake) A. Jones.

Aster ericoides L. var. stricticaulis (Torrey &amp; Gray) Gates.

Aster exiguus (Fernald) Rydberg. RYDBE06.

Virgulus ericoides (L.) Reveal &amp; Keener. REVEA81.

**Symphotrichum falcatum (Lindley) Nesom**

NESOM94.

Aster apricus (A. Gray) Rydberg. RYDBE06.

Aster ascendens Lindley var. fremontii Torrey &amp; Gray. PORTE74. Tentative assignment.

Aster burkei (A. Gray) T. J. Howell. RYDBE06.

Aster canbyi Vasey ex Rydberg, non Kuntze. RYDBE06. Nomen nudum.

Aster commutatus (Torrey &amp; Gray) A. Gray. RYDBE06; HARRI54.

Aster commutatus (Torrey &amp; Gray) A. Gray var. crassulus (Rydberg) S. F. Blake. HARRI54.

Aster commutatus (Torrey &amp; Gray) A. Gray var. polycephalus (Rydberg) S. F. Blake. HARRI54.

Aster crassulus Rydberg. Type: Huerfano Co.: La Veta, 26 Sept. 1900, Vreeland 690a (NY). Type specimen from Colorado.

Aster ericoides L. var. commutatus (Torrey &amp; Gray) Boivin.

Aster falcatus Lindley. PORTE74; HARRI54.

Aster falcatus Lindley subsp. commutatus (Torrey &amp; Gray) A. Jones.

Aster foliaceus Lindley ex De Candolle var. apricus A. Gray. HARRI54. Lectotype: Junior Pass, 1873, Wolf &amp; Rothrock 521 (GH). Type specimen from Colorado.

Aster foliaceus Lindley ex De Candolle var. burkei A. Gray. RYDBE06.

Aster foliaceus Lindley ex De Candolle var. canbyi A. Gray. HARRI54.

Aster foliaceus Lindley ex De Candolle var. foliaceus. HARRI54.

Aster foliaceus Lindley ex De Candolle var. frondeus A. Gray. HARRI54. Possibly these varieties are environmental modifications.

Aster frondeus (A. Gray) Greene. RYDBE06.

Aster multiflorus Aiton. PORTE74; RYDBE06.

Aster polycephalus Rydberg. RYDBE06.

Virgulus falcatus (Lindley) Reveal &amp; Keener. REVEA81.

**Symphotrichum fendleri (A. Gray) Nesom**

NESOM94.

Aster fendleri A. Gray. RYDBE06; HARRI54.

Virgulus fendleri (A. Gray) Reveal &amp; Keener. REVEA81; NESOM94.

**Symphotrichum foliaceum (DeCandolle) Nesom**

NESOM94.

**Symphotrichum laeve (L.) Löve & Löve var. geyeri (A. Gray) Nesom**

NESOM94.

*Aster geayeri* (A. Gray) T. J. Howell. RYDBE06.

*Aster laevis* L. var. *geayeri* A. Gray. HARRI54.

*Aster laevis* L. var. *strictiflorus* Osterhout. Type: Garfield Co.: Glenwood Springs, 18 Aug. 1906, Osterhout 3397 (RM). Type specimen from Colorado.

*Aster subsalignus* Rydberg. Type: Garfield Co.: Glenwood Springs, 18 Aug. 1896, Osterhout 3397 (NY). Type specimen from Colorado.

*Symphotrichum laeve* (L.) Löve & Löve var. *laeve*

NESOM94. Erroneous Report.

*Aster laevis* L.. RYDBE06; HARRI54. We have only the variety *geayeri*.

***Symphotrichum lanceolatum* (Willdenow) Nesom**

NESOM94.

***Symphotrichum novae-angliae* (L.) Nesom**

NESOM94.

*Aster novae-angliae* L.. RYDBE06, Cañon City; HARRI54. Occurred near Boulder until 1950.

*Virgulus novae-angliae* (L.) Reveal & Keener. REVEA81.

***Symphotrichum oblongifolium* (Nuttall) Nesom**

NESOM94.

*Aster kumlienii* E. Fries ex Rydberg. RYDBE06; HARRI54.

*Aster oblongifolius* Nuttall. PORTE74.

*Virgulus oblongifolius* (Nuttall) Reveal & Keener. REVEA81.

***Symphotrichum porteri* (A. Gray) Sesom**

NESOM94.

*Aster ericoides* L. var. *strictus* T. C. Porter in Porter & Coulter. Type: "In the mountains at middle elevations," Hall & Harbour 254 (first specimen cited). Type specimen from Colorado.

*Aster porteri* A. Gray. RYDBE06; HARRI54. Nom. nov. at species level, for *A. ericoides* var. *strictus* T. C. Porter in Porter & Coulter. HARRI54 incorrectly cites Gray, p 89 instead of 99.

*Symphotrichum praealtum* (Poiret) Nesom

NESOM94. Erroneous Report.

***Symphotrichum spathulatum* (Lindley) Nesom**

NESOM94.

*Aster andinus* Nuttall. RYDBE06; HITCH55.

*Aster corymbiformis* Rydberg. Type: Custer Co.: West Cliff, 13 Aug. 1896, Shear 3460 (NY). Type specimen from Colorado.

*Aster fremontii* A. Gray. RYDBE06.

*Aster occidentalis* (Nuttall) Torrey & Gray. HARRI54.

*Aster spathulatus* Lindley ex De Candolle. CRONQ43. Cronquist finds that this name can be used, since *A. spathulatus* Lagasca ex Nees, for which he considered it a homonym, was never validly published.

*Symphotrichum subspicatum* (Nees) Nesom

NESOM94. Erroneous Report.

*Aster oregonus* (Nuttall) Torrey & Gray. HARRI54. According to HITCH55 a synonym of *A. subspicatus*, which does not occur in Colorado. Specimens are *A. spathulatus*.

**Tanacetum L., 1753**

***Tanacetum parthenium* (L.) Schultz-Bipontinus**

TUTIN64 (nomenclature). Alien. Not naturalized.

*Chrysanthemum parthenium* (L.) Bernhardt. HARRI54.

***Tanacetum vulgare* L.**

HARRI54. Alien.

**Taraxacum G. H. Weber in Wiggers, 1780**

*Taraxacum ceratophorum* (Ledebour) De Candolle

HARRI54. Misidentifications of *T. ovinum*.

***Taraxacum dumetorum* Greene**

Annotations by R. Doll, 1986. One specimen from Larimer Co. Not enough known to list unequivocally.

*Taraxacum oblanceolatum* A. Nelson. RYDBE06. !Doll. Although the name is cited by Rydberg as a synonym, neither Gray Index or Index Kewensis list this name, evidently unpublished f.

***Taraxacum eriophorum* Rydberg**



HARRI54. !Doll.

*Taraxacum lyratum* (Ledebour) De Candolle

Misidentifications of *T. scopulorum*, fide Doll.

**Taraxacum officinale G. H. Weber ex Wiggers**

HARRI54. Alien.

*Taraxacum erythrospermum* Andrzejewski ex Besser. HARRI54.

*Taraxacum laevigatum* (Willdenow) De Candolle.

*Taraxacum mexicanum* De Candolle. RYDBE06. Assignment tentative.

*Taraxacum taraxacum* (L.) Karsten. RYDBE06.

**Taraxacum ovinum Greene**

Annotations by R. Doll, 1986.

*Taraxacum fasciculatum* A. Nelson. Type: Rio Grande Co.: Wagon Wheel Gap, Blue Park, 11000 ft., 21 July 1912, Griffin 111 (RM). Assignment tentative. Type specimen from Colorado.

*Taraxacum leiospermum* Rydberg. Type: Tennessee Pass, 18 July 1902, Osterhout 2645 (NY, not found). Assignment tentative. Type specimen from Colorado.

*Taraxacum montanum* Nuttall. RYDBE06. Assignment tentative.

*Taraxacum palustre* T. C. Porter, non De Candolle. PORTE74.

*Taraxacum phymatocarpum* J. Vahl

WEBER76B. Misidentification, fide Doll.

**Taraxacum scopulorum (A. Gray) Rydberg**

RYDBE06. Annotations by R. Doll, 1986.

*Taraxacum officinale* G. H. Weber ex Wiggers var. *scopulorum* A. Gray. RYDBE06.

**Tetradymia De Candolle, 1838 STROT78**

**Tetradymia canescens De Candolle**

HARRI54; STROT78.

*Tetradymia canescens* De Candolle var. *inermis* (Nuttall) A. Gray. PORTE74.

*Tetradymia inermis* Nuttall. RYDBE06.

*Tetradymia linearis* Rydberg. RYDBE06.

*Tetradymia glabrata* Torrey & Gray

PORTE74. Report applies to *T. canescens*.

**Tetradymia nuttallii Torrey & Gray**

HARRI54; STROT78.

**Tetradymia spinosa Hooker & Arnott**

RYDBE06; HARRI54; STROT78.

**Tetraneuris Greene, 1898**

**Tetraneuris acaulis (Pursh) Greene**

RYDBE06.

*Actinella acaulis* Nuttall. PORTE74; RYDBE06.

*Hymenoxys acaulis* (Pursh) Parker. HARRI54.

*Tetraneuris simplex* A. Nelson. RYDBE06.

*Tetraneuris trinervata* Greene. RYDBE06.

*Tetraneuris acaulis* (Pursh) Greene var. *arizonica* (Greene) Parker

PARKE80. This may be synonymous with *T. ivesiana*.

*Hymenoxys acaulis* (Pursh) Parker var. *arizonica* (Greene) Parker. PARKE80.

*Tetraneuris arizonica* Greene. RYDBE06.

*Tetraneuris argentea* (A. Gray) Greene

Occurs in New Mexico and Arizona.

*Actinella leptoclada* A. Gray. RYDBE06.

*Tetraneuris leptoclada* (A. Gray) Greene. RYDBE06.

**Tetraneuris brevifolia Greene**

WEBER87B. Type: El Paso Co.: Pikes Peak, Canby (ND-G). The earliest name, *Actinella lanata* Nuttall (1841) was preoccupied by *A. caespitosa* Pursh (1814), a synonym of *Eriophyllum lanatum*. Type specimen from Colorado.

*Actinella lanata* Nuttall, non Pursh. RYDBE06.

*Hymenoxys acaulis* (Pursh) Parker var. *caespitosa* (A. Nelson) Parker. HARRI54.

*Tetraneuris lanata* (Nuttall) Greene. RYDBE06.

#### ***Tetraneuris ivesiana* Greene**

*Hymenoxys acaulis* (Pursh) Parker var. *ivesiana* (Greene) Parker. HARRI54.

*Tetraneuris angustifolia* Rydberg. RYDBE06. Type specimen from Colorado.

*Tetraneuris crandallii* Rydberg. Type: Mesa Co.: Grand Junction, 28 May 1894, Crandall (NY). Type specimen from Colorado.

*Tetraneuris intermedia* Greene. Type: Montrose Co.: Cimarron, 6 June 1901, Baker 34 (ND-G). Type specimen from Colorado.

*Tetraneuris mancosensis* A. Nelson. Type: Montezuma Co.: Mancos, 29 June 1898, Crandall (RM). Type specimen from Colorado.

*Tetraneuris pilosa* Greene ex Rydberg. Nomen nudum. Type: La Plata Co.: Los Pinos (Bayfield), May 1899, Baker 726 (NY). Type specimen from Colorado.

#### ***Tetraneuris scaposa* (De Candolle) Greene**

*Actinea osterhoutii* A. Nelson. Type: Las Animas Co.: Rocky Ford, 8 June 1900, Osterhout 2035 (RM). Type should be examined; Nelson says leaves can be almost ovate! We have no specimens from Trinidad, Berwind or Rocky Ford; a problem to solve with more collections. Type specimen from Colorado.

*Actinella scaposa* (De Candolle) Nuttall. PORTE74.

*Hymenoxys scaposa* (De Candolle) Parker. HARRI54.

*Hymenoxys scaposa* (De Candolle) Parker var. *linearis* (Nuttall) Parker. HARRI54.

*Tetraneuris scaposa* (De Candolle) Greene var. *linearis* (Nuttall) Parker. PARKE80.

*Tetraneuris stenophylla* Rydberg. RYDBE06.

#### ***Tetraneuris torreyana* (Nuttall) Greene**

RYDBE06.

*Hymenoxys torreyana* (Nuttall) Parker. WEBER73A.

#### ***Thelesperma* Lessing, 1831**

#### ***Thelesperma filifolium* (Hooker) A. Gray var. *intermedium* (Rydberg) Shinnery**

*Thelesperma intermedium* Rydberg. RYDBE06.

*Thelesperma tenue* Rydberg. Type: Huerfano Co.: La Veta Pass, 3 July 1900, Rydberg & Vreeland 5473 (NY). Type specimen from Colorado.

*Thelesperma trifidum* (Poiret) Britton. HARRI54.

#### ***Thelesperma megapotamicum* (Sprengel) Kuntze**

HARRI54. Distribution includes not only southwestern U. S. and Mexico, but Brasil, Uruguay, and Argentina!.

*Thelesperma gracile* A. Gray. RYDBE06.

#### ***Thelesperma subnudum* A. Gray**

RYDBE06; HARRI54.

#### ***Thymophylla* Lagasca 1816 STROT86**

#### ***Thymophylla aurea* (A. Gray) Greene**

STROT86.

*Dyssodia aurea* (A. Gray) A. Nelson. HARRI54; STROT86.

*Hymenatherum aureum* A. Gray. RYDBE06.

*Lowellia aurea* (A. Gray) A. Gray. RYDBE06.

#### ***Tonestus* A. Nelson, 1904 NESOM90**

#### ***Tonestus lyallii* (A. Gray) A. Nelson**

RYDBE06.

*Haplopappus lyallii* A. Gray. HARRI54.

*Haplopappus lyallii* A. Gray forma *hallii* A. Gray. Type: Hall & Harbour (GH). Type specimen from Colorado.

*Pyrocoma lyallii* (A. Gray) A. Nelson. RYDBE06.

#### ***Tonestus pygmaeus* (Torrey & Gray) A. Nelson**

RYDBE06.

*Haplopappus pygmaeus* (Torrey & Gray) A. Gray. HARRI54.

*Stenotus pygmaeus* Torrey & Gray. Type: El Paso Co.: Pikes Peak, James (fide GOODM95). Type specimen from Colorado.

#### ***Townsendia* Hooker, 1834 BEAMA57**

#### ***Townsendia annua* Beaman**

BEAMA57.

#### ***Townsendia eximia* A. Gray**

RYDBE06; HARRI54; BEAMA57.

*Townsendia vreelandii* Rydberg. Type: Huerfano Co.: Veta Mt., 19 July 1900, Vreeland 639 (NY). Type specimen from Colorado.

***Townsendia exscapa* (Richardson) T. C. Porter**

RYDBE06; HARRI54; BEAMA57.

*Townsendia exscapa* (Richardson) T. C. Porter var. *wilcoxiana* (Wood) A. Nelson in Coulter & Nelson. RYDBE06.

*Townsendia intermedia* Rydberg. RYDBE06.

*Townsendia sericea* auct., non Hooker. RYDBE06; BEAMA57. (= *T. hookeri* or *T. exscapa*).

*Townsendia wilcoxiana* Wood. RYDBE06.

***Townsendia fendleri* A. Gray**

RYDBE06; BEAMA57. Chaffee Co.

***Townsendia glabella* A. Gray**

RYDBE06; HARRI54; BEAMA57.

*Townsendia bakeri* Greene. Type: Archuleta Co.: Los Pinos, 16 May 1899, Baker 727 (ND-G). Type specimen from Colorado.

***Townsendia grandiflora* Nuttall**

RYDBE06; HARRI54; BEAMA57.

***Townsendia hookeri* Beaman**

HARRI54; BEAMA57. Type: Jefferson Co.: Mt. Vernon Canyon, 13 April 1920, Clokey 4338 (COLO). Type specimen from Colorado.

***Townsendia incana* Nuttall**

RYDBE06; HARRI54; BEAMA57.

*Townsendia diversa* Osterhout. Type: Mesa Co.: Grand Junction, 31 May 1921, Osterhout 6116 [6166 on holotype!] (RM). Type specimen from Colorado.

***Townsendia leptotes* (A. Gray) Osterhout**

HARRI54; BEAMA57. Endemic.

*Townsendia sericea* Hooker var. *leptotes* A. Gray. Type: Grand Co.: Middle Park, June-July 1864, Parry (GH). Type specimen from Colorado.

***Townsendia montana* Jones**

Moffat Co., (Wilken ined). Tentative, close to *T. leptotes*.

***Townsendia rothrockii* A. Gray ex Rothrock**

RYDBE06; HARRI54; BEAMA57. Endemic. Type: Park Co.: South Park, 13,500 ft. [probably Hoosier Ridge], 1873, Rothrock 875. Type specimen from Colorado.

***Townsendia strigosa* Nuttall**

RYDBE06; WEBER87B. Rydberg's reports are all erroneous, based on *T. annua* and others. Moffat Co.: Peterson & Wilken 83:287 (COLO).

***Tragopogon* L., 1753**

***Tragopogon dubius* Scopoli subsp. *major* (Jacquin) Vollmann**

HARRI54. Alien. Hybrids occur between this and the next.

***Tragopogon porrifolius* L.**

RYDBE06; HARRI54. Alien.

***Tragopogon pratensis* L.**

RYDBE06; HARRI54. Alien. Rydberg's reports apply to *T. dubius*.

***Trimorpha* Cassini, 1817 NESOM89A; NESOM94**

NESOM94 places this in *Symphytotrichum*, but we disagree

***Trimorpha elongata* (Ledebour) Vierhapper**

NESOM89A.

*Erigeron acre* L. var. *asteroides* (Andrzejowski) De Candolle. HARRI54.

*Erigeron acre* L. var. *debilis* A. Gray. HARRI54.

*Erigeron debilis* (A. Gray) Rydberg. RYDBE06.

*Erigeron droebachensis* O. F. Müller ex Retzius. RYDBE06.

*Erigeron elatus* Greene var. *bakeri* Greene. Type: Larimer Co.: Cameron Pass, 1896, Baker. Type specimen from Colorado.

*Erigeron elongatus* Ledebour. FERNA38; NESOM89A.

*Erigeron jucundus* Greene. RYDBE06.

*Erigeron yellowstonensis* A. Nelson. RYDBE06.

***Trimorpha lonchophylla* (Hooker) Nesom**

NESOM89A.

*Erigeron lonchophyllus* Hooker. HARRI54; NESOM89A.

**Unamia Greene, 1903****Unamia alba (Nuttall) Rydberg**

This hybridizes, in Canada, with *Oligoneuron rigidum*.

*Aster ptarmicoides* (Nees) Torrey & Gray. PORTE74; RYDBE06; HARRI54.

*Solidago ptarmicoides* (Nees) Boivin.

*Unamia ptarmicoides* (Nees) Greene. RYDBE06.

**Vernonia Schreber, 1791****Vernonia baldwinii Torrey subsp. interior (Small) Faust**

WEBER73A; FAUST72.

*Vernonia baldwinii* Torrey var. *interior* (Small) Schubert.

**Vernonia fasciculata Michaux subsp. corymbosa (Schweinitz) Löve & Löve**

HARRI54, as the species.

**Vernonia marginata (Torrey) Rafinesque**

HARRI54.

**Wyethia Nuttall, 1834: WEBER46****Wyethia amplexicaulis (Nuttall) Nuttall**

RYDBE06; HARRI54; WEBER46.

**Wyethia arizonica A. Gray**

RYDBE06; HARRI54; WEBER46.

**Wyethia magna A. Nelson ex W. A. Weber**

WEBER46; WEBER83A. Hybrid, *W. amplexicaulis* X *W. arizonica*. Hybrid.

**Xanthium L., 1753****Xanthium strumarium L.**

Alien.

*Xanthium commune* Britton. RYDBE06.

*Xanthium italicum* Moretti. HARRI54.

*Xanthium pensylvanicum* Wallroth. HARRI54.

**Ximenesia Cavanilles, 1794****Ximenesia encelioides Cavanilles**

PORTE74. Alien.

*Verbesina encelioides* (Cavanilles) Benth & Hooker ex A. Gray var. *exauriculata* Robinson & Greenman. HARRI54.

*Ximenesia exauriculata* (Robinson & Greenman) Rydberg. RYDBE06.

**Xylorhiza Nuttall, 1841****Xylorhiza glabriuscula Nuttall**

WATSO77.

*Aster xylorhiza* Torrey & Gray. RYDBE06; HARRI54.

*Machaeranthera glabriuscula* (Nuttall) Cronquist & Keck var. *villosa* (Nuttall) Cronquist & Keck.

*Xylorhiza villosa* Nuttall. RYDBE06.

**Xylorhiza venusta (Jones) Heller**

RYDBE06; WATSO77.

*Aster venustus* Jones. RYDBE06; HARRI54.

*Machaeranthera venusta* (Jones) Cronquist & Keck.

**Zinnia L., 1759 TORRE63****Zinnia grandiflora Nuttall**

HARRI54; TORRE63.

*Crassina anomala* (A. Gray) Kuntze. RYDBE06.

*Crassina grandiflora* (Nuttall) Kuntze. RYDBE06.

*Zinnia anomala* A. Gray. RYDBE06.

**ATHYRIACEAE****Athyrium Roth, 1799**

**Athyrium distentifolium Tausch ex Opiz var. americanum (Butters) Cronquist**

See discussion by Love in folder.

*Athyrium alpestre* (Hoppe) Rylands ex T. Moore subsp. *americanum* (Butters) Lellinger. LELLI81.

*Athyrium alpestre* (Hoppe) Rylands ex T. Moore var. *americanum* Butters. HARRI54.

**Athyrium filix-femina (L.) Roth ex Mertens subsp. angustum (Willdenow) Hultén**

*Athyrium angustum* (Willdenow) K. Presl var. *rubellum* (Gilbert) Butters. HARRI54.

**Athyrium filix-femina (L.) Roth ex Mertens subsp. cyclosorum (Ruprecht) C. Christensen**

PORTE74; HARRI54, as the binomial.

*Athyrium cyclosorum* Ruprecht. HARRI54.

***Athyrium filix-femina* (L.) Roth subsp. *filix-femina***

The eastern North American race. Erroneous Report.

**Cystopteris Bernhardi, 1805****Cystopteris fragilis (L.) Bernhardt**

HARRI54.

*Filix fragilis* (L.) Underwood. RYDBE06.

**Cystopteris montana (Lamarck) Bernhardt ex Desvoux**

HARRI54.

*Filix montana* (Lamarck) Underwood. RYDBE06.

**Cystopteris reevesiana Lellinger**

LELLI85.

**Cystopteris tenuis (Michaux) Desvoux**

LELLI85.

**Cystopteris utahensis Windham & Hauffler**

HAUFL91. Cited: Moffat Co.: Harding Hole, Dinosaur Nat. Mon., O'Kane 3170.

**Gymnocarpium Newman, 1851 PRYER93**

The genus is assigned to Dryopteridaceae by PRYER93

***Gymnocarpium disjunctum* (Ruprecht) Ching**

PRYER93. Northwestern North America to NW Wyoming.

*Dryopteris disjuncta* (Ledebour) Morton.

*Gymnocarpium dryopteris* (L.) Newman subsp. *disjunctum* (Ruprecht) Sarvela. SARVE78; PRYER93.

**Gymnocarpium dryopteris (L.) Newman**

PRYER93.

*Carpogymnia dryopteris* (L.) Löve & Löve.

*Phegopteris dryopteris* (L.) Fée. PORTE74; HARRI54.

**Gymnocarpium x brittonianum (Sarvela) Pryer & Hauffler**

PRYER93. Triploid hybrid, [G. *disjunctum* x G. *dryopteris*], the former no longer present here.

**BALSAMINACEAE****Impatiens L., 1753****Impatiens capensis Meerburgh**

HARRI54. Alien.

*Impatiens biflora* Walter.

**BERBERIDACEAE****Berberis L., 1753****Berberis fendleri A. Gray**

HARRI54.

**Berberis vulgaris L.**

HARRI54. Alien.

**Mahonia Nuttall, 1818; AHREN61*****Mahonia aquifolium* (Pursh) Nuttall**

TORRE27. Reports apply to *M. repens*.

*Berberis aquifolium* Pursh. PORTE74.

*Odostemon aquifolium* (Pursh) Rydberg. RYDBE06.

**Mahonia fremontii (Torrey) Fedde**

AHREN61.

*Berberis fremontii* Torrey. HARRI54.

*Odostemon fremontii* (Torrey) Rydberg. RYDBE06.

**Mahonia haematocarpa (Wootton) Fedde**

WEBER89C. Los Animas Co.: south of Trinidad, Archibald (COLO).

**Mahonia repens (Lindley) G. Don**

AHREN61.

*Berberis repens* Lindley. HARRI54.

## BETULACEAE

### *Alnus* P. Miller, 1754: AHREN79

***Alnus incana* (L.) Moench subsp. *tenuifolia* (Nuttall) Breitung**

PORTE74, as the species; FURLO79.

*Alnus tenuifolia* Nuttall. HARRI54.

***Alnus incana* (L.) Moench subsp. *tenuifolia* (Nuttall) Breitung forma *incisa* (W. A. Weber) W. A. Weber**

WEBER81B.

*Alnus tenuifolia* Nuttall forma *incisa* W. A. Weber. WEBER79A.

*Alnus viridis* Aiton

PORTE74. Report applies to *A. incana* ssp *tenuifolia*.

### *Betula* L., 1753

***Betula fontinalis* Sargent**

DUGLE66. Type: El Paso Co.: Manitou Springs, 21 June 1880, Engelmann & Sargent (A). Type specimen from Colorado.

*Betula eastwoodiae* Sargent. A hybrid of *B. fontinalis* X *B. glandulosa*. El Paso Co.: Pikes Peak, Weber 13270-13272.

***Betula glandulosa* Michaux**

HARRI54.

*Betula occidentalis* Hooker

PORTE74; HARRI54; DUGLE66. Reports apply to *B. fontinalis*.

***Betula papyrifera* H. Marshall**

HARRI54.

*Betula andrewsii* A. Nelson. FROIL52. Nomen nudum. Type: Boulder Co.: Green Mt., Andrews (RM). Hybrid, *B. papyrifera* X *B. fontinalis*. The *B. papyrifera* population has been swamped; only one tree comes really close to being pure *B. papyrifera*. Type specimen from Colorado.

### *Corylus* L., 1753

***Corylus cornuta* H. Marshall**

HARRI54.

### *Ostrya* Scopoli 1760

*Ostrya virginiana* (Miller) K. Koch

Erroneous Report.

*Ostrya virginica* Michaux. TORRE27. No specimen was collected; probably a misidentification of *Corylus rostrata*, fide GOODM95.

## BIGNONIACEAE

### *Campsis* Loureiro, 1790

***Campsis radicans* (L.) Seemann**

WEBER85A. Alien.

*Tecoma radicans* (L.) Jussieu.

## BORAGINACEAE

### *Amsinckia* Lehmann, 1831

*Amsinckia douglasiana* A. De Candolle

HARRI54. Misidentification.

*Amsinckia intermedia* Fischer & Meyer

HARRI54. Misidentification.

***Amsinckia lycopsoides* Lehmann**

WEBER66. Alien.

***Amsinckia menziesii* (Lehmann) Nelson & Macbride**

WEBER66. Alien.

***Amsinckia retrorsa* Suksdorf**

HITCH55. Alien.

*Amsinckia rugosa* Rydberg.*Amsinckia tessellata* A. GrayMisidentification of *A. retrorsa*.***Anchusa* L., 1753*****Anchusa azurea* P. Miller**

TUTIN64. Alien.

*Anchusa italica* Retzius. WEBER66.***Anchusa officinalis* L.**

RYDBE06; HARRI54. Alien.

***Asperugo* L., 1753*****Asperugo procumbens* L.**

HARRI54; SVENS87. Alien.

***Buglossoides* Moench, 1794*****Buglossoides arvense* (L.) I. M. Johnston**

CORRE70. Alien.

*Lithospermum arvense* L.. HARRI54.***Cryptantha* Lehmann, 1837***Cryptantha affinis* (A. Gray) Greene

HARRI54. Harrington's ms indicates that he never located a Colorado specimen.

***Cryptantha ambigua* (A. Gray) Greene**

HARRI54.

***Cryptantha circumscissa* (Hooker & Arnott) I. M. Johnston**HARRI54. This may not be a true *Cryptantha* in which case the correct name would be *Greeneocharis circumscissa* Hooker & Arnott Rydberg.*Greeneocharis circumscissa* (Hooker & Arnott) Rydberg. *Greeneocharis* Guerke & Harms in Engler & Prantl, Natürl. Pflanzenfam. Gesamtregister 2-4:462.1899. New name for *Piptocalyx* Torrey, non Olivier.*Piptocalyx circumscissa* (Hooker & Arnott) Torrey. RYDBE06.***Cryptantha crassisepala* (Torrey & Gray) Greene var. *crassisepala***

RYDBE06; HARRI54.

*Cryptantha kelseyana* Greene. RYDBE06; HARRI54.*Eritrichum angustifolium* Torrey. PORTE74.*Eritrichum crassisepalum* Torrey & Gray. PORTE74.***Cryptantha crassisepala* (Torrey & Gray) Greene var. *elachantha* I. M. Johnston**

MCGRE84B.

*Cryptantha echinella* GreeneWEBER73A. Misidentifications of *C. scoparia*.***Cryptantha fendleri* (A. Gray) Greene**

RYDBE06; HARRI54.

*Cryptantha exigua* Osterhout. Type: Larimer Co.: Moraine Park, July 1900 (or 1903), Osterhout 7339 (RM). Type specimen from Colorado.*Cryptantha pattersonii* (A. Gray) Greene. RYDBE06; HARRI54.*Krynitzkia pattersonii* A. Gray. Type: Base of Rocky Mts., 1875, Patterson (GH). Type specimen from Colorado.

**Cryptantha gracilis Osterhout**

HARRI54. Type: Garfield Co.: Glenwood Springs, 6 Aug. 1903, Osterhout 2589 (RM). Type specimen from Colorado.

**Cryptantha minima Rydberg**

HARRI54. Type: Huerfano Co.: Cucharas R. above La Veta, 31 May 1900, Rydberg & Vreeland 5697 (NY). Type specimen from Colorado.

**Cryptantha pterocarya (Torrey) Greene**

RYDBE06; HARRI54.

**Cryptantha recurvata Coville**

HARRI54.

**Cryptantha scoparia A. Nelson**

WEBER87B. !Cronquist.

*Cryptantha torreyana (A. Gray) Greene*

RYDBE06; HARRI54. "Idaho Springs." Far out of range. Misidentification (of?).

**Cryptantha watsonii (A. Gray) Greene**

HARRI54.

**Cynoglossum L., 1753****Cynoglossum officinale L.**

HARRI54; SVENS90. Alien.

**Echium L., 1753****Echium vulgare L.**

HARRI54. Alien. reported one record from SE Colorado, Otero Co. (RM).

**Eritrichum Schrader, 1820 LECHN56****Eritrichum aretioides (Chamisso) De Candolle**

LECHN56.

*Eritrichum aretioides* (Chamisso) De Candolle var. *elongatum* Rydberg. RYDBE06.

*Eritrichum argenteum* W. F. Wight. RYDBE06.

*Eritrichum elongatum* (Rydberg) W. F. Wight. RYDBE06; HARRI54.

*Eritrichum villosum* De Candolle var. *aretioides* Hooker. PORTE74.

*Myosotis nana* Villars. TORRE24,27. Pikes Peak, James.

*Omphalodes nana* (Aman) A. Gray var. *aretioides* (Chamisso) A. Gray. RYDBE06.

*Oreocarya pulvinata* A. Nelson. Type: Larimer Co.: Mummy Mt., 12-13000 ft., 12 Aug. 1904, Nelson 278 (RM). This is the white, small-flowered form. Type specimen from Colorado.

**Euploca Nuttall, 1836****Euploca convolvulacea Nuttall subsp. californica (Greene) Abrams**

Mesa Co.; Rabbit Valley (CS).

*Heliotropium convolvulaceum* (Nuttall) A. Gray var. *californicum* (Greene) I. M. Johnston. WILKE78.

**Euploca convolvulacea Nuttall subsp. convolvulacea**

RYDBE06; GOODM95. James collected this between Crook and Sterling, fide GOODM95.

*Heliotropium convolvulaceum* (Nuttall) A. Gray. PORTE74; HARRI54.

**Hackelia Opiz, 1838****Hackelia besseyi (Rydberg) J. L. Gentry**

GENTR74. Endemic.

*Lappula besseyi* Rydberg. Type: El Paso Co.: Cheyenne Canyon, 25 July 1895, Bessey s.n. (NY). Type specimen from Colorado.

**Hackelia floribunda (Lehmann) I. M. Johnston**

HARRI54.

*Echinospermum deflexum* Lehmann var. *floribundum* (Lehmann) S. Watson. PORTE74.

*Echinospermum subdecumbens* Parry. (This is a Colorado type, so get the information!). Type specimen from Colorado.

*Lappula subdecumbens* (Parry) A. Nelson.

**Hackelia gracilenta (Eastwood) I. M. Johnston**

HARRI54. Endemic.

*Lappula gracilenta* Eastwood. Type: Montezuma Co.: Navajo Canyon, Mesa Verde, 7 June 1892, Eastwood (CAS). Type specimen from Colorado.

*Hackelia leptophylla (Rydberg) I. M. Johnston*



HARRI54. Erroneous Report.

**Hackelia micrantha (Eastwood) J. L. Gentry**

GENTR74.

*Hackelia jessicae* (McGregor) Brand. GENTR74.

**Heliotropium L., 1753**

**Heliotropium curassavicum L. subsp. oculatum (Heller) Thorne**

PORTE74, as the species. Alien.

*Heliotropium spathulatum* Rydberg. HARRI54.

**Lappula Moench, 1794**

*Lappula diploloma (Fischer & Meyer) Guerke*

WEBER79A; WEBER87B. Misidentifications of *L. marginata*.

**Lappula marginata (Bieberstein) Guerke**

WEBER87B.

*Lappula heterosperma* Greene var. *homosperma* A. Nelson. Type: Weld Co.: New Windsor, 23 June 1899, Osterhout (RM). Type specimen from Colorado.

*Lappula redowskii* (Hornemann) Greene var. *desertorum* (Greene) I. M. Johnston.

*Lappula texana* (Scheele) Britton.

*Lappula texana* (Scheele) Britton var. *coronata* (Greene) Nelson & Macbride.

**Lappula redowskii (Hornemann) Greene**

HARRI54.

*Echinosperrum redowskii* (Hornemann) Lehmann. PORTE74.

*Lappula calycosa* Rydberg. Type: Huerfano Co.: Walsenburg, 5 June 1900, Rydberg & Vreeland 5715 (NY). Type specimen from Colorado.

**Lappula squarrosa (Retzius) Dumont de Cours**

*Lappula echinata* Gilibert.

*Lappula fremontii* (Torrey) Greene.

*Lappula myosotis* N. M. Wolf ex Moench.

**Lithospermum L., 1753 JOHNS52B**

*Lithospermum canescens (Michaux) Lehmann*

RYDBE06; HARRI54. "reported for eastern Colorado." Probably report refers to *L. croceum*.

**Lithospermum croceum Fernald**

*Lithospermum carolinense* (Walter) MacMillan. HARRI54.

*Lithospermum gmelinii* (Michaux) A. S. Hitchcock. RYDBE06.

*Lithospermum hirtum* Lehmann. PORTE74.

**Lithospermum incisum Lehmann**

HARRI54.

*Lithospermum albescens* Greene. RYDBE06. Error for *albicans*?

*Lithospermum albicans* Greene. Type: Archuleta Co.: Arboles, 10,25 June 1899, Baker 555) (ND-G). Type specimen from Colorado.

*Lithospermum angustifolium* Michaux. PORTE74; RYDBE06.

*Lithospermum breviflorum* Engelman & Gray. RYDBE06.

*Lithospermum linearifolium* Goldie. RYDBE06.

*Lithospermum longiflorum* Sprengel. PORTE74.

*Lithospermum mandanense* Sprengel. RYDBE06.

**Lithospermum multiflorum Torrey ex A. Gray**

RYDBE06; HARRI54.

**Lithospermum ruderales Douglas ex Lehmann**

HARRI54.

*Lithospermum ciliolatum* Greene. Type: Conejos Co.: Los Pinos, 18 May 1899, Baker (ND-G). Type specimen from Colorado.

*Lithospermum pilosum* Nuttall. PORTE74; RYDBE06.

*Lithospermum torreyi* Nuttall. RYDBE06.

**Lycopsis L., 1753**

## Erroneous Report

*Lycopsis arvensis* L.

HARRI54. "reported for Colorado." Daniels (1906) cited his collection 165 from mouth of Boulder Canyon. The specimen could not be found and probably this is a misidentification of *Anchusa*.

**Mertensia Roth, 1797 WILLI37****Mertensia alpina (Torrey) G. Don**

PORTE74; RYDBE06. In Colorado restricted to Pikes Peak, Sangre de Cristos. Old reports apply to any species of the *M. lanceolata* group.  
*Mertensia obtusiloba* Rydberg. Type: El Paso Co.: Pike's Peak, 1900, Clements s.n. (NY). Type specimen from Colorado.  
*Pulmonaria alpina* Torrey. TORRE27. Type: El Paso Co.: Pikes Peak, James (NY). Type specimen from Colorado.

**Mertensia arizonica Greene var. grahamii L. Williams**

WEBER66.

**Mertensia brevistyla S. Watson**

PORTE74; RYDBE06; HARRI54. Probably a heterostylous species. *M. fusiformis* differs from this only in the pin/thrum type. Even WILLI37 annotated "intermediates".  
*Mertensia fusiformis* Greene. HARRI54. Type: La Plata Co.: Bob Creek, 10,500 ft., 28 June 1898, Baker, Earle & Tracy 206 (ND-G). Type specimen from Colorado.

**Mertensia ciliata (James ex Torrey) G. Don**

RYDBE06; HARRI54.  
*Mertensia picta* Rydberg. Type: Larimer Co.: Estes Park, 20 July 1903, Osterhout 2823 (NY). Type specimen from Colorado.  
*Mertensia platensis* (Rydberg) Rydberg. RYDBE06.  
*Mertensia polyphylla* Greene. Type: Mineral Co.: Pagosa Peak, 8 Aug. 1899, Baker (ND-G). Type specimen from Colorado.  
*Mertensia polyphylla* Greene var. *platensis* Rydberg. Type: La Plata Co.: La Plata Mts., Bob Cr., 26 June 1898, Baker, Earle & Tracy 180 pr.p. (NY). Type specimen from Colorado.  
*Mertensia punctata* Greene. Type: Mineral Co.: Pagosa Peak, 10,000 ft., 15 Aug. 1899, Baker (ND-G). Type specimen from Colorado.  
*Pulmonaria ciliata* James ex Torrey. TORRE27; RYDBE06. Type: Rocky Mountains, James (NY). Type specimen from Colorado.

**Mertensia franciscana Heller**

HARRI54.  
*Mertensia alba* Rydberg. Type: La Plata Co.: La Plata R., 13 June 1898, Baker, Earle & Tracy 825 (NY). Type specimen from Colorado.  
*Mertensia pratensis* Heller. RYDBE06; WILLI37.

**Mertensia humilis Rydberg**

HARRI54.

**Mertensia lanceolata (Pursh) A. De Candolle var. lanceolata**

RYDBE06; HARRI54; WILLI37. A taxon with multitudinous intermingling races.  
*Mertensia bakeri* Greene. HARRI54. Type: Summit of Mt. Hayden, 13,000 ft., 14 July 1898, Baker, Earle & Tracy 326 (ND-G). Type specimen from Colorado.  
*Mertensia bakeri* Greene var. *lateriflora* (Greene) A. Nelson. RYDBE06.  
*Mertensia bakeri* Greene var. *osterhoutii* L. Williams. HARRI54. Type: Grand Co.: Sulphur Springs, 8 June 1906, Osterhout 3225 (RM). Type specimen from Colorado.  
*Mertensia brachyloba* Greene. Type: Larimer Co.: near Ft. Collins, 24 May 1896, Baker (ND-G). Type specimen from Colorado.  
*Mertensia canescens* Rydberg, non Kaulfuss. Type: Berthoud Pass, July 1903, Tweedy 5664 (NY). Basionym for *M. viridis* var. *cana*. Type specimen from Colorado.  
*Mertensia clokeyi* Osterhout. Type: Boulder Co.: Lake Eldora, Clokey 3161 (RM). Type specimen from Colorado.  
*Mertensia cynoglossoides* Greene. Type: Montrose Co.: moist ledges, Black Canyon, 20 June 1901, Baker 191 (ND-G). Type specimen from Colorado.  
*Mertensia lanceolata* (Pursh) A. De Candolle var. *brachyloba* (Greene) A. Nelson. HARRI54.  
*Mertensia lanceolata* (Pursh) A. De Candolle var. *fendleri* A. Gray. HARRI54.  
*Mertensia lanceolata* (Pursh) A. De Candolle var. *pubens* (Macbride) L. Williams. HARRI54.  
*Mertensia lanceolata* (Pursh) A. De Candolle var. *secundorum* (Cockerell) Cockerell. HARRI54.  
*Mertensia lateriflora* Greene. Type: Hinsdale Co.: above Carson, 9,000 ft., 2 July 1901, Baker 334 (ND-G). Type specimen from Colorado.  
*Mertensia lineariloba* Rydberg. Type: Huerfano Co.: West Indian Cr, Trinchera Mts., 14-15 June 1900, Rydberg & Vreeland 5691 (NY). Type specimen from Colorado.  
*Mertensia linearis* Greene. Type: No specimens mentioned. "foothills, Colorado, Wyoming etc.". Type specimen from Colorado.  
*Mertensia media* Osterhout. Type: El Paso Co.: Palmer Lake, 24 May 1913, Osterhout 4882 (RM). Type specimen from Colorado.  
*Mertensia micrantha* A. Nelson. Type: Boulder Co.: Sugarloaf Mt., 14 July 1906, Ramaley & Robbins 1750 (RM). Type specimen from Colorado.

*Mertensia muriculata* Greene. Lectotype (Williams): Montrose Co.: Black Canyon, 20 June 1901, Baker 193 (ND-G). Type specimen from Colorado.

*Mertensia ovata* Rydberg. Type: Huerfano Co.: West Spanish Peak, 6 July 1900, Rydberg & Vreeland 5690 (NY). Type specimen from Colorado.

*Mertensia papillosa* Greene. Type: 1868, Vasey on Powell Exped. Type specimen from Colorado.

*Mertensia parryi* Rydberg. Type: Alpine ridges E of Middle Park. 1861, Parry 286 (NY). Type specimen from Colorado.

*Mertensia perplexa* Rydberg. Type: Boulder Co.: S of Ward, 18 July 1901, Osterhout 2439 (NY). Type specimen from Colorado.

*Mertensia refracta* A. Nelson. Type: Rio Grande Co.: Wagon Wheel Gap, 9,000 ft., 28 July 1912, Griffin 139 (RM). Type specimen from Colorado.

*Mertensia secundorum* Cockerell. Type: Boulder Co.: mouth of Boulder Canyon, 16 May 1907, Euler (RM). Type specimen from Colorado.

*Mertensia viridula* Rydberg. Type: El Paso Co.: North Cheyenne Canyon, 16 July 1894, Bessey s.n. (NY). Type specimen from Colorado.

#### ***Mertensia lanceolata* (Pursh) A. De Candolle var. *viridis* A. Nelson**

*Mertensia myosotifolia* Heller ex Rydberg. WILLI37. Nomen nudum. Type: Eagle Co.: Red Cliff, 26 June 1900, Osterhout 2164 (NY). Hybrid.

*Mertensia viridis* (A. Nelson) A. Nelson. HARRI54.

*Mertensia viridis* (A. Nelson) A. Nelson var. *cana* (Rydberg) L. Williams. HARRI54.

*Mertensia viridis* (A. Nelson) A. Nelson var. *dilatata* (A. Nelson) L. Williams. HARRI54.

*Mertensia viridis* (A. Nelson) A. Nelson var. *parvifolia* L. Williams. HARRI54.

#### ***Mertensia oblongifolia* (Nuttall) G. Don**

HARRI54.

*Mertensia amoena* A. Nelson. RYDBE06.

*Mertensia oblongifolia* (Nuttall) G. Don var. *amoena* (A. Nelson) L. Williams. WILLI37.

#### ***Mertensia paniculata* G. Don**

PORTER74. Northwest America. Report applies to *M. ciliata*.

#### ***Mertensia sibirica* G. Don**

PORTE74. Reports apply to *M. ciliata*.

### **Myosotis L., 1753**

#### ***Myosotis alpestris* F. W. Schmidt var. *alpestris***

RYDBE06. The European race.

#### ***Myosotis asiatica* (Vestergren) Schischkin & Sergievskaya**

MERXM63.

*Myosotis alpestris* F. W. Schmidt subsp. *asiatica* Vestergren. HULTE27.

#### ***Myosotis scorpioides* L.**

WEBER55. Alien.

### **Onosmodium Michaux, 1803**

#### ***Onosmodium molle* Michaux subsp. *occidentale* (Mackenzie) Cochrane**

HARRI54, as the species. Michigan Bot. 15:104.1976.

*Onosmodium molle* Michaux var. *occidentale* (Mackenzie) I. M. Johnston.

*Onosmodium occidentale* Mackenzie. RYDBE06.

#### ***Onosmodium virginianum* (L.) A. De Candolle**

PORTE74. Southeastern U.S. Reports apply to *O. molle*.

### **Oreocarya Greene, 1887 HIGGI71, as *Cryptantha***

#### ***Oreocarya aperta* Eastwood**

Endemic. Type: Mesa Co.: Grand Junction, 27 June 1892, Eastwood (CAS). The species has not been found since the type collection was taken. Type specimen from Colorado.

*Cryptantha aperta* (Eastwood) Payson. HARRI54.

#### ***Oreocarya bakeri* Greene**

Type: Mancos R., 8 July 1898, Baker, Earle & Tracy 827 (ND-G). Type specimen from Colorado.

*Cryptantha bakeri* (Greene) Payson.

*Oreocarya eulophus* Rydberg. HIGGI71. Type: Dolores Co.: Dolores, 16 June 1892, Crandall s.n. (NY). Type specimen from Colorado.

#### ***Oreocarya breviflora* Osterhout**

*Cryptantha breviflora* (Osterhout) Payson. WEBER66.

#### ***Oreocarya caespitosa* A. Nelson**

WEBER79A.

*Cryptantha caespitosa* (A. Nelson) Payson.

**Oreocarya cana A. Nelson**

*Cryptantha cana* (A. Nelson) Payson. HARRI54.

**Oreocarya celosioides Eastwood**

*Cryptantha bradburiana* Payson. HARRI54.

*Cryptantha celosioides* (Eastwood) Payson. HIGGI71.

*Eritrichum glomeratum* A. De Candolle. RYDBE06.

*Krynitzkia glomerata* (A. De Candolle) A. Gray. RYDBE06.

*Oreocarya affinis* Greene. HIGGI71.

*Oreocarya affinis* Greene var. *perennis* A. Nelson. RYDBE06; HIGGI71.

*Oreocarya perennis* (A. Nelson) Rydberg. RYDBE06. "Cheyenne Mountain." Misidentification, probably of *O. thyrsoflora*; far out of range for the species.

*Rochelia glomerata* (Nuttall ex Pursh) Torrey. TORRE27.

**Oreocarya elata Eastwood**

Endemic. Type: Mesa Co.: Grand Junction, 15 May , 28 June 1892, Eastwood (CAS). Type specimen from Colorado.

*Cryptantha elata* (Eastwood) Payson. HARRI54.

**Oreocarya flava A. Nelson**

RYDBE06.

*Cryptantha flava* (A. Nelson) Payson. HARRI54.

*Oreocarya cristata* Eastwood. HIGGI71. Type: Mesa Co.: Grand Junction, 17 May 1892 Eastwood (CAS). Type specimen from Colorado.

**Oreocarya flavocolata A. Nelson**

*Cryptantha flavocolata* (A. Nelson) Payson. HARRI54.

**Oreocarya fulvocanescens (A. Gray) Greene**

*Cryptantha fulvocanescens* (A. Gray) Payson. RYDBE06; HARRI54.

*Krynitzkia fulvocanescens* A. Gray. RYDBE06.

**Oreocarya humilis Greene subsp. nana (Eastwood) W. A. Weber**

WEBER81B.

*Cryptantha nana* (Eastwood) Payson. HARRI54.

*Oreocarya nana* Eastwood. Type: Mesa Co.: Mesa above Gunnison R., Grand Junction, 17 May 1892 (Eastwood (CAS). Type specimen from Colorado.

**Oreocarya longiflora A. Nelson**

Endemic. Type: Mesa Co.: Palisade, 14 May 1898, Crandall (RM). Type specimen from Colorado.

*Cryptantha longiflora* (A. Nelson) Payson. HARRI54.

*Oreocarya horridula* Greene. HIGGI71. Type: Deer Run, 11 June 1901, Baker 133 (ND-G). Type specimen from Colorado.

**Oreocarya mensana (Jones) Payson**

*Cryptantha mensana* Jones. KELLE83.

**Oreocarya nitida Greene**

HIGGI71; CRONQ72; SIVIN94. Type: Deer Run, 11 June 1901, Baker 95 (ND-G). SIVIN94 regards this as a subspecies of *O. fulvocanescens* but does not combine under *Oreocarya*, which he considers a subgenus of *Cryptantha*. Type specimen from Colorado.

*Cryptantha fulvocanescens* (A. Gray) Payson. RYDBE06; HARRI54.

*Krynitzkia fulvocanescens* A. Gray. RYDBE06.

**Oreocarya osterhoutii Payson**

Endemic. Type: Mesa Co.: Monument Park, Grand Junction, 3 June 1921, Osterhout 6138 (RM). Type specimen from Colorado.

*Cryptantha osterhoutii* (Payson) Payson. HARRI54.

**Oreocarya paradoxa A. Nelson**

Endemic. Type: Montrose Co.: Paradox Valley, 19 June 1912, Walker 91 (RM). Type specimen from Colorado.

*Cryptantha paradoxa* (A. Nelson) Payson. HARRI54.

*Oreocarya gypsophila* Payson. HIGGI71. Type: Montrose Co.: Paradox Valley, 18 June 1914, Payson 458 (RM). Type specimen from Colorado.

**Oreocarya pustulosa Rydberg**

*Cryptantha jamesii* (Torrey) Payson var. *pustulosa* (Rydberg) Harrington. HARRI54.

*Cryptantha pustulosa* (Rydberg) Payson. CRONQ72.

**Oreocarya rollinsii (I. M. Johnston) W. A. Weber**

WEBER81B.

*Cryptantha rollinsii* I. M. Johnston.

**Oreocarya sericea (A. Gray) Greene**

Endemic.

*Cryptantha sericea* (A. Gray) Payson. HARRI54.

*Oreocarya argentea* Rydberg. Type: Garfield Co.: Rifle, 23 June 1900, Osterhout 2122 (NY). Type specimen from Colorado.

*Oreocarya procera* Osterhout. Type: Garfield Co.: Glenwood Springs, 18 June 1899, Osterhout 1867 (RM). Type specimen from Colorado.

**Oreocarya stricta Osterhout**

Endemic. Type: Moffat Co.: S of Yampa River along Victory Hwy, 21 June 1922, Osterhout 6195 (RM). Type specimen from Colorado.

*Cryptantha stricta* (Osterhout) Payson. HARRI54.

**Oreocarya suffruticosa (Torrey) Greene**

RYDBE06. Based on *Myosotis suffruticosa* Torrey (non *Cryptantha suffruticosa* Piper, 1919).

*Cryptantha cinerea* (Greene) Cronquist var. *jamesii* Cronquist. CRONQ84. *Oreocarya cinerea* Greene is later than *O. suffruticosa* Greene. the specific epithet *suffruticosa* is preoccupied in *Cryptantha* but available in *Oreocarya*.

*Cryptantha jamesii* (Torrey) Payson. HARRI54.

*Eritrichum jamesii* Torrey. PORTE74.

*Eritrichum multicaule* Torrey. RYDBE06.

*Myosotis suffruticosa* Torrey. TORRE27; PORTE74. Type from either Nebraska or Colorado, fide GOODM95. Type specimen from Colorado.

*Oreocarya cinerea* Greene. Type: Arkansas R. valley, Greene (ND-G). Type specimen from Colorado.

*Oreocarya multicaulis* (Torrey) Greene. RYDBE06.

**Oreocarya thyrsoflora Greene**

RYDBE06; HIGGI71. Lectotype from Cheyenne, Wyoming.

*Cryptantha thyrsoflora* (Greene) Payson. HARRI54.

*Eritrichum glomeratum* A. De Candolle var. *hispidissimum* Torrey. PORTE74, as the species; RYDBE06.

*Oreocarya dura* Nelson & Macbride. HIGGI71. Type: Central Colorado, 1907, Johnson 418 (RM). Type specimen from Colorado.

*Oreocarya hispidissima* (Torrey) Rydberg. RYDBE06.

*Oreocarya monosperma* Osterhout. HIGGI71. Type: Las Animas Co.: Trinidad, 20 July 1918, Osterhout 5754 (RM). Type specimen from Colorado.

*Rochelia* (n.sp.) Torrey. TORRE27.

**Oreocarya virgata (T. C. Porter) Greene**

RYDBE06. Endemic.

*Cryptantha virgata* (T. C. Porter) Payson. HARRI54.

*Eritrichum glomeratum* De Candolle var. *virgatum* T. C. Porter. Type: not designated. Type specimen from Colorado.

*Oreocarya spicata* Rydberg. Type: El Paso Co.: Artist's Glen, 1 Aug. 1901, Clements 102 (NY). Type specimen from Colorado.

**Oreocarya weberi (I. M. Johnston) W. A. Weber**

WEBER81B; OKANE88. Endemic.

*Cryptantha weberi* I. M. Johnston. Type: Saguache Co.: Cochetopa Pass, 28 July 1950, Weber 5778 (GH). Type specimen from Colorado.

**Plagiobothrys Fischer & Meyer, 1836**

**Plagiobothrys scouleri (Hooker & Arnott) I. M. Johnston subsp. *penicillata* (Greene) Löve**

CRONQ72.

*Allocarya scopulorum* Greene. RYDBE06. No type mentioned. Colorado first state noted. Type specimen from Colorado.

*Plagiobothrys nelsonii* (Greene) I. M. Johnston. HARRI54; CRONQ72.

*Plagiobothrys orthocarpus* (Greene) I. M. Johnston.

*Plagiobothrys scopulorum* (Greene) I. M. Johnston. HARRI54.

**Symphytum L., 1753**

***Symphytum officinale* L.**

WEBER81A. Alien.

**BRASSICACEAE**

***Aethionema* R. Brown, 1812**

***Aethionema saxatile* (L.) R. Brown**

Alien.

**Alliaria Heister ex Fabricius, 1759**

**Alliaria petiolata (Bieberstein) Cavara & Grande**

TUTIN64. Alien.

Alliaria officinalis L.. WEBER66.

Arabis petiolata M. Bieberstein. Fl. Taur.-Caucas.2:126.1808.

Erysimum alliaria L.. Sp. Pl. 2:660.1753.

**Alyssum L., 1753 DUDLE64**

**Alyssum alyssoides (L.) L.**

HARRI54; DUDLE64. Alien. Syst. Nat., ed. 10, 2:1130.1759.

Clypeola alyssoides L.. Sp. Pl. 2:653.1753.

**Alyssum desertorum Stapf**

WEBER66; DUDLE64. Alien. Denkschr. Kaiserl. Akad. Wiss. Math.-Naturwiss. Kl. 51:302.1886.

**Alyssum murale Waldstein & Kitaibel**

WEBER82A. Alien. Descr. Icon. Pl. Hung. 1:5.1799.

**Alyssum parviflorum M. Bieberstein var. micranthum (C. A. Meyer in Fisher & Meyer) Dorn**

DORN88C. Alien. Vasc. Pl. Wyoming p. 295.1988. Explanation on p. 302.

Alyssum micranthum C. A. Meyer in Fischer & Meyer. Ind. Sem. Hort. Bot. Petrop. 1:22.1835.

Alyssum minus (L.) Rothmaler. WEBER66; DUDLE64; DORN88C. The basionym, Clypeola minor L. was illegitimate (see ICBN Art. 45, Ex. 1).

Alyssum minus (L.) Rothmaler var. micranthum (C. A. Meyer) Dudley. DORN88C.

**Arabis L., 1753 ROLLI41**

**Arabis hirsuta (L.) Scopoli var. glabrata Torrey & Gray**

ROLLI93. Moffat Co.: MacLeod 608, 486, 472.

*Arabis hirsuta (L.) Scopoli var. hirsuta*

HARRI54. Erroneous Report.

**Arabis hirsuta (L.) Scopoli var. pycnocarpa (Hopkins) Rollins**

HARRI54.

Arabis ovata (Pursh) Poiret. RYDBE06.

*Arabis lyallii S. Watson*

WEBER66. COLO report is misident. of Boechera drummondii.

*Arabis nuttallii B. L. Robinson in A. Gray*

WEBER73A. COLO report is misident. of A. hirsuta.

**Armoracia Gaertner, Meyer, & Scherbius, 1800**

**Armoracia rusticana Gaertner, Meyer, & Scherbius**

TUTIN64. Alien. One old record. The species has not persisted.

Rorippa armoracia (L.) A. S. Hitchcock. HARRI54.

**Barbarea R. Brown, 1812**

**Barbarea orthoceras Ledebour**

HARRI54.

Barbarea americana Rydberg. RYDBE06.

*Barbarea verna (P. Miller) Ascherson*

HARRI54. "doubtfully reported from western Colorado".

Barbarea praecox (J. E. Smith) R. Brown. RYDBE06; TUTIN64. "Hotchkiss".

**Barbarea vulgaris R. Brown**

WEBER66. Alien.

**Berteroa De Candolle, 1821**

**Berteroa incana (L.) De Candolle**

WEBER61. Alien.

**Boechera Löve & Löve, 1976 ROLLI41, as Arabis; BOCHE54; LOVE76**

**Boechea crandallii (B. L. Robinson) W. A. Weber**

WEBER82B. Endemic.

*Arabis crandallii* B. L. Robinson. HARRI54. Type: Montrose Co.: Cimarron, 18 May 1898, Crandall 6 (GH). Type specimen from Colorado.

*Arabis stenoloba* Greene. Type: Montrose Co.: stony hillsides above Cimarron, Baker 21 (ND-G). Type specimen from Colorado.

**Boechea divaricarpa (A. Nelson) Löve & Löve**

Bot. Not. 128:513.1976.

*Arabis divaricarpa* A. Nelson. HARRI54.

*Arabis oblanceolata* Rydberg. Type: Ouray Co.: Valley Spur, 13 Sept. 1901, Underwood & Selby 454 (NY). Type specimen from Colorado.

**Boechea drummondii (A. Gray) Löve & Löve**

Bot. Not. 128:513.1976.

*Arabis connexa* Greene. Type: Mineral Co.: Pagosa Peak, 10,500 ft., 18 Aug. 1899, Baker (ND-G). Type specimen from Colorado.

*Arabis drummondii* A. Gray. HARRI54.

*Arabis oxyphylla* Greene. Type: Clear Creek Co.: Empire, 1875, Greene (ND-G). Type specimen from Colorado.

*Arabis philonipha* A. Nelson. RYDBE06.

**Boechea fendleri (S. Watson) W. A. Weber subsp. fendleri**

WEBER82B.

*Arabis fendleri* (S. Watson) Greene. HARRI54.

**Boechea fendleri (S. Watson) W. A. Weber subsp. spatifolia (Rydberg) W. A. Weber**

WEBER82B.

*Arabis fendleri* (S. Watson) Greene var. *spatifolia* (Rydberg) Rollins. HARRI54.

*Arabis spatifolia* Rydberg. Type: Larimer Co.: Estes Park, 20 July 1903, Osterhout 2808 (NY). Type specimen from Colorado.

**Boechea fernaldiana (Rollins) W. A. Weber**

WEBER82B; WELSH86B.87. Welsh claims that *B. fernaldiana* is limited to Nevada, and proposes *Arabis vivariensis* Welsh (1986) for the Colorado sp. However, this appears to be more closely related to *fernalidiana* than *fernalidiana* var. *stylosa* is to *fernalidiana*.

*Arabis fernaldiana* Rollins. HARRI54.

*Arabis vivariensis* Welsh.

*Boechea vivariensis* (Welsh) W. A. Weber. WEBER89B.

**Boechea gunnisoniana (Rollins) W. A. Weber**

WEBER82B. Endemic.

*Arabis gunnisoniana* Rollins. HARRI54. Gunnison Co.: Saguache Cr., 6 mi E Gunnison, 21 May 1938, Rollins 2090 (GH). Type specimen from Colorado.

**Boechea lemmonii (S. Watson) W. A. Weber**

WEBER82B.

*Arabis drummondii* A. Gray var. *alpina* S. Watson. PORTE74.

*Arabis egglestonii* Rydberg. Type: Clover Mt., above Garfield, 31 July 1910, Eggleston 6013 (fr.), 6016 (fl) (NY). Type specimen from Colorado.

*Arabis lemmonii* S. Watson. HARRI54.

**Boechea lignifera (A. Nelson) W. A. Weber**

WEBER82B.

*Arabis lignifera* A. Nelson. HARRI54.

**Boechea oxylobula (Greene) W. A. Weber**

WEBER82B.

*Arabis aprica* Osterhout ex A. Nelson. Lectotype: Grand Co.: Sulphur Springs, 26 June 1907, Osterhout 3540 (RM 60660). Type specimen from Colorado.

*Arabis demissa* Greene. HARRI54. Type: Montrose Co.: Cimarron, 4 June 1901, Baker 16 (ND-G). Type specimen from Colorado.

*Arabis demissa* Greene var. *russeola* Rollins. HARRI54.

*Arabis oxylobula* Greene. HARRI54. Type: Garfield Co.: Glenwood Springs, 18 June 1899, Osterhout (ND-G). Type specimen from Colorado.

*Arabis pendulina* Greene var. *russeola* (Rollins) Rollins.

*Arabis rugocarpa* Osterhout. Type: Lake Co.: Malta, near Leadville, 20 June 1903, Osterhout 2080 (RM). Type specimen from Colorado.

*Boechea demissa* (Greene) W. A. Weber. WEBER82B.

*Boechea pendulina* (Greene) W. A. Weber. WEBER82B.

**Boechea pallidifolia (Rollins) W. A. Weber**

WEBER95.

*Arabis pallidifolia* Rollins. ROLLI93B. Type: Gunnison Co.: High hill above Sapinero, 18 June 1983, Rollins 8376 (GH). Type specimen from Colorado.

***Boechera perennans* (S. Watson) W. A. Weber**

WEBER82B.

*Arabis perennans* S. Watson. HARRI54.

***Boechera pulchra* (Jones ex S. Watson) W. A. Weber subsp. *pallens* (Jones) W. A. Weber**

WEBER82B.

*Arabis pulchra* Jones ex S. Watson var. *pallens* Jones. HARRI54.

***Boechera retrofracta* (R. Graham) Löve & Löve**

BOECH54; LOVE82A p. 125.

*Arabis consanguinea* Greene. Type: Conejos Co.: Los Pinos, 18 May 1899, Baker (ND-G). Type specimen from Colorado.

*Arabis holboellii* Hornemann var. *pendulocarpa* (A. Nelson) Rollins. HARRI54. hybrids?.

*Arabis holboellii* Hornemann var. *pinetorum* (Tidestrom) Rollins. HARRI54. hybrids?.

*Arabis holboellii* Hornemann var. *retrofracta* (R. Graham) Rydberg. HARRI54.

*Arabis retrofracta* R. Graham. PORTE74.

*Arabis rhodantha* Greene. Type: Clear Creek Co.: near Empire, 1875, Greene (ND-G). Type specimen from Colorado.

***Boechera selbyi* (Rydberg) W. A. Weber**

WEBER82B.

*Arabis selbyi* Rydberg. HARRI54. Type: Ouray Co.: W of Ouray, 9 Sept. 1901, Underwood & Selby 207 (NY). Type specimen from Colorado.

**Brassica L., 1753**

***Brassica elongata* Ehrhart var. *integrifolia* (Boissier) Breistroffer**

Alien. Grand Co.: 4 mi. NNW of Kremmling along Hwy. 40, 11 July 1985, Neese, Grah & Masslich 17185 (BY, RM, COLO-photo).

***Brassica juncea* (L.) Cosson**

RYDBE06; HARRI54. Alien.

***Brassica napus* L.**

Alien.

***Brassica nigra* (L.) K. Koch**

HARRI54. Alien.

***Brassica rapa* L.**

TUTIN64. Our collections appear to belong to *B. napus*.

*Brassica campestris* L.. HARRI54.

**Braya Sternberg & Hoppe, 1815**

***Braya glabella* (Richardson) S. Watson var. *glabella***

HARRI85; SIEMS90. Disjunct from Canadian Rockies, Jasper National Park. Omitted by Rollins, ROLLI93.

***Braya humilis* (C. A. Meyer) B. L. Robinson**

*Braya humilis* (C. A. Meyer) B. L. Robinson subsp. *ventosa* Rollins. ROLLI53A. Type: Summit Co.: North Star Mt., Hoosier Pass, 7 July 1951, Rollins & Weber 51288 (GH). Type specimen from Colorado.

*Torulularia humilis* (C. A. Meyer) O. E. Schulz. Fl. USSR uses this name but the genera are not clearly delimited. Type specimen from Altai!.

**Camelina Crantz, 1762**

***Camelina microcarpa* Andrzejowski ex De Candolle**

HARRI54. Alien.

***Camelina rumelica* Velenovsky**

MCGRE84A. Alien.

***Camelina sativa* Crantz**

PORTE74. Report applies to *C. microcarpa*.

**Capsella Medicus, 1792**

***Capsella bursa-pastoris* (L.) Medicus**

HARRI54. Alien.

*Bursa bursa-pastoris* (L.) Britton. RYDBE06.

**Cardamine L., 1753**



**Cardamine breweri S. Watson**

!Crovello.

Cardamine vallicola Greene. Type: Larimer Co.: Dale Cr, "Wyoming", 30 June 1896, Greene (ND-G). Type specimen from Colorado.

**Cardamine cordifolia A. Gray**

HARRI54.

Cardamine cordifolia A. Gray var. cardiophylla (Rydberg) O. E. Schulz. Bot. Jahrb. 32:438. 1903.

**Cardamine cordifolia A. Gray var. incana Jones**

ROLLI93. "Colorado and Utah".

Cardamine cardiophylla Rydberg. Type: Lake Co.: Tennessee Pass, 27 June 1900, Osterhout 2178 (NY). The densely pubescent race. Type specimen from Colorado.

Cardamine cordifolia A. Gray var. pubescens A. Gray ex O. E. Schulz. Bot. Jahrb. 32:439.1903.

Cardamine incana (A. Gray) A. Nelson. Bot. Gaz. 42:50. 1906.

Cardamine infausta Greene. RYDBE06.

**Cardamine oligosperma Nuttall in Torrey & Gray**

HITCH55; ROLLI93.

Cardamine acuminata (Nuttall ex Torrey &amp; Gray) Rydberg. ROLLI93.

Cardamine hirsuta L. var. acuminata Nuttall ex Torrey &amp; Gray. RYDBE06; ROLLI93.

Cardamine umbellata Greene. HARRI54; ROLLI93.

**Cardamine pensylvanica Mühlenberg ex Willdenow**

HARRI54; ROLLI93.

**Cardaria Desvaux, 1815 ROLLI40****Cardaria chalepensis (L.) Handel-Mazzetti**

WEBER81A. Alien.

**Cardaria draba (L.) Desvaux**

HARRI54. Alien.

Cardaria draba (L.) Desvaux var. repens (Schrenk) O. E. Schulz. WEBER55.

**Cardaria latifolia (L.) Spach**

WEBER89C. Alien. Spach, Hist. Nat. Veg. 6:546.1838. This is the type species of Lepidium; Lepidium should be retypified!.

Lepidium latifolium L.. HARRI54.

**Cardaria pubescens (C. A. Meyer) Jarmolenko**

HARRI54. Alien.

**Caulanthus S. Watson, 1871****Caulanthus crassicaulis (Torrey) S. Watson**

HARRI54.

**Caulanthus lasiophyllus (Hooker & Arnott) Payson var. utahensis (Rydberg) Payson**

Erroneous Report.

Thelypodium utahensis Rydberg. RYDBE06. Misidentification of (?). Taxon comes no nearer to Colorado than southwestern Utah.

**Chorispora R. Brown, 1821****Chorispora tenella (Pallas) De Candolle**

HARRI54. Alien.

**Conringia Heister, 1759****Conringia orientalis (L.) Dumont de Cours**

HARRI54. Alien.

**Descurainia Webb & Berthelot, 1836 DETLI39; ROLLI93B****Descurainia californica (A. Gray) O. E. Schulz**

HARRI54.

**Descurainia incana (Bernhardi ex Fischer & Meyer) Dorn**

DORN88C; ROLLI93B.

Descurainia richardsonii (Sweet) O. E. Schulz. HARRI54; DORN88C. Dorn points out that Sweet's names in ed. 3, Hort. Brit., are invalid according to ICBN87.

Descurainia richardsonii (Sweet) O. E. Schulz subsp. incisa (Engelmann ex A. Gray) Detling. HARRI54.

Descurainia richardsonii (Sweet) O. E. Schulz subsp. procera (Greene) Detling. HARRI54.

*Descurainia richardsonii* (Sweet) O. E. Schulz var. *sonnei* (B. L. Robinson) C. L. Hitchcock. HARRI54; ROLLI93B.  
*Sisymbrium canescens* Richardson, non Nuttall. TORRE27; PORTE74. Nuttall's *S. canescens* is *D. pinnata* subsp. *pinnata*.  
*Sisymbrium incanum* Bernhardt ex Fischer & Meyer. ROLLI93B.  
*Sophia incisa* (Engelmann ex A. Gray) Greene. RYDBE06.  
*Sophia leptophylla* Rydberg. ROLLI93B. Type: Larimer Co.: foothills, 20 Aug. 1895, Crandall & Cowen 55 (NY). Type specimen from Colorado.  
*Sophia procera* Greene. ROLLI93B. Type: Mineral Co.: Pagosa Peak, 13 Aug. 1899, Baker 360 (ND-G). Type specimen from Colorado.  
*Sophia purpurascens* Rydberg. ROLLI93B. Type: Ouray Co.: Red Mountain, S of Ouray, 11 Sept. 1901, Underwood & Selby 275 (NY). Type specimen from Colorado.  
*Sophia ramosa* Rydberg. Type: Gunnison Co.: Pitkin, 9,180 ft., 13 Sept. 1901, Underwood & Selby 413 (NY), isotype (COLO). ROLLI93 does not mention this name. Type specimen from Colorado.

***Descurainia incisa* (Engelmann ex A. Gray) Britton subsp. *filipes* (A. Gray) Rollins**

ROLLI93B.

*Descurainia pinnata* (Walter) Britton subsp. *filipes* (A. Gray) Detling. HARRI54; ROLLI93B.  
*Sisymbrium incisum* Engelmann ex A. Gray var. *filipes* A. Gray. ROLLI93B. Type from New Mexico.  
*Sophia filipes* (A. Gray) Heller. RYDBE06.

***Descurainia incisa* (Engelmann ex A. Gray) Britton subsp. *incisa***

ROLLI93B.

*Descurainia richardsonii* (Sweet) O. E. Schulz. HARRI54; DORN88C. Dorn points out that Sweet's names in ed. 3, Hort. Brit., are invalid according to ICBN87.  
*Descurainia richardsonii* (Sweet) O. E. Schulz subsp. *incisa* (Engelmann ex A. Gray) Detling. HARRI54.  
*Descurainia richardsonii* (Sweet) O. E. Schulz subsp. *procera* (Greene) Detling. HARRI54.  
*Descurainia richardsonii* (Sweet) O. E. Schulz var. *sonnei* (B. L. Robinson) C. L. Hitchcock. HARRI54; ROLLI93B.  
*Sisymbrium canescens* Richardson, non Nuttall. TORRE27; PORTE74. Nuttall's *S. canescens* is *D. pinnata* subsp. *pinnata*.  
*Sisymbrium incanum* Bernhardt ex Fischer & Meyer. ROLLI93B.  
*Sophia incisa* (Engelmann ex A. Gray) Greene. RYDBE06.  
*Sophia leptophylla* Rydberg. ROLLI93B. Type: Larimer Co.: foothills, 20 Aug. 1895, Crandall & Cowen 55 (NY). Type specimen from Colorado.  
*Sophia procera* Greene. ROLLI93B. Type: Mineral Co.: Pagosa Peak, 13 Aug. 1899, Baker 360 (ND-G). Type specimen from Colorado.  
*Sophia purpurascens* Rydberg. ROLLI93B. Type: Ouray Co.: Red Mountain, S of Ouray, 11 Sept. 1901, Underwood & Selby 275 (NY). Type specimen from Colorado.  
*Sophia ramosa* Rydberg. Type: Gunnison Co.: Pitkin, 9,180 ft., 13 Sept. 1901, Underwood & Selby 413 (NY), isotype (COLO). ROLLI93 does not mention this name. Type specimen from Colorado.

***Descurainia incisa* (Engelmann ex A. Gray) Britton subsp. *viscosa* (Rydberg) Rollins**

ROLLI93B.

*Descurainia richardsonii* (Sweet) O. E. Schulz subsp. *viscosa* (Rydberg) Detling. HARRI54; ROLLI93B.  
*Sophia glandifera* Osterhout. ROLLI93B. Type: Routt Co.: Hayden, 27 May 1915, Osterhout 5226 (RM). Rollins incorrectly assigned this to subsp. *filipes*, although the name was based on glandulosity!. Type specimen from Colorado.  
*Sophia viscosa* Rydberg. ROLLI93B. Type from Idaho.

***Descurainia pinnata* (Walter) Britton subsp. *brachycarpa* (Richardson) Detling**

HARRI54; ROLLI93. Colorado not specifically mentioned, but included implicitly within the range given. No specimens at COLO.

***Descurainia pinnata* (Walter) Britton subsp. *halictorum* (Cockerell) Detling**

HARRI54; ROLLI93.

*Descurainia pinnata* (Walter) Britton subsp. *halictorum* (Cockerell) Detling. HARRI54; ROLLI93.  
*Sophia andrenarum* Cockerell. RYDBE06; ROLLI93B.  
*Sophia halictorum* Cockerell. ROLLI93. Type from New Mexico, Mesilla Park, April 1900, Cockerell (NY).  
*Sophia intermedia* Rydberg. ROLLI93; RYDBE06.

***Descurainia pinnata* (Walter) Britton subsp. *intermedia* (Rydberg) Detling**

ROLLI93. No specimens at COLO, although ROLLI93 includes Colorado specifically in the range.

*Sophia nelsonii* Rydberg. ROLLI93.

***Descurainia pinnata* (Walter) Britton subsp. *nelsonii* (Rydberg) Detling**

ROLLI93. No specimens at COLO, although ROLLI93 specifically includes Colorado in the range.

*Sophia nelsonii* Rydberg. ROLLI93.

***Descurainia ramosissima* Rollins**

WEBER89C. Endemic. Type: State route 17, 7 mi S Villa Grove, 16 June 1983, Rollins et al. 8349) (GH). San Luis Valley and South Park. Type specimen from Colorado.

**Descurainia sophia (L.) Webb ex Prantl**

HARRI54; ROLLI93. Alien.

**Dimorphocarpa Rollins, 1979***Dimorphocarpa candicans (Raf.) Rollins*

TORRE27. Erroneous Report.

Iberis candicans Rafinesque. TORRE27. As Iberis n. sp.. No collection or locality mentioned. Probably coseen in Kansas or Oklahoma.

**Dimorphocarpa wislizenii (Engelmann) Rollins**

RYDBE06; ROLLI79; OKANE88. Alien. O'Kane reports from western Montezuma Co.: Cowboy Wash.

Dithyrea wislizenii Engelmann. HARRI54. "San Juan Valley, Brandegee 1117" (MO, UC).

**Diplotaxis A. De Candolle, 1821****Diplotaxis muralis (L.) A. De Candolle**

Alien. Rio Blanco Co.

**Draba L., 1753****Draba albertina Greene**

MULLI75. !Mulligan.

Draba nitida Greene. MULLI75. Type: Marshall Pass, 19 July 1901, Baker 492 (ND-G). Type specimen from Colorado.

Draba stenoloba Ledebour var. nana (O. E. Schulz) C. L. Hitchcock. HARRI54; HITCH41.

*Draba alpina L.*

PORTE74. Eurasian species. Misidentification.

*Draba apiculata C. L. Hitchcock*HARTM87. Price, in litt., identifies the specimen as *D. globosa* Payson.Draba densifolia Nuttall ex Torrey & Gray var. apiculata (C. L. Hitchcock) Welsh. WELSH86A. Colorado collection is *D. globosa*.**Draba aurea M. Vahl ex Hornemann**

HARRI54.

Draba aureiformis Rydberg. Type: Huerfano Co.?: Headwaters of Pass Cr, 30 June 1900, Rydberg &amp; Vreeland 6157 (NY). Type specimen from Colorado.

Draba decumbens Rydberg. Type: Clear Creek Co.: Gray's Peak, 1895, Rydberg s.n. (NY). Type specimen from Colorado.

Draba luteola Greene. HITCH41. Type: Upper La Plata Canyon [Pagosa Peak], 6 Aug. 1899, Baker, Earle &amp; Tracy 651 (351 in ND-G). Type specimen from Colorado.

**Draba borealis De Candolle**

WEBER79A.

**Draba breweri S. Wats. var. cana (Rydb.) Rollins**ROLLI93. American reports of *D. lanceolata* are referred here.

Draba cana Rydberg. RYDBE06.

**Draba crassa Rydberg**

HARRI54. Type: Clear Creek Co.: Gray's Peak, Rydberg (US?, not found by Tiehm). Type specimen from Colorado.

**Draba crassifolia R. Graham**

HARRI54.

Draba parryi Rydberg. MULLI75; ROLLI93. Type: Clear Creek Co.: foot of Gray's Peak, Aug. 1872, Greene (NY). Type specimen from Colorado.

**Draba cuneifolia Nuttall ex Torrey & Gray**

HARRI54.

**Draba exunguiculata (O. E. Schulz) C. L. Hitchcock**

HARRI54. Endemic.

Draba chrysantha S. Watson var. exunguiculata O. E. Schulz. Lectotype: Clear Creek Co.; Gray's Peak, Patterson 2. Type specimen from Colorado.

Draba chrysantha S. Watson, non K. Koch. Type: Clear Creek Co.: Gray's Peak, Patterson 2 (GH). Type specimen from Colorado.

**Draba fladnizensis Wulfen var. pattersonii (O. E. Schulz) Rollins**

HARRI54; ROLLI93B.

**Draba globosa Payson**HARTM87, as *D. apiculata*. Range extension from Utah, Wyoming. Verified by R. Price.**Draba graminea Greene**

HARRI54; HITCH41. Type: Carson, 2. July, Baker 296 (not listed in ND-G catalog). Type specimen from Colorado.

*Draba chrysantha* S. Watson var. *hirticaulis* O. E. Schulz. Type: San Miguel Co.: Telluride, Tweedy 142. Type specimen from Colorado.

***Draba grayana* (Rydberg) C. L. Hitchcock**

HARRI54. Endemic.

*Draba alpicola* Osterhout, non Klotsch. Type: Larimer Co.: above Estes Park, 22 July 1903, Osterhout 2842 (RM). Type specimen from Colorado.

*Draba chrysantha* S. Watson var. *hirticaulis* O. E. Schulz forma *perhumilis* O. E. Schulz. Type: Clear Creek Co.: Gray's Peak, Patterson 2. Type specimen from Colorado.

*Draba streptocarpa* A. Gray var. *grayana* Rydberg. HITCH41. Type: Clear Creek Co.: Gray's Peak, Aug. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

***Draba helleriana* Greene**

HARRI54.

***Draba incerta* Payson**

HARRI54.

*Draba lanceolata* Royle

HARRI54. Records apply to *D. breweri* var. *cana*.

***Draba lonchocarpa* Rydberg**

HARRI54. Reports of *D. nivalis* in Colorado apply to this.

*Draba lonchocarpa* Rydberg var. *exigua* O. E. Schulz. Type: Sawatch Mts., 1880, Brandegee. Type specimen from Colorado.

***Draba nemorosa* L.**

HARRI54. Alien.

*Draba lutea* Gilibert. RYDBE06.

*Draba nivalis* Liljeblad var. *exigua* (O. E. Schulz) C. L. Hitchcock

HARRI54. Reports apply to *D. lonchocarpa*.

***Draba oligosperma* Hooker**

HARRI54.

*Draba juniperina* Dorn. WEBER79A.

*Draba oligosperma* Hooker var. *juniperina* (Dorn) Welsh. WELSH86A.

*Draba pectinipila* Rollins. ROLLI53B. Does not appear to be clearly separable from *D. oligosperma* in Colorado.

*Draba paysonii* Macbride

WEBER81A. Price annotates the collection as *D. ventosa*.

***Draba porsildii* Mulligan**

WEBER79A.

***Draba rectifruca* C. L. Hitchcock**

HARRI54; HITCH41. Type: Park Co.: South Park, Wolf & Rothrock 637 (GH). Type specimen from Colorado.

*Draba montana* S. Watson, non Bergeret. RYDBE06. Type: 1875, Brandegee 1072. Type specimen from Colorado.

***Draba reptans* (Lamarck) Fernald**

HARRI54.

*Draba coloradensis* Rydberg. HITCH41. Type: Larimer Co.: Ft. Collins, 1 May 1897, Armstrong 109 (NY). Type specimen from Colorado.

*Draba micrantha* Nuttall. RYDBE06.

*Draba reptans* (Lamarck) Fernald forma *micrantha* (Nuttall) C. L. Hitchcock. HARRI54.

*Draba reptans* (Lamarck) Fernald forma *stellifera* (O. E. Schulz) C. L. Hitchcock. HARRI54.

***Draba smithii* Gilg ex O. E. Schulz**

HARRI54. Type: Mt. Baldy, 4,000 m, 1891, E. C. Smith. Type specimen from Colorado.

***Draba spectabilis* Greene**

HARRI54; HITCH41. Type: La Plata Co.: La Plata Mts., 1898, Baker, Earle & Tracy (ND-G, 3 specimens). Type specimen from Colorado.

*Draba oxyloba* Greene. Montrose Co.: Van Boxle's Ranch above Cimarron, 10 July 1901, Baker 382 (ND-G). Type specimen from Colorado.

*Draba spectabilis* Greene var. *oxyloba* (Greene) Gilg & Schulz. HARRI54.

***Draba streptobrachia* Price**

PRICE80. Nom. nov., non *D. dasycarpa* Bernhardt 1800.

*Draba chrysantha* S. Watson var. *hirticaulis* O. E. Schulz forma *dasycarpa* O. E. Schulz. PRICE80. Type: La Plata Co.: Cumberland Mine, La Plata Mts., Baker, Earle & Tracy 903. Type specimen from Colorado.

*Draba spectabilis* Greene var. *dasycarpa* (O. E. Schulz) C. L. Hitchcock. HARRI54.

**Draba streptocarpa A. Gray**

HARRI54. Type: Clear Creek Co.: Upper Clear Creek, Parry (GH). Type specimen from Colorado.

*Draba bakeri* Greene. Type: Hinsdale Co.: Mts. near Carson, 2 July 1901, Baker 316 (ND-G). Type specimen from Colorado.

*Draba streptocarpa* A. Gray var. *tonsa* (Wootton & Standley) O. E. Schulz. HARRI54.

**Draba ventosa A. Gray**

WEBER55.

**Draba weberi Price & Rollins**

PRICE91. Endemic. Type: Summit Co.: outlet of Blue Lake Dam, Monte Cristo Creek, 11,500 ft., 28 June 1981, Price 464 (COLO). Type specimen from Colorado.

**Erysimum L., 1753 ROSSB58; ROLLI93****Erysimum asperum (Nuttall) De Candolle**

TORRE27; HARRI54; ROLLI93.

**Erysimum capitatum (Douglas ex Hooker) Greene var. purshii (Durand) Rollins**

ROLLI93.

*Cheiranthus argillosus* Greene. Type: Pueblo Co.: clay bluffs near Pueblo, May 1873, Greene. Fruit not described; assignment tentative. Type specimen from Colorado.

*Cheiranthus aridus* Greene. RYDBE06; ROLLI93.

*Cheiranthus asperimus* Greene. RYDBE06; ROLLI93.

*Cheiranthus bakeri* Greene. RYDBE06; ROLLI93.

*Cheiranthus nivalis* Greene. ROLLI93. Type: no specimens mentioned. Type specimen from Colorado.

*Cheiranthus nivalis* Greene var. *amoenum* Greene. ROLLI93. Type: no specimens mentioned. The form with rose-colored corolla. Type specimen from Colorado.

*Erysimum amoenum* (Greene) Rydberg. RYDBE06; ROLLI93.

*Erysimum argillosum* (Greene) Rydberg. RYDBE06; ROLLI93.

*Erysimum asperum* (Greene) Rydberg. RYDBE06; ROLLI93.

*Erysimum asperum* (Nuttall) De Candolle forma *alpestre* Cockerell. ROLLI93. Type: Custer Co.: Micawber Mine, Sangre de Cristo Mts., Cockerell (probably no specimens collected). Type specimen from Colorado.

*Erysimum asperum* (Nuttall) De Candolle var. *amoenum* (Greene) Reveal. ROLLI93.

*Erysimum asperum* (Nuttall) De Candolle var. *pumilum* S. Watson. PORTE74; ROLLI93.

*Erysimum nivale* (Greene) Rydberg. RYDBE06; HARRI54.

*Erysimum oblanceolatum* Rydberg. Type: Clear Creek Co.: Georgetown, Aug. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

*Erysimum radiculatum* Rydberg. ROLLI93. El Paso Co.: Bottomless Pit, Pike's Peak, 6 July 1901, Clements 441 (NY). Type specimen from Colorado.

**Erysimum capitatum (Douglas) Greene var. capitatum**

ROSSB58; ROLLI93.

*Erysimum asperum* (Nuttall) De Candolle var. *arkansanum* Nuttall. PORTE74; ROLLI93.

*Erysimum bakeri* (Greene) Rydberg. RYDBE06; ROLLI93.

*Erysimum elatum* Nuttall. RYDBE06; ROLLI93.

*Erysimum wheeleri* Rothrock in G. M. Wheeler. RYDBE06; HARRI54; ROLLI93.

**Erysimum cheiranthoides L. subsp. altum Ahti**

AHTI62.

**Erysimum inconspicuum (S. Watson) MacMillan**

HARRI54.

*Erysimum parviflorum* Nuttall. RYDBE06.

*Erysimum pallasii (Pursh) Fernald*

Species of Arctic America. Reports apply to *E. capitatum*, rose-colored phase.

*Cheiranthus pallasii* Pursh.

*Hesperis pallasii* (Pursh) Torrey & Gray. PORTE74.

**Erysimum repandum L.**

HARRI54. Alien.

**Euclidium R. Brown, 1812****Euclidium syriacum (L.) R. Brown**

WEBER82A. Alien.

**Eutrema R. Brown, 1823**

**Eutrema edwardsii R. Brown subsp. penlandii (Rollins) W. A. Weber**

WEBER85B. Endemic. Does not appear to differ from the species proper in any respect. Type specimen from Colorado.

**Halimolobos Tausch, 1836 ROLLI43B****Halimolobos virgata (Nuttall) O. E. Schulz**

HARRI54.

*Stenophragma virgata* (Nuttall) Greene. RYDBE06.

**Hesperis L., 1753****Hesperis matronalis L.**

HARRI54. Alien.

**Hymenolobus Nuttall, 1818****Hymenolobus procumbens (L.) Nuttall ex Torrey & Gray**

TUTIN64. Ignore.

*Hutchinsia procumbens* (L.) Desvaux. HARRI54.

**Iberis L., 1753****Iberis amara L.**

WEBER79A. Alien. One old collection, an escape near Roxborough Park, 1919.

**Isatis L., 1753****Isatis tinctoria L.**

WEBER79A. Alien. Population N of Kremmling was destroyed soon after discovery. Presumably extinct in Colorado.

**Lepidium L., 1753 ROLLI93****Lepidium alyssoides A. Gray**

RYDBE06; ROLLI93.

*Lepidium alyssoides* A. Gray var. *minus* Thellung. ROLLI93. Type: Park Co.: South Park, 1874, Engelmann. Type specimen from Colorado.

*Lepidium alyssoides* A. Gray var. *polycarpum* Thellung. ROLLI93. Type: Fremont Co.: Cañon City, 1874, Engelmann. Type specimen from Colorado.

*Lepidium montanum* Nuttall subsp. *alyssoides* (A. Gray) C. L. Hitchcock. HARRI54; ROLLI93.

**Lepidium crenatum (Greene) Rydberg**

ROLLI93.

*Lepidium montanum* Nuttall var. *spathulatum* (B. L. Robinson) C. L. Hitchcock. HITCH36; ROLLI93.

*Lepidium spathulatum* B. L. Robinson. RYDBE06; HITCH36; ROLLI93.

*Lepidium vaseyanum* Thellung. ROLLI93.

*Thelypodium crenatum* Greene. ALSHE73; ROLLI93. Type: Montezuma Co.: Mancos sage plains, Baker, Earle, & Tracy 394 (ND-G). Type specimen from Colorado.

**Lepidium densiflorum Schrader**

HARRI54; HITCH36; ROLLI93. Alien.

*Lepidium ramosum* A. Nelson. RYDBE06; ROLLI93. Rollins says the varieties are very weak at best!

**Lepidium lasiocarpum Nuttall**

HARRI54; ROLLI93.

**Lepidium montanum Nuttall ex Torrey & Gray var. coloradense Rollins**

ROLLI93. Endemic. Type: Eagle Co.: 8.5 mi SW Gypsum, 7 Aug., 1957, Rollins 8630 (GH). Type specimen from Colorado.

**Lepidium montanum Nuttall var. eastwoodiae (Wooton) C. L. Hitchcock**

HITCH36; ROLLI93.

**Lepidium montanum Nuttall var. jonesii (Rydberg) C. L. Hitchcock**

HITCH36.

*Lepidium alyssoides* (A. Gray) Jones var. *stenocarpum* Thellung. ROLLI93. Type: Montrose Co.: Montrose, Baker 12. Type specimen from Colorado.

*Lepidium crandallii* Rydberg. ROLLI93. Type: Mesa Co.: Palisade, 14 May 1898, Crandall 131 (NY). Type specimen from Colorado.

*Lepidium jonesii* Rydberg. RYDBE06; ROLLI93.

**Lepidium montanum Nuttall var. montanum**

HITCH36; ROLLI93.

**Lepidium montanum Nuttall var. tenellum (L. Williams) C. L. Hitchcock**

HITCH36; ROLLI93.

**Lepidium montanum Nuttall var. wyomingense (C.L. Hitchcock) C. L. Hitchcock**

ROLLI93.

*Lepidium montanum* Nuttall forma *wyomingense* C. L. Hitchcock. HITCH36; ROLLI93.

*Lepidium tenellum* L. Williams. HITCH36; ROLLI93. Type: Montrose Co.: Black Canyon, 8 July 1917, Payson 1033 (RM). Type specimen from Colorado.

*Lepidium paysonii* Rollins

ROLLI93. This is narrowly endemic to Idaho/Wyoming. The Colorado specimen cited by ROLLI83, Grand Lake, 26 June 1937, C. H. Knowlton s.n. (GH), we regard as a label error.

**Lepidium perfoliatum L.**

HARRI54; ROLLI94. Alien.

**Lepidium ramosissimum A. Nelson**

HARRI54; ROLLI93.

*Lepidium bourgeuanum* Thellung. MULLI61; ROLLI93.

*Lepidium densiflorum* Schrader var. *ramosum* (A. Nelson) Thellung. HARRI54.

*Lepidium densiflorum* Thellung var. *bourgeuanum* (Thellung) C. L. Hitchcock. HARRI54; ROLLI93. We consider this a very weak variety.

*Lepidium divergens* Osterhout. ROLLI93. Type: Lake Co.: Tennessee Pass, 10 July 1902, Osterhout 1642 (RM). We consider this a very weak variety. Type specimen from Colorado.

*Lepidium ramosissimum* A. Nelson var. *bourgeuanum* (Thellung) Rollins. ROLLI93. This appears to be a weak variety.

**Lepidium sativum L.**

PORTE74; ROLLI93. Alien. The Porter description suggests that this was a misidentification of *Thlaspi arvense*. A recent collection, Gunnison Co., was from a garden and probably is not naturalized.

**Lepidium strictum (S. Watson) Rattan**

HITCH55; WEBER89C. Alien. San Miguel Co.: Little Gypsum Valley, N of Gyp Gap, pinon-juniper woodland, 30-31 May 1982, Siplivinsky & Beck 3407 (COLO). Rattan, V. Anal. Key W. Coast Bot. 25. 1. Bot. Calif. 1:46.1876.

**Lepidium virginicum L. var. virginicum**

HARRI54; ROLLI93. The various varieties are weak and probably we have only one in Colorado.

*Lepidium intermedium* A. Gray. PORTE74; ROLLI93.

*Lepidium medium* Greene. RYDBE06; ROLLI93.

*Lepidium virginicum* L. var. *medium* (Greene) C. L. Hitchcock. HARRI54; ROLLI93.

*Lepidium virginicum* L. var. *pubescens* (Greene) C. L. Hitchcock. HARRI54; ROLLI93.

**Lesquerella S. Watson, 1888 ROLLI73**

**Lesquerella alpina (Nuttall ex Torrey & Gray) S. Watson subsp. alpina**

HARRI54.

*Lesquerella arenosa* (Richardson) Rydberg var. *arenosa*

RYDBE06. Rydberg's citation, from "Dolores," must apply to another species, probably *L. ludoviciana*.

**Lesquerella arenosa (Richardson) Rydberg var. argillosa Rollins & Shaw**

ROLLI73; WEBER89C. Logan CO.: Wittmann 2262; Weber & Wittmann 16627, 16635.

**Lesquerella calcicola Rollins**

HARRI54. Endemic. Type: Las Animas Co.: 8 mi NW of Trinchera, 13 July 1937, Rollins 1861 (GH). Type specimen from Colorado.

**Lesquerella congesta Rollins**

Endemic. Type: Rio Blanco Co.: 1.5 mi E jct Little Duck Cr & Trail Canyon, 2 June 1982, Walker et al. 82-108 (CS). Type specimen from Colorado.

*Lesquerella engelmannii* (A. Gray) S. Watson

RYDBE06; ROLLI73. Endemic to Texas.

**Lesquerella fendleri (A. Gray) S. Watson**

HARRI54.

*Lesquerella stenophylla* (A. Gray) Rydberg. RYDBE06.

*Vesicaria stenophylla* A. Gray. PORTE74.

*Lesquerella intermedia* (S. Watson) Heller

HARRI54. Restricted to New Mexico and Arizona.

**Lesquerella ludoviciana (Nuttall) S. Watson**

HARRI54.

*Lesquerella argentea* (Pursh) MacMillan. RYDBE06.

*Vesicaria ludoviciana* De Candolle. TORRE27; PORTE74.

***Lesquerella montana* (A. Gray) S. Watson**

HARRI54.

*Lesquerella curvipes* A. Nelson. RYDBE06.

*Lesquerella prostrata* A. Nelson. RYDBE06.

*Lesquerella shearis* Rydberg. ROLLI73. Type: Clear Creek Co.: Idaho Springs, 29 Aug. 1895, Shear 3269 (NY). Type specimen from Colorado.

*Vesicaria montana* A. Gray. Type: Hall & Harbour 49 (GH). Type specimen from Colorado.

***Lesquerella ovalifolia* Rydberg**

HARRI54.

*Lesquerella engelmannii* S. Watson subsp. *ovalifolia* (Rydberg) C. Clark. ROLLI73.

*Lesquerella ovata* Greene. ROLLI73. Type: Pueblo Co.: Arkansas bluffs, Pueblo, 1873, Greene (ND-G).

***Lesquerella parviflora* Rollins**

Endemic. Type: Rio Blanco Co.: Tommy's Draw, 2595 m, 21 Aug. 1982, Baker & Sigstedt 82-308 (GH). Type specimen from Colorado.

***Lesquerella parvula* Greene**

ROLLI93. Endemic. Type: Summit Co.: Summit Mt. Bross, 29 July 1876, Patterson (ND-G). Differing from *L. alpina*: leaves linear, revolute, no petiole; multicapital growth with no taproot. Type specimen from Colorado.

*Lesquerella alpina* (Nuttall ex Torrey & Gray) S. Watson subsp. *parvula* (Greene) Rollins & Shaw. ROLLI73.

***Lesquerella pruinosa* Greene**

HARRI54. Endemic. Type: Archuleta Co.: Pagosa Springs, 21 July 1899 (ND-G). Type specimen from Colorado.

***Lesquerella rectipes* Wootton & Standley**

HARRI54.

***Lesquerella subumbellata* Rollins**

ROLLI73; ROLLI03. Type from Uintah Co. Utah, 18 miles N of Vernal.

***Lesquerella vicina* Anderson, Reveal, & Rollins**

ANDER97. Montrose Co.: mesa overlooking Uncompahgre R. just S of 66500 Kinikin Road 4 air mi SE of Montrose, 29 June 1995, Reveal 7492 (holotype GH, isotype COLO). Hybrid.

***Lobularia Desvaux, 1815***

***Lobularia maritima* (L.) Desvaux**

TUTIN64. Alien. One old record, Weld Co.: New Windsor, Osterhout (RM).

*Koniga maritima* (L.) R. Brown. HARRI54.

***Malcolmia* R. Brown, 1812**

***Malcolmia africana* (L.) R. Brown**

HARRI54. Alien.

***Nasturtium* R. Brown, 1812**

***Nasturtium officinale* R. Brown**

PORTE74; STUCK72.

*Rorippa nasturtium* (L.) Rusby. RYDBE06.

*Rorippa nasturtium-aquaticum* (L.) Schinz & Thellung. HARRI54.

***Neolepia* W. A. Weber, 1989 WEBER89B**

***Neolepia campestris* (L.) W. A. Weber**

WEBER89B. Alien.

*Lepidium campestre* (L.) R. Brown. HARRI54.

***Noccaea* Moench, 1802 MUMME91**

***Noccaea montana* (L.) F. K. Meyer**

WEBER87B.

*Thlaspi coloradense* Rydberg. HOLMG71. Type: El Paso Co.: Bald Mt. near Pikes Peak, 1 Aug. 1896, Bessey s.n. (NY). Type specimen from Colorado.

*Thlaspi glaucum* A. Nelson. RYDBE06.

*Thlaspi montanum* L.. HOLMG71.

*Thlaspi nuttallii* Rydberg. RYDBE06.



*Thlaspi purpurascens* Rydberg. RYDBE06.

### **Pennellia Nieuwland, 1918**

#### **Pennellia micrantha (A. Gray) Nieuwland**

WEBER66; ROLLI80. More recent colls. from LP.

*Thelypodium micranthum* S. Watson. RYDBE06.

### **Physaria A. Gray, 1848**

#### **Physaria acutifolia Rydberg**

HARRI54. Type: Mesa Co.: Grand Junction, June 1892, Eastwood s.n. (NY). Type specimen from Colorado.

*Physaria australis* (Payson) Rollins. HARRI54; MULLI67B.

*Physaria didymocarpa* (Hooker) A. Gray var. *australis* Payson. Type: San Miguel Co.: Placerville, 23 July 1917, Payson 1093 (MO). Type specimen from Colorado.

#### **Physaria alpina Rollins**

Endemic. Type: Gunnison Co.: SW of Avery Peak, N of Gothic, 12,000 ft., 20 July 1980, Groff 80-121 (GH). Type specimen from Colorado.

#### **Physaria bellii Mulligan**

MULLI67B. Endemic. Type: Boulder Co.: 4 mi N of Boulder, on shale, 24 Aug. 1964 (DAO). Type specimen from Colorado.

#### *Physaria didymocarpa* (Hooker) A. Gray

PORTE74; RYDBE06. Reports apply to a variety of species.

#### **Physaria floribunda Rydberg**

HARRI54. Type: Costilla Co.: Sangre de Cristo Cr., 2 July 1900, Rydberg & Vreeland 6135 (NY). Type specimen from Colorado.

#### **Physaria floribunda Rydberg var. osterhoutii (Payson) Rollins**

*Physaria osterhoutii* Payson. HARRI54. Type: Grand Co.: Kremmling, 22 June 1907, Osterhout 3477 (RM). Type specimen from Colorado.

#### **Physaria obcordata Rollins**

Endemic. Type: Rio Blanco Co.: NE of junction Hog Lot Draw and Piceance Cr., 1890 m, 8 July 1982, Baker & Naumann 82-277 (GH). Type specimen from Colorado.

#### **Physaria rollinsii Mulligan**

Endemic. Type: Gunnison Co.: 4 mi NW Doyleville, 7400 ft., 21 Aug. 1964, Mulligan & Crompton 2880 (DAO). This is Harrington's *P. acutifolia*. Type specimen from Colorado.

#### **Physaria vitulifera Rydberg**

HARRI54. Endemic. Type: Clear Creek Co.: Idaho Springs, 26 Aug. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

### **Raphanus L., 1753**

#### **Raphanus raphanistrum L.**

HARRI54. Alien. Cultivar occasionally escaped.

#### **Raphanus sativus L.**

HARRI54. Alien.

### **Rorippa Scopoli, 1760 STUCK72**

#### **Rorippa alpina (S. Watson) Rydberg**

ROLLI93.

*Nasturtium obtusum* Nuttall ex Torrey & Gray var. *alpinum* S. Watson.

*Rorippa curvipes* Greene var. *alpina* (S. Watson) Stuckey. STUCK72.

#### **Rorippa coloradensis Stuckey**

STUCK72. Endemic. Type: 1875, Brandege 1069 (PH). Stuckey thinks San Luis Lakes. Distinguished by extremely large buds and spatulate petals strongly differentiated into blade and claw. Type specimen from Colorado.

#### **Rorippa curvipes Greene**

HARRI64; STUCK72. Lectotype: Montrose Co.: Cimarron, 30 Aug. 1896, Greene (G-ND 10256). Type specimen from Colorado.

*Rorippa underwoodii* Rydberg. STUCK72. Type: Ouray Co.: Red Mt., S of Ouray, 11 Sept. 1901, Underwood 299a (NY). Type specimen from Colorado.

#### *Rorippa curvisiliqua* (Hooker) Bessey ex Britton var. *lyrata* (Nuttall in Torrey & Gray) Stuckey

STUCK72; ROLLI93. Erroneous Report.

*Rorippa lyrata* (Nuttall) Greene. HARRI54. Report applies to *R. tenerima*, fide STUCK72.

#### *Rorippa islandica* (Oeder ex J. A. Murray) Borbas

HARRI54; STUCK72. Erroneous Report.

**Rorippa palustris (L.) Besser subsp. hispida (Desvaux) Jonsell**

STUCK72.

Nasturtium palustre De Candolle. PORTE74.

Rorippa hispida (Desvaux) Britton. HARRI54.

Rorippa palustris (L.) Besser var. glabra (O. E. Schulz) Stuckey. STUCK72; ROLLI93. Map 16 has dot in Routt Co..

**Rorippa sinuata (Nuttall in Torrey & Gray) A. S. Hitchcock**

HARRI54.

Nasturtium sinuatum Nuttall. PORTE74.

Nasturtium trachycarpum A. Gray. STUCK72. Type: SW Colorado [probably Archuleta Co.], 1875, Brandegee 1180 (GH). Type specimen from Colorado.

Rorippa calycina (Engelmann) Rydberg. RYDBE06.

Rorippa trachycarpa (A. Gray) Greene. RYDBE06.

**Rorippa sphaerocarpa (A. Gray) Britton**

RYDBE06; HARRI54. San Juan Co.: Ironton, Jackson Co.: North Park.

**Rorippa sylvestris (L.) Besser**

STUCK66. Alien.

**Rorippa tenerrima Greene**

STUCK72. Mapped along South Platte River. COLO has no specimens.

**Rorippa teres (Michaux) Stuckey**

STUCK72.

Nasturtium obtusum Nuttall. PORTE74.

Rorippa obtusa (Nuttall) Britton. HARRI54.

**Schoenocrambe Greene, 1896 ROLLI82****Schoenocrambe linearifolia (A. Gray) Rollins**

ROLLI82.

Hesperidanthus linearifolius (A. Gray) Rydberg. HARRI54.

Schoenocrambe decumbens Rydberg. RYDBE06.

Streptanthus linearifolius A. Gray. PORTE74.

Thelypodium linearifolium (A. Gray) S. Watson. PORTE74; RYDBE06.

**Schoenocrambe linifolia (Nuttall) Greene**

ROLLI82.

Schoenocrambe pinnata Greene. RYDBE06.

Sisymbrium linifolium Nuttall. HARRI54.

**Sinapis L., 1753****Sinapis alba L.**

RYDBE06; TUTIN64. Alien. "Fort Collins".

Brassica hirta Moench. HARRI54.

**Sinapis arvensis L.**

TUTIN64. Alien.

Brassica arvensis (L.) Britton, Sterns, &amp; Poggenberg. RYDBE06.

Brassica kaber (De Candolle) L. C. Wheeler. HARRI54.

**Sisymbrium L., 1753****Sisymbrium altissimum L.**

HARRI54. Alien.

**Sisymbrium austriacum Jacquin**

TUTIN64. Alien. Boulder Co.: weed in Boulder, Weber 15112.

**Sisymbrium loeselii L.**

WEBER66. Alien.

**Sisymbrium officinale (L.) Scopoli**

RYDBE06; HARRI54. Alien.

**Smelowskia C. A. Meyer, 1830 ROLLI52**

**Smelowskia calycina (Stephan ex Willdenow) C. A. Meyer**

HARRI54.

Smelowskia americana Rydberg. RYDBE06.

Smelowskia lineariloba Rydberg. Type: Douglass Mt., 18 July 1878, Jones 447 (NY). Locality not given in Lens biography, nor is it in Colorado Gazetteer. Type specimen from Colorado.

**Stanleya Nuttall, 1818: ROLLI39 ROLLI39****Stanleya albescens Jones**

HARRI54.

**Stanleya pinnata (Pursh) Britton var. integrifolia (James) Rollins**

HARRI54.

Stanleya integrifolia James. TORRE27; ROLLI39. Type: "summits of sandstone ridges along the base of the mountains," James (NY). Near Palmer Lake, fide GOODM95. Type specimen from Colorado.

**Stanleya pinnata (Pursh) Britton var. pinnata**

HARRI54.

Stanleya arcuata Rydberg. RYDBE06.

Stanleya bipinnata Greene. RYDBE06.

Stanleya glauca Rydberg. Type: Grand Co.: entrance Soldier's Canyon to Sulphur Springs, 15 July 1895, Cowen s.n. (NY). Type specimen from Colorado.

Stanleya pinnata (Pursh) Britton var. bipinnata (Greene) Rollins. HARRI54.

Stanleya pinnatifida Nuttall. PORTE74.

**Stanleya viridiflora Nuttall**

HARRI54.

**Streptanthella Rydberg****Streptanthella longirostris (S. Watson) Rydberg**

HARRI54.

Euklisia longirostris (S. Watson) Rydberg. RYDBE06.

Streptanthus longirostris S. Watson. RYDBE06.

**Streptanthus Nuttall, 1825****Streptanthus cordatus Nuttall ex Torrey & Gray**

HARRI54.

Euklisia cordata (Nuttall) Rydberg. RYDBE06.

Euklisia crassifolia (Greene) Rydberg. RYDBE06.

Streptanthus argutus Greene. Type: no specimens cited in protologue). Grand Co.: W Middle Park, Muddy Cr., 27 July 1875, Patterson (ND-G). Type specimen from Colorado.

Streptanthus coloradensis A. Nelson in Coulter &amp; Nelson. Type: Garfield Co.: Glenwood Springs, 6 June 1902, Osterhout 2586 (RM!). Type specimen from Colorado.

**Subularia L. 1753****Subularia aquatica L.**

NELSO93, NELSO97. Larimer Co.: subalpine lake, vicinity Cameron Pass, Aug., Sept. 1993, J. K. Nelson 1342, 1488, 1573, 1606.

**Thellungiella O. E. Schulz, 1924 SCHUL24, p.251****Thellungiella salsuginea (Pallas) O. E. Schulz**

WEBER66; LOVE71.

Arabidopsis salsuginea (Pallas) Busch. ROLLI93. Rollins prefers this disposition.

Sisymbrium glaucum Nuttall. PORTE74.

Sisymbrium salsugineum Pallas. HARRI54.

**Thelypodiopsis Rydberg, 1907 ROLLI82****Thelypodiopsis aurea (Eastwood) Rydberg**

ROLLI82.

Sisymbrium aureum (Eastwood) Payson. HARRI54.

Thelypodium aureum Eastwood. Type: La Plata Co.: Durango, Eastwood (CAS). Type specimen from Colorado.

**Thelypodiopsis elegans (Jones) Rydberg**

ROLLI82.

Sisymbrium elegans (Jones) Payson. HARRI54.

*Streptanthus wyomingensis* A. Nelson. RYDBE06.

*Thelypodium bakeri* Greene. Type: Gunnison Co.: Cimarron, 6 June, Baker 22 (ND-G), but not in ND-G computer list. Type specimen from Colorado.

*Thelypodium elegans* Jones. Type: Mesa Co.: Westwater, 7 May 1891, Jones (RSA). Type specimen from Colorado.

***Thelypodopsis juniperorum* (Payson) Rydberg**

ROLLI82. Endemic.

*Sisymbrium elegans* (Jones) Payson var. *juniperorum* (Payson) Harrington. HARRI54.

***Thelypodium Endlicher*, 1839 ALSHE73**

***Thelypodium integrifolium* (Nuttall) Endlicher**

ALSHE73. Jackson Co.: Camp Creek, Goodding (COLO) cited by Al-Shehbaz but COLO does not have the specimen.

*Pachypodium integrifolium* Nuttall. PORTE74.

*Thelypodium gracilipes* (B. L. Robinson) Rydberg. RYDBE06.

*Thelypodium integrifolium* (Nuttall) Endlicher subsp. *gracilipes* (B. L. Robinson) Al-Shehbaz. ALSHE73.

*Thelypodium lilacinum* Greene. HARRI54. Type: Gunnison Co.: Doyles, Baker 635 (ND-G). Type specimen from Colorado.

*Thelypodium rhomboideum* Greene. HARRI54.

*Thelypodium rhomboideum* Greene var. *gracilipes* (B. L. Robinson) Payson. HARRI54.

***Thelypodium laxiflorum* Al-Shehbaz**

ALSHE73.

*Thelypodium wrightii* A. Gray var. *tenellum* Jones.

***Thelypodium paniculatum* A. Nelson**

ALSHE73.

***Thelypodium sagittatum* (Nuttall) Endlicher subsp. *sagittatum***

HARRI54;ALSHE73. Jackson Co.: North Park, Nelson, Ripley & Barneby 8996 (CAS).

***Thelypodium wrightii* A. Gray subsp. *oklahomense* Al-Shehbaz**

ALSHE73.

*Thelypodium wrightii* A. Gray subsp. *wrightii*

RYDBE06; ALSHE73. Erroneous Report.

*Stanleyella wrightii* (A. Gray) Rydberg. HARRI54.

***Thlaspi* L., 1753 HOLMG71**

*Thlaspi alpestre* L.

HARRI54. =*Noccaea*, but combination not proposed; *alpestre* is European only. COLO records pertain to *Noccaea montana*.

***Thlaspi arvense* L.**

HARRI54. Alien.

***Turritis* L., 1753**

***Turritis glabra* L.**

RYDBE06. Alien.

*Arabis glabra* (L.) Bernhardt. HARRI54.

*Arabis perfoliata* Lamarck. RYDBE06.

**CACTACEAE**

***Coryphantha* Lemaire, 1868 BENSO82**

***Coryphantha missouriensis* (Sweet) Britton & Rose**

BENSO82.

*Cactus mammillaris* Torrey, non L.. TORRE27; GOODM95.

*Cactus missouriensis* (Sweet) Kuntze. RYDBE06.

*Cactus similis* (Engelmann) Rydberg. RYDBE06.

*Escobaria missouriensis* (Sweet) D. R. Hunt. HUNT78.

*Mammillaria missouriensis* Sweet. HARRI54.

*Mammillaria nuttallii* Engelmann var. *caespitosa* Engelmann. PORTE74.

*Coryphantha vivipara* (Nuttall) Britton & Rose var. *arizonica* (Engelmann) W. T. Marshall

BENSO82. Not in Colorado.

*Coryphantha vivipara* (Nuttall) Britton & Rose var. *radiosa* (Engelmann) Backeberg

BENSO82. Not in Colorado.

*Cactus radiosus* (Engelmann) Coulter var. *neomexicanus* (Engelmann) Coulter. RYDBE06.

***Coryphantha vivipara* (Nuttall) Britton & Rose var. *vivipara***

BENSO82.

*Cactus viviparus* Nuttall. TORRE27; RYDBE06.

*Escobaria vivipara* (Nuttall) Britton & Rose. HUNT78.

*Mammillaria vivipara* (Nuttall) Haworth. HARRI54.

***Cylindropuntia* Knuth, 1935**

***Cylindropuntia davisii* (Engelmann & Bigelow) Knuth**

Erroneous Report.

*Opuntia davisii* Engelmann & Bigelow. RYDBE06; HARRI54.

*Opuntia tunicata* (Lehmann) Link & Otto var. *davisii* (Engelmann & Bigelow) L. Benson. BENSO82.

***Cylindropuntia imbricata* (Haworth) Knuth**

*Cactus bleo* Torrey, non Humboldt, Bonpland, & Kunth. TORRE27.

*Opuntia arborescens* Engelmann. PORTE74; RYDBE06; HARRI54.

*Opuntia imbricata* Haworth.

***Cylindropuntia whipplei* (Engelmann & Bigelow) Knuth**

*Opuntia whipplei* Engelmann & Bigelow. BENSO82.

***Echinocereus* Engelmann, 1848 BENSO82**

***Echinocereus fendleri* (Engelmann) Rumpler**

RYDBE06; HARRI54.

*Cereus fendleri* Engelmann. PORTE74.

***Echinocereus reichenbachii* (Terscheck) Haage var. *perbellus* (Britton & Rose) L. Benson**

BENSO82.

*Echinocereus caespitosus* Engelmann var. *perbellus* (Britton & Rose) L. Benson. HARRI54, as the species.

***Echinocereus triglochidiatus* Engelmann var. *gonacanthus* (Engelmann & Bigelow) Boissevain & Davidson**

BENSO82.

*Cereus conoideus* Engelmann & Bigelow. PORTE74.

*Cereus gonacanthus* Engelmann & Bigelow. PORTE74.

*Cereus paucispinus* Engelmann. PORTE74.

*Cereus phoeniceus* Engelmann. PORTE74.

*Echinocactus gonacanthus* (Engelmann & Bigelow) Lehmann. RYDBE06.

***Echinocereus triglochidiatus* Engelmann var. *melanacanthus* (Engelmann) L. Benson**

BENSO82.

*Echinocereus aggregatus* (Engelmann) Rydberg. RYDBE06.

*Echinocereus coccineus* Engelmann var. *inermis* (K. Schumann) Boissevain & Davidson. HARRI54.

*Echinocereus roemerii* (Mühlentpfordt) Rydberg. RYDBE06.

*Echinocereus triglochidiatus* Engelmann var. *inermis* (K. Schumann) Rowley. BENSO82. Neotype: Utah, San Juan Co. Better treated as forma, since it occurs sporadically in populations of the normal form.

***Echinocereus triglochidiatus* Engelmann var. *triglochidiatus***

HARRI54.

*Echinocereus coccineus* Engelmann. HARRI54.

***Echinocereus viridiflorus* Engelmann**

TORRE27; RYDBE06; HARRI54.

*Cereus viridiflorus* Engelmann. PORTE74.

***Opuntia* P. Miller, 1754 BENSO82**

***Opuntia erinacea* Engelmann & Bigelow var. *erinacea***

HARRI54; BENS82.

***Opuntia erinacea* Engelmann & Bigelow var. *hystricina* (Engelmann & Bigelow) L. Benson**

BENSO82. Very close to Colorado in NW New Mexico.

*Opuntia hystricina* Engelmann & Bigelow. HARRI54.

***Opuntia erinacea* Engelmann & Bigelow var. *utahensis* (Engelmann) L. Benson**

BENSO82. The most common race in Colorado.

*Opuntia rhodantha* K. Schumann. RYDBE06; BENSO82.

*Opuntia xanthostemma* K. Schumann. RYDBE06; BENSO82.

***Opuntia fragilis* (Nuttall) Haworth var. *brachyarthra* (Engelmann & Bigelow) Coulter**

BENSO82.

*Opuntia schweriniana* K. Schumann. RYDBE06; HARRI54; BENSO82. Type: Gunnison Co.: Sapinero, Purpus 13. See Benson 1982 p. 919, who places this in (I think incorrectly) in var. *fragilis*. Type specimen from Colorado.

***Opuntia fragilis* (Nuttall) Haworth var. *fragilis***

RYDBE06; HARRI54; BENSO82.

***Opuntia heacockiae* Arp**

ARP84. Type: Chaffee Co.: Trout Creek Pass, 17 April 1984, Arp 4841 (SMU). Status not settled.

***Opuntia humifusa* (Rafinesque) Rafinesque**

HARRI54; BENSO82. Does not occur west of E. Oklahoma.

*Opuntia compressa* (Salisbury) Macbride. BENSO82. See *O. macrorhiza*.

*Opuntia mesacantha* Rafinesque. RYDBE06. Rydberg was referring to plants now called *O. macrorhiza*.

*Opuntia rafinesquei* Haworth. PORTE74; HARRI54.

***Opuntia macrorhiza* Engelmann**

BENSO82. Colorado reports of *O. compressa* are referred here.

*Opuntia tortispina* Engelmann & Bigelow. RYDBE06; BENSO82.

***Opuntia phaeacantha* Engelmann var. *camanchica* (Engelmann & Bigelow) L. Benson**

BENSO82; HARRI54, as the species.

*Opuntia camanchica* Engelmann ex A. Gray. PORTE74; RYDBE06.

***Opuntia phaeacantha* Engelmann var. *major* Engelmann**

BENSO82. "SW Colorado, occasional".

***Opuntia polyacantha* Haworth var. *polyacantha***

RYDBE06; HARRI54; BENSO82. The races recognized by Benson are very minor variants in a very variable species affected by interspecific hybridization.

*Cactus ferox* Nuttall. TORRE27; GOODM95.

*Opuntia missouriensis* De Candolle. PORTE74.

*Opuntia polyacantha* Haworth var. *juniperina* (Engelmann & Bigelow) L. Benson. BENSO82.

*Opuntia polyacantha* Haworth var. *trichophora* (Engelmann & Bigelow) Coulter. BENSO82.

*Opuntia rutila* Nuttall. HARRI54; BENSO82.

*Opuntia trichophora* (Engelmann & Bigelow) Britton & Rose.

***Opuntia polyacantha* Haworth var. *rufispina* (Engelmann) L. Benson**

BENSO82.

*Cactus ferox* Nuttall. TORRE27; GOODM95.

*Opuntia missouriensis* De Candolle. PORTE74.

*Opuntia polyacantha* Haworth var. *juniperina* (Engelmann & Bigelow) L. Benson. BENSO82.

*Opuntia polyacantha* Haworth var. *trichophora* (Engelmann & Bigelow) Coulter. BENSO82.

*Opuntia rutila* Nuttall. HARRI54; BENSO82.

*Opuntia trichophora* (Engelmann & Bigelow) Britton & Rose.

**Pediocactus Britton & Rose, 1913**

***Pediocactus knowltonii* L. Benson**

BENSO82. Endemic. Not definitely recorded for Colorado, according to Benson.

***Pediocactus simpsonii* (Engelmann) Britton & Rose var. *minor* (Engelmann) Cockerell**

BENSO82.

***Pediocactus simpsonii* (Engelmann) Britton & Rose var. *simpsonii***

BENSO82.

*Echinocactus simpsonii* Engelmann. PORTE74; RYDBE06. Cited specimens are of var. *minor*.

**Sclerocactus Britton & Rose, 1922 BENSO82**

***Sclerocactus glaucus* (K. Schumann) L. Benson**

BENSO82.

*Echinocactus glaucus* K. Schumann. RYDBE06.

*Pediocactus glaucus* (K. Schumann) Arp. ARP72.

**Sclerocactus mesa-verdae (Boissevain & Davidson) L. Benson**

BENS082. Endemic.

Coloradoa mesa-verdae Boissevain &amp; Davidson. BENS082. Neotype: Montezuma Co.: Mesa Verde S of Cortez, 11 April 1962, Benson &amp; Benson 16155 (RSA). Type specimen from Colorado.

Echinocactus mesa-verdae (Boissevain &amp; Davidson) L. Benson.

Pediocactus mesa-verdae (Boissevain &amp; Davidson) Arp. ARP72.

**Sclerocactus parviflorus Clover & Jotter**

BENS082.

*Sclerocactus whipplei* (Engelmann & Bigelow) Britton & RoseBENS080. Colorado records are *S. parviflorus*.

Echinocactus whipplei Engelmann &amp; Bigelow. RYDBE06; HARRI54.

Pediocactus whipplei (Engelmann &amp; Bigelow) Arp.

**CAESALPINIACEAE****Caesalpinia L., 1753****Caesalpinia jamesii (Torrey & Gray) Fisher**

ISELY75.

Hoffmanseggia jamesii Torrey &amp; Gray. RYDBE06; HARRI54. Type, Las Animas Co.: Bachicha Canyon, near jct Hwy 389 and 160, James, fide GOODM95. Type specimen from Colorado.

**Chamaecrista (L.) Moench, 1794**

Erroneous Report

*Chamaecrista fasciculata* (Michaux) Greene

RYDBE06. "Denver." No specimen has been found.

Cassia chamaecrista auctt., non L.. PORTE74.

Cassia fasciculata Michaux. RYDBE06.

**Hoffmanseggia Cavanilles, 1798****Hoffmanseggia drepanocarpa A. Gray**

RYDBE06; HARRI54.

**Hoffmanseggia glauca (Ortega) Eifert**

ISELY75.

Hoffmanseggia densiflora Benth. HARRI54.

**CALLITRICHACEAE****Callitriche L., 1753****Callitriche hermaphroditica L.**

HARRI54.

**Callitriche heterophylla Pursh emend. Darby**

HARRI54. Philbrick annotates two specimens, Boulder (Ramaley 10579) and Montrose Co. (Weber 3548).

**Callitriche verna L. emend. Lönnroth**

HYLAN55.

Callitriche palustris Harrington, non L.. RYDBE06; HARRI54.

**CALOCHORTACEAE****Calochortus Pursh, 1814 OWNBE40***Calochortus elegans* PurshTORRE27. Misidentification of *C. gunnisonii*, fide GOODM95.**Calochortus flexuosus S. Watson**

HARRI54.

**Calochortus gunnisonii S. Watson**

PORTE74; HARRI54.

*Calochortus macrocarpus* Douglas

HARRI54; OWNBE40. Does not occur east of Nevada!

*Calochortus acuminatus* Rydberg. RYDBE06. Reported from Mancos, misidentification of *C. nuttallii*.

***Calochortus nuttallii* Torrey var. *aureus* (S. Watson) M. Ownbey**

HARRI54. Sporadic mutant.

***Calochortus nuttallii* Torrey var. *nuttallii***

HARRI54.

## CAMPANULACEAE

### *Campanula* L., 1753

***Campanula aparinoides* Pursh**

RYDBE06; WEBER61. RYDBE06: Along Platte, near Denver, Eastwood; South Park, Hall & Harbour. Not collected in modern times.

***Campanula parryi* A. Gray**

RYDBE06; HARRI54. Type: Clear Creek Co.: headwaters of Clear Creek, Parry 266. Hybrid.

***Campanula rapunculoides* L.**

WEBER73A. Alien.

***Campanula rotundifolia* L.**

TORRE27; HARRI54. The alpine race in Colorado deserves taxonomic recognition.

*Campanula langsdorffiana* Fischer ex Trautvetter & Meyer. PORTE74.

*Campanula petiolata* De Candolle. RYDBE06.

***Campanula uniflora* L.**

TORRE27; RYDBE06; HARRI54. The specimen of James was *C. parryi* fide GOODM95.

### *Heterocodon* Nuttall, 1843 MCVAU45

***Heterocodon rariflorus* Nuttall**

HARRI54; MCVAU41,45. MCVAU41 made the comb. nov. *Specularia rariflora* (Nuttall) McVaugh, but MCVAU45 maintained *Heterocodon*. Known from a single collection, Routt Co.: Eastwood.

*Specularia rariflora* (Nuttall) McVaugh. MCVAU41,45.

### *Lobelia* L., 1753

***Lobelia cardinalis* L. subsp. *graminea* (Lamarck) McVaugh**

HARRI54.

***Lobelia kalmii* L.**

HARRI54. McVaugh letter 9.III.49: "Ft. Collins, Baker (CM): "no more specific locality than "Ft. Collins" and in view of Baker's very wide botanical activities it is very likely that some error is involved."

***Lobelia siphilitica* L. var. *ludoviciana* A. De Candolle**

RYDBE06, as "siphilitica"; HARRI54.

### *Triodanis* Rafinesque MCVAU45

***Triodanis holzingeri* McVaugh**

HARRI54; MCVAU45.

***Triodanis leptocarpa* (Nuttall) Nieuwland**

HARRI54; MCVAU45.

*Specularia leptocarpa* (Nuttall) A. Gray. RYDBE06.

***Triodanis perfoliata* (L.) Nieuwland**

HARRI54; MCVAU45. Alien.

*Specularia perfoliata* (L.) A. De Candolle. RYDBE06.

## CANNABACEAE

### *Cannabis* L., 1753

***Cannabis sativa* L.**

HARRI54. Alien.

### *Humulus* L., 1753

***Humulus lupulus* L. subsp. *americanus* (Nuttall) Löve & Löve**

TORRE27, as the species; LOVE82A, p. 121.



*Humulus americanus* Nuttall. HARRI54.

*Humulus lupulus* L. var. *neomexicanus* Nelson & Cockerell.

## CAPPARACEAE

### *Cleome* L., 1753

#### *Cleome lutea* Hooker

HARRI54.

*Peritoma luteum* (Hooker) Greene. RYDBE06.

#### *Cleome multicaulis* Sessé & Moçño ex De Candolle

ILTIS58A. Alien. Possibly introduced from Mexico by the Spanish.

*Cleome sonorae* A. Gray. HARRI54.

*Peritoma sonorae* (A. Gray) Rydberg. RYDBE06.

#### *Cleome serrulata* Pursh

HARRI54.

*Cleome inornata* Greene. Type: Mesa Co.: Grand Junction, 26 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

*Cleome integrifolia* Torrey & Gray. PORTE74.

*Cleome serrulata* Pursh forma *inornata* (Greene) W. A. Weber. WEBER81B. Sporadic mutant.

*Cleome serrulata* Pursh var. *angusta* (Jones) Tidestrom. HARRI54.

*Peritoma inornatum* Greene. RYDBE06.

*Peritoma serrulatum* (Pursh) De Candolle. TORRE27; RYDBE06.

### *Cleomella* De Candolle, 1824

#### *Cleomella angustifolia* Torrey

PORTE74; RYDBE06; HARRI54.

*Cleomella tenuifolia* Torrey. PORTE74.

#### *Cleomella palmerana* Jones

PAYSO22. *Iltis*, annotations in herb.

*Cleomella montrosae* Payson. HARRI54. Type: Montrose Co.: Montrose, Oct. 1912, Payson 222 (RM). Type specimen from Colorado.

*Cleomella nana* Eastwood. HARRI54.

*Cleomella oöcarpa* A. Gray. RYDBE06.

### *Polanisia* Rafinesque, 1819 ILTIS58B

#### *Polanisia dodecandra* (L.) De Candolle

ILTIS58B.

*Polanisia dodecandra* (L.) De Candolle var. *trachysperma* (Torrey & Gray) Iltis. ILTIS58B.

*Polanisia graveolens* Rafinesque. ILTIS58B.

*Polanisia trachysperma* Torrey & Gray. RYDBE06; HARRI54.

*Polanisia uniglandulosa* De Candolle. PORTE74.

#### *Polanisia jamesii* (Torrey & Gray) Iltis

ILTIS58B.

*Cristatella jamesii* Torrey & Gray. HARRI54.

## CAPRIFOLIACEAE

### *Distegia* Rafinesque, 1838

#### *Distegia involucrata* (Banks ex Sprengel) Cockerell

RYDBE06. Univ. Colo. Stud. 3:50.1905. Rydberg published the combination in 1906. In Cockerell's copy, the second author (Rydberg) is crossed out and Ckll. printed in Cockerell's hand.

*Lonicera involucrata* Banks ex Sprengel. RYDBE06; HARRI54.

### *Linnaea* L., 1753

#### *Linnaea borealis* L. subsp. *americana* (Forbes) Hultén ex Clausen

*Linnaea americana* Forbes. RYDBE06.

*Linnaea borealis* L. var. *americana* (Forbes) Rehder. HARRI54.

### *Lonicera* L., 1753

#### *Lonicera morrowii* A. Gray in Perry

WEBER82A. Alien.

**Lonicera tatarica L.**

Alien.

*Lonicera utahensis* S. Watson

WEBER66. Misidentification of *L. morrowii*.

**Sambucus L., 1753**

**Sambucus canadensis L.**

HARRI54. Alien.

**Sambucus coerulea Rafinesque**

HARRI54.

*Sambucus neomexicana* Wootton. RYDBE06. Rydberg's locality, Silver Plume, must be an error.

**Sambucus microbotrys Rydberg**

RYDBE06; SAMUT86. Type: El Paso Co.: Bottomless Pit, Pikes Peak, 11 Aug. 1896, E. A. Bessey s.n. (NY).

*Sambucus melanocarpa* A. Gray. RYDBE06; HARRI54. Black fruited local variant. Samutina makes this a subspecies of *S. pubens*. Probably black-fruited variants occur in both species.

*Sambucus pubens* Michaux

HARRI54. Colorado reports apply to *S. microbotrys*.

*Sambucus racemosa* L. subsp. *pubens* (Michaux) House var. *melanocarpa* (A. Gray) McMinn.

*Sambucus racemosa* L. subsp. *pubens* (Michaux) House var. *microbotrys* (Rydberg) Kearney & Peebles. SAMUT86. Samutina recognizes *S. microbotrys* and *S. pubens* as distinct species. *S. pubens* is Eastern U. S. and into the Pacific Northwest. Not in Colorado although Samutina shows it occurring here in a few map dots!.

**Symphoricarpos Duhamel, 1755 JONES40**

**Symphoricarpos albus (L.) S. F. Blake**

HARRI54.

*Symphoricarpos albus* (L.) S. F. Blake var. *pauciflorus* (Robbins) S. F. Blake.

*Symphoricarpos pauciflorus* (Robbins) Britton. RYDBE06.

*Symphoricarpos racemosus* Michaux var. *pauciflorus* Robbins. RYDBE06.

*Symphoricarpos rivularis* Suksdorf. HARRI54.

**Symphoricarpos longiflorus A. Gray**

HARRI54.

**Symphoricarpos occidentalis Hooker**

RYDBE06; HARRI54.

*Symphoricarpos orbiculatus* Moench

HARRI54. Record based on cultivated plant.

*Symphoricarpos symphoricarpos* (L.) MacMillan. RYDBE06. "Manitou".

*Symphoricarpos vulgaris* Michaux. RYDBE06.

**Symphoricarpos rotundifolius A. Gray**

RYDBE06; HARRI54. In our opinion, JONES40 took too narrow a view of this, resulting in many segregates of this extremely variable species.

*Symphoricarpos montanus* auctt. non Hooker. PORTE74. Report applies to *S. rotundifolius*.

*Symphoricarpos oreophilus* A. Gray. RYDBE06; HARRI54.

*Symphoricarpos oreophilus* A. Gray var. *utahensis* (Rydberg) A. Nelson. HARRI54.

*Symphoricarpos palmeri* Jones. HARRI54.

*Symphoricarpos tetonensis* A. Nelson. HARRI54.

*Symphoricarpos utahensis* Rydberg. RYDBE06; HARRI54.

*Symphoricarpos vaccinioides* Rydberg. RYDBE06; HARRI54.

**Viburnum L., 1753**

**Viburnum edule (Michaux) Rafinesque**

FERNA50.

*Viburnum pauciflorum* La Pylaie ex Torrey & Gray. RYDBE06; HARRI54.

**Viburnum lantana L.**

Alien.

**Viburnum lentago L.**

RYDBE06; HARRI54. Alien.

## CARYOPHYLLACEAE

### *Agrostemma* L., 1753

*Agrostemma githago* L.

HARRI54. Alien. "has been reported".

### *Agrostemma gracilis* Boissier

WEBER79A. Alien. A waif in a Boulder garden. Not seen again.

### *Anotites* Greene, 1905

#### *Anotites menziesii* (Hooker) Greene

GREEN05.

*Anotites bakeri* Greene. Type: Montezuma Co.: Mancos, 1898, Baker, Earle & Tracy 37 (ND-G). Type specimen from Colorado.

*Anotites discurrens* Greene. Type: Gunnison Co.: Gunnison, 23 July 1901, Baker 559 (MD-G). Type specimen from Colorado.

*Anotites elliptica* Greene. Type: La Plata Co.: Bob Creek, Mt. Hesperus, July 1898, Baker, Earle & Tracy 272 (MD-G). Type specimen from Colorado.

*Silene menziesii* Hooker. HARRI54.

*Silene stellarioides* Nuttall. RYDBE06.

### *Conosilene* Fourreau LOVE72

*Conosilene* has chromosome base number  $n=10$ , *Silene*  $n=12$ ]. Capsule conical

#### *Conosilene conica* (L.) Fourreau subsp. *conoidea* (L.) Löve & Kjellkvist

LOVE72. Alien. Boulder Co.: Rocky Flats, 2 June 1997, Jody Nelson 560. The subspecies has capsules and calyx larger than in *C. conica* and possibly justifies species status.

*Silene conoidea* L..

### *Coronaria* Schaeffer 1760 SHISH36

#### *Coronaria coriacea* (Moench) Shishkin & Gorschkova

SHISH36. Alien. Boulder Co.: City open space, Crawford 28.

*Agrostemma coronaria* L.. SHISH36.

*Lychnis coriacea* Moench. SHISH36.

*Lychnis coronaria* (L.) Desrousseaux. SHISH36.

### *Dianthus* L., 1753

#### *Dianthus armeria* L.

WEBER81A. Alien.

#### *Dianthus deltoides* L.

WEBER66. Alien.

### *Gastrolychnis* Reichenbach, 1841

#### *Gastrolychnis apetala* (L.) Tolmatchev & Kozhanchikov subsp. *uralensis* (Ruprecht) Löve & Löve

*Lychnis apetala* L.. PORT74; HARRI54.

*Melandrium apetalum* (L.) Fenzl in Ledebour.

#### *Gastrolychnis drummondii* (Hooker) Löve & Löve

LOVE82A, p. 123.

*Lychnis drummondii* (Hooker) S. Watson. HARRI54.

*Lychnis striata* Rydberg. Type: Larimer Co.: Cameron Pass, 30 July 1896, Baker s.n. (NY). Type specimen from Colorado.

*Melandrium drummondii* (Hooker) Porsild. Porsild, *Sargentia* 4:36. 1943, earlier than Hultén, 1944.

#### *Gastrolychnis kingii* (S. Watson) W. A. Weber

WEBER82B.

*Lychnis kingii* S. Watson. HARRI54.

*Lychnis montana* S. Watson. Type: Mt. peaks, Parry 132, Hall & Harbour 63 (GH). Type specimen from Colorado.

*Melandrium kingii* (S. Watson) Tolmatchev.

### *Gypsophila* L., 1753

#### *Gypsophila elegans* Bieberstein

WEBER66. Alien.

**Gypsophila paniculata L.**

WEBER55. Alien.

**Gypsophila scorzonerifolia Seringe in De Candolle**

WEBER81B. Alien.

**Melandrium Roehling, 1812****Melandrium dioicum (L.) Cosson & Germain**

WEBER67. Alien.

Lychnis alba P. Miller. HARRI54.

Melandrium album (P. Miller) Garcke.

Silene latifolia Poir. subsp. alba (P. Miller) Greuter &amp; Burdet. Annotations (1987) by McNeill &amp; Prentice.

**Saponaria L., 1753****Saponaria officinalis L.**

HARRI54. Alien.

Vaccaria vulgaris Host. PORTE74.

**Silene L., 1753****Silene acaulis (L.) L. subsp. subacaulescens (F. N. Williams) Hitchcock & Maguire**

TORRE27; HARRI54. See Linnaeus, Sp. Pl. ed. 2 for species authorship.

**Silene antirrhina L.**

HARRI54; HITCH47. Alien.

Silene antirrhina L. var. depauperata Rydberg. RYDBE06.

Silene antirrhina L. var. vaccariifolia Rydberg. RYDBE06.

**Silene csereii Baumgartner**

WEBER82A. Alien.

**Silene dichotoma Ehrhart**

WEBER79A. Alien. Gunnison Co..

**Silene gallica L.**

WEBER82A. Alien.

**Silene noctiflora L.**

RYDBE06HARRI54. Alien.

**Silene scouleri Hooker subsp. hallii (S. Watson) Hitchcock & Maguire**

HARRI54.

Silene hallii S. Watson. RYDBE06. Type: Hall &amp; Harbour 61. Type specimen from Colorado.

**Silene vulgaris (Moench) Garcke**

RYDBE06; TUTIN64. Alien.

Silene cucubalus Wibel. HARRI54.

**Vaccaria N. M. Wolf, 1781****Vaccaria pyramidata Medicus**

TUTIN64. Alien.

Saponaria vaccaria L.. PORTE74; HARRI54.

Vaccaria segetalis (Necker) Garcke.

Vaccaria vaccaria (L.) Britton. RYDBE06.

**CELASTRACEAE****Paxistima Rafinesque, 1838****Paxistima myrsinites (Pursh) Rafinesque**

HARRI54.

Pachystima myrsinites (Pursh) Rafinesque. RYDBE06.

**CERATOPHYLLACEAE****Ceratophyllum L., 1753****Ceratophyllum demersum L.**

HARRI54.

**CHENOPODIACEAE****Atriplex L., 1753 HALL23****Atriplex argentea Nuttall**

HARRI54.

*Atriplex argentea* Nuttall subsp. *expansa* (S. Watson) Hall & Clements. HARRI54.*Atriplex expansa* S. Watson. RYDBE06; HALL23.*Atriplex pabularis* A. Nelson. RYDBE06; HALL23.*Obione argentea* (Nuttall) Moquin in De Candolle. PORTE74.**Atriplex canescens (Pursh) Nuttall subsp. canescens**

HARRI54.

*Atriplex occidentalis* (Torrey & Frémont) Moquin in De Candolle. RYDBE06; HALL23.*Atriplex odontopectera* Rydberg. RYDBE06; HALL23.*Obione canescens* (Pursh) Moquin in De Candolle. PORTE74.**Atriplex canescens (Pursh) Nuttall subsp. garrettii (Rydberg) Hall & Clements**

HARRI54.

**Atriplex confertifolia (Torrey & Frémont) S. Watson**

HARRI54.

**Atriplex corrugata S. Watson**

HARRI54.

**Atriplex gardneri (Moquin) Standley**

STAND16; HALL23. We follow Standley's interpretation.

*Atriplex cuneata* A. Nelson. RYDBE06; HALL23.*Atriplex eremicola* Osterhout. RYDBE06; HALL23.*Atriplex nuttallii* S. Watson. HARRI54.*Atriplex nuttallii* S. Watson subsp. *cuneata* (A. Nelson) Hall & Clements. HARRI54.*Atriplex nuttallii* S. Watson subsp. *gardneri* (Moquin) Hall & Clements. HARRI54.*Atriplex nuttallii* S. Watson subsp. *tridentata* (Kuntze) Hall & Clements. HARRI54.*Atriplex oblanceolata* Rydberg. HALL23. Type: Delta Co.: Delta, 3 Sept. 1897, Cowen 4071 (NY). Type specimen from Colorado.**Atriplex graciliflora Jones**

BARNE44; WEBER66.

**Atriplex grayi Collotzi ex W. A. Weber**

WEBER85B.

*Grayia spinosa* (Hooker) Moquin. HARRI54. Non *Atriplex spinosa* D. Dietrich.**Atriplex heterosperma Bunge**

WEBER66. Alien.

**Atriplex hortensis L.**

HARRI54. Alien.

**Atriplex obovata Moquin**

HARRI54.

**Atriplex pachypoda Stutz & Chu**

STUTZ98. Endemic. La Plata Co., and adjacent New Mexico. TYPE: La Plata Co., Dry Creek, 7 km W of Bayfield, T34N R7W S12, 21 Sept. 1995, Stutz 9822 (holotype, BRY). Type specimen from Colorado.

**Atriplex patula L.**

HARRI54. Alien.

*Atriplex carnosa* A. Nelson. RYDBE06; HALL23.*Atriplex subspicata* (S. Watson) Rydberg. RYDBE06; HALL23.**Atriplex powellii S. Watson**

HARRI54.

*Atriplex philonitra* A. Nelson. RYDBE06; HALL23.***Atriplex prostrata* Boucher ex De Candolle subsp. *triangularis* (Willdenow) Rauschert**

ATLAS88. Alien. Erroneous Report.

*Atriplex hastata* L.. TUTIN64.

*Atriplex triangularis* Willdenow. ATLAS88.

***Atriplex rosea* L.**

HARRI54. Alien.

*Atriplex virgata* Osterhout. HALL23. Type: Larimer Co.: Horsetooth Mt., Oct. 1925, Osterhout 6520 (RM). Type specimen from Colorado.

***Atriplex saccaria* S. Watson**

HARRI54.

*Atriplex cornuta* Jones. RYDBE06.

***Atriplex suckleyi* (Torrey) Rydberg**

MCNEI79B.

*Atriplex dioica* (Nuttall) Macbride. HARRI54.

*Endolepis dioica* (Nuttall) Standley. STAND16.

***Atriplex truncata* (Torrey) A. Gray**

HARRI54.

***Atriplex wolfii* S. Watson**

HARRI54.

*Atriplex tenuissima* A. Nelson. HARRI54; WEBER73A.

***Axyris* L., 1753**

***Axyris amaranthoides* L.**

WEBER66. Alien.

***Bassia Allioni*, 1766 SCOTT78**

***Bassia hyssopifolia* (Pallas) Kuntze**

HARRI54. Alien.

***Bassia iranica* (Hausknecht & Bornmüller) Bornmüller**

Erroneous Report.

*Kochia iranica* Bornmüller. WEBER61; WEBER79A. Misidentification of *Bassia sieversiana*.

***Bassia scoparia* (L.) A. J. Scott**

RYDBE06. Colorado plants are *B. sieversiana*.

*Kochia scoparia* (L.) Schrader. HARRI54.

***Bassia sieversiana* (Pallas) W. A. Weber**

WEBER89B. Alien.

*Kochia alata* Bates. BATES18.

*Kochia sieversiana* (Pallas) C. A. Meyer. WEBER79A.

***Chenopodium* L., 1753**

***Chenopodium acerifolium* Andrzejowski**

WEBER66. Needs to be re-evaluated. Possibly *C. berlandieri*.

***Chenopodium album* L.**

HARRI54. Alien.

*Chenopodium strictum* Roth.

***Chenopodium atrovirens* Rydberg**

HARRI54; CRAWF75.

*Chenopodium wolfii* Rydberg. Lake Co.: Twin Lakes, Aug. 1873, Wolf 253 (NY). Assignment tentative. Type specimen from Colorado.

***Chenopodium berlandieri* Moquin**

HARRI54.

***Chenopodium capitatum* (L.) Ascherson**

HARRI54. Alien.

*Blitum capitatum* L.. PORTE74, RYDBE06.

***Chenopodium cycloides* A. Nelson**

HARRI54.

***Chenopodium desiccatum* A. Nelson**

CRAWF75; GREAT86.

**Chenopodium foliosum (Moench) Ascherson**

ENGST72. Alien.

Chenopodium chenopodioides (L.) Aellen var. degenianum Aellen. WEBER66; ENGST72.

Chenopodium rubrum L. forma humile (Hooker) Ascherson &amp; Graebner.

**Chenopodium fremontii S. Watson**

HARRI54.

Chenopodium deltaphyllum Osterhout. Type: Larimer Co.: Estes Park, 4 Sept. 1930, Osterhout 7308 (RM). =forma farinosum Aellen fide Wahl annotations at RM. Type specimen from Colorado.

**Chenopodium glaucum L.**

HARRI54. Alien.

Chenopodium glaucum L. var. salinum (Standley) Aellen. HARRI54.

**Chenopodium hians Standley**

HARRI54; CRAWF75. This might be what we have been calling C. atrovirens. To be checked.

*Chenopodium hybridum L.*

PORTE74, TUTIN64. A Eurasian species.

**Chenopodium incanum (S. Watson) Heller**

HARRI54.

**Chenopodium leptophyllum (Nuttall ex Moquin) S. Watson var. leptophyllum**

TORRE27; HARRI54. Torrey listed this as Kochia dioica Nuttall.

**Chenopodium leptophyllum (Nuttall ex Moquin) S. Watson var. oblongifolium S. Watson***Chenopodium pallescens Standley*

HARRI54, as a doubtful report. Erroneous Report.

**Chenopodium pratericola Rydberg**

HARRI54; GREAT86.

Chenopodium albescens Small. RYDBE06; GREAT86. "Durango".

**Chenopodium rubrum L.**

HARRI54.

**Chenopodium simplex (Torrey) Rafinesque**

DORN88B.

Chenopodium gigantospermum Aellen. HARRI54; DORN88.

Chenopodium hybridum L. var. simplex Torrey. Type from Council Bluffs, coll. James (NY).

**Chenopodium subglabrum (S. Watson) A. Nelson**

GREAT86.

**Chenopodium watsonii A. Nelson**

HARRI54.

**Corispermum L., 1753 BETAN84; MOSYA95****Corispermum americanum (Nuttall) Nuttall**

Mosyakin annotations, 1994.

Corispermum hyssopifolium L. var. americanum Nuttall. MOSYA95.

**Corispermum americanum (Nuttall) Nuttall var. rydbergii Mosyakin**

MOSYA95.

**Corispermum hyssopifolium L.**

HARRI54. Alien. One possible record from San Luis Valley, Alamosa Co., Weber &amp; Becking 18471, !Mosyakin.

**Corispermum navicula Mosyakin**

MOSYA95. HOLOTYPE: Jackson Co.: North Sand Dunes, E of Dowell Ranch, T10N R78W S6. between Government Creek and N Sand Creek, 29 Sept. 1976, F. M. Brown(COLO). Known only from the type; possible records are from Oklahoma.

*Corispermum nitidum Kitaibel ex Schultes*

RYDBE06; HARRI54; MOSYA95. European species; American specimens considered by Mosyakin to belong to C. americanum.

**Corispermum villosum Rydberg**

RYDBE06; HARRI54; MOSYA95. Alamosa Co.

Corispermum emarginatum Rydberg. RYDBE06; HARRI54; MOSYA95.

*Corispermum marginale* Rydberg. RYDBE06; MOSYA95. Type from New Mexico. Specimens from Huerfano and Las Animas counties reported in protologue.

**Cycloloma Moquin, 1840**

***Cycloloma atriplicifolium* (Sprengel) Coulter**

HARRI54.

*Cycloloma platyphyllum* Moquin. PORTE74.

**Halogeton C. A. Meyer, 1829**

***Halogeton glomeratus* (Bieberstein) C. A. Meyer**

HARRI54. Alien.

**Kochia Roth, 1801**

***Kochia americana* S. Watson**

HARRI54.

*Bassia americana* (S. Watson) A. J. Scott. Fedde Rep. 89:197.1987. Scott's revision is incomplete and the justification is not convincing.

*Kochia vestita* S. Watson. RYDBE06.

**Krascheninnikovia Guldenstaedt, 1772**

***Krascheninnikovia lanata* (Pursh) Meeuse & Smit**

MEEUS71.

*Ceratoides lanata* (Pursh) J. T. Howell. HOWEL71B.

*Diotis lanata* Pursh. JAMES25.

*Eurotia lanata* (Pursh) Moquin. HARRI54.

**Monolepis Schrader, 1831**

***Monolepis nuttalliana* (Schultes) Greene**

HARRI54.

*Blitum nuttallianum* Schultes. PORTE74.

*Monolepis chenopodioides* Moquin in De Candolle. PORTE74.

***Monolepis pusilla* Torrey**

WEBER66. Mesa Co.: Grand Junction, Eastwood (NY!).

**Proatriplex Stutz & Chu, 1990 STUTZ90**

***Proatriplex pleiantha* (W. A. Weber) Stutz & Chu**

STUTZ90. Endemic.

*Atriplex pleiantha* W. A. Weber. WEBER50A. Type: Montezuma Co.: 27 mi SW Towaoc, 12 June 1949, Weber 4788 (COLO). Also in adjacent New Mexico. Type specimen from Colorado.

**Salicornia L., 1753**

***Salicornia europaea* L. subsp. *rubra* (A. Nelson) Breitung**

Amer. Midl. Nat. 58:29. 1957.

*Salicornia herbacea* L.. PORTE74; RYDBE06.

*Salicornia rubra* A. Nelson. HARRI54.

**Salsola L., 1753**

***Salsola australis* R. Brown**

FULLE86; BOTSC74. Alien.

*Salsola iberica* Sennen & Pau. BOTSC69.

*Salsola kali* L. var. *tenuifolia* Tausch. HARRI54.

*Salsola pestifer* A. Nelson.

***Salsola collina* Pallas**

HARRI54. Alien.

*Salsola tragus* L.

RYDBE06. Misidentification of *S. australis*.

**Suaeda Forskål, 1777**

***Suaeda calceoliformis* (Hooker) Moquin**

TORRE27; MCNEI77. Called *Salsola prostrata* in TORRE27, cf. GOODM95.

*Dondia depressa* (Pursh) Britton. RYDBE06.



- Dondia erecta* (S. Watson) A. Nelson. RYDBE06.  
*Suaeda depressa* (Pursh) S. Watson. PORTE74; HARRI54.  
*Suaeda depressa* (Pursh) S. Watson var. *erecta* S. Watson. HARRI54.

***Suaeda fruticosa* (L.) Forskål**

HARRI54. Probably all reports refer to *S. moquinii*.

***Suaeda maritima* (L.) Dumont de Cours**

PORTE74. In U.S. restricted to eastern salt marshes.

***Suaeda moquinii* Torrey**

BASSE78.

- Dondia moquinii* (Torrey) A. Nelson. RYDBE06.  
*Suaeda torreyana* S. Watson. HARRI54.

***Suaeda nigra* (Rafinesque) Macbride**

HARRI54.

- Dondia diffusa* (S. Watson) Heller. RYDBE06.  
*Suaeda diffusa* S. Watson. RYDBE06.

***Suaeda occidentalis* S. Watson**

HARRI54. No COLO specimens, and all records on Harrington map (ms, CS) are marked with (?).

**Suckleya A. Gray, 1876*****Suckleya suckleyana* (Torrey) Rydberg**

HARRI54; CHU91.

Obione *suckleyana* Torrey. PORTE74.

**Teloxys Moquin, 1834 PALOM90*****Teloxys ambrosioides* (L.) W. A. Weber**

WEBER85B. Alien. *Teloxys* chromosome base number, x=8; *Chenopodium* x=9.

*Chenopodium ambrosioides* L.. HARRI54.

***Teloxys botrys* (L.) W. A. Weber**

WEBER85B. Alien.

*Chenopodium botrys* L.. HARRI54.

***Teloxys graveolens* (Willdenow) W. A. Weber**

WEBER85B. Alien.

*Chenopodium graveolens* Willdenow. HARRI54.

*Chenopodium incisum* Poir.

*Teloxys cornuta* Torrey. PORTE74.

**Zuckia Standley, 1915*****Zuckia brandegei* (A. Gray) Welsh & Stutz**

WELSH87. *Zuckia*, with C-3 photosynthetic path and foliar anatomy, differs from *Atriplex* with C-4.

*Atriplex brandegei* (A. Gray) Collotzi ex W. A. Weber. WEBER85B; WELSH87. Broad leaved populations are tetraploids (STUTZ87).

*Grayia brandegei* A. Gray. HARRI54. Type: San Juan River, 1875, Brandegee (GH). Type specimen from Colorado.

**CISTACEAE*****Crocanthemum* Spach, 1836 JANCH25*****Crocanthemum bicknellii* (Fernald) Janchen**

JANCH25.

*Helianthemum bicknellii* Fernald. HARRI54.

***Crocanthemum majus* (L.) Britton**

Erroneous Report.

*Helianthemum majus* (L.) Britton, Sterns, & Poggenberg. RYDBE06. Misidentification of *C. bicknellii*.

**COMMELINACEAE*****Commelina* L., 1753*****Commelina dianthifolia* Delile**

HARRI54.

***Commelina erecta* L. var. *angustifolia* (Michaux) Fernald**

CORRE70.

*Commelina crispata* Wooton. RYDBE06; HARRI54.***Commelina virginica* L.**PORTE74. Record applies to *C. erecta*.***Tradescantia* L., 1753*****Tradescantia occidentalis* (Britton) Smyth var. *scopulorum* (Rose) Anderson & Woodson**

HARRI54.

*Tradescantia scopulorum* Rose. RYDBE06.*Tradescantia universitatis* Cockerell. Type: Boulder Co.: Boulder (2 isotypes, NY). *Muhlenbergia* 3:54.1907 (detailed description). Type specimen from Colorado.***Tradescantia virginica* L.**PORTE74. Report applies to *T. occidentalis*].**CONVALLARIACEAE*****Maianthemum* G. H. Weber ex Wiggers, 1780 LAFRA86*****Maianthemum amplexicaule* (Nuttall) W. A. Weber**

WEBER87A.

*Smilacina amplexicaule* Nuttall.*Smilacina racemosa* (L.) Desfontaines var. *amplexicaulis* (Nuttall) S. Watson. PORTE74; HARRI54.*Vagnera amplexicaulis* (Nuttall) Morong. RYDBE06.***Maianthemum racemosum* (L.) Link**

Erroneous Report.

*Smilacina racemosa* (L.) Desfontaines. HARRI54.*Vagnera racemosa* (L.) Morong. RYDB06.***Maianthemum stellatum* (L.) Link**

LAFRA86.

*Smilacina stellata* (L.) Desfontaines. PORTE74; HARRI54.*Vagnera leptopetala* Rydberg. Type: Custer Co.: headwaters of Sangre de Cristo Creek, 22 June 1900, Rydberg & Vreeland 6441 (NY). Type specimen from Colorado.*Vagnera liliacea* (Greene) Rydberg. RYDBE06.**CONVOLVULACEAE*****Calystegia* R. Brown, 1810*****Calystegia macounii* (Greene) Brummitt**

BRUMM81; GREAT86.

*Convolvulus interior* House. RYDBE06.***Calystegia sepium* (L.) R. Brown subsp. *angulata* Brummitt**

BRUMM81; LEWIS65.

*Calystegia sepium* (L.) R. Brown subsp. *americana* (Sims) Brummitt. BRUMM65; GREAT86.*Convolvulus ambigens* House. Type: Larimer Co.: Fort Collins, 23 Aug. 1898, Crandall (NY). Type specimen from Colorado.*Convolvulus americanus* (Sims) Greene. RYDBE06.*Convolvulus sepium* L. var. *americanus* Sims. HARRI54.***Convolvulus* L., 1753*****Convolvulus arvensis* L.**

RYDBE06; HARRI54. Alien.

***Convolvulus equitans* Bentham**

CORRE70.

*Convolvulus hermannioides* A. Gray. RYDBE06.*Convolvulus incanus* auctt., non M. Vahl. RYDBE06; HARRI54.*Convolvulus lobatus* Engelmann & Gray. PORTE74.***Evolvulus* L., 1753**

**Evolvulus nuttallianus Schultes**

RYDBE06; HARRI54.

*Evolvulus argenteus* Pursh. PORTE74.**Ipomoea L., 1753****Ipomoea leptophylla Torrey**

RYDBE06; HARRI54.

*Ipomoea purpurea (L.) Lamarck*

HARRI54. "reported from Colorado".

**COPTACEAE*****Coptis* Salisbury, 1807**

Erroneous Report

*Coptis groenlandica (Oeder) Fernald*

HARRI54. Plant was actually collected in Minnesota (specimens collected in Minnesota were pressed in newspapers with Gunnison County locality data!).

**CORNACEAE****Chamaepericlymenum J. Hill, 1756****Chamaepericlymenum canadense (L.) Ascherson & Graebner**

WEBER87B; EYDE87.

*Cornella canadensis (L.) Rydberg.* RYDBE06.*Cornus canadensis* L.. HARRI54.**Swida Opiz, 1838****Swida sericea (L.) Holub**EYDE87. See Holub in *Folia Geobot. Phytotax.*, Praha 2:427.1967.*Cornus pubescens* Nuttall. PORTE74.*Cornus stolonifera* Michaux. HARRI54.*Swida interior* Rydberg. RYDBE06, as *Svida*.*Swida stolonifera* (Michaux) Rydberg var. *riparia* Rydberg. Type: Crystal Creek, 29 June 1901, Baker 257 (NY), as *Svida*. Type specimen from Colorado.**CRASSULACEAE****Amerosedum Löve & Löve, 1985****Amerosedum lanceolatum (Torrey) Löve & Löve**

(x=8).

*Sedum lanceolatum* Torrey. CLAUS48,75; GOODM95. Type: "near the Rocky Mountains", [July] 1820, James (NY). Type specimen from Colorado.*Sedum lanceolatum* Torrey subsp. *subalpinum* (Blankinship) Clausen. CLAUS75. "at an evolutionary stage somewhere between ecotype and subspecies".*Sedum stenopetalum* Pursh forma *rubrolineatum* Cockerell. CLAUS75. Type: Custer Co.: Micawber Mine, Cockerell (probably no specimen kept). Type specimen from Colorado.*Sedum stenopetalum* Pursh var. *subalpinum* Fröderström. CLAUS75. Type: Larimer Co.: Cameron Pass, 2 Sept. 1892, State Agr. Coll. Colo. (NY). Type specimen from Colorado.***Amerosedum stenopetalum (Pursh) Löve & Löve***

Erroneous Report.

*Sedum stenopetalum* (Pursh) Löve & Löve. TORRE27; PORTE74; HARRI54; CLAUS48. Name long used in Colorado for *A. lanceolatum*. Torrey's entry was incorrect.**Clementsia Rose, 1903****Clementsia rhodantha (A. Gray) Rose**

RYDBE06.

*Sedum rhodanthum* A. Gray. HARRI54. Type: Clear Creek Co.: headwaters of Clear Creek, Parry (GH). Closely related to "*Sedum*" *semenovii* and *S. kirilovii* of SW Asia. Type specimen from Colorado.***Cockerellia (Clausen & Uhl) Löve & Löve, 1985***

## Erroneous Report

*Cockerellia cockerellii* (Britton) Löve & Löve

CLAUS43. From "Colorado", Cockerell (NY); "specimen is in too poor condition for positive identification."

*Sedum cockerellii* Britton. HARRI54. "reported from Colorado," but CLAUS75 does not allow north of Jemez Mts., New Mexico.

***Rhodiola*, L. 1753***Rhodiola rosea* L.

The Arctic Amphi-Atlantic species.

*Sedum rosea* (L.) De Candolle. PORTE74. Report applies to *R. integrifolia*.

***Tolmachevia integrifolia* (Rafinesque) Löve & Löve**

Basal chromosome number 11, and bisexual; *Rhodiola* has base number 9 and dioecious.

*Rhodiola atropurpurea* (Turczaninov) Trautvetter & Meyer. See Fl. USSR Vol. 9:33-34.

*Rhodiola integrifolia* Rafinesque. RYDBE06; LOVE71. Type: "On the Rocky Mts." [Pikes Peak, El Paso Co.,] James. Type specimen from Colorado.

*Rhodiola polygama* (Rydberg) Britton & Rose. RYDBE06.

*Rhodiola rosea* L. subsp. *integrifolia* (Rafinesque) Hara.

*Sedum atropurpureum* Turczaninov. See Fl. USSR 9:33-34.

*Sedum frigidum* Rydberg. RYDBE06.

*Sedum integrifolium* (Rafinesque) A. Nelson. HARRI54.

*Sedum integrifolium* (Rafinesque) A. Nelson subsp. *procerum* Clausen. CLAUS75. Type: San Juan Co.: Bonita Peak, Silverton, Clausen 62-90. Type specimen from Colorado.

*Sedum polygamum* Rydberg. Type: Huerfano Co.: W. Spanish Peak, 9 July 1900, Rydberg & Vreeland 6113 (NY). Type specimen from Colorado.

***Sedum* L., 1753*****Sedum acre* L.**

HARRI54. Alien. Clear Creek, Pitkin.

***Spathulata* (Borissova) Löve & Löve**

Based on *Sedum* subsect. *Spathulata* Borissova, Novost. Sist. Vyss. Rast. 6:117.1060

***Spathulata spuria* (Bieberstein) Löve & Löve**

WEBER90B. Alien. Moffat Co.: Douglas Mt., MacLeod.

*Sedum spurium* Bieberstein.

**CROSSOSOMATACEAE*****Forsellesia* Greene, 1893 HOLMG88*****Forsellesia meionandra* (Koehne) Heller**

RYDBE06; HARRI54; HOLMG88. HOLMG88 treats this as a variety of *F.* [as *Glossopetalon*] *spinescens*.

*Glossopetalon spinescens* A. Gray var. *meionandrum* (Koehne) Trelease. HOLMG88.

***Forsellesia planitierum* Ensign**

WEBER66.

***Forsellesia spinescens* (A. Gray) Greene**

RYDBE06; HARRI54. Report refers to *F. meionandra*." Rydberg had no exact locations for that species.

*Glossopetalon spinescens* A. Gray var. *spinescens*. HOLMG88.

**CRYPTOGRAMMACEAE*****Cryptogramma* R. Brown, 1823*****Cryptogramma acrostichoides* R. Brown in Richardson**

HARRI54; LOVE71. diploid, n=60.

*Cryptogramma crispa* (L.) R. Brown subsp. *acrostichoides* (R. Brown in Richardson) Hultén.

***Cryptogramma crispa* (L.) R. Brown**

LOVE71. Tetraploid, n=120; Eurasian.

***Cryptogramma stelleri* (S. G. Gmelin) Prantl**

HARRI54.

*Pellaea gracilis* Hooker. PORTE74.

**CUCURBITACEAE****Cucurbita L., 1753****Cucurbita foetidissima Humboldt, Bonpland, & Kunth**

RYDBE06; HARRI54.

Cucumis? perennis James in Torrey. TORRE27.

Cucurbita perennis A. Gray. PORTE74.

**Cyclanthera Schrader, 1831****Cyclanthera dissecta (Torrey & Gray) Arnott**

HARRI54.

**Echinocystis Torrey & Gray, 1840****Echinocystis lobata (Michaux) Torrey & Gray**

HARRI54.

Micrampelis lobata (Michaux) Greene. RYDBE06.

**CUPRESSACEAE****Juniperus L., 1753****Juniperus communis L. subsp. alpina (J. E. Smith) Celakovsky**

TORRE27; HOLUB66. Published 1867, one year before ssp nana Syme.

Juniperus communis L. subsp. nana (Willdenow) Syme.

Juniperus communis L. var. alpina J. E. Smith. PORTE74.

Juniperus communis L. var. montana Aiton. HARRI54.

Juniperus communis L. var. saxatilis Pallas. HARRI54.

Juniperus sibirica Burgsdorf. RYDBE06.

**Sabina P. Miller, 1754****Sabina horizontalis (Moench) Rydberg**GREAT86; WEBER91B. Reported from Baca and Las Animas counties, but McGregor writes (11 July 1988) that the specimens (KANU) belong to *S. monosperma*.

Juniperus horizontalis Moench. HARRI54. "has been reported."

Sabina prostrata (Persoon) Antoine. RYDBE06.

**Sabina monosperma (Engelmann) Rydberg**

RYDBE06; WEBER87B.

Juniperus monosperma (Engelmann) Sargent. HARRI54.

**Sabina osteosperma (Torrey) Antoine**

WEBER87B.

Juniperus osteosperma (Torrey) Little. LITTL53.

Juniperus utahensis (Engelmann) Lemmon. HARRI54.

Sabina utahensis (Engelmann) Rydberg. RYDBE06.

**Sabina scopulorum (Sargent) Rydberg**

TORRE27; RYDBE06; WEBER87B.

Juniperus scopulorum Sargent. HARRI54.

**Sabina virginiana (L.) Antoine**

TORRE27. Logan Co., Lewis Canyon, Peetz Table, 31 August 1997, Weber and Wittmann 19268. One small stand in eastern Las Animas County, discovered 1994 by D. Clark. Torrey's report was incorrect..

Juniperus virginiana L..

**CUSCUTACEAE****Cuscuta L., 1753 YUNCK32****Cuscuta epithymum (L.) L. subsp. approximata (Babington) Rouy**

RYDBE06, as the species; HARRI54; TUTIN64. Alien.

Cuscuta approximata Babington var. urceolata (Kuntze) Yuncker.

**Grammica Loureiro, 1790 YUNCK32**

**Grammica campestris (Yuncker) Hadaç & Chrtek**

HADAC70.

*Cuscuta campestris* Yuncker. HARRI54.**Grammica cuspidata (Engelmann) Hadaç & Chrtek**

HADAC70; WEBER73.

*Cuscuta cuspidata* Engelmann. PORTE74; RYDBE06; HARRI54.**Grammica denticulata (Engelmann in Parry) W. A. Weber**

WEBER72.

*Cuscuta denticulata* Engelmann in Parry.***Grammica gronovii (Willdenow ex Roemer & Schultes) Hadaç & Chrtek***

HADAC70. Erroneous Report.

*Cuscuta curta* Engelmann. RYDBE06. "Dome Rock in Platte Canyon".*Cuscuta gronovii* Willdenow ex Roemer & Schultes. RYDBE06; HARRI54. "Manitou." Report possibly is of *G. indecora*, but specimens not checked (NY).**Grammica indecora (Choisy) W. A. Weber var. neuropetala (Engelmann) W. A. Weber**

WEBER73.

*Cuscuta decora* Engelmann. PORTE74; YUNCK32.*Cuscuta indecora* Choisy var. *neuropetala* (Engelmann) A. S. Hitchcock. RYDBE06, as the species; HARRI54.**Grammica occidentalis (Millsbaugh) Hadaç & Chrtek**

HADAC70; WEBER73.

*Cuscuta occidentalis* Millsbaugh. HARRI54.***Grammica pentagona (Engelmann) W. A. Weber***

WEBER73. Erroneous Report.

*Cuscuta arvensis* Beyrich var. *pentagona* Engelmann. PORTE74. "Hall & Harbour 464." No locality given, could be on the plains east of Colorado. Not mentioned by GOODM95.*Cuscuta pentagona* Engelmann.**Grammica umbellata (Humboldt, Bonpland, & Kunth) Hadaç & Chrtek**

HADAC70; WEBER73.

*Cuscuta umbellata* Humboldt, Bonpland, & Kunth. RYDBE06; HARRI54.**Grammica umbrosa (Hooker) W. A. Weber**

WEBER73.

*Cuscuta megalocarpa* Rydberg. Type: Huerfano Co.: Cucharas Cr. near La Veta, 1900, Vreeland 670 (NY). Type specimen from Colorado.**CYPERACEAE****Amphiscirpus Oteng-Yeboah, 1974****Amphiscirpus nevadensis (S. Watson) Oteng-Yeboah***Scirpus nevadensis* S. Watson. HARRI54. Type from Nevada.**Bolboschoenus Palla, 1907****Bolboschoenus maritimus (L.) Palla subsp. fluviatilis (Torrey) Löve & Löve**

Fresh water marshes, styles 3, achenes trigonous. 2n=104.

**Bolboschoenus maritimus (L.) Palla subsp. paludosus (A. Nelson) Löve & Löve**

Alkaline sites, styles 2, achenes lenticular. 2n=104.

*Bolboschoenus paludosus* (A. Nelson) Oteng-Yeboah.*Schoenoplectus maritimus* (L.) K. Lye.*Scirpus campestris* Britton. RYDBE06.*Scirpus maritimus* L.. PORTE74.*Scirpus paludosus* A. Nelson. HARRI54. Type from Wyoming.**Carex L., 1753 MACKE31; HERMA70****Carex albo-nigra Mackenzie in Rydberg**

HARRI54. Type from Wyoming.

**Carex angustior Mackenzie in Rydberg**

HARRI54. Type from New York.

*Carex stellulata* Goodenough var. *angustata* Carey. Non *C. angustata* Boott in Hook.

*Carex appropinquata* Schumacher

KELSO53. Unsubstantiated report.

***Carex aquatilis* Wahlenberg subsp. *aquatilis***

HARRI54; STAND85. Type from Swedish Lapland.

*Carex acutina* L. H. Bailey var. *petrophila* Holm. RYDBE06; STAND85. Type: Clear Creek Co.: rocks near Graymont, 9,500 ft., Holm s.n. (LCU).

*Carex aperta* F. Boott var. *divaricata* L. H. Bailey in Coulter. MACKE31. Type specimen from Colorado.

*Carex limula* E. Fries. PORTE74; MACKE31.

*Carex rhomboidea* Holm. RYDBE06; STAND85. Type: Larimer Co.: Lamb's Ranch near Long's Peak, 8,600 ft., Holm s.n. (lectotype, LCU). Type specimen from Colorado.

*Carex variabilis* L. H. Bailey. RYDBE06; STAND85. Type: "Colorado", Vasey 582 (lectotype, GH). Type specimen from Colorado.

*Carex variabilis* L. H. Bailey var. *elatiior* L. H. Bailey. STAND85; Type: Fremont Co.: Cañon City, Brandegee s.n. (lectotype, GH).

*Carex variabilis* L. H. Bailey var. *sciaphila* Holm. RYDBE06; STAND85. Type: Lake Co.: Mt. Massive, 11,000 ft., Holm s.n. (LCU).

***Carex aquatilis* Wahlenberg subsp. *stans* (Drejer) Hultén**

WEBER67.

*Carex stans* Drejer.

***Carex arapahoensis* Clokey**

HARRI54. Type: Boulder Co.: Arapahoe Peak, 3,550 m, Holm 3227. Type specimen from Colorado.

***Carex atherodes* Sprengel**

HARRI54. Type from arctic America.

*Carex aristata* R. Brown. RYDBE06.

***Carex athrostachya* Olney**

HARRI54. Type from California.

***Carex atrata* L.**

HARRI54. Type from the Alps.

*Carex atratiformis* Britton

MACKE31. Erroneous Report.

*Carex atrata* L. var. *ovata* (Rudge) F. Boott. PORTE74. Report applies to *C. chalciolepis* or a close relative.

***Carex atosquama* Mackenzie**

MURRA69.

***Carex aurea* Nuttall**

HARRI54. Type from "shores Lake Michigan".

***Carex backii* F. Boott in Hooker**

HERMA70. Type from Manitoba.

***Carex bebbii* (L. H. Bailey) Fernald**

HARRI54. Type from Illinois.

*Carex tribuloides* var. *bebbii* L. H. Bailey.

***Carex bella* L. H. Bailey**

HARRI54. Type not designated.

*Carex uncomphagre* L. Kelso. Paper not seen. Type specimen from Colorado.

*Carex bigelowii* Torrey ex Schweinitz subsp. *rigida* (Goodenough) Schultze-Motel

Reported often, but erroneously; the species in question is *C. scopulorum*.

*Carex rigida* Goodenough. PORTE74; RYDBE06. Report applies to *C. scopulorum*.

***Carex brevior* (Dewey) Mackenzie**

HARRI54.

*Carex straminea* var. *brevior* Dewey. Type from Massachusetts.

*Carex straminea* Willdenow. PORTE74, RYDBE06.

***Carex brevipes* F. Boott in S. Watson**

HERMA70. Uncomfortably close to *C. rossii* and differing only in small measurements of the perigynium size.

***Carex brunnescens* (Persoon) Poiret in Lamarck**

HARRI54.

*Carex curta* Goodenough var. *brunnescens* Persoon. Type from Switzerland.

**Carex buxbaumii Wahlenberg**

HARRI54. Type from Sweden.

**Carex canescens L.**

HARRI54. Type not designated. TUTIN64 uses *C. curta* Goodenough, but I cannot find literature justifying this. We follow HYLAN66.

**Carex capillaris L.**

HARRI54. Type from Sweden.

**Carex capitata L. subsp. arctogena (H. Smith) Böcher**

WEBER55; BOCHE52; LOVE71.

*Carex arctogena* H. Smith.

**Carex chalciolepis Holm**

HARRI54. Type not designated. Type specimen from Colorado.

*Carex heteroneura* W. Boott var. *chalciolepis* (Holm) F. J. Hermann.

**Carex concinna R. Brown in Richardson**

HARRI54.

*Carex conjuncta F. Boott*

PORTE74. Report probably applies to *C. stipata*.

**Carex crandallii Gandoger**

Type: Clear Creek Co.: Gray's Peak, 13,000 ft., Crandall. We treat this as distinct from *C. pyrenaica* of Europe. D. Murray now considers this synonymous with *C. micropoda* C. A. Meyer of Alaska and Asia.. Type specimen from Colorado.

**Carex crawei Dewey**

WEBER82A. Type from New York.

**Carex deweyana Schweinitz**

HARRI54. Type from Michigan.

**Carex diandra Schrank**

HARRI54. Type from Bavaria. San Juan Co.: Silverton, 11,000 ft., 30 Aug. 1937, Darrow (ARIZ 36440) !Fritts.

*Carex teretiuscula* Goodenough. RYDBE06. San Juan Co.: Hamor Lake.

**Carex dioica L. subsp. gynocrates (Wormskiöld) Hultén**

HULTE62, v.1, p. 170.

*Carex gynocrates* Wormskiöld ex Drejer. HARRI54. Type from Greenland.

**Carex disperma Dewey**

HARRI54. Type from Massachusetts.

*Carex tenella* Schkuhr, non Thuillier. PORTE74; RYDBE06; TUTIN64.

**Carex douglasii F. Boott in Hooker**

HARRI54.

*Carex douglasii* F. Boott var. *minor* Olney ex S. Watson. PORTE74.

**Carex ebenea Rydberg**

HARRI54. Type: El Paso Co.: Pikes Peak, 1900, Clements s.n. (NY). Type specimen from Colorado.

*Carex echinata J. A. Murray*

A European and eastern North American species.

*Carex stellulata* Goodenough. RYDBE06. Report applies to *C. angustior*.

**Carex egglestonii Mackenzie**

HARRI54. Type: Gunnison Co.: Kebler Pass, Eggleston 5181. Type specimen from Colorado.

**Carex elynoides Holm**

HARRI54. Type: not designated; Archuleta Co.: Pagosa Peak, 12,000 ft., Baker (first cited). Type specimen from Colorado.

*Carex filifolia* Nutt. var. *miser* L. H. Bailey. Not *C. miser* Buckley. Type specimen from Colorado.

**Carex emoryi Dewey in Torrey**

HARRI54. Type from Texas.

**Carex engelmannii L. H. Bailey**

HARRI54. Type: Clear Creek Co.: Gray's Peak, Engelmann.

**Carex epapillosa Mackenzie in Rydberg**

MURRA69. Type from Utah.

*Carex heteroneura* W. Boott var. *epapillosa* (Mackenzie) F. J. Hermann. HERMA70.



**Carex exsiccata L. H. Bailey**

WEBER79.

*Carex festiva Dewey*

RYDBE06; PORTE74. Name given to any number of related species.

**Carex festivella Mackenzie**

HARRI54. Type from Wyoming.

*Carex festucacea Schkuhr*

RYDBE06. The Baca County specimen so reported is *C. molesta*.

**Carex filifolia Nuttall**

HARRI54. Type: "Dry plains and gravelly hills of the Missouri."

**Carex foenea Willdenow**

FERNA50; HERMA70. Type from "North America."

*Carex foenea* Willdenow var. *tuberculata* F. J. Hermann. HERMA70.

*Carex siccata* Dewey. PORTE74; RYDBE06; HARRI54.

**Carex geophila Mackenzie**

HARRI54. Type from New Mexico.

*Carex pityophila* Mackenzie. HARRI54. *C. geophila* and *C. pityophila*) were published one page apart, from the same type locality. There are no consistent features separating them. *C. geophila* is likewise doubtfully distinct from *C. rossii*.

**Carex geyeri F. Boott**

HARRI54. Type from Rocky Mountains (Geyer).

**Carex gravida L. H. Bailey var. lunelliana (Mackenzie) F. J. Hermann**

HARRI54.

*Carex lunelliana* Mackenzie. Type from Missouri.

**Carex hassei L. H. Bailey**

HARRI54. Type from California.

*Carex aurea* Nuttall var. *androgyna* Olney ex S. Watson.

**Carex haydeniana Olney**

HARRI54; CRONQ72. *C. festiva* Dewey var. *decumbens* Holme: Amer. J. Sci. 16:20,26.1903 and *C. nubicola* MacKenzie, nom. nov., Bull. Torr. Bot. Club 36:480.1909. Not *C. decumbens* Ehrhart.

**Carex hepburnii F. Boott in Hooker**

HARRI54. D. Murray in litt. cites Egerova, viz: In *C. hepburnii* the perigynia are elliptic to obovate, 1.5-2.0 mm wide, obscurely stipitate, the beak abrupt. In *C. nardina* the perigynia are narrow elliptic, 1.4-1.6 mm wide, tapering to both ends, distinctly stipitate. *C. nardina* is European..

**Carex hoodii F. Boott in Hooker**

HARRI54. Type from Washington.

*Carex hookerana Dewey*

PORTE74. Report probably applies to *C. occidentalis*.

**Carex hystericina Mühlenberg ex Willdenow**

HARRI54. Type from Pennsylvania.

**Carex illota L. H. Bailey**

HARRI54. Type from Colorado (Hall & Harbour 591).

*Carex bonplandii* Kunth var. *minor* F. Boott. PORTE74; RYDBE06.

**Carex interior L. H. Bailey**

HARRI54. Type from New York.

**Carex jonesii L. H. Bailey**

HARRI54. Type from California.

**Carex lachenalii Schkuhr**

HARRI54.

*Carex bipartita* Allioni. LOVE71.

*Carex bipartita* Allioni subsp. *austromontana* F. J. Hermann. Lfl. W. Bot. 10:15.1963; HERMA70. Possibly this is a clear subspecies of the southern Rocky Mts., but a thorough study should be made.

*Carex tripartita* Allioni.

**Carex laeviculmis Meinshausen**

BARRE69; HERMA70.

**Carex lanuginosa Michaux**

HARRI54. Type from Quebec.

**Carex lasiocarpa Ehrhart**

WEBER89C. Type from Sweden. Jackson Co.: SE of Big Creek Lake, Neely & Carpenter 5328.

**Carex lenticularis Michaux var. lipocarpa (Holm) L. Standley**

STAND85.

Carex kelloggii W. Boott in S. Wats.. HARRI54. Type from California.

Carex vulgaris E. Fries. RYDBE06.

*Carex leporina L.*

PORTE74. A European species; report applies to *C. phaeocephala*.

**Carex leptalea Wahlenberg**

HARRI54. Type from "North America."

Carex polytrichoides Willdenow. PORTE74; RYDBE06. Lake Co.: Twin Lakes.

**Carex limnophila F. J. Hermann**

HERMA70..

**Carex limosa L.**

WEBER61. Type from "Europae frigidae."

**Carex livida (Wahlenberg) Willdenow**

WEBER89C. Park Co.: East Lost Park, quaking fen, 16 July 1989, Weber & Cooper 18034.

Carex limosa L. var. livida Wahlenberg. Type from Swedish Lapland.

*Carex lupulina Mühlenberg*

RYDBE06. Misidentification, probably of *C. retrorsa*, from the same locality. Far out of range.

**Carex macloviana D'Urville**

HERMA70. Type from Falkland Islands.

**Carex magellanica Lamarck subsp. irrigua (J. E. Smith) Hultén**

HULTE62.

Carex limosa L. var. irrigua Wahlenberg. Type from Sweden.

Carex pauperula Michaux. HARRI54; HERMA70.

**Carex maritima Gunnerus**

Carex incurva Lightfoot. RYDBE06.

Carex incurviformis Mackenzie in Rydberg. WEBER55. Type from Alberta.

*Carex melanocephala Turczaninow*

RYDBE06. This may actually be the correct name for the American *C. nova*, as Rydberg suggested.

**Carex microglochis Wahlenberg**

HARRI54. Type from Swedish Lapland.

**Carex microptera Mackenzie**

WEBER67. Type from Nevada.

Carex festiva Dewey var. stricta L. H. Bailey. RYDBE06. This name applied to a mixture of several species in this group.

Carex microptera Mackenzie var. crassinervia F. J. Hermann. HERMA70.. Perigynia coarsely nerved ventrally.

**Carex misandra R. Brown**

HARRI54. Type from Melville I., Canada.

**Carex molesta Mackenzie**

HERMA70. Type from Kansas.

**Carex nebrascensis Dewey**

HARRI54. Type from Nebraska. Spelling is correct.

Carex jamesii Torrey & Gray, non Schweinitz. TORRE27. PORTE74; STAND85. Type: Rocky Mts., James s.n. (GH). Type specimen from Colorado.

**Carex nelsonii Mackenzie in Rydberg**

HARRI54. Type from Wyoming.

Carex elbertana L. Kelso. Type: Lake Co.: Mt. Elbert, 1 Aug. 1945, Kelso (private herb.). Type specimen from Colorado.

Carex estesiana L. Kelso. Paper not seen. Type specimen from Colorado.

**Carex neurophora Mackenzie in Abrams**

HARRI54.

**Carex nigricans C. A. Meyer**

HARRI54.

**Carex norvegica Retzius subsp. norvegica**

MURRA69.

*Carex alpina* Liljeblad. PORTE74; RYDBE06.

**Carex nova L. H. Bailey**

HARRI54. Clear Creek Co.: headwaters of Clear Creek, Petterson 22 (BH). See also *C. melanocephala*.

*Carex atrata* L. var. *nigra* F. Boott. PORTE74; MACKE31.

*Carex erxlebeniana* L. Kelso. Type: paper not seen. Type specimen from Colorado.

*Carex nova* L. H. Bailey var. *erxlebenii* L. Kelso.

*Carex violacea* C. B. Clarke. MACKE31. Hall & Harbour 587, erroneously attributed to California. Type specimen from Colorado.

*Carex nudata* W. Boott

MACKE31. A species of Oregon and California.

*Carex acutina* L. H. Bailey. RYDBE06. Misidentification, probably of *C. aquatilis*.

**Carex obtusata Liljeblad**

HARRI54. Type from Sweden.

**Carex occidentalis L. H. Bailey**

HARRI54. Type not designated.

*Carex muricata* L. var. *americana* L. H. Bailey. Proc. Amer. Acad. 22:140.1886.

**Carex oreocharis Holm**

HARRI54. Type: "Colorado.". Type specimen from Colorado.

*Carex filifolia* Nuttall var. *valida* Olney in Bailey. Based on *C. filifolia* var., Boott, Proc. Amer. Acad. 1863:77. 1863. Type specimen from Colorado.

*Carex oreocharis* Holm var. *enantiomorpha* L. Kelso. Type: Park Co.: Como, 10,000 ft., Aug. 1929, Kelso 3651 (private herb.). Type specimen from Colorado.

**Carex pachystachya Chamisso ex Steudel**

HARRI54. Type from, Unalashka.

*Carex festiva* Dewey var. *pachystachya* (Chamisso ex Steudel) L. H. Bailey. RYDBE06; PORTE74.

*Carex macloviana* D'Urville subsp. *pachystachya* (Chamisso ex Steudel) Hultén. HULTE41.

*Carex pachystachya* Chamisso ex Steudel forma *monds-coulteri* (L. Kelso) F. J. Hermann.

*Carex pachystachya* Chamisso ex Steudel var. *monds-coulteri* L. Kelso. Type: Pitkin Co.: Aspen, 7900 ft., 11 July 1951, Kelso 6662 (private herb.). Type specimen from Colorado.

**Carex parryana Dewey subsp. hallii (Olney) D. Murray**

MURRA69.

*Carex hallii* Olney ex Porter. HARRI54. Type: Hall & Harbour 617 (GH). Type specimen from Colorado.

**Carex parryana Dewey subsp. parryana**

MURRA69. Type: Hudson's Bay.

*Carex pauciflora* Lightfoot

PORTE74. An Amphiatlantic species; report applies to *C. microglochis*.

*Carex paysonis* Clokey

WEBER82A. Misidentification of *C. raynoldsii*.

**Carex peckii E. C. Howe**

HERMA70.

**Carex pelocarpa F. J. Hermann**

MURRA69.

**Carex pensylvanica Lamarck subsp. heliophila (Mackenzie) W. A. Weber**

WEBER81A.

*Carex heliophila* Mackenzie. HARRI54. Type from Missouri.

**Carex perglobosa Mackenzie**

HARRI54. Type: Summit Co.: Mt. Baldy, Mackenzie 167.

*Carex incurva* Lightfoot var. *chartacea* Kükenthal.

**Carex petasata Dewey**

HARRI54. Type: "Rocky Mts.".

*Carex liddonii* F. Boott in Hooker. RYDBE06.

**Carex phaeocephala Piper**

HARRI54. Type from Oregon.

*Carex leporina* L. var. *americana* Olney ex L. H. Bailey.

**Carex praeceptorum Mackenzie**

WEBER66. Type from Washington.

**Carex praegracilis F. Boott**

HARRI54. Type from San Diego, Cal.

*Carex hookeriana* Dewey. RYDBE06.

*Carex marcida* F. Boott in Hooker. RYDBE06.

**Carex praticola Rydberg**

HARRI54. *C. pratensis* Drejer not Host, Nat. Tidsskr. 3:442.1841 RYDBE06. *C. adusta* F. Boott PORTE74; MACKE31. Boott's name applied, in part, to *C. praticola*. The true *C. adusta* does not occur in Colorado.

*Carex pyrenaica Wahlenberg*

HARRI54. European species. See *C. crandallii*.

**Carex raynoldsii Dewey**

HARRI54. Type from Wyoming.

**Carex retrorsa Schweinitz**

RYDBE06; HARRI54. Type from Massachusetts. La Plata Co.: Durango.

**Carex rossii F. Boott in Hooker**

HARRI54. Type: Canada, not designated.

*Carex rostrata J. Stokes*

HARRI54. Not in Colorado. See *C. utriculata*.

**Carex rupestris Allioni subsp. drummondiana (Dewey) Holub**

We do not find the Holub reference.

*Carex drummondiana* Dewey. HARRI54. Type from Canada.

**Carex sartwellii Dewey**

HARRI54. Type from New York.

*Carex disticha* F. Boott. PORTE74.

**Carex saxatilis L. subsp. laxa (Trautvetter) Kalela**

KALEL40.

*Carex physocarpa* J. & K. Presl. HARRI54.

*Carex pulla* Goodenough. RYDBE06.

*Carex pulla* Goodenough var. *laxa* Trautvetter. Type from Siberia.

*Carex saxatilis* L. var. *major* Olney.

**Carex saximontana Mackenzie**

HARRI54. Type: Larimer Co.: near Fort Collins, Baker. Type specimen from Colorado.

**Carex scirpoidea Michaux**

HARRI54; WEBER89C. Type from Hudson Strait.

**Carex scirpoidea Michaux subsp. pseudoscirpoidea (Rydberg) Dunlop**

Dunlop ined. Ecologically this behaves very differently (dry tundra) from *C. scirpoidea* (wet fens).

*Carex pseudoscirpoidea* Rydberg. HARRI54. Type from Montana.

**Carex scoparia Schkuhr ex Willdenow**

HARRI54. Type: "North America.".

**Carex scopulorum Holm**

HARRI54; STAND85. Type: Clear Creek Co.: Clear Creek Canyon, along creeks between 3,600 and 3,900 m., Holm s.n. (lectotype, LCU). Type specimen from Colorado.

*Carex chimaphila* Holm. HARRI54; STAND85. Type: Larimer Co.: Long's Peak, 12,000 ft., Holm s.n. (LCU). Type specimen from Colorado.

*Carex gymnoclada* Holm. HARRI54; STAND85. Type from Oregon.

*Carex scopulorum* Holm var. *bracteosa* (L. H. Bailey) F. J. Hermann. HERMA59; STAND85 (recognized as var.).

*Carex scopulorum* Holm var. *subconcoloroides* L. Kelso. STAND85. Type: Larimer Co.: Lawn Lake, RMNP, Kelso 3642 (private herb.). Type specimen from Colorado.

*Carex tolmiei* F. Boott in Hooker var. *subsessilis* L. H. Bailey. STAND85. Type: Clear Crteek Co.: Gray's Peak, Patterson s.n. (lectotype,

BH). Type specimen from Colorado.

*Carex vulgaris* E. Fries var. *alpina* W. Boott. RYDBE06.

*Carex senta* F. Boott

KELSO72; HERMA70. Far out of range, undoubtedly based on a misidentification, probably, of *C. nebrascensis*.

**Carex simulata Mackenzie**

HARRI54. Type from Wyoming.

*Carex gayana* Desvaux. PORTE74. Author given incorrectly as Dewey.

*Carex marcida* F. Boott. PORTE74; MACKE31. *C. marcida* of Boott, 1858, not Boott in Hooker, 1839.

**Carex sprengei Dewey ex Sprengel**

HARRI54. Type from "North America."

*Carex longirostris* Torrey var. *minor* F. Boott. No specimen cited. Type specimen from Colorado.

**Carex stenophylla Wahlenberg subsp. eleocharis (L. H. Bailey) Hultén**

HULTE41.

*Carex eleocharis* L. H. Bailey. HARRI54.

**Carex stenoptila F. J. Hermann**

HARRI54. Type: Montrose Co.: Sneezeweed Camp, Uncompahgre Nat. For., 9,500 ft., 16 Aug. 1940, Costello 4500. Type specimen from Colorado.

*Carex sterilis Willdenow*

RYDBE06. An eastern North American species. Probably the record applies to *C. angustior*.

*Carex stellulata* L. var. *scirpoides* W. Darlington. PORTE74.

**Carex stevenii (Holm) Kalela**

*Carex alpina* Liljebblad var. *stevenii* Holm. Type: not designated, but probably Clear Creek Co.: between Graymont and Stevens Mine, Holm. Type specimen from Colorado.

*Carex media* R. Brown var. *stevenii* (Holm) Fernald. HARRI54.

*Carex norvegica* Retzius subsp. *stevenii* (Holm) D. Murray. MURRA69.

*Carex vahlii* Schkuhr.

**Carex stipata Mühlenberg ex Willdenow**

HARRI54. Type from Pennsylvania.

*Carex stramineiformis* L. H. Bailey

RYDBE06; MACKE31. MACKE31 reported this was a misidentification of *C. egglestonii*.

**Carex sychnocephala Carey**

WEBER81A; HERMA70. Alien.

*Carex tenera* Dewey

PORTE74. Report based on some species of the *Ovales* group.

**Carex tenuiflora Wahlenberg**

WEBER89C. Type from Sweden. Park Co.: East Lost Park, Weber & Cooper 18036.

**Carex torreyi Tuckerman**

HARRI54.

*Carex umbellata* Schkuhr var. *brevirostris* F. Boott

RYDBE06. Misidentification, possibly of *C. geophila*.

**Carex utriculata F. Boott**

WEBER67.

*Carex utriculata* F. Boott var. *minor* F. Boott. PORTE74; RYDBE06.

**Carex vallicola Dewey**

HARRI54. Type from Wyoming.

**Carex vernacula L. H. Bailey**

HARRI54; MACKE31. Type locality not given.

**Carex vesicaria L.**

HARRI54. Alien. Type from "Europe."

*Carex monile* Tuckerman. RYDBE06.

**Carex viridula Michaux**

RYDBE06; HARRI54; WEBER89C. Type from "Canada."

*Carex oederi* Retzius subsp. *viridula* (Michaux) Hultén. HULTE68.

**Carex vulpinoidea Michaux**

HARRI54. Type not designated.

**Carex xerantica L. H. Bailey**

HARRI54. Type from Saskatchewan.

**Cyperus L., 1753****Cyperus acuminatus Torrey & Hooker**

HARRI54.

**Cyperus aristatus Rottboel**

HARRI54.

*Cyperus inflexus* Mühlenberg. TORRE27; ONEIL42.*Cyperus diandrus* Torrey

HARRI54. Reported but no specimens seen.

**Cyperus erythrorhizus Mühlenberg**

WEBER55. Alien.

**Cyperus esculentus L.**

HARRI54. Alien.

**Cyperus odoratus L.**

WEBER81A. Alien.

**Cyperus rivularis Kunth**

HARRI54.

***Dulichium L. C. Richard ex Persoon, 1805***

Erroneous Report

*Dulichium arundinaceum (L.) Britton*

RYDB09; GREAT77. Rydberg did not cite a locality. GREAT77 does not map west of central Nebraska.

**Eleocharis R. Brown, 1810****Eleocharis acicularis (L.) Roemer & Schultes**

HARRI54.

*Scirpus acicularis* L.. Type from Europe.**Eleocharis atropurpurea (Retzius) K. Presl**

WEBER66. historic coll. by Greene, along Poudre River, Greeley.

*Scirpus atropurpureus* Retzius. Type from India.**Eleocharis bolanderi A. Gray**

HARRI54.

**Eleocharis elliptica Kunth var. compressa (Sullivant) Drapalik & Mohlenbrock**

WEBER66.

*Eleocharis compressa* Sullivant. PORTE74. Type from Ohio.**Eleocharis erythropoda Steudel**

HARMS68. Harms cites a collection (p. 968) from "Colorado, Thompson (KANU)".

**Eleocharis macrostachya Britton**

HARRI54; HARMS68.

*Eleocharis glaucescens* (Willdenow) Schultes. RYDBE06; TUTIN64.**Eleocharis montevidensis Kunth**

WEBER66. Ignore. Type from Uruguay.

**Eleocharis obtusa (Willdenow) Schultes var. detonsa (A. Gray) Drapalik & Mohlenbrock**

DRAPA60.

*Eleocharis engelmannii* Steudel. DRAPA60.*Eleocharis obtusa (Willdenow) Schultes var. obtusa*

HARRI54. One old record; probably all our material belongs to the variety.

*Eleocharis olivacea* Torrey

SVENS57. A species of eastern U.S.

*Eleocharis palustris (L.) Roemer & Schultes*

HARMS68. A Eurasian species. For Colorado species, see.

*Eleocharis glaucescens* (Willdenow) Schultes. RYDBE06; TUTIN64.

***Eleocharis parvula* (Roemer & Schultes) Link var. *anachaeta* (Torrey) Svenson**

HARRI54; GILLY41; CRONQ78.

*Eleocharis coloradoënsis* (Britton) Gilly. MASON57; GILLY41; CRONQ72.

*Scirpus coloradoënsis* Britton. Type: Larimer Co.: Shore L., 21 July 1896, Cowen (NY). Type specimen from Colorado.

***Eleocharis quinqueflora* (F. X. Hartman) Schwartz**

HULTE67, p. 24.

*Eleocharis pauciflora* (Lightfoot) Link. HARRI54.

*Scirpus pauciflorus* Lightfoot. PORTE74.

***Eleocharis rostellata* Torrey**

HARRI54.

*Eleocharis tenuis* (Willdenow) Schultes

COX33. Probably the report applies to *E. acicularis*.

***Eleocharis wolfii* A. Gray**

WEBER66. The specimen, cited by Svenson, *Rhodora* 41:18.1939, Black Forest, 2 July 1935, [Christ] (CS, not Cornell!), is *A. acicularis*.

Weber & Wittmann, Logan Co., 19274, is correctly named.

***Eleocharis xyridiformis* Fernald & Brackett**

HARMS68. Logan Co.: Peete Table, 31 Aug. 1997, Weber & Wittmann 19273.

***Eriophorum* L., 1753**

***Eriophorum altaicum* Meinshausen var. *neogaeum* Raymond**

RAYMO57. *E. humile* Turczaninow was a nomen nudum as well as a mixture.

***Eriophorum angustifolium* Honckeny**

*Eriophorum angustifolium* Honckeny subsp. *scabriusculum* Hultén. HARRI54; HULTE36.

*Eriophorum polystachion* L.. PORTE74; RYDBE06. HYLAN45 shows that this name is a nomen ambiguum and should be rejected.

*Eriophorum polystachyum* sensu auctt. Scand.. HYLAN54. Nomen ambiguum.

***Eriophorum gracile* W.D.J. Koch in Roth**

RYDBE06; HARRI54; WEBER89C.

*Eriophorum gracile* W.D.J. Koch var. *caurianum* Fernald. A form tending to have paler floral scales.

***Eriophorum russeolum* E. Fries ex Hartman**

WEBER87B. Specimens so called belong to *E. altaicum* with slightly reddish bristles. Anthers are small, ca. 1 mm long (in *russeolum* they are 2.5 mm long).

***Eriophorum scheuchzeri* Hoppe**

WEBER55; RAYMO57. Reports apply to *E. altaicum*.

***Fimbristylis* M. Vahl, 1805**

***Fimbristylis castanea* (Michaux) M. Vahl**

RYDBE06; KRAL71. No record cited.

***Fimbristylis puberula* (Michaux) M. Vahl var. *puberula***

HARRI54; KRAL71. Erroneous Report.

***Fimbristylis puberula* (Michaux) Vail var. *interior* (Britton) Kral**

KRAL71.

*Fimbristylis interior* Britton. Type: Logan Co.: Sterling, 13 Aug. 1896, Osterhout (NY). Type specimen from Colorado.

*Fimbristylis laxa* M. Vahl. PORTE74. This name is not listed by KRAL71, but the report is presumably of *F. puberula*.

***Fimbristylis thermalis* S. Watson**

RYDBE06. Specimens belong to *F. puberula*.

***Hemicarpha* Nees, 1834**

***Hemicarpha micrantha* (Vahl) Pax var. *aristulata* Coville**

HARRI54.

*Hemicarpha subsquarrosa* Nees in Martius. PORTE74.

***Kobresia* Willdenow, 1805**

***Kobresia myosuroides* (Villars) Fiori & Paoli**

HYLAN66.

*Carex affinis* R. Brown. PORTE74.  
*Carex bellardii* Allioni. HYLAN45. Allioni (1785).  
*Carex myosuroides* Villars. HYLAN45. Villars (1779).  
*Elyna bellardii* (Allioni) K. Koch. RYDBE06.  
*Elyna spicata* Schrader. PORTE74.  
*Kobresia bellardii* (Allioni) Degland. HARRI54.  
*Kobresia scirpina* Willdenow. PORTE74.

***Kobresia schoenoides* (C. A. Meyer) Steudel**

SHISH35.

*Kobresia bellardii* (Allioni) Degland var. *macrocarpa* (Clokey) Harrington. HARRI54.  
*Kobresia hyperborea* Porsild. HULTE67, p. 25..  
*Kobresia macrocarpa* Clokey ex Mackenzie. HULTE67, p. 25. Type: El Paso Co.: Pike's Peak, 30 Aug. 1920, Clokey 3651 (NY). Type specimen from Colorado.  
*Kobresia sibirica* Turczaninov. HULTE67, p. 25; LOVE71; SHISH35.

***Kobresia simpliciuscula* (Wahlenberg) Mackenzie**

WEBER61.

*Carex simpliciuscula* Wahlenberg. Type from England.

**Mariscus M. Vahl, 1806*****Mariscus fendlerianus* (Böckeler) Koyama**

*Cyperus fendlerianus* Böckeler. HARRI54.

***Mariscus filiculmis* (M. Vahl) Koyama**

*Cyperus filiculmis* M. Vahl. HARRI54.  
*Cyperus lupulinus* (Sprengel) Marckx subsp. *macilentus* (Fernald) Marckx.

***Mariscus schweinitzii* (Torrey) Koyama**

*Cyperus bushii* Britton. RYDBE06.  
*Cyperus schweinitzii* Torrey. HARRI54.

**Schoenoplectus Palla, 1888***Schoenoplectus americanus* (Persoon) Volkart

CRONQ72. Our plants belong to *S. pungens*.  
*Scirpus americanus* Persoon. HARRI54.

***Schoenoplectus lacustris* (L.) Palla subsp. *acutus* (Mühlenberg ex Bigelow) Löve & Löve**

*Scirpus acutus* Mühlenberg ex Bigelow. HARRI54. Type from Massachusetts.

***Schoenoplectus lacustris* (L.) Palla subsp. *creber* (Fernald) Löve & Löve**

*Scirpus lacustris* L. subsp. *creber* (Fernald) Koyama.  
*Scirpus validus* M. Vahl var. *creber* Fernald.

*Schoenoplectus lacustris* (L.) Palla subsp. *validus* (M. Vahl) Löve & Löve

This subspecies is South American.  
*Scirpus lacustris* L. subsp. *validus* (M. Vahl) Koyama. KOYAM62.  
*Scirpus validus* M. Vahl. PORTE74; HARRI54.

***Schoenoplectus pungens* (M. Vahl) Palla**

*Scirpus pungens* M. Vahl. PORTE74; CRONQ72; SCHUY74. Type from Europe.

***Schoenoplectus saximontanus* (Fernald) Raynal**

*Scirpus hallii* A. Gray. RYDBE96. Type from St. Louis, Mo.  
*Scirpus saximontanus* Fernald. Nom. nov. for *S. hallii* Britton, non A. Gray.  
*Scirpus supinus* L. var. *hallii* A. Gray. HARRI54.  
*Scirpus supinus* L. var. *saximontanus* (Fernald) Koyama. KOYAM62.

**Scirpus L., 1753***Scirpus atrovirens* Willdenow

PORTE74. Report applies to *S. pallidus*.

*Scirpus lineatus* Michaux

WEBER55. Type from "Carolina." Missidentification of *S. pendulus*.

***Scirpus microcarpus* J. & K. Presl**

HITCH55. Type: Nootka Sound.



*Scirpus rubrotinctus* Fernald. HARRI54.

***Scirpus pallidus* (Britton) Fernald**

HARRI54.

*Scirpus atrovirens* Mühlenberg var. *pallidus* Britton. RYDBE06. Type from "Indian Territory."

***Scirpus pendulus* Muhlenberg**

SCHUY66; SCHUY (FNA ined.). Alien.

*Scirpus sylvaticus* auctt., non L.

PORTE74. A species of eastern U.S.

***Trichophorum* Persoon, 1805 SALME89**

*Trichophorum caespitosum* (L.) F. X. Hartman

PORTE74; RYDBE06; WEBER89C. The specimen at Geneva, annotated by C. B. Clarke, has been examined. It is *T. pumilum*, as are all other sheets of the collection there. The species does occur in the Uinta Mts. of Utah.

***Trichophorum pumilum* (M. Vahl) Schinz & Thellung**

SALME89.

*Baeothryon pumilum* (M. Vahl) Löve & Löve. LOVE65; SALME89.

*Scirpus pumilus* M. Vahl. RYDBE06; WEBER61. Type from Switzerland.

**CYPRIPEDIACEAE**

***Cypripedium* L., 1753**

***Cypripedium calceolus* L. subsp. *parviflorum* (Salisbury) Hultén**

HULTE68.

*Cypripedium calceolus* L. var. *pubescens* (Willdenow) Correll. HARRI54.

*Cypripedium parviflorum* Salisbury. PORTE74; RYDBE06.

*Cypripedium pubescens* Willdenow. PORTE74; RYDBE06.

***Cypripedium fasciculatum* Kellogg ex S. Watson**

HARRI54.

*Cypripedium knightiae* A. Nelson.

**DIPSACACEAE**

***Dipsacus* L., 1753**

***Dipsacus fullonum* L.**

Alien. Linnaeus' concept of *D. fullonum* included *D. sylvestris* and *D. sativus*.

*Dipsacus sylvestris* Hudson. HARRI54; TUTIN64. See Fl. Europaea for discussion of nomenclatural confusion.

***Dipsacus laciniatus* L.**

WEBER91B. Alien. Jefferson Co.: Heritage Square between Golden & Morrison, 11 July 1990, Weber 18053.

***Knautia* L., 1753**

***Knautia arvensis* (L.) Coulter**

WEBER79A. Alien.

**DROSERACEAE**

***Drosera* L., 1753**

***Drosera rotundifolia* L.**

WEBER79A; WEBER89C. Gunnison and Jackson counties.

**EHRETIACEAE**

***Tiquilia* Persoon, 1805**

***Tiquilia nuttallii* (Bentham) A. Richard**

See Richardson, Sida 6:236.1976.

*Coldenia nuttallii* Bentham. WEBER73.

**ELAEAGNACEAE**

***Elaeagnus* L., 1753**

***Elaeagnus angustifolia* L.**

HARRI54. Alien.

***Elaeagnus commutata* Bernhardi**

HARRI54. Alien. There is some question as to whether this is really native here. Possibly the populations have spread from original plantings by the CCC during the Great Depression.

*Elaeagnus argentea* Pursh. Pursh (1814), non Moench (1795).*Elaeagnus orientalis* L.WEBER79A. Report applies to juvenile *E. angustifolia*.*Elaeagnus parvifolia* RoyleWEBER79A. Report applies to juvenile *E. angustifolia*.**Shepherdia Nuttall, 1818*****Shepherdia argentea* (Pursh) Nuttall**

HARRI54.

*Lepargyrea argentea* (Nuttall) Greene. RYDBE06.***Shepherdia canadensis* (L.) Nuttall**

HARRI54.

*Lepargyrea canadensis* (L.) Greene. RYDBE06.**ELATINACEAE*****Bergia* L., 1753*****Bergia texana* (Hooker) Seubert ex Walpers**

WEBER55.

***Elatine* L., 1753***Elatine americana* (Pursh) Arnott

PORTE74; RYDBE06; HARRI54. Misidentification.

***Elatine triandra* Schkuhr**

RYDBE06; WEBER61. Alien.

*Elatine rubella* Rydberg. MASON57.**EPHEDRACEAE*****Ephedra* L., 1753***Ephedra antisyphilitica* E. A. Meyer

RYDBE06. Misidentification.

***Ephedra cutleri* Peebles**

FNA93.

*Ephedra viridis* Coville var. *viscida* (Cutler) L. Benson. HARRI54; CUTLE39; FNA93.***Ephedra torreyana* S. Watson**

HARRI54; CUTLE39.

*Ephedra trifurca* Torrey

RYDBE06. Misidentification.

***Ephedra viridis* Coville var. *viridis***

HARRI54; CUTLE39.

**EQUISETACEAE*****Equisetum* L., 1753*****Equisetum arvense* L.**

HARRI54.

*Equisetum arvense* L. forma *serotinum* (C. F. Schultz) Klinge. HARRI54.***Equisetum pratense* Ehrhart**

WEBER55. There are lingering doubts as to this report.

**Hippochaete Milde, 1865**

**Hippochaete hyemalis (L.) Bruhin**

- Equisetum hyemale L.. HARRI54.  
 Equisetum hyemale L. var. californicum Milde. HARRI54.  
 Equisetum praealtum Rafinesque. HARRI54.

**Hippochaete laevigata (A. Braun) Farwell**

- Equisetum kansanum Schaffner. HARRI54.  
 Equisetum laevigatum A. Braun. HARRI54.

**Hippochaete variegata (Schleicher) Bruhin**

- Equisetum variegatum Schleicher. HARRI54.  
 Equisetum variegatum Schleicher var. nelsonii A. A. Eaton. HARRI54.

**ERICACEAE****Arctostaphylos Adanson, 1763****Arctostaphylos patula Greene forma platyphylla (A. Gray) P. V. Wells**

WELLS89.

- Arctostaphylos coloradensis Rollins. Type: Mesa Co.: 3 mi W Cold Spring R.S., Uncompahgre Plateau, 1 Sept. 1936, [Rollins 1587] (GH). A. patula X A. adenotricha. Type specimen from Colorado.  
 Arctostaphylos nevadensis A. Gray var. coloradensis (Rollins) Harrington. HARRI54. A. adenotricha x A. patula. Hybrid.  
 Arctostaphylos patula Greene subsp. platyphylla (A. Gray) P. V. Wells. WELLS68, 89.  
 Arctostaphylos pinetorum Rollins. ROLLI37. Type: Mesa Co.: 3 mi W Cold Spring R.S., Uncompahgre Plateau, 1 Sept. 1936, Rollins 1586 (GH). Type specimen from Colorado.  
 Arctostaphylos platyphylla Greene.

**Arctostaphylos uva-ursi (L.) Sprengel subsp. adenotricha (Fernald & Macbride) Calder & Taylor**

PACKE74. PACKE74 implies that from his maps that subsp. longipilosa Packer & Denford and other subspecies occur in Colorado, but the maps are vague and no specimens are cited.

- Arctostaphylos adenotricha (Fernald & Macbride) Löve et al.. LOVE71; ROSAT87. Rosatti presents evidence that this is a minor variant of A. uva-ursi. WELLS89 says this is consistently diploid, n=13, while coactilis is tetraploid.  
 Arctostaphylos uva-ursi (L.) Sprengel forma adenotricha (Fernald & Macbride) P. V. Wells. WELLS89.  
 Arctostaphylos uva-ursi (L.) Sprengel var. adenotricha Fernald & Macbride.

**Arctostaphylos uva-ursi (L.) Sprengel subsp. coactilis (Fernald & Macbride) Löve et al.**

LOVE71; PACKE74.

- Arbutus uva-ursi L.. TORRE27.  
 Arctostaphylos uva-ursi (L.) Sprengel forma coactilis (Fernald & Macbride) P. V. Wells. WELLS89.  
 Arctostaphylos uva-ursi (L.) Sprengel var. coactilis Fernald & Macbride. HARRI54.

**Azaleastrum Rydberg, 1900****Azaleastrum albiflorum (Hooker) Rydberg subsp. albiflorum**

- PALSE91. Important embryological evidence pertaining to classification.  
 Rhododendron albiflorum Hooker. HARRI54.

**Azaleastrum albiflorum (Hooker) Rydberg subsp. warrenii (A. Nelson) W. A. Weber**

WEBER95.

- Azaleastrum warrenii A. Nelson. Type: Jackson Co.: 14 July 1911, Warren (RM). Type specimen from Colorado.

**Gaultheria L., 1753****Gaultheria humifusa (R. Graham) Rydberg**

- RYDBE06; HARRI54.  
 Gaultheria myrsinites Hooker. PORTE74.  
 Vaccinium humifusum R. Graham. RYDBE06.

**Kalmia L., 1753****Kalmia microphylla (Hooker) Heller**

- RYDBE06; LOVE71.  
 Kalmia glauca Aiton var. microphylla Hooker. PORTE74.  
 Kalmia polifolia Wangerin subsp. microphylla (Hooker) Calder & Taylor.  
 Kalmia polifolia Wangerin var. microphylla (Hooker) Rehder. HARRI54.

**Phyllodoce Salisbury, 1806**

## Erroneous Report

*Phyllodoce empetriformis* (J. E. Smith) D. Don

WALLA05, Vol. 2, p. 183; RYDBE06; HARRI54. Misidentification by A. R. Wallace; his plants were *Kalmia microphylla*!

**Vaccinium L., 1753****Vaccinium cespitosum Michaux**

RYDBE06; HARRI54. *cespitosum* was the original spelling.

**Vaccinium globulare Rydberg**

WEBER87B. Routt Co. Evidence still not conclusive; perhaps only very large *V. myrtillus*.

**Vaccinium myrtillus L. subsp. oreophilum (Rydberg) Löve et al.**

LOVE71; DORN88. DORN88 says that our plants have a "different twig coloration than the European material." The distribution pattern is also extremely anomalous. Perhaps Rydberg's name will eventually prevail when more is known.

*Vaccinium oreophilum* Rydberg. RYDBE06. nom. nov. for *V. myrtilloides* S. Watson, non Michaux. Type specimen from Colorado.

**Vaccinium scoparium Leiberg ex Coville**

HARRI54.

*Vaccinium erythrococtum* Rydberg. RYDBE06.

*Vaccinium myrtillus* L. var. *microphyllum* Hooker. RYDBE06.

**EUPHORBIACEAE****Agaloma Rafinesque, 1838****Agaloma marginata (Pursh) Löve & Löve**

TORRE27; LOVE61. Torrey says that seed from James' collections were cultivated in New York.

*Dichrophyllum marginatum* (Pursh) Klotzsch & Garcke. RYDBE06.

*Euphorbia marginata* Pursh. HARRI54.

**Argythamnia P. Browne, 1756****Argythamnia humilis (Engelmann & Gray) Müller-Argoviensis**

PORTE74, as *Argyrothamnia*; CORRE70.

*Aphora humilis* Engelmann & Gray. PORTE74.

*Ditaxis humilis* (Engelmann & Gray) Pax. RYDBE06; HARRI54.

**Argythamnia mercurialina (Nuttall) Müller-Argoviensis**

CORRE70.

*Ditaxis mercurialina* (Nuttall) Coulter. HARRI54.

**Chamaesyce Rafinesque, 1817 WHEEL41****Chamaesyce albomarginata (Torrey & Gray) Small**

RYDBE06; WHEEL41. Misidentification. Way out of range.

**Chamaesyce fendleri (Torrey & Gray) Small**

RYDBE06.

*Euphorbia fendleri* Torrey & Gray. HARRI54.

*Euphorbia fendleri* Torrey & Gray var. *dissimilis* Payson. Type: Montrose Co.: Naturita, Payson (two collections cited). Type specimen from Colorado.

**Chamaesyce geyeri (Engelmann) Small**

WHEEL41. Morgan Co.: 4 mi S of Brush, Ramaley & Ewan 16326.

*Euphorbia geyeri* Engelmann. HARRI54.

**Chamaesyce glyptosperma (Engelmann) Small**

RYDBE06.

*Euphorbia glyptosperma* Engelmann. HARRI54.

**Chamaesyce lata (Engelmann) Small**

RYDBE06; WHEEL41. "Southwestern Colorado." Baca Co.: 10 mi N Boise City, Okla., Stratton 441 (WHEEL41).

**Chamaesyce missurica (Rafinesque) Shinnery**

TORRE27 as *Euphorbia portulacoides* Willd..

*Chamaesyce petaloidea* (Engelmann) Small. PORTE74; RYDBE06.

*Euphorbia missurica* Rafinesque var. *intermedia* (Engelmann) L. C. Wheeler. HARRI54.

**Chamaesyce parrvi (Engelmann) Rydberg**

WEBER55.

*Chamaesyce flagelliformis* (Engelmann) Rydberg. RYDBE06.  
*Euphorbia parryi* Engelmann. HARRI54. "reported for Colorado".

***Chamaesyce revoluta* (Engelmann) Small**

PORTE74; RYDBE06; WHEEL41. Fremont Co.: Canyon City, Brandegee; Clements 272 (NY).  
*Euphorbia revoluta* Engelmann. HARRI54.

***Chamaesyce serpens* (Humboldt, Bonpland, & Kunth) Small**

RYDBE06. Alien. "Weld Co.: New Windsor." Introduced by the Spanish?  
*Chamaesyce albicaulis* Rydberg. RYDBE06; WHEEL41.  
*Chamaesyce rugulosa* (Engelmann) Rydberg. RYDBE06.  
*Euphorbia serpens* Humboldt, Bonpland, & Kunth. HARRI54.

***Chamaesyce serpyllifolia* (Persoon) Small**

RYDBE06. Alien.  
*Euphorbia serpyllifolia* Persoon. HARRI54.

***Chamaesyce stictospora* (Engelmann) Small**

RYDBE06.  
*Euphorbia stictospora* Engelmann. HARRI54.

***Chamaesyce supina* (Rafinesque) Moldenke**

Alien. Arapahoe Co.: Community College of Aurora property between Chambers Rd. and Centratech Pkwy., 12 Sept. 1991, Yeatts & Wingate 3162 (COLO).

***Croton* L., 1753**

***Croton texensis* (Klotsch) Müller-Argoviensis in De Candolle**

HARRI54.  
*Croton muricatus* Nuttall. PORTE74.

***Poinsettia* R. Graham, 1836**

***Poinsettia dentata* (Michaux) Klotsch & Garcke**

RYDBE06.  
*Euphorbia cuphosperma* (Engelmann) Boissier.  
*Euphorbia dentata* Michaux. HARRI54.  
*Euphorbia dentata* Michaux var. *cuphosperma* Engelmann. HARRI54.  
*Poinsettia cuphosperma* (Engelmann) Small. RYDBE06.

***Reverchonia* A. Gray, 1880 WEBST63**

***Reverchonia arenaria* A. Gray**

Las Animas Co.; John Martin Reservoir, 1998, D. Clark.

***Stillingia* Garden ex L., 1767**

***Stillingia sylvatica* Garden ex L.**

HARRI54.

***Tithymalus* Gaertner, 1790**

***Tithymalus brachyceras* (Engelmann) Small**

*Euphorbia brachyceras* Engelmann.  
*Euphorbia montana* Engelmann. PORTE74.  
*Euphorbia montana* Engelmann var. *robusta* Engelmann. TORRE27; RYDBE06.  
*Euphorbia robusta* (Engelmann) Small. HARRI54.  
*Galarrhoeus robustus* (Engelmann) Rydberg.  
*Tithymalus montanus* (Engelmann) Small. RYDBE06.  
*Tithymalus robustus* (Engelmann) Small. RYDBE06.

***Tithymalus crenulatus* (Engelmann in Torrey) Heller**

RYDBE06.  
*Euphorbia crenulata* Engelmann in Torrey. HARRI54.  
*Euphorbia manca* A. Nelson. Type: Montezuma Co.: Mancos, 23 June 1898, Baker, Earle & Tracy 23 (RM). Type specimen from Colorado.

***Tithymalus cyparissias* (L.) Lamarck**

RYDBE06. Alien.

*Euphorbia cyparissias* L. HARRI54.

***Tithymalus esula* (L.) Scopoli**

Alien.

*Euphorbia esula* L. HARRI54.

***Tithymalus incisus* (Engelmann) W. A. Weber**

WEBER89B.

*Euphorbia incisus* Engelmann var. *mollis* (Norton) L. C. Wheeler. WEBER55.

***Tithymalus myrsinites* (L.) J. Hill**

WEBER79A. Alien. Naturalized near Boulder.

*Euphorbia myrsinites* L. WEBER79.

***Tithymalus peplus* (L.) J. Hill**

Alien.

*Euphorbia peplus* L. WEBER73.

***Tithymalus spathulatus* (Lamarck) W. A. Weber**

WEBER85A.

*Euphorbia dictyosperma* Fischer & Meyer. PORTE74; HARRI54.

*Euphorbia obtusata* Pursh. PORTER74.

*Euphorbia spathulata* Lamarck. CORRE70.

*Tithymalus arkansanus* (Engelmann & Gray) Klotsch & Garcke. RYDBE06.

*Tithymalus arkansanus* (Engelmann & Gray) Klotsch & Garcke var. *coloradensis* (Norton) Rydberg. RYDBE06.

*Tithymalus missouriensis* (Norton) Small. RYDBE06.

***Tithymalus uralensis* (Fischer ex Link) Prokhanov**

Alien.

*Euphorbia uralensis* Fischer ex Link.

***Tragia* L., 1753**

***Tragia nepetifolia* Cavanilles**

HARRI54; MILL67. Misinterpretation.

***Tragia ramosa* (Müller-Argoviensis in De Candolle) Torrey**

TORRE27; MILL67.

*Tragia nepetifolia* Cavanilles var. *ramosa* Müller-Argoviensis in De Candolle. PORTE74.

***Zygophyllidium* (Boissier) J. K. Small, 1903**

***Zygophyllidium hexagonum* (Nuttall) Small**

RYDBE06. James' collection evidently came from Las Animas Co.: Bachicha Canyon, NNE of jct. Hwy 389 and 160, fide GOODM95.

*Euphorbia hexagona* Nuttall. TORRE27; PORTE74; HARRI54.

**FABACEAE**

***Alhagi* Gagnebin, 1755**

***Alhagi maurorum* Medikus**

Alien. Saguache Co., 1955-6 (CS). Evidently now exterminated in the San Luis Valley.

*Alhagi camelorum* Fischer.

***Amorpha* L., 1753**

***Amorpha canescens* Pursh**

RYDBE06; HARRI54; WILBU75.

***Amorpha fruticosa* L.**

WILBU75.

*Amorpha angustifolia* (Pursh) Boynton. RYDBE06.

*Amorpha fruticosa* L. var. *angustifolia* Pursh. HARRI54; WILBU75.

***Amorpha nana* Nuttall**

RYDBE06; HARRI54; WILBU75. Wilbur's map shows this in Moffat Co., probably an error!.

***Apios* Fabricius, 1759**

**Apios americana Medicus**

HARRI54.

**Astragalus L., 1753 BARNE64; ISELY98****Astragalus agrestis Douglas ex G. Don**

HARRI54.

Astragalus goniatus Nuttall. RYDBE06.

Astragalus hypoglottis L. var. polyspermus Torrey &amp; Gray. Type: On the Platte [probably near the mouth, W of Denver], James (NY). Type specimen from Colorado.

Astragalus virgultulus Sheldon. RYDBE06, as virgultatus. Type: Boulder Co.: plains near Boulder, July 1892, Patterson (MINN). Type specimen from Colorado.

**Astragalus allochrous A. Gray var. playanus (Jones) Isely**

ISELY98.

Astragalus playanus Jones. ISELY98.

Astragalus wootonii Sheldon var. wootonii. RYDBE06; WEBER89C. RYDBE06 reported from "Canyon City;" possibly the locality where recently found; Conejos Co.: 0.5 mi SSE of Canyon, Douglas 1576 (CS).

**Astragalus alpinus L.**

HARRI54.

Phaca astragalina De Candolle forma occidentalis Gandoger. BARNE64. Lectotype: Park Co.: Como, 23 July 1897, Crandall (LY). Type specimen from Colorado.

Tium alpinum (L.) Rydberg. RYDBE06.

**Astragalus amphioxys A. Gray var. vespertinus (Sheldon) Jones**

HARRI54.

Astragalus vespertinus Sheldon. BARNE64. Type: Mesa Co.: Grand Junction, May 1892, Eastwood 6109 (MINN). Type specimen from Colorado.

Xylophacos amphioxys (A. Gray) Rydberg. RYDBE06, as amphioxus.

Xylophacos vespertinus (Sheldon) Rydberg. RYDBE06.

**Astragalus anisus Jones**

RYDBE06; HARRI54; BARNE64. Endemic. Type: said to be Pueblo, but actually east of Gunnison! Rediscovered by Weber. Type specimen from Colorado.

**Astragalus argophyllus Nuttall ex Torrey & Gray var. martinii Jones**

BARNE64.

**Astragalus argophyllus Nuttall ex Torrey & Gray var. pephragmenoides Barneby**

HARRI54. Mesa Co.: N slope Grand Mesa, Ripley &amp; Barneby 5437 (NY). Type specimen from Colorado.

**Astragalus asclepiadoides Jones**

HARRI54.

Jonesiella asclepiadoides (Jones) Rydberg.

**Astragalus australis (L.) Lamarck subsp?**

Status in doubt. This is the tundra plant. Barneby did not decide about these races and their relationship to the Eurasian plants.

Astragalus aboriginum Richardson var. fastigiorum Jones. HARRI54; BARNE64. Taxonomic status undetermined. Is this really part of *A. australis*? This is the low tundra plant.**Astragalus australis (L.) Lamarck var. glabriusculus (Hooker) Isely**

ISELY98.

Astragalus aboriginum Richardson var. glabriusculus (Hooker) Rydberg. HARRI54; BARNE64. ISELY84, p. 129, equates this with the Eurasian *A. australis* (L.) Lamarck var. glabriusculus (A. Gray) Isely, but does not treat Rocky Mountain segregates.

Astragalus glabriusculus A. Gray. PORTE74.

Astragalus glabriusculus Hooker var. major A. Gray. Type: 1862, Hall &amp; Harbour (GH). Type specimen from Colorado.

Atelophragma aboriginum (Richardson) Rydberg. RYDBE06.

**Astragalus bisulcatus (Hooker) A. Gray**

HARRI54; BARNE64.

Astragalus bisulcatus (Hooker) A. Gray forma decalvans Gandoger. BARNE64. Type: Larimer Co.: Fort Collins, Crandall (LY). Type specimen from Colorado.

Astragalus diholcos Tidestrom. HARRI54.

Diholcos bisulcatus (Hooker) Rydberg. RYDBE06.

Diholcos decalvans (Gandoger) Rydberg. RYDBE06.

Diholcos micranthus Rydberg. BARNE64. Huerfano Co.: La Veta, 13 July 1896, Shear 3569 (NY). The name was based on a mixture of

*A. bisulcatus* and *A. haydenianus*, which Barneby considers a single species. Type specimen from Colorado.

**Astragalus bodinii Sheldon**

HARRI54. Disjunct between COLO-WY-UT and Yukon!.

*Phaca bodinii* (Sheldon) Rydberg. RYDBE06.

**Astragalus brandegei T. C. Porter in Porter & Coulter**

HARRI54; BARNE64. Type: Fremont Co.: Cañon City, 26 June 1873, Brandegee (PH). Type specimen from Colorado.

*Atelophragma brandegei* (T. C. Porter) Rydberg. RYDBE06.

**Astragalus calycosus Torrey ex S. Watson var. calycosus**

HARRI54. Moffat Co.: Dunn 17727.

**Astragalus calycosus Torrey ex S. Watson var. scaposus Jones**

BARNE64.

*Hamosa scaposa* (A. Gray) Rydberg. RYDBE06.

**Astragalus canadensis L. var. canadensis**

RYDBE06; HARRI54.

*Astragalus canadensis* L. forma *monticola* Gandoger. BARNE64. Type: Larimer Co.: 6-8 mi W Fort Collins, 24 July-8 Aug., Crandall (LY). Type specimen from Colorado.

*Astragalus oreophilus* Rydberg. BARNE64. Type: Archuleta Co.: Pagosa Springs, July 1899, Baker 419 (NY). Type specimen from Colorado.

***Astragalus canadensis* L. var. *mortonii* (Nuttall) S. Watson**

HARRI54; BARNE64. A subspecies of the Pacific Northwest.

**Astragalus ceramicus Sheldon var. ceramicus**

HARRI54.

*Astragalus ceramicus* Sheldon var. *imperfectus* Sheldon. HARRI54.

*Astragalus pictus* (A. Gray) A. Gray.

*Phaca picta* A. Gray. RYDBE06.

**Astragalus ceramicus Sheldon var. filifolius (A. Gray) F. J. Hermann**

BARNE64.

*Astragalus pictus* (A. Gray) A. Gray var. *filifolius* A. Gray. PORTE74.

*Phaca longifolia* (Pursh) Nuttall. RYDBE06.

**Astragalus cerussatus Sheldon**

HARRI54; BARNE64. Type: Fremont Co.: Cañon City, June, July 1890, Bodin (MINN). Type specimen from Colorado.

*Phaca cerussata* (Sheldon) Rydberg. RYDBE06.

**Astragalus chamaeleuce A. Gray**

HARRI54.

*Astragalus cicadae* Jones. Type: Mesa Co.: Grand Junction, May 1892, Eastwood 10 (RSA). Type specimen from Colorado.

*Xylophacos pygmaeus* (Nuttall) Rydberg. RYDBE06.

*Xylophacos uintensis* Rydberg. RYDBE06; BARNE64. See discussion in BARNE64:627.

**Astragalus cibarius Sheldon**

WEBER61.

**Astragalus cicer L.**

WEBER79. Alien.

**Astragalus coltonii Jones var. moabensis Jones**

HARRI54.

**Astragalus convallarius Greene var. convallarius**

BARNE64. Moffat Co. only.

*Astragalus junceus* A. Gray. PORTE74.

*Astragalus simplicifolius* A. Gray. PORTE74.

*Homalobus junciformis* (A. Nelson) Rydberg. RYDBE06.

**Astragalus convallarius Greene var. scopulorum Barneby**

BARNE64. Type: Garfield Co.: 25 mi N of Loma, 28 May 1943, Ripley & Barneby 5478 (CAS).

*Homalobus campestris* Nuttall. RYDBE06.

*Homalobus salidae* Rydberg. BARNE64. Type: Chaffee Co.: Salida, 3 Aug. 96, Shear 3468 (NY). Type specimen from Colorado.

**Astragalus crassicaarpus Nuttall var. crassicaarpus**

BARNE64.



*Astragalus caryocarpus* Ker. PORTE74.

*Astragalus mexicanus* A. De Candolle. PORTE74.

***Astragalus crassicaarpus* Nuttall var. *paysonii* (L. Kelso) Barneby**

HARRI54.

*Astragalus succulentus* Richardson. HARRI54.

*Geoprumnon crassicaarpum* (Nuttall) Rydberg. RYDBE06.

*Geoprumnon succulentum* (Richardson) Rydberg. RYDBE06.

***Astragalus cronquistii* Barneby**

WEBER87B.

*Astragalus dasyglottis* Fischer ex De Candolle

BARNE64. Barneby considers *A. agrestis* distinct from this, the Eurasian counterpart.

***Astragalus desperatus* Jones**

HARRI54.

*Tium desperatum* (Jones) Rydberg. RYDBE06.

***Astragalus desperatus* Jones var. *neeseae* Barneby**

ISELY. Mapped in Mesa County.

***Astragalus deterior* (Barneby) Barneby**

BARNE64; ISELY98. Isely writes: "Barneby (1964) described the flowers of *A. deterior* as ochroleucous, but those I have seen were light lilac to lavender."

*Astragalus naturitensis* Payson var. *deterior* Barneby. BARNE64. Type: Montezuma Co.: Mesa Verde, 21 May 1943, Ripley & Barneby 5359 (CAS). Type specimen from Colorado.

***Astragalus detritalis* Jones**

HARRI54.

*Astragalus diversifolius* A. Gray

BARNE64; PORTE74. Misidentifications of *A. convallarius*.

***Astragalus drummondii* Douglas ex Hooker**

HARRI54.

*Astragalus drummondii* Douglas ex Hooker forma *melanocalyx* Gandoger. BARNE64. Type: Larimer Co.: Fort Collins, Crandall (LY). Type specimen from Colorado.

*Tium drummondii* (Douglas) Rydberg. RYDBE06.

***Astragalus duchesnensis* Jones**

WEBER79A.

***Astragalus eastwoodiae* Jones**

BARNE64. Endemic. Type: Mesa Co.: Westwater, 6 May 1891, Jones (RSA). Type specimen from Colorado.

*Astragalus debequaeus* Welsh. WELSH85. Type: 7 mi. S of DeBeque, 16 May 1984, Welsh et al. 22792 (BYU). Probably a color form of *A. eastwoodiae*. Type specimen from Colorado.

*Astragalus eastwoodiae* var. *debequaeus* (Welsh) Isely. ISELY98.

*Astragalus preussii* A. Gray var. *eastwoodiae* (Jones) Jones. HARRI54.

*Astragalus preussii* A. Gray var. *sulcatus* Jones. Type: Mesa Co.: Westwater, 6 May 1891, Jones. Type specimen from Colorado.

*Phaca eastwoodiae* (Jones) Rydberg. RYDBE06.

***Astragalus eucosmus* B. L. Robinson**

HARRI54.

*Atelophragma elegans* (Hooker) Rydberg. RYDBE06.

***Astragalus falcatus* Lamarck**

WEBER79A. Alien.

***Astragalus flavus* Nuttall**

BARNE64.

*Astragalus confertiflorus* A. Gray. HARRI54.

*Astragalus confertiflorus* A. Gray var. *flaviflorus* (Kuntze) Jones. BARNE64.

*Cnemidophacos flavus* (Nuttall) Rydberg. RYDBE06.

***Astragalus flexuosus* (Hooker) G. Don var. *diehlii* (Jones) Barneby**

HARRI54.

***Astragalus flexuosus* (Hooker) G. Don var. *flexuosus***

HARRI54.

*Astragalus fendleri* (A. Gray) Rydberg. RYDBE06.

*Homalobus flexuosus* (Hooker) Rydberg. RYDBE06.

*Phaca fendleri* A. Gray. PORTE74.

*Pisophaca saundersii* Rydberg. Type: Garfield Co.: Glenwood Springs, 11 June 1893, Saunders (MINN, not found by Ownbey). Type specimen from Colorado.

*Astragalus frigidus* (L.) A. Gray

PORTE74; BARNE64. Probably *A. americanus* is only a subspecies of this Eurasian species.

***Astragalus frigidus* (L.) A. Gray var. *americanus* (Hooker) S. Watson**

ISELY98.

*Astragalus fucatus* Barneby

BARNE64. Alien. Dot on map near McElmo Canyon, based on an Eastwood collection, probably from eastern Utah, fide Barneby who has been unable to find the right dune areas on the Colorado side.

***Astragalus geyeri* A. Gray**

Delta Co.: 5 mi W of Delta, Gunnison R. valley, 21 May 1991, J. Anderson 91-26.

***Astragalus gracilis* Nuttall**

HARRI54.

*Astragalus microlobus* A. Gray. BARNE64. Lectotype: Hall & Harbour 119 (GH). Type specimen from Colorado.

*Astragalus parviflorus* (Pursh) Nuttall. HARRI54.

*Microphacos microlobus* (A. Gray) Rydberg. RYDBE06.

***Astragalus hallii* A. Gray**

HARRI54. Type: Hall & Harbour 121 (GH). Type specimen from Colorado.

*Astragalus shearii* Rydberg. BARNE64. Type: Lake Co.: Twin Lakes, 21 Aug. 1896, Shear 3317 (NY). Type specimen from Colorado.

*Atelophragma shearii* (Rydberg) Rydberg. RYDBE06, as *shearis*.

*Homalobus hallii* (A. Gray) Rydberg. RYDBE06.

***Astragalus haydenianus* A. Gray**

HARRI54; BARNE64. Type: SW Colo, 7,000 ft. [between Parrott City and the Mancos], 1875, Brandege 1285 (GH). We disagree with Barneby on the status of this taxon. Type specimen from Colorado.

*Astragalus bisulcatus* (Hooker) A. Gray subsp. *haydenianus* (A. Gray) W. A. Weber. WEBER82B.

*Astragalus bisulcatus* (Hooker) A. Gray var. *haydenianus* (A. Gray) Barneby. BARNE64.

*Astragalus grallator* S. Watson ex Eastwood. BARNE64. Type: Routt Co.: Steamboat Springs, July 1891, Eastwood (GH). Type specimen from Colorado.

*Astragalus haydenianus* A. Gray forma *leiocarpus* Gandoger. BARNE64. Type: Larimer Co.: Fort Collins, Crandall (LY). Type specimen from Colorado.

*Diholcos haydenianus* (A. Gray) Rydberg. RYDBE06.

*Homalobus grallator* (S. Watson) Rydberg. RYDBE06.

***Astragalus humillimus* A. Gray**

BARNE64; OKANE88. Type: Montezuma Co.: Mesa Verde, 1875, Brandege (GH), recently rediscovered by O'Kane. Type specimen from Colorado.

*Phaca humillima* (A. Gray) Rydberg. RYDBE06.

*Astragalus humistratus* A. Gray

HARRI54. Misidentification. See *A. missouriensis*.

*Tium humistratum* (A. Gray) Rydberg. RYDBE06.

*Astragalus hypoglottis* L.

PORTE74. Report applies to *A. agrestis*.

*Astragalus iodanthus* S. Watson

PORTE74. Report applies to *A. flexuosus*.

***Astragalus iodopetalus* (Greene ex Rydberg) Barneby**

HARRI54. Endemic.

*Xylophacos iodopetalus* Greene ex Rydberg. BARNE64. Type: Archuleta Co.: Arboles, June 1899, Baker 415 (NY). Type specimen from Colorado.

***Astragalus jejunos* S. Watson**

WILKE84. Moffat Co.: Vermillion Cr., T10N R100W S33, 6,800 ft. alt., 8 June 1983, Peterson & Wiley-Eberle 83-141 (COLO, CS, RM).

***Astragalus kentrophyta* A. Gray subsp. *elatus* (S. Watson) W. A. Weber**

WEBER83A.

*Astragalus tegetarius* S. Watson var. *elatus* (S. Watson) Barneby. BARNE64.

*Kentrophyta impensa* (Sheldon) Rydberg. RYDBE06.

***Astragalus kentrophyta* A. Gray subsp. *implexus* (Canby ex Porter & Coulter) W. A. Weber**

WEBER83A.

*Astragalus kentrophyta* A. Gray var. *implexus* (Canby ex Porter & Coulter) Barneby. BARNE64.

*Homalobus wolfii* Rydberg. BARNE64. Type: Park Co.: South Park, July 1873, Wolf 243 (NY). Type specimen from Colorado.

*Kentrophyta aculeata* (A. Nelson) Rydberg. RYDBE06.

*Kentrophyta wolfii* (Rydberg) Rydberg. RYDBE06.

***Astragalus kentrophyta* A. Gray subsp. *kentrophyta***

WEBER91B. WL: Pawnee Buttes, Weber 18052.

*Astragalus tegetarius* S. Watson. BARNE64.

*Kentrophyta viridis* Nuttall. RYDBE06. Locality, Palisades, suggests subsp. *implexa*.

***Astragalus laxmannii* Lamarck**

ISELY98.

*Astragalus adsurgens* Pallas var. *robustior* Hooker. BARNE64.

*Astragalus crandallii* Gandoger. BARNE64. Type: Larimer Co.: 7-8,000 ft., Crandall (LY). Type specimen from Colorado.

*Astragalus marianus* Huber. Type: St. Mary's Glacier (Barneby, pers. comm.). Type specimen from Colorado.

*Astragalus nitidus* Douglas. RYDBE06.

*Astragalus striatus* Nuttall ex Torrey & Gray. HARRI54.

*Astragalus sulphureus* Rydberg. BARNE64. Type: Clear Creek Co.: Georgetown, 18 Aug. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

*Astragalus sulphureus* Rydberg var. *pinicola* L. Kelso. HARRI54. Type: Larimer Co.: Rocky Mt. Nat. Park, 8 Aug. 1936, Kelso & Kelso 320 (CS). Type specimen from Colorado.

***Astragalus lentiginosus* Douglas ex Hooker var. *albiflorus* (A. Gray) Schoener**

ISELY98.

*Astragalus diphysus* (A. Gray) Rydberg. RYDBE06.

***Astragalus lentiginosus* Douglas ex Hooker var. *diphysus* (A. Gray) Jones**

HARRI54.

*Astragalus diphysus* (A. Gray) Rydberg. RYDBE06.

***Astragalus lentiginosus* Douglas ex Hooker var. *palans* (Jones) Jones**

HARRI54.

*Astragalus amplexus* Payson. Type: Montrose Co.: Long Park near Naturita, 22 May 1914, Payson 335 (RM). Type specimen from Colorado.

***Astragalus lentiginosus* Douglas ex Hooker var. *platyphyllidius* (Rydberg) M. Peck**

BARNE64. Moffat Co..

***Astragalus leptaleus* A. Gray**

HARRI54. nom. nov..

*Phaca pauciflora* Nuttall ex Torrey & Gray, non Pallas nec Hooker. PORTE74. Nuttall's type must be from Idaho or Montana, "plains of the Rocky Mts. near streams".

***Astragalus leptocarpus* Torrey & Gray**

RYDBE06. Misidentification of *A. nuttallianus*.

*Hamosa leptocarpa* (Torrey & Gray) Rydberg. RYDBE06.

***Astragalus linifolius* Osterhout**

BARNE64. Endemic. Type: Mesa Co.: hills 6 mi S of Grand Junction, Osterhout 6557 (RM). Type specimen from Colorado.

*Astragalus toanus* C. L. Porter, non Jones. HARRI54.

***Astragalus lonchocarpus* Torrey var. *hamiltonii* (C. L. Porter) Isely**

*Astragalus hamiltonii* C. L. Porter. OKANE89. Moffat Co.: Dinosaur N.M., O'Kane 2768.

***Astragalus lonchocarpus* Torrey var. *lonchocarpus***

HARRI54.

*Astragalus macer* A. Nelson. BARNE64. Type: Montrose Co.: Paradox Valley, 24 June 1912, Walker 179 (RM). Type specimen from Colorado.

*Homalobus macrocarpus* (A. Gray) Rydberg. RYDBE06.

***Astragalus lotiflorus* Hooker**

HARRI54.

*Astragalus lotiflorus* Hooker forma *brachypus* A. Gray. Paratype: Hall & Harbour 131 pr. p. (GH). Type specimen from Colorado.

*Astragalus lotiflorus* Hooker forma *pedunculatus* A. Gray. Paratype: Hall & Harbour 131 pr. p. (GH). Type specimen from Colorado.

*Phaca elatiocarpa* (Sheldon) Rydberg. RYDBE06.

***Astragalus lutosus* Jones**

HARRI54. Rio Blanco Co. and adjacent Utah.

***Astragalus megacarpus* (Nuttall) A. Gray**

HARRI54.

***Astragalus microcymbus* Barneby**

Endemic. Type: Gunnison Co.: sandy roadside 4 mi W of Gunnison, Ripley & Barneby 7179 (NY). Type specimen from Colorado.

***Astragalus miser Douglas in Hooker var. decumbens* (Nuttall) Cronquist**

BARNE64. Erroneous Report.

*Homalobus camporum* Rydberg. RYDBE06. Specimen is var *oblongifolius*.

*Homalobus decumbens* Nuttall. RYDBE06. Specimen is var *oblongifolius*.

***Astragalus miser Douglas in Hooker var. oblongifolius* (Rydberg) Cronquist**

BARNE64.

*Astragalus campestris* (Nuttall) A. Gray. PORTE74. See discussion of nomenclatural confusion here, in BARNE64, p. 248.

*Astragalus decumbens* (Nuttall ex Torrey & Gray) A. Gray. PORTE74; HARRI54.

*Astragalus decumbens* (Nuttall ex Torrey & Gray) A. Gray var. *decurrens* (Rydberg) Cronquist. HARRI54.

*Astragalus decumbens* (Nuttall ex Torrey & Gray) A. Gray var. *oblongifolius* (Rydberg) Cronquist. HARRI54.

*Homalobus decurrens* Rydberg, non Boissier. Type: Larimer Co.: Estes Park, Aug. 1895, Osterhout (NY). Type specimen from Colorado.

*Homalobus hylophilus* Rydberg. RYDBE06.

*Homalobus microcarpus* Rydberg. Type: Jackson Co.: East slope Rabbit Ear Range, 20 July 1894, collector? (NY). Type specimen from Colorado.

*Homalobus oblongifolius* Rydberg. Type: Gunnison Co.: Cerro Summit, 12 July 1901, Baker 409 (NY). Type specimen from Colorado.

***Astragalus miser Douglas in Hooker var. tenuifolius* (Nuttall) Barneby**

BARNE64. Wyoming and Montana. Report applies to var *oblongifolia*.

*Homalobus tenuifolius* Nuttall. RYDBE06.

***Astragalus missouriensis* Nuttall var. *amphibolus* Barneby**

BARNE64. Type: Montezuma Co.: Mancos, Baker, Earle & Tracy 56 (NY). Type specimen from Colorado.

***Astragalus missouriensis* Nuttall var. *humistratus* Isely**

ISELY83. Type: Archuleta Co.: Pagosa Springs, 20 June 1951, Weber & Livingston 6348 (COLO). Not to be confused with *A. humistratus* A. Gray. Type specimen from Colorado.

***Astragalus missouriensis* Nuttall var. *missouriensis***

HARRI54.

*Astragalus missouriensis* Nuttall forma *leucophaeus* Gandoger. BARNE64. Type: Larimer Co.: Fort Collins, 24 May 1898, Crandall (LY), as *leucophaea*. Type specimen from Colorado.

*Xylophacos missouriensis* (Nuttall) Rydberg. RYDBE06.

***Astragalus mollissimus* Torrey var. *mollissimus***

HARRI54. Type: "On the Platte", 1820, James (NY). Type specimen from Colorado.

***Astragalus mollissimus* Torrey var. *thompsoniae* (S. Watson) Barneby**

BARNE64.

*Astragalus bigelovii* A. Gray. RYDBE96.

*Astragalus bigelovii* A. Gray var. *thompsoniae* (S. Watson) Jones. HARRI54.

*Astragalus thompsoniae* S. Wats..

*Astragalus thompsoniae* S. Watson. ISELY98. Isely considers this a separate species.

***Astragalus molybdenus* Barneby**

BARNE64. Endemic. Nom. nov..

*Astragalus plumbeus* Barneby, non Gontscharow. Type: Lake Co.: 4 mi E Leadville, 11,400 ft., 24 July 1948, Ripley & Barneby 9994 (CAS). Type specimen from Colorado.

***Astragalus monumentalis* Barneby var. *cottamii* (Welsh) Isely**

ISELY83. Isely does not list for Colorado!.

*Astragalus cottamii* Welsh. Montezuma Co.: mesa N of Tanner Mesa, 1 May 1987, O'Kane 2640.

***Astragalus musiniensis* Jones**

WILKE78.

***Astragalus naturitensis* Payson**

HARRI54. Endemic. Type: Montrose Co.: Naturita, 27 May 1914, Payson 360 (RM). Type specimen from Colorado.

*Astragalus arietinus* Jones var. *stipularis* Jones. BARNE64. Type: Montezuma Co.: McElmo Cr., June 1892, Eastwood (RSA). Type specimen from Colorado.

***Astragalus nelsonianus* Barneby**

WILKE84. Moffat Co.: Powder Pash, T11N R97W S10, 6,280 ft., 21 June 1983, Peterson & Wilken 83-232 (CS, NY), !Barneby.

***Astragalus newberryi* A. Gray**

RYDBE06. Montezuma Co.: J. Anderson 90-81.

*Xylophacos newberryi* (A. Gray) Rydberg. RYDBE06. Nomen nudum. "exact locality not given." Later validly published.

*Astragalus nuttallianus* De Candolle subsp. *nuttallianus*

HARRI54. see subspecies.

***Astragalus nuttallianus* De Candolle var. *micranthemiformis* Barneby**

BARNE64. Type: Montezuma Co.: Towaoc, 29 May 1947, Ripley & Barneby 8390 (CAS). Type specimen from Colorado.

*Hamosa nuttalliana* (De Candolle) Rydberg. RYDBE06.

*Astragalus nuttallianus* De Candolle var. *trichocarpus* Torrey & Gray

HARRI54. Restricted to Texas.

***Astragalus oöcalycis* Jones**

HARRI54. Endemic. Type from Aztec, New Mexico.

*Cnemidophacos urceolatus* Rydberg. BARNE64. Type: Archuleta Co.: Arboles, 3 June 1899, Baker 424 (NY). Type specimen from Colorado.

***Astragalus oöphorus* Jones var. *caulescens* (Jones) Jones**

HARRI54.

*Phaca artipes* (A. Gray) Rydberg. RYDBE06.

***Astragalus osterhoutii* Jones**

HARRI54; BARNE64. Endemic. Type: Grand Co.: Hot Sulphur Springs, July 1905, June 1906, Osterhout 3038, 3235. Type specimen from Colorado.

***Astragalus parryi* A. Gray**

HARRI54; BARNE64. Nom. nov.. Type specimen from Colorado.

*Astragalus succumbens* Torrey & Gray, non Douglas. Type: Clear Creek Co.: Gravelly banks along Clear Creek, Parry (NY). Type specimen from Colorado.

*Xylophacos parryi* (A. Gray) Rydberg. RYDBE06.

***Astragalus pattersonii* A. Gray**

HARRI54; BARNE64. Type: Summit Co.: Foothills of Gore Mts., Patterson (GH). Type specimen from Colorado.

*Phacopsis pattersonii* (A. Gray) Rydberg. RYDBE06.

***Astragalus pectinatus* (Hooker) Douglas in Hooker**

HARRI54.

*Ctenophyllum pectinatum* (Hooker) Rydberg. RYDBE06.

***Astragalus piscator* Barneby & Welsh**

WELSH87; BARNE86. Mesa Co.: Gateway, Barneby 18185.

***Astragalus plattensis* Nuttall ex Torrey & Gray**

PORTE74; HARRI54.

***Astragalus praelongus* Sheldon var. *ellisiae* (Rydberg) Barneby**

BARNE64.

***Astragalus praelongus* Sheldon var. *praelongus***

BARNE64.

*Astragalus pattersonii* A. Gray var. *praelongus* (Sheldon) Jones. HARRI54.

*Astragalus recedens* (Greene ex Rydberg) C. L. Porter. BARNE64.

*Jonesiella recedens* Greene ex Rydberg. BARNE64. Type: Archuleta Co.: Arboles, June 1899, Baker 422 (NY). Type specimen from Colorado.

*Phacopsis praelongus* (Sheldon) Rydberg. RYDBE06.

***Astragalus proximus* (Rydberg) Wooton & Standley**

HARRI54. Endemic.

*Homalobus proximus* Rydberg. Type: Archuleta Co.: Arboles, June 1889, Baker 421 (NY). Type specimen from Colorado.

***Astragalus pubentissimus* Torrey & Gray**

WEBER89C. Rio Blanco Co.: ridge SE of Raven Ridge, W of Rangely, Tabar 169 (CS).

***Astragalus puniceus* Osterhout**

HARRI54. Type: Las Animas Co.: Trinidad, 28 June 1898, Osterhout 1737 (RM). Type specimen from Colorado.

*Astragalus gracilentus* (A. Gray) A. Gray var. *exsertus* Jones. BARNE64. Type: Las Animas Co.: Trinidad, 1898, Osterhout 7 (RSA). Type specimen from Colorado.

***Astragalus purshii* Douglas ex Hooker**

HARRI54.

*Xylophacos purshii* (Douglas ex Hooker) Rydberg. RYDBE06.

***Astragalus racemosus* Pursh var. *longisetus* Jones**

BARNE64. Lectotype: Pueblo Co.: Pueblo, 8 June 1890, Bodin (US). Type specimen from Colorado.

***Astragalus racemosus* Pursh var. *racemosus***

HARRI54.

*Tium racemosum* (Pursh) Rydberg. RYDBE06.

***Astragalus rafaensis* Jones**

WEBER84C.

***Astragalus ripleyi* Barneby**

HARRI54.

***Astragalus robbinsii* (Oakes) A. Gray var. *minor* (Hooker) Barneby**

BARNE64.

*Astragalus occidentalis* (S. Watson) Jones. HARRI54.

*Atelophragma macounii* Rydberg. RYDBE06.

***Astragalus schmollii* C. L. Porter**

HARRI54; BARNE64. Endemic. Type: Montezuma Co.: Mesa Verde N.P., 26 May 1925, Schmol & Nusbaum 1555 (RM). Type specimen from Colorado.

***Astragalus scopulorum* T. C. Porter in Porter & Coulter**

HARRI54; BARNE64. Co-types: South Park, 24 July 1872, Porter; Wet Mt. Valley, 1873, Brandegee (PH). Type specimen from Colorado.

*Astragalus rarus* Sheldon. BARNE64. Type: La Plata Co.: Durango, June 1891, Eastwood (MINN). Type specimen from Colorado.

*Astragalus subcompressus* A. Gray ex Brandegee. BARNE64. Type: La Plata Co.: Animas Valley, 1875, Brandegee (GH). Type specimen from Colorado.

*Tium scopulorum* (T. C. Porter in Porter & Coulter) Rydberg. RYDBE06.

***Astragalus sesquiflorus* S. Watson**

WEBER83B.

***Astragalus shortianus* Nuttall in Torrey & Gray**

HARRI54.

*Xylophacos shortianus* (Nuttall) Rydberg. RYDBE06.

***Astragalus simplicifolius* (Nuttall) A. Gray**

HARRI54; BARNE64. Misidentifications of *A. spatulatus*.

***Astragalus sparsiflorus* A. Gray**

HARRI54. Type: Lower Rocky Mts., Hall & Harbour 128 (GH). Type specimen from Colorado.

*Astragalus sparsiflorus* A. Gray var. *majusculus* A. Gray. BARNE64. Type: Lower Rocky Mts., Hall & Harbour 129 (GH). Both races occur in the same population!.

*Tium sparsiflorum* (A. Gray) Rydberg. RYDBE06.

*Tium variegatum* Rydberg. BARNE64. Type: Jefferson Co.: Platte Canyon, 19 May 1894, collector? (NY). Type specimen from Colorado.

***Astragalus spatulatus* Sheldon**

HARRI54.

*Homalobus caespitosus* Nuttall. RYDBE06.

***Astragalus tenellus* Pursh**

HARRI54.

*Astragalus multiflorus* A. Gray. PORTE74.

*Homalobus clementis* Rydberg. BARNE64. Type: Sangre de Cristo, 1896, Clements 354 (NY). Type specimen from Colorado.

*Homalobus tenellus* (Pursh) Britton. RYDBE06.

***Astragalus tortipes* Anderson & Porter**

ANDER94. Type: Montezuma Co.: Sleeping Ute Mt., 2.5 mi SW of Towaoc, on Mancos shale, 25 April 1989, Anderson 89-16(BRY). Type specimen from Colorado.

***Astragalus wetherillii* Jones**

HARRI54; BARNE64. Type: Mesa Co.: Colorado River Canyon above Grand Junction, May 1892, Eastwood (RSA). Type specimen from Colorado.

*Phaca wetherillii* (Jones) Rydberg. RYDBE06.

**Astragalus wingatanus S. Watson**

HARRI54.

*Astragalus acerbus* Sheldon. BARNE64. Type: Garfield Co.: Glenwood Springs, 18 June 1893, Saunders s.n. (MINN). Type specimen from Colorado.

*Homalobus acerbus* (Sheldon) Rydberg. RYDBE06.

*Homalobus wingatanus* (S. Watson) Rydberg. RYDBE06.

*Astragalus wootonii* Sheldon var. *candollianus* (Kunth) Barneby

BARNE64. A case of great nomenclatural confusion. Not a Colorado plant.

*Phaca candolliana* Kunth. RYDBE06. "Cañon City." Specimen probably is *A. cerussata* at the type locality.

**Caragana Fabricius, 1763**

**Caragana arborescens Lamarck**

Alien. Abundantly naturalized in vicinity of Air Force Academy, and spreading.

**Caragana aurantiaca Koehne**

WEBER82A. Alien. Park Co.: between Grant and Guanella Pass.

**Colutea L., 1753**

**Colutea arborescens L.**

WEBER59. Alien.

**Dalea P. Browne, 1758 BARNE77**

**Dalea aurea Nuttall ex Pursh**

HARRI54.

*Parosela aurea* (Nuttall ex Pursh) Britton. RYDBE06.

*Dalea candida* Willdenow var. *candida*

Erroneous Report.

*Dalea occidentalis* (Britton & Kearney) Isely. ISELY98. This would be the correct name if regarded as a species separated from *D. candida*.

*Petalostemon candidum* (Willdenow) Michaux. TORRE27; PORTE74; HARRI54. Reports apply to the variety.

**Dalea candida Willdenow var. oligophylla (Torrey) Shinnery**

BARNE77.

*Petalostemon occidentale* (Heller) Fernald. BARNE77.

*Petalostemon oligophyllus* (Torrey) Rydberg. RYDBE06.

*Dalea cliffortiana* Willdenow

BARNE77. Mexican and Central American species.

*Parosela dalea* (L.) Britton. RYDBE06. Misidentification of *D. leporina*.

**Dalea cylindriceps Barneby**

BARNE77.

*Dalea compacta* Sprengel. BARNE77.

*Petalostemon compactus* (Sprengel) Swezey. RYDBE06; HARRI54.

*Petalostemon macrostachyus* Torrey, non Moricand. TORRE27; PORTE74.

**Dalea enneandra Nuttall**

HARRI54; BARNE77.

*Dalea laxiflora* Pursh. TORRE27; PORTE74; BARNE77.

**Dalea formosa Torrey**

TORRE27; HARRI54; GOODM95.

*Parosela formosa* (Torrey) Vail. RYDBE06.

**Dalea jamesii (Torrey) Torrey & Gray**

HARRI54.

*Jamesia obovata* Rafinesque. Based on *Psoralea jamesii* Torrey.

*Parosela jamesii* (Torrey) Vail. RYDBE06.

*Parosela porteri* A. Nelson. BARNE77. Type: Huerfano Co.: Berwind, 1900, Archibald 244 (RM). Type specimen from Colorado.

*Psoralea jamesii* Torrey. TORRE27. Type: "Sandy plains of the Canadian", James (NY). GOODM95 suggests otherwise; Turkey Creek,

Pueblo Co., Colorado. Type specimen from Colorado.

**Dalea lanata Sprengel**

HARRI54. *D. lanata* var. *terminalis* is mapped for Montezuma Co. (Isely p.315). To be checked out.

*Parosela lanata* (Sprengel) Britton. RYDBE06.

**Dalea lasiathera A. Gray**

Out of range.

*Parosela lasiathera* (A. Gray) Heller. RYDBE06, as *lasianthera*.

**Dalea leporina (Aiton) Bullock**

HARRI54.

*Dalea alopecuroides* Willdenow. PORTE74.

*Dalea leporina* (Aiton) Bullock var. *alba* (Michaux) Harrington. HARRI54; BARNE77. Illegitimate name.

**Dalea multiflora (Nuttall) Shinnery**

WEBER82B.

**Dalea nana Torrey var. *carnescens* (Rydberg) Kearney & Peebles**

HARRI54. See Barneby's remarks about Colorado records.

*Dalea nana* Torrey var. *elatior* Torrey. PORTE74.

*Parosela elatior* Vail. RYDBE06.

**Dalea nana Torrey var. *nana***

HARRI54.

**Dalea purpurea Ventenat**

BARNE77.

*Petalostemon pubescens* A. Nelson. RYDBE06; BARNE77. Type: Huerfano Co.: Berwind, Archibald 247 (RM). Type specimen from Colorado.

*Petalostemon purpureus* (Ventenat) Rydberg. RYDBE06; HARRI54.

*Petalostemon purpureus* (Ventenat) Rydberg var. *pubescens* (A. Nelson) Harrington. HARRI54.

*Petalostemon violaceum* Michaux. TORRE27; PORTE74.

**Dalea tenuifolia (A. Gray) Shinnery**

BARNE77. Barneby cites Stephens & Brooks 21842 (NY); Great Plains Atlas shows Larimer and four Southeastern counties.

**Dalea villosa Sprengel**

BARNE77.

*Petalostemon villosus* (Sprengel) Nuttall. RYDBE06; HARRI54.

**Desmodium Desvaux, 1813**

**Desmodium rigidum (Elliott) De Candolle**

WEBER61. Presumably extinct; found once around Denver.

**Glycyrrhiza L., 1753**

**Glycyrrhiza lepidota Pursh**

RYDBE06; HARRI54.

**Hedysarum L., 1753 ROLLI40A**

***Hedysarum alpinum* L.**

BARRE69. Misidentification of *Astragalus bisulcatus* (COLO, US)!.

**Hedysarum boreale Nuttall**

HARRI54.

*Hedysarum bakeri* Greene ex Rydberg. RYDBE06. Nomen nudum, cited in synonymy.

*Hedysarum carnosulum* Greene. RYDBE06. Type: Arkansas R. Canyon, Greene (ND-G). Type specimen from Colorado.

*Hedysarum pabulare* A. Nelson. RYDBE06.

***Hedysarum mackenzii* Richardson**

PORTE74. Report applies to *H. boreale*.

**Hedysarum occidentale Greene**

HARRI54.

*Hedysarum marginatum* Greene. RYDBE06. Type: Montrose Co.: Cimarron, 30 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

**Lathyrus L., 1753 HITCH52**



**Lathyrus brachycalyx Rydberg var. zionis (C. L. Hitchcock) Welsh**

WELSH65; WELSH87. La Plata Co.: Eastwood; Mesa and Montrose counties (Barney colls, NY). Mesa Co., fide ISELY98.

*Lathyrus zionis* C. L. Hitchcock. ISELY98.

**Lathyrus eucosmus Butters & St. John**

HARRI54.

**Lathyrus latifolius L.**

WEBER79A. Alien.

**Lathyrus leucanthus Rydberg**

HARRI54; WELSH87; BARNE89. Type: Huerfano Co.: Ojo, 26 May 1900, Rydberg & Vreeland 6020 (NY). We do not accept Barney's reclassification of this group, at least for Colorado. Type specimen from Colorado.

*Lathyrus arizonicus* Britton. RYDBE06; HARRI54; HITCH52; WELSH87.

*Lathyrus laetivirens* Greene. RYDBE06. Nomen nudum. Type: Montrose Co.: Cerro Summit, 17 June 1901, Baker 149 (NY). Type specimen from Colorado.

*Lathyrus lanzwertii* Kellogg var. *leucanthus* (Rydberg) Dorn. DORN88; BARNE89.

*Lathyrus leucanthus* Rydberg var. *laetivirens* (Greene) C. L. Hitchcock. HITCH52. Type: Montrose Co.: Cerro Summit, 17 June 1901, Baker 149. Hitchcock's treatment validates the epithet, which was nomen nudum. Type specimen from Colorado.

***Lathyrus palustris* L.**

PORTE74; HITCH52. Not present in the Rocky Mountain region.

**Lathyrus pauciflorus Fernald**

HARRI54.

*Lathyrus pauciflorus* Fernald var. *utahensis* (Jones) M. Peck. WELSH87.

*Lathyrus utahensis* Jones. RYDBE06.

**Lathyrus polymorphus Nuttall subsp. incanus (Small & Rydberg) C. L. Hitchcock**

HARRI54.

*Lathyrus incanus* (Small & Rydberg) Rydberg. RYDBE06. authorities given as "Rydberg & Smith".

*Lathyrus incanus* (Small & Rydberg) Rydberg forma *albidus* L. Kelso. Type: Adams Co.: Aurora, 4 April 1929, Kelso 3381 (hb. Kelso). Type specimen from Colorado.

**Lathyrus polymorphus Nuttall subsp. polymorphus**

HARRI54.

*Lathyrus ornatus* Nuttall. PORTE74; RYDBE06; HITCH52.

*Lathyrus stipulaceus* (Pursh) Butters & St. John. HITCH52.

***Lathyrus vestitus* Nuttall ex Torrey & Gray**

HITCH52. Erroneous Report.

*Lathyrus pubescens* Nuttall ex Torrey & Gray. PORTE74. Report probably applies to *L. polymorphus* subsp. *incanus*.

**Lotus L., 1753****Lotus tenuis Waldstein & Kitaibel**

WEBER89C. Alien. Boulder Co.: Ottley annotations in herb.

**Lotus wrightii (A. Gray) Greene**

HARRI54.

*Anisolotus wrightii* (A. Gray) Rydberg. RYDBE06.

*Hosackia purshiana* Bentham. PORTE74.

**Lupinus L., 1753****Lupinus ammophilus Greene**

RYDBE06; HARRI54.

**Lupinus argenteus Pursh**

RYDBE06; HARRI54.

*Lupinus alpestris* A. Nelson. RYDBE06. Hybrid, *L. argenteus* x *L. caudatus*.

*Lupinus argenteus* Pursh subsp. *ingratus* (Greene) Harmon. The common ochroleucous form of the Front Range foothills.

*Lupinus argenteus* Pursh subsp. *moabensis* Welsh.

*Lupinus argenteus* Pursh subsp. *rubricaulis* (Greene) Hess & Dunn. HESS70.

*Lupinus argenteus* Pursh subsp. *spathulatus* (Rydberg) Hess & Dunn. HESS70.

*Lupinus argenteus* Pursh var. *decumbens* S. Watson. PORTE74.

*Lupinus argenteus* Pursh var. *moabensis* Welsh. Based on *L. argenteus* subsp. nov. Dunn & Harmon." No citation given; this seems to have been unpublished.

- Lupinus argenteus* Pursh var. *tenellus* (Douglas) Dunn.  
*Lupinus decumbens* Torrey. TORRE27; RYDBE06. Type: from near Brighton, Adams Co., fide GOODM95, not "on the southern branches of the Arkansa.". Type specimen from Colorado.  
*Lupinus decumbens* Torrey var. *argentatus* Rydberg. RYDBE06. Nom. nud.. Type: Larimer Co.: July 1896, Baker s.n. (NY).  
*Lupinus ingratus* Greene. Type from Chama, N. M.  
*Lupinus parviflorus* Nuttall subsp. *myrianthus* (Greene) Harmon. ISELY98.  
*Lupinus parviflorus* Nuttall subsp. *parviflorus*. RYDBE06; HARRI54.  
*Lupinus parviflorus* Nuttall var. *fulvomaculatus* (Payson) Harmon. ISELY98.  
*Lupinus rubricaulis* Greene. Type: Gunnison Co.: Crested Butte, 6 July 1901, Baker 342 (ND-G). Type specimen from Colorado.  
*Lupinus tenellus* Nuttall. RYDBE06.

***Lupinus barbiger* S. Watson**

HARRI54; FLEAK71. Reports apply to *L. sericeus*.

***Lupinus brevicaulis* S. Watson**

HARRI54.

*Lupinus scaposus* Rydberg. Type: Garfield Co.: Glenwood Springs, 17 June 1899, Osterhout s.n. (NY). Type specimen from Colorado.

***Lupinus caudatus* Kellogg**

PHILL75.

- Lupinus aduncus* Greene. HARRI54; PHILL75.  
*Lupinus arceuthinus* Greene. Assignment tentative. Not in ND-G computer listing. Type specimen from Colorado.  
*Lupinus argenteus* Pursh var. *argophyllus* S. Watson. PORTE74.  
*Lupinus argophyllus* (A. Gray) Cockerell. RYDBE06.  
*Lupinus caudatus* Kellogg subsp. *argophyllus* (A. Gray) Phillips. PHILL75.  
*Lupinus caudatus* Kellogg var. *utahensis* (S. Watson) Welsh. ISELY98.  
*Lupinus dichrous* Greene. Type: Delta Co.: Cedaredge, 24 June 1901, Baker 249. Type specimen from Colorado.  
*Lupinus greenei* A. Nelson. HARRI54; PHILL75.  
*Lupinus oreophilus* Greene. Pittonia 4:135-136.1900. Type: Montrose Co.: Cimarron R, 29 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

***Lupinus crassus* Payson**

ISELY. Type: Montrose Co.: Naturita, 21 April 1914, Payson 239 (RM). ISELY98 equates this with *L. ammophilus*!

***Lupinus kingii* S. Watson**

RYDBE06; HARRI54.

***Lupinus lepidus* Douglas subsp. *caespitosus* (Nuttall) Detling**

DETLI51.

- Lupinus caespitosus* Nuttall. RYDBE06; HARRI54; DETLI51.  
*Lupinus lepidus* Douglas var. *utahensis* (S. Watson) C. L. Hitchcock.  
*Lupinus watsonii* Heller. RYDBE06; DETLI51.

***Lupinus plattensis* S. Watson**

RYDBE06; HARRI54.

*Lupinus ornatus* Douglas var. *glabratus* S. Watson in Porter. PORTE74. Type: Hall & Harbour 95. Type specimen from Colorado.

***Lupinus polyphyllus* Lindley**

ISELY98.

- Lupinus humicola* A. Nelson. HARRI54; ISELY98.  
*Lupinus prunophilus* Jones. COX70; ISELY98.

***Lupinus pusillus* Pursh subsp. *pusillus***

HARRI54.

***Lupinus pusillus* Pursh subsp. *rubens* (Rydberg) Dunn**

DUNN59.

***Lupinus sericeus* Pursh**

ISELY98.

- Lupinus amplus* Greene. FLEAK71. Type: Montrose Co.: Cerro Summit, 17 May 1901, Baker 164 (ND-G). Type specimen from Colorado.  
*Lupinus bakeri* Greene subsp. *amplus* (Greene) Fleak & Dunn. FLEAK71.  
*Lupinus bakeri* Greene subsp. *bakeri*. FLEAK71; ISELY98. Type: Conejos Co.: Los Pinos, 31 May 1899, Baker 436 (ND-G). Type specimen from Colorado.  
*Lupinus comatus* Rydberg. Type: Hinsdale Co.: Lake City, 10 June 1878, Pease s.n. (NY). Annotated by Fleak, 1971. Type specimen

from Colorado.

*Lupinus psoraleoides* Pollard. Type: Gunnison Co.: Gunnison, 30 Aug. 1899, Bartholomew 2680 (US). Type specimen from Colorado.

*Lupinus sericeus* Pursh var. *flexuosus* (Lindley) C. P. Smith. DUNN66.

**Lupinus sericeus Pursh var. egglestonianus C. P. Smith**

DUNN66.

*Lupinus wyethii* S. Watson

DUNN66. Out of range.

**Medicago L., 1753**

**Medicago lupulina L.**

HARRI54. Alien.

**Medicago sativa L.**

HARRI54. Alien.

**Melilotus P. Miller, 1754**

**Melilotus albus Medicus**

HARRI54. Alien.

**Melilotus officinale (L.) Pallas**

HARRI54. Alien.

**Onobrychis P. Miller, 1754**

**Onobrychis viciifolia Scopoli**

RYDBE06; HARRI54. Alien. "Walsenburg".

**Orophaca (Torrey & Gray) Britton, 1897 ISELY83**

**Orophaca aretioides (Jones) Rydberg**

RYDBE06; ISELY83.

*Astragalus aretioides* (Jones) Barneby. WEBER73.

*Astragalus sericoleucus* A. Gray var. *aretioides* Jones.

**Orophaca hyalina (Jones) Isely**

ISELY83.

*Astragalus hyalinus* Jones. HARRI54.

**Orophaca sericea (Nuttall) Britton**

RYDBE06; ISELY83.

*Astragalus sericoleucus* A. Gray. HARRI54; OKANE88. O'Kane reports from Chaffee Co.: Harrington Gulch W of Salida. Isely makes this *Orophaca sericea* an epithet available in that genus but preoccupied in *Astragalus*.

*Phaca sericea* Nuttall ex Torrey & Gray. Type: "High hills of the Platte near the Rocky Mountains."

**Orophaca tridactylca (A. Gray) Rydberg**

RYDBE06; ISELY83.

*Astragalus sericoleucus* A. Gray var. *tridactylicus* (A. Gray) Jones. HARRI54.

*Astragalus tridactylicus* A. Gray. BARNE64. Type: Boulder Co.: Boulder, 1864, Parry (GH).

*Astragalus tridactylicus* A. Gray forma *coloradensis* Gandoger. BARNE64. Type: Larimer Co.: La Porte, Crandall (LY). Type specimen from Colorado.

**Orophaca triphylla Britton**

Based on *Astragalus triphyllus* Pursh, but this is a later homonym of *A. triphyllus* Pallas. Britton's name can be used as a new proposition in *Orophaca*.

*Astragalus gilviflorus* Sheldon. WEBER79A.

*Astragalus triphyllus* Pursh.

*Orophaca argophylla* (Nuttall) Rydberg.

*Orophaca caespitosa* (Nuttall) Britton.

*Phaca argophylla* Nuttall.

*Phaca caespitosa* Nuttall.

**Oxytropis De Candolle, 1802**

**Oxytropis besseyi (Rydberg) Blankinship var. obnapiformis (C. L. Porter) Welsh**

ISELY98.

*Oxytropis nana* Nuttall var. *obnapiformis* (C. L. Porter) Isely. ISELY83.

*Oxytropis obnapiformis* C. L. Porter. HARRI54. Type: Moffat Co.: 8-9 mi W of Maybell, 19 June 1946, Porter 3616 (RM). Type specimen from Colorado.

***Oxytropis borealis* De Candolle var. *viscida* (Nuttall) Welsh**

ISELY98.

*Oxytropis viscida* Nuttall ex Torrey & Gray. HARRI54; ISELY98.

***Oxytropis cusickii* Greenman**

ELISE80. Not in Colorado, fide Elisens 1996.

*Oxytropis campestris* (L.) De Candolle var. *cusickii* (Greenman) Barneby. BARNE52; ELISE80.

***Oxytropis deflexa* (Pallas) De Candolle subsp. *deflexa***

HARRI54.

*Aragallus deflexus* (Pallas) Heller. RYDBE06.

*Oxytropis deflexa* (Pallas) De Candolle var. *foliolosa* (Hooker) Barneby. BARNE52.

***Oxytropis deflexa* (Pallas) De Candolle var. *sericea* Torrey & Gray**

BARNE52. The most widespread variety in Colorado.

***Oxytropis lambertii* Pursh subsp. *bigelovii* (A. Gray) W. A. Weber**

WEBER82B.

*Oxytropis lambertii* Pursh var. *bigelovii* A. Gray. BARNE52.

***Oxytropis lambertii* Pursh subsp. *lambertii***

HARRI54; WEBER82A.

*Aragallus lambertii* (Pursh) Greene. RYDBE06.

***Oxytropis maydelliana* Trautvetter**

BARBE52. Erroneous Report.

*Oxytropis campestris* (L.) De Candolle var. *glabrata* Hooker. HARRI54; BARNE52.

***Oxytropis monticola* A. Gray**

ELISE80.

*Oxytropis campestris* (L.) De Candolle var. *gracilis* (A. Nelson) Barneby. BARNE52; ELISE80.

*Oxytropis campestris* (L.) DeCandolle subsp. *gracilis* (A. Nelson) Hulten. ELISE80.

***Oxytropis multiceps* Nuttall**

HARRI54.

*Aragallus multiceps* (Nuttall) Heller. RYDBE06.

*Aragallus multiceps* Nuttall var. *minor* (A. Gray) Rydberg. RYDBE06.

*Oxytropis multiceps* Nuttall var. *minor* A. Gray. Type: Hall & Harbour 144 (GH). Type specimen from Colorado.

***Oxytropis nana* Nuttall**

PORTE74. "Northern Colorado, on the authority of Nuttall".

***Oxytropis parryi* A. Gray**

HARRI54. Lectotype: Huerfano Co.: Sangre de Cristo Pass, Parry 413 (GH). Barneby incorrectly placed this in Taos Co., N. Mex. Type specimen from Colorado.

*Aragallus parryi* (A. Gray) Greene. RYDBE06.

***Oxytropis podocarpa* A. Gray**

HARRI54.

*Aragallus hallii* (Bunge) Rydberg. RYDBE06.

*Oxytropis hallii* Bunge. RYDBE06. Type: Colorado, Hall & Harbour 143. Type specimen from Colorado.

***Oxytropis sericea* Nuttall**

HARRI54.

*Aragallus albiflorus* A. Nelson. RYDBE06.

*Aragallus monticola* (A. Gray) Greene. RYDBE06.

*Aragallus patens* Rydberg. Type: Boulder Co.: near Boulder, July 1902, Tweedy 5164 (NY). Description suggests the hybrid with *O. lambertii*. Type specimen from Colorado.

*Aragallus sericeus* (Nuttall) Greene. RYDBE06.

*Oxytropis lambertii* Pursh forma *pannosa* Gandoger. Type: Larimer Co.: Fort Collins, Crandall. Type specimen from Colorado.

***Oxytropis splendens* Douglas ex Hooker**

HARRI54.

*Aragallus richardsonii* (Hooker) Greene. RYDBE06.

*Oxytropis splendens* Douglas ex Hooker forma *strigosa* Gandoger. Type: Jackson Co.: North Park, Crandall. Type specimen from Colorado.

*Oxytropis uralensis* (L.) De Candolle var. *pumila* Ledebour

PORTE74. Endemic to the Urals. Report applies to *O. podocarpa*.

**Parryella Torrey & Gray, 1868**

**Parryella filifolia Torrey & Gray**

HARRI54.

**Pediomelum Rydberg, 1919**

**Pediomelum argophyllum (Pursh) Grimes**

ISELY98.

*Psoralea argophylla* Pursh. RYDBE06; HARRI54.

*Psoralidium argophyllum* (Pursh) Rydberg. RYDBE19.

**Pediomelum aromaticum (Payson) W. A. Weber**

WEBER83A.

*Psoralea aromatica* Payson. HARRI54. Type: Montrose Co.: Paradox Valley, Bedrock, 17 June 1914, Payson 451 (RM). Type specimen from Colorado.

**Pediomelum cuspidatum (Pursh) Rydberg**

RYDBE19.

*Psoralea cuspidata* Pursh. HARRI54.

**Pediomelum digitatum (Nuttall) Isely**

ISELY98.

*Psoralea digitata* Nuttall. PORTE74; HARRI54.

*Psoralidium digitatum* (Nuttall) Rydberg. RYDBE19.

**Pediomelum esculentum (Pursh) Rydberg**

RYDBE19.

*Psoralea esculenta* Pursh. HARRI54.

**Pediomelum hypogaeum (Nuttall ex Torrey & Gray) Rydberg**

RYDBE19.

*Psoralea hypogaea* Nuttall ex Torrey & Gray. RYDBE06; HARRI54.

**Pediomelum megalanthum (Wooton & Standley) Rydberg**

RYDBE19.

*Psoralea megalantha* Wooton & Standley. HARRI54.

*Pediomelum mephiticum* (S. Watson) Rydberg

Erroneous Report.

*Psoralea mephitica* S. Watson. RYDBE06. Misidentification of *Pediomelum megalanthum*.

***Peteria* A. Gray, 1852 PORTE56**

Erroneous Report

*Peteria scoparia* A. Gray

RYDBE06; RYDBE23; PORTE56. "La Plata Valley (Brandegee)." Porter did not see the cited specimen, but he did not seek material from NY. However, RYDBE23 did not credit the species to Colorado.

**Psoralidium Rydberg, 1919**

**Psoralidium lanceolatum (Pursh) Rydberg**

RYDBE19.

*Psoralea lanceolata* Pursh. RYDBE06; HARRI54.

**Psoralidium linearifolium (Torrey & Gray) Rydberg**

RYDBE19. Omitted (accidentally?) by Isely, ISLEY98.

*Psoralea linearifolia* Torrey & Gray. HARRI54.

**Psoralidium tenuiflorum (Pursh) Rydberg**

RYDBE19.

*Psoralea floribunda* Nuttall. PORTE74.

*Psoralea tenuiflora* Pursh. RYDBE06; HARRI54.

*Psoralea tenuiflora* Pursh var. *bigelovii* (Rydberg) Macbride. HARRI54.

***Psorothamnus* Rydberg, 1919**

## Erroneous Report

*Psorothamnus spinosus* (A. Gray) Barneby

BARNE77. Erroneous Report.

Parosela spinosa (A. Gray) Vail. RYDBE06. "Colorado, exact locality not given;" error for Colorado River, in Arizona.

**Robinia L., 1753****Robinia neomexicana** A. Gray

RYDBE06; HARRI54. Probably native only in the south.

**Robinia pseudo-acacia** L.

HARRI54. Alien.

**Securigera De Candolle, 1805 LASSE89****Securigera varia** (L.) Lassen

LASSE89. Alien.

Coronilla varia L.. WEBER79A.

**Sphaerophysa De Candolle, 1825****Sphaerophysa salsula** (Pallas) De Candolle

KEARN60, suppl. Alien.

Swainsona salsula (Pallas) Taubert. HARRI54.

**Strophostyles Elliott, 1823****Strophostyles leiosperma** (Torrey & Gray) Piper

HARRI54.

Strophostyles pauciflora (Bentham) S. Watson.

**Thermopsis R. Brown, 1811 CHEN94****Thermopsis divaricarpa** A. Nelson

RYDBE06; HARRI54.

Thermopsis pinetorum Greene. Lectotype: Saguache Co.: Marshall Pass, 4 Sept. 1896, Greene (ND-G). Type specimen from Colorado.

Thermopsis rhombifolia (Nuttall ex Pursh) Nuttall ex Richardson var. divaricarpa (A. Nelson) Isely. ISELY78.

**Thermopsis montana** Nuttall ex Torrey & Gray

RYDBE06; HARRI54.

Thermopsis fabacea De Candolle var. montana A. Gray. PORTE74.

Thermopsis rhombifolia (Nuttall ex Pursh) Nuttall ex Richardson var. montana (Nuttall) Isely. ISELY78.

Thermopsis stricta Greene. Type: Gunnison Co.: Sapinero, 19 June 1901, Baker 173 (fls.); Gunnison, 25 July 1901, Baker 604 (fr) (ND-G). Type specimen from Colorado.

**Thermopsis rhombifolia** (Nuttall ex Pursh) Richardson

TORRE27; RYDBE06.

Thermopsis arenosa A. Nelson. RYDBE06.

**Trifolium L., 1753****Trifolium andinum** Nuttall

WILKE84.

**Trifolium attenuatum** Greene

GILLE69; ZOHAR84. Type: Mineral Co.: Pagosa Peak, Baker 433 (ND-G). Type specimen from Colorado.

Trifolium lilacinum Rydberg. Type: Huerfano Co.: W Spanish Peak, 6 July 1900, Rydberg &amp; Vreeland 5950 (NY). Type specimen from Colorado.

Trifolium stenolobum Rydberg. ZOHAR84. Type: La Plata Co.: La Plata Mts., 15 July 1896, Tweedy 457 (US). Type specimen from Colorado.

**Trifolium brandegei** S. Watson

HARRI54. Type: La Plata Co.: La Plata Mts., "NW Border of New Mexico", Brandege. Type specimen from Colorado.

*Trifolium campestre* Schreber

ZOHAR84. Alien. Erroneous Report.

Trifolium procumbens L.. HARRI54. No reports; "to be expected".

**Trifolium dasyphyllum** Torrey & Gray

HARRI54. Type: El Paso Co.: Pikes Peak, James (NY). Type specimen from Colorado.

Trifolium lividum Rydberg. Type: Clear Creek Co.: Graymont, 23 Aug. 1895, Rydberg 2442 (NY). Type specimen from Colorado.

**Trifolium fragiferum L.**

HARRI54. Alien.

**Trifolium gymnocarpum Nuttall**

HARRI54; ZOHAR84.

Trifolium gymnocarpum Nuttall var. plummerae (S. Watson) J. Martin. ZOHAR84.

Trifolium gymnocarpum Nuttall var. subacaulescens (A. Gray) A. Nelson. HARRI54; ZOHAR84.

Trifolium nemorale Greene. Type: Conejos Co.: Los Pinos, 17 May 1899, Baker (not listed in ND-G computer list). Type specimen from Colorado.

Trifolium subacaulescens A. Gray. RYDBE06.

**Trifolium hybridum L.**

HARRI54. Alien.

*Trifolium involucratum Willdenow*PORTE74. Report applies to *T. wormskioldii*.**Trifolium kingii S. Watson**

WEBER79A.

Trifolium macilentum Greene. HARRI54.

*Trifolium longipes Nuttall ex Torrey & Gray*ZOHAR84. A species of the Pacific Northwest. Reports apply to *T. rusbyi*.

Trifolium longipes Nuttall ex Torrey &amp; Gray subsp. pygmaeum (A. Gray) J. M. Gillett. ZOHAR84.

Trifolium longipes Nuttall ex Torrey &amp; Gray subsp. reflexum (A. Nelson) J. M. Gillett. ZOHAR84.

Trifolium longipes Nuttall ex Torrey &amp; Gray var. rusbyi (Greene) Harrington. HARRI54; BARNE89.

Trifolium rusbyi Greene subsp. reflexum (A. Nelson) Heller &amp; Zohary. ZOHAR84.

Trifolium rusbyi Greene subsp. rusbyi. RYDBE06; ZOHAR84; BARNE89.

Trifolium rydbergii Greene. RYDBE06.

*Trifolium longipes Nuttall ex Torrey & Gray subsp. atrorubens (Greene) J. M. Gillett*

ZOHAR84. A Californian subspecies.

*Trifolium mucronatum Willdenow subsp. lacerum (Greene) J. M. Gillett*ZOHAR84. Zohary attributes this to Colorado, but Colorado plants are *T. wormskioldii*.

Trifolium mucronatum Willdenow subsp. arizonicum (Greene) J. M. Gillett. WEBER82A.

**Trifolium nanum Torrey**

TORRE24; HARRI54. Type: El Paso Co.: Pikes Peak, James (NY). Type specimen from Colorado.

**Trifolium parryi A. Gray**

HARRI54. Type: "Rocky Mts., 1862," Parry 178 (GH). Type specimen from Colorado.

**Trifolium pratense L.**

HARRI54. Alien.

**Trifolium repens L.**

RYDBE06; HARRI54. Alien.

**Trifolium salictorum Greene ex Rydberg**

RYDBE06; LOVE71. Nomen nudum. Gunnison Co.: Gunnison Watershed, Cardon, 11,500 ft., 2 July 1901, Baker 307 (ND-G). Validated in 1917. Type specimen from Colorado.

Trifolium parryi A. Gray subsp. salictorum (Greene ex Rydberg) J. M. Gillett. GILLE69.

**Trifolium wormskioldii Lehmann**

ZOHAR84.

Trifolium fendleri Greene. RYDBE06; ZOHAR84. Type: No specimens cited; Gunnison Co.: Sargent, 2 Sept. 1896, Greene (ND-G). Type specimen from Colorado.

Trifolium oxyodon Greene ex Rydberg. ZOHAR84. Nomen nudum. Gunnison Co.: Gunnison, 16 Aug. 1901, Baker 826 (NY).

**Vexibia Rafinesque, 1825****Vexibia nuttalliana (B. Turner) W. A. Weber**

WEBER87A.

Sophora nuttalliana B. Turner.

Sophora sericea Nuttall, non H. C. Andrews. TORRE27; RYDBE06; HARRI54.

Vexibia sericea (Nuttall) Rafinesque. POLHI81.

**Vicia L., 1753 HERMA60**

**Vicia americana Mühlenberg ex Willdenow var. americana**

RYDBE06; HARRI54; HERMA60.

Vicia truncata Nuttall. PORTE74.

**Vicia americana Mühlenberg ex Willdenow var. oregana (Nuttall) A. Nelson**

HERMA60. Does not occur east of S. Utah.

Vicia dissitifolia (Nuttall) Rydberg. RYDBE06.

Vicia oregana Nuttall. RYDBE06.

**Vicia americana Mühlenberg ex Willdenow var. villosa (Kellogg) F. J. Hermann**

HERMA60. Pacific coast race.

Vicia californica Greene. RYDBE06.

**Vicia angustifolia L.**

WEBER61. Alien.

**Vicia linearis (Nuttall) Greene**

RYDBE06.

Lathyrus linearis Nuttall. PORTE74; HITCH52; HERMA60.

Vicia americana Mühlenberg ex Willdenow subsp. minor (Hooker) Löve &amp; Löve.

Vicia americana Mühlenberg var. minor Hooker. HERMA60.

Vicia caespitosa A. Nelson. RYDBE06.

Vicia trifida D. Dietrich. RYDBE06.

**Vicia ludoviciana Nuttall var. texana (Torrey & Gray) Shinnars**

SHINN48; HERMA60.

Vicia exigua Nuttall.

Vicia micrantha Nuttall. PORTE74.

Vicia producta Rydberg. HARRI54; HERMA60. Type: Huerfano Co.: Butte 5 mi SW of La Veta, 22 May 1900, Rydberg &amp; Vreeland 6006 (NY). Type specimen from Colorado.

**Vicia villosa Roth**

HARRI54. Alien.

**FAGACEAE****Quercus L., 1753****Quercus ajoensis C. J. Muller**

ERDMA62.

**Quercus emoryi Torrey**

PORTE74. Out of range.

**Quercus gambelii Nuttall**

HARRI54.

Quercus alba L. var. gunnisonii Torrey. Type: Saguache Co.: Cochetopa Pass, Gunnison Exped. 47 (NY). Type specimen from Colorado.

Quercus fendleri Liebmann. HARRI54.

Quercus gunnisonii (Torrey) Rydberg. RYDBE06.

Quercus leptophylla Rydberg. Type: tributaries of Turkey Creek, 8-9 June 1900, Rydberg &amp; Vreeland 6347 (NY). Type specimen from Colorado.

Quercus nitescens Rydberg. Type: Huerfano Co.: mesa near La Veta, 18 Sept. 1900, Vreeland 677 (NY). Type specimen from Colorado.

Quercus novomexicana (A. De Candolle) Rydberg. RYDBE06.

Quercus utahensis (A. De Candolle) Rydberg. RYDBE06.

Quercus vreelandii Rydberg. HARRI54. Type: Huerfano Co.: mesas near La Veta, 20 Sept. 1900, Vreeland 685 (NY). Type specimen from Colorado.

**Quercus grisea Liebmann**

CORRE70. Annotations by Tucker in herb.; Baca Co.

Quercus undulata Torrey. HARRI54. "Rocky Mts., Dr. James" (NY). Hybrids, Q. grisea x Q. gambelii. Rydberg, Bull. N. Y. Bot. Gard. 2:248.1828, gives expanded description. Type specimen from Colorado.

**Quercus havardii Rydberg var. tuckeri Welsh**

Hybrid, Q. gambelii x Q. havardii. Hybrid.

**Quercus pungens Liebmann**

HARRI54. "Has been recorded for southern Colorado." Records apply to Q. grisea x Q. gambelii hybrids.



*Quercus venustula* Greene. HARRI54. Type: [paper not seen]. Type specimen from Colorado.

**Quercus turbinella Greene**

HARRI54.

*Quercus venustula* Greene. HARRI54. Type: [paper not seen]. Type specimen from Colorado.

**FRANKENIACEAE**

**Frankenia L., 1753**

**Frankenia jamesii Torrey ex A. Gray**

RYDBE06; HARRI54; WHALE87. James' "Hypericum corymbosum" may have been this, fide GOODM95. The lectotype is Wright 626 probably from Texas.

**FUMARIACEAE**

**Corydalis Ventenat, 1804**

**Corydalis aurea Willdenow**

HARRI54.

*Capnoides aureum* (Willdenow) Kuntze. RYDBE06.

*Corydalis gooddingii* Fedde. Jackson Co.: Walden, July 1908, Goodding 1501. Type specimen from Colorado.

*Corydalis macrorrhiza* Fedde. Type: Montezuma Co.: West Mancos Canyon, 9,000 ft., July 1898, Baker, Earle & Tracy 304. Type specimen from Colorado.

**Corydalis caseana A. Gray subsp. brandegei (S. Watson) G. Ownbey**

HARRI54; OWNBE47.

*Capnoides brandegei* (S. Watson) Heller. RYDBE06.

*Corydalis brandegei* S. Watson. Type: lectotype not selected, acc. to G. Ownbey (pers. comm.). Type specimen from Colorado.

**Corydalis curvisiliqua Engelmann subsp. occidentalis (Engelmann ex A. Gray) W. A. Weber**

WEBER91.

*Capnoides montanum* (Engelmann) Britton. RYDBE06.

*Corydalis aurea* Willdenow subsp. *occidentalis* (Engelmann ex A. Gray) G. Ownbey. HARRI54; OWNBE47; WEBER91.

*Corydalis bilimbata* Fedde. Type: Gunnison Co., Baker 183. Type specimen from Colorado.

*Corydalis montana* Engelmann ex A. Gray. published as synonym of *C. aurea* var. *occidentalis*.

*Corydalis pachyloba* Greene ex Fedde. Type: Archuleta Co.: Arboles, July 1899, Baker 338. Type specimen from Colorado.

*Corydalis curvisiliqua Engelmann var. curvisiliqua*

Erroneous Report.

*Corydalis aurea* Willdenow var. *curvisiliqua* A. Gray. PORTE74. Report applies to *C. aurea*.

*Corydalis micrantha (Engelmann) A. Gray*

WEBER89C, 91B. This specimen is *C. curvisiliqua* subsp. *occidentalis*! WAW 1991.

**Dicentra Bernhardi 1883**

**Dicentra uniflora Kellogg**

Reported, without vouchers, from Garfield, Mesa, and Rio Blanco counties, by M. L. Petersen, *Aquilegia* 15(2):11.1991. There is no reason to doubt the observation. Photographs in Herb. COLO..

**Fumaria L.,1753**

*Fumaria officinalis L.*

RYDBE06; WILKE78. "Fort Collins." The specimens are *F. vaillantii*.

**Fumaria vaillantii Loiseleur**

Alien.

**GENTIANACEAE**

**Centaurium J. Hill, 1756**

*Centaurium calycosum (Buckley) Fernald*

HARRI54. Reports based on misidentifications of [*C. exaltatum*].

**Centaurium exaltatum (Grisebach) W. F. Wight ex Piper**

WEBER83B.

**Centaurium pulchellum (Swartz) Druce**

Alien. Plains, Weld Co.

### **Chondrophylla A. Nelson, 1904**

#### **Chondrophylla aquatica (L.) W. A. Weber**

WEBER85B.

- Chondrophylla fremontii (Torrey in Frémont) A. Nelson. RYDBE06.
- Ciminalis fremontii (Torrey in Frémont) W. A. Weber. WEBER76A.
- Gentiana fremontii Torrey in Frémont. RYDBE06; HARRI54.
- Gentiana humilis Engelman, non Steven. PORTE74; RYDBE06.

#### **Chondrophylla nutans (Bunge) W. A. Weber**

WEBER85B.

#### **Chondrophylla prostrata (Haenke ex Jacquin) J. P. Anderson**

- Chondrophylla americana (Engelmann) A. Nelson. RYDBE06.
- Ciminalis prostrata (Haenke) Löve & Löve.
- Ericoila prostrata (Haenke) Bornmüller.
- Gentiana prostrata Haenke ex Jacquin. HARRI54.
- Gentiana prostrata Haenke ex Jacquin var. americana Engelman. Type: Grand Co.: Mt. Flora, Parry 306 (first coll. cited). Type specimen from Colorado.

### **Comastoma Toyokuni, 1961**

#### **Comastoma tenellum (Rottboel) Toyokuni**

- Amarella monantha (A. Nelson) Rydberg. RYDBE06.
- Gentiana monantha A. Nelson. Type: El Paso Co.: Mirror Lake, 6 Sept. 1901, Clements 456 (RM). Type specimen from Colorado.
- Gentianella tenella (Rottboel) Börner. RYDBE06.

### **Eustoma Salisbury, 1806**

#### **Eustoma grandiflorum (Rafinesque) Shinnery**

- Eustoma andrewsii A. Nelson. Type: Boulder Co.: Boulder, 1904, Andrews (RM). Type specimen from Colorado.
- Eustoma russelianum (Hooker) Grisebach. RYDBE06; HARRI54.
- Eustoma russelianum (Hooker) Grisebach forma flaviflorum Cockerell. Type: Denver, 1914, Walker (COLO). Type specimen from Colorado.
- Lisianthus glaucifolius Jacquin. TORRE27; GOODM95.

### **Frasera Walter, 1788**

#### **Frasera albomarginata S. Watson**

POST58.

- Swertia albomarginata (S. Watson) Kuntze. HARRI54.

#### *Frasera carolinensis* Walter

TORRE27. Misidentification of *F. speciosa*.

#### **Frasera coloradensis (C. M. Rogers) D. Post**

POST58.

- Swertia coloradensis C. M. Rogers. Type: Baca Co.: 9 mi E of Troy, 29 June 1948, Rogers 6110 (MICH). Type specimen from Colorado.

#### **Frasera paniculata Torrey**

WEBER89C. Mesa Co.: Dolores Canyon, J. Anderson 88-58 (COLO).

#### **Frasera speciosa Douglas ex Grisebach**

RYDBE06; POST58.

- Frasera angustifolia Rydberg. RYDBE06.
- Frasera macrophylla Greene. Type: Archuleta Co.: Pagosa Springs, 25 July 1899, Baker (ND-G). Type specimen from Colorado.
- Frasera scabra (Jones) Rydberg. RYDBE06.
- Frasera speciosa Douglas ex Grisebach var. scabra Jones. RYDBE06.
- Frasera speciosa Douglas ex Grisebach var. stenosepala Rydberg. Type: Larimer Co.: foothills, 20 June 1895, Cowen s.n. (NY). Type specimen from Colorado.
- Frasera stenosepala Rydberg. RYDBE06.
- Swertia radiata (Kellogg) Kuntze. HARRI54.

### **Gentianella Moench, 1794, GILLE57**

#### **Gentianella acuta (Michaux) Hiitonen**

- Gentiana acuta Michaux var. nana Engelman. Type specimen from Colorado.

*Gentiana plebeia* Chamisso ex Bunge. HARRI54.

*Gentianella amarella* (L.) Boerner subsp. *acuta* (Michaux) J. M. Gillett. GILLE57.

*Gentianella clementis* Rydberg. Type: El Paso Co.: Minnehaha, 31 July 1901, Clements 253 (NY). Type specimen from Colorado.

*Gentianella amarella* (L.) Börner subsp. *amarella*  
Eurasian.

***Gentianella heterosepala* (Engelmann) Holub**

*Gentiana distegia* Greene. Type: Mineral Co.: Pagosa Peak, Aug. 1899, Baker (ND-G). Type specimen from Colorado.

*Gentiana heterosepala* Engelmann. PORTE74; HARRI54.

*Gentiana polyantha* A. Nelson. Type: Iron Springs Mesa, 21 Aug. 1912, Walker (RM). Type specimen from Colorado.

*Gentianella amarella* (L.) Börner subsp. *heterosepala* (Engelmann) J. M. Gillett. GILLE57.

***Gentianella strictiflora* (Rydberg) W. A. Weber**

WEBER91A.

*Amarella strictiflora* (Rydberg) Greene.

*Gentiana acuta* Michaux var. *stricta* Grisebach in Hooker.

*Gentiana acuta* Michaux var. *strictiflora* Rydberg.

*Gentiana amarella* L. var. *stricta* (Grisebach in Hooker) S. Watson. PORTE74.

*Gentiana stricta* (Grisebach) Howell, non Willdenow.

*Gentiana strictiflora* (Rydberg) A. Nelson. HARRI54.

***Gentianella tortuosa* (Jones) J. M. Gillett**

WILKE84.

*Gentiana tortuosa* Jones.

***Gentianodes Löve & Löve. 1972***

***Gentianodes algida* (Pallas) Löve & Löve**

*Dasystephana romanzovii* (Ledebour) Rydberg. RYDBE06.

*Gentiana algida* Pallas.

*Gentiana frigida* Haenke. PORTE74; RYDBE06.

*Gentiana frigida* Haenke var. *algida* (Pallas) Ledebour. PORTE74.

*Gentiana romanzovii* Ledebour. HARRI54.

***Gentianopsis* Ma, 1951**

***Gentianopsis barbellata* (Engelmann) Iltis**

*Gentiana barbellata* Engelmann. HARRI54. Type: Grand Co.: Mt. Flora, Parry (MO). Type specimen from Colorado.

*Gentianella barbellata* (Engelmann) J. M. Gillett. GILLE57.

***Gentianopsis detonsa* (Rottboel) Ma**

Amphiatlantic and Far North.

*Gentiana detonsa* Rottboel. PORTE74.

***Gentianopsis thermalis* (Kuntze) Iltis**

*Gentiana moseleyi* A. Nelson. Type: Boulder Co.: 1896, Moseley (RM). Type specimen from Colorado.

*Gentiana thermalis* Kuntze.

*Gentianella detonsa* (Rottboel) G. Don subsp. *elegans* (A. Nelson) J. M. Gillett.

***Lomatogonium* A. Braun, 1830**

***Lomatogonium rotatum* (L.) Grisebach subsp. *tenuifolium* (Grisebach) Porsild**

PORSI55.

*Pleurogyne fontana* A. Nelson. Type: Crow Cr., 27 Aug. 1903, Andrews (RM). Type specimen from Colorado.

***Pneumonanthe* Gleditsch, 1764**

***Pneumonanthe affinis* (Grisebach) Greene**

GREEN04A.

*Dasystephana affinis* (Grisebach) Rydberg. RYDBE06.

*Dasystephana forwoodii* (A. Gray) Rydberg. RYDBE06.

*Dasystephana interrupta* (Greene) Rydberg. RYDBE06.

*Gentiana affinis* Grisebach in Hooker. HARRI54.

*Gentiana affinis* Grisebach in Hooker var. *brachycalyx* Engelmann ex A. Gray. Type: subalpine, Parry 468, 469 (GH). Type specimen from Colorado.

*Gentiana forwoodii* A. Gray. HARRI54.

*Gentiana interrupta* Greene. Type: Archuleta Co.: Pagosa Springs, 30 Aug. 1899, Baker (ND-G). Type specimen from Colorado.

***Pneumonanthe andrewsii* (Grisebach in Hooker) W. A. Weber**

WEBER76B. Extinct in Colorado.

*Gentiana andrewsii* Grisebach in Hooker. HARRI54. One old record.

***Pneumonanthe bigelovii* (A. Gray) Greene**

*Dasystephana bigelovii* (A. Gray) Rydberg. RYDBE06.

*Gentiana bigelovii* A. Gray. HARRI54. Type from Arizona.

***Pneumonanthe calycosa* (Grisebach in Hooker) Greene**

GREEN04A. Erroneous Report.

*Gentiana calycosa* Grisebach in Hooker. WEBER67. Misinterpretation of *P. parryi*.

***Pneumonanthe parryi* (Engelmann) Greene**

GREEN04A.

*Dasystephana parryi* (Engelmann) Rydberg. RYDBE06.

*Gentiana bracteosa* Greene. Type: Marshall Pass, 1896, Greene (ND-G). Type specimen from Colorado.

*Gentiana parryi* Engelmann. Type: Snowy Range, Parry 304 (MO). Type specimen from Colorado.

***Swertia* L., 1753**

***Swertia perennis* L.**

HARRI54.

*Swertia congesta* A. Nelson. RYDBE06.

*Swertia palustris* A. Nelson. RYDBE06.

*Swertia scopulina* Greene. Type: Little Ouray Mt., Marshall Pass, 3 Sept. 1896, Greene (ND-G). Type specimen from Colorado.

**GERANIACEAE**

***Erodium* L'Heritier, 1789**

***Erodium cicutarium* (L.) L'Heritier**

RYDBE06; HARRI54. Alien.

***Geranium* L., 1753 JONES43**

***Geranium bicknellii* Britton var. *longipes* (S. Watson) Fernald**

RYDBE06, as the species; FERNA35. Grand Co., Middle Park, Parry. One recent collection..

*Geranium carolinianum* L. var. *longipes* S. Watson. HARRI54.

***Geranium caespitosum* James ex Torrey subsp. *atropurpureum* (Heller) W. A. Weber**

WEBER83A.

*Geranium atropurpureum* Heller. RYDBE06; WEBER67.

***Geranium caespitosum* James ex Torrey subsp. *caespitosum***

RYDBE06; HARRI54. Type: mouth of Platte Canyon, James (NY). Type specimen from Colorado.

*Geranium caespitosum* James ex Torrey var. *parryi* (Engelmann in A. Gray) W. A. Weber. WEBER76A.

*Geranium cowenii* Rydberg. Nom. nudum. Type: Larimer Co.: Rist Canyon, 16 June 1899, Marshall 1157 (NY).

*Geranium fremontii* Torrey ex A. Gray. RYDBE06; HARRI54.

*Geranium fremontii* Torrey ex A. Gray var. *cowenii* (Rydberg) Harrington. HARRI54.

*Geranium fremontii* Torrey ex A. Gray var. *parryi* Engelmann ex A. Gray. Type: Clear Creek Co.: headwaters of Clear Cr., Parry (GH). Type specimen from Colorado.

*Geranium intermedium* James. GOODM95. GOODM95 suggests that this name should be used, but that arguments could be made in favor of either *G. caespitosum* or *G. intermedium*. Type specimen from Colorado.

*Geranium parryi* (Engelmann in A. Gray) Heller. RYDBE06.

*Geranium pattersonii* Rydberg. Type: Clear Creek Co.: Gray's Peak, 23 Aug. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

***Geranium columbinum* L.**

WEBER79A. Alien.

***Geranium ibericum* Cavanilles**

Alien. See also Bot. Mag. t.1386.1811.

***Geranium marginale* Rydberg**

HARRI54. "reported for Colorado." Not likely correct, far out of range.

***Geranium pusillum* Burman f.**

HARRI54. "reported".

**Geranium richardsonii Fischer & Trautvetter**

HARRI54.

*Geranium gracilentum* Greene ex Rydberg. JONES43. Nomen nudum. Type: Archuleta Co.: Piedra, 14 July 1899, Baker 449 (NY).**Geranium viscosissimum Fischer & Meyer subsp. nervosum (Rydberg) W. A. Weber**

WEBER82B.

*Geranium nervosum* Rydberg. RYDBE06; HARRI54.*Geranium viscosissimum* Fischer & Meyer var. *nervosum* (Rydberg) C. L. Hitchcock. HITCH55.**GROSSULARIACEAE****Ribes L., 1753****Ribes americanum P. Miller**

HARRI54.

*Ribes floridum* L'Heritier. PORTE74; RYDBE06.**Ribes aureum Pursh**

TORRE27; HARRI54.

*Chrysobotrya aurea* (Pursh) Rydberg.*Ribes longifolium* Nuttall. RYDBE06.**Ribes cereum Douglas**

HARRI54.

*Ribes inebrians* Lindley. RYDBE06.*Ribes pumilum* Nuttall. RYDBE06.**Ribes coloradense Coville**

HARRI54.

**Ribes divaricatum Douglas**

WEBER84C.

*Ribes hirtellum* MichauxPORTE74. A species of eastern U.S. Report applies to *R. inerme*.**Ribes inerme Rydberg**

HARRI54.

*Ribes purpusii* Koehne. RYDBE06.*Ribes vallicola* Greene ex Rydberg. RYDBE06. Nom. nov. for *R. saxosum* Coville, non Hooker. La Plata Co.: Los Pinos (Bayfield), 27 May 1899, Baker 372 (NY).**Ribes inerme Rydberg forma incisum W. A. Weber**

WEBER66. Endemic. Type: Boulder Co.: Sugarloaf Hill, 8,000 ft., 18 July 1965, Weber &amp; Jones 12916a (COLO). Type specimen from Colorado.

**Ribes lacustre (Persoon) Poiret**

HARRI54.

*Ribes parvulum* (A. Gray) Rydberg. RYDBE06.**Ribes leptanthum A. Gray**

HARRI54.

**Ribes montigenum McClatchie**

HARRI54.

*Limnobotrya montigena* (McClatchie) Rydberg. HARRI54.*Ribes lentum* (Jones) Coville & Rose. RYDBE06.**Ribes odoratum Wendland**

WEBER79A. Alien.

*Ribes prostratum* L'HeritierPORTE74. Report probably applies to *R. montigenum*.**Ribes viscosissimum Pursh**

RYDBE06; HARRI54.

**Ribes wolfii Rothrock**

HARRI54.

*Ribes mogollonicum* Greene. RYDBE06.

**HALORAGACEAE****Myriophyllum L., 1753****Myriophyllum sibiricum Komarov**

CESKA86.

Myriophyllum exalbescens Fernald. HARRI54.

Myriophyllum spicatum L. subsp. exalbescens (Fernald) Hultén. RYDBE06, as the species.

**Myriophyllum verticillatum L.**

TORRE27; HARRI54; GOODM27. Torrey's report was erroneous. A single report from Gunnison Co.: lake near Marcellina Pass, Elk Mts., Brandegee, Oct. 1881 (MO). Recollected in 1995, same locality.

**HELLEBORACEAE****Aconitum L., 1753****Aconitum columbianum Nuttall ex Torrey & Gray var. bakeri (Greene) Harrington**

HARRI54.

Aconitum atrocyanum Rydberg. Type: Park Co.: Boreas, 24 July 1897, Crandall s.n. (NY). Type specimen from Colorado.

Aconitum columbianum Nuttall ex Torrey &amp; Gray forma ochroleucum (A. Nelson) St. John. WEBER87B.

Aconitum insigne Greene in Fedde. RYDBE06. Type: Archuleta Co.: Pagosa Peak, 18 Aug. 1899, Baker 317 (ND-G). This validates the nomen nudum of RYDBE06. Type specimen from Colorado.

Aconitum lutescens A. Nelson.

Aconitum ochroleucum A. Nelson. RYDBE06.

**Aconitum columbianum Nuttall ex Torrey & Gray var. columbianum**

HARRI54.

Aconitum atrocyanum Rydberg. Type: Park Co.: Boreas, 24 July 1897, Crandall s.n. (NY). Type specimen from Colorado.

Aconitum columbianum Nuttall ex Torrey &amp; Gray forma ochroleucum (A. Nelson) St. John. WEBER87B.

Aconitum insigne Greene in Fedde. RYDBE06. Type: Archuleta Co.: Pagosa Peak, 18 Aug. 1899, Baker 317 (ND-G). This validates the nomen nudum of RYDBE06. Type specimen from Colorado.

Aconitum lutescens A. Nelson.

Aconitum ochroleucum A. Nelson. RYDBE06.

**Aconitum nasutum Fischer ex Reichenbach**

PORTE74. Asiatic species. Porter's report applies to A. columbianum.

**Actaea L., 1753 COMPT98****Actaea rubra (Aiton) Willdenow subsp. arguta (Nuttall in Torrey & Gray) Hultén**

HULTE41.

Actaea arguta Nuttall ex Torrey &amp; Gray. HARRI54.

Actaea arguta Nuttall in Torrey &amp; Gray var. eburnea (Rydberg) Cockerell. COMPT98.

Actaea eburnea Rydberg. COMPT98; RYDBE06.

Actaea spicata L. var. arguta Torrey. PORTE74.

Actaea viridiflora Greene. RYDBE06.

Actaea viridiflora Greene var. clementiorum Gates. COMPT98. Type: Jack Brook, 20 June 1901, Clements &amp; Clements 230 (MO).

**Aquilegia L., 1753****Aquilegia barnebyi Munz**

MUNZ49; HARRI54. Endemic. Type: Rio Blanco Co.: Piceance Cr., 3 mi NW Rio Blanco, 14 June 1948, Ripley &amp; Barneby 9179 (RSA). This has not been compared critically with A. trirnata of Arizona. Type specimen from Colorado.

**Aquilegia canadensis L.**

PORTE74. Reports apply to R. elegantula.

**Aquilegia chrysantha A. Gray var. rydbergii Munz**

HARRI54; MUNZ46.

Aquilegia thalictrifolia Rydberg. (non Schott &amp; Kotschy 1853). Type: Fremont Co.: Cañon City, 23 June 1873, Greene s.n. (NY). Type specimen from Colorado.

**Aquilegia coerulea James**

JAMES23; TORRE27; HARRI54; MUNZ46. Type: James (NY). Original spelling coerulea.

Aquilegia coerulea James ex Torrey forma daileyae (Eastwood) W. A. Weber.

Aquilegia coerulea James ex Torrey forma glandulosa Cockerell. Type: Custer Co.: Micawber Mine [Sangre de Cristos], Cockerell. No

specimen cited. Type specimen from Colorado.

*Aquilegia coerulea* James ex Torrey forma *pallidiflora* Cockerell. Type: none cited, but Custer Co.: Lake-of-the-Clouds, Cusack, mentioned. The pale-flowered form of high altitudes. Type specimen from Colorado.

*Aquilegia coerulea* James ex Torrey var. *daileyae* Eastwood. HARRI54. Type: Larimer Co.: Estes Park, DeFrance s.n. (CAS). A sporadic spurless mutant. Type specimen from Colorado.

*Aquilegia coerulea* James ex Torrey var. *ochroleuca* Hooker. HARRI54.

#### ***Aquilegia elegantula* Greene**

HARRI54. Type: Slide Rock Canyon, 30 June 1898, Baker, Earle & Tracy 237 (ND-G). Type specimen from Colorado.

#### *Aquilegia flavescens* S. Watson

HARRI54. Records evidently based on hybrids (*A. micrantha* x *elegantula*?).

#### ***Aquilegia micrantha* Eastwood**

HARRI54; MUNZ46. Type from Utah: Bluff.

*Aquilegia eastwoodiae* Rydberg. RYDBE06.

*Aquilegia ecalcarata* Eastwood. MUNZ46. Type: Montezuma Co.: Wetherill. A spurless mutant.

*Aquilegia lithophila* Payson. Type: Dolores R. Canyon, Mesa Cr., 11 June 1914, Payson 405 (RM). Type specimen from Colorado.

*Aquilegia mancosana* (Eastwood) Cockerell.

*Aquilegia micrantha* Eastwood forma *mancosana* (Eastwood) W. A. Weber. WEBER83A. A spurless mutant.

*Aquilegia micrantha* Eastwood var. *mancosana* Eastwood. A spurless mutant. Type specimen from Colorado.

#### ***Aquilegia pubescens* Coville**

WEBER66. Alien. A casual introduction above Hessie (Boulder Co.), not seen again.

#### ***Aquilegia saximontana* Rydberg ex B. L. Robinson in A. Gray**

HARRI54. Endemic. Nom. nov.. Type: Clear Creek Co.: Gray's Peak, 23 Aug. 1895, Rydberg s.n. (Lectotype NY). Type specimen from Colorado.

*Aquilegia vulgaris* L. var. *brevistyla* A. Gray, non Coulter. Type: Rocky Mts. of Colorado, Parry (GH). Type specimen from Colorado.

#### *Aquilegia triternata* Payson

HARRI54. Misidentification of *A. barnebyi*.

### **Delphinium L., 1753 EWAN45,51; WARNO81,89**

#### ***Delphinium andersonii* A. Gray var. *scaposum* (Greene) Welsh**

WELSH86A.

*Delphinium scaposum* Greene. HARRI54; WELSH86A.

#### ***Delphinium barbeyi* (Huth) Huth**

HARRI54.

*Delphinium exaltatum* Aiton var. *barbeyi* Huth. WARNO89. Type: Boulder Co.: Massif de l'Arapahoe, 10,000 ft., July 1891, Penard 7 (G-BB). Type specimen from Colorado.

*Delphinium occidentale* (S. Watson) S. Watson forma *subroseum* Cockerell. EWAN45. [Ewan gives Nature Notes, Selborne Soc. 19:126 (15 July 1891). Type: Custer Co.: Micawber Mine, Cockerell (type not found). Type specimen from Colorado.

*Delphinium occidentale* (S. Watson) S. Watson var. *barbeyi* (Huth) Welsh. WELSH86A.

*Delphinium subalpinum* A. Nelson. RYDBE06.

#### *Delphinium bicolor* Nuttall

RYDBE06. Report undoubtedly applies to *D. nuttallianum*.

#### *Delphinium carolinianum* Walter subsp. *carolinianum*

EWAN45. The eastern American race.

*Delphinium azureum* Michaux. PORTE74. Report applies to *D. carolinianum* subsp. *virescens*.

#### ***Delphinium carolinianum* Walter subsp. *virescens* (Nuttall) R. Brooks**

*Delphinium albescens* Rydberg. RYDBE06.

*Delphinium camporum* Greene. RYDBE06.

*Delphinium carolinianum* Walter subsp. *penardii* (Huth) Warnock. WARNO81.

*Delphinium penardii* Huth. WARNO89. Lectotype, Boulder Co.: Flagstaff Hill, 6,000 ft., July 1891, Penard 8 (G-BB). Type specimen from Colorado.

*Delphinium virescens* Nuttall subsp. *penardii* (Huth) Ewan. HARRI54.

#### *Delphinium geraniifolium* Rydberg

RYDBE06. Misidentification. An endemic of northern Arizona.

#### ***Delphinium geyeri* Greene**

HARRI54.

**Delphinium glaucum S. Watson**

FNA(ined.). Type from California.

*Delphinium cucullatum* A. Nelson. RYDBE06.

*Delphinium elatum* L. var. *occidentale* S. Watson. PORTE74.

*Delphinium multiflorum* Rydberg. RYDBE06.

*Delphinium occidentale* (S. Watson) S. Watson subsp. *cucullatum* (A. Nelson) Ewan. HARRI54.

*Delphinium occidentale* (S. Watson) S. Watson subsp. *occidentale*. HARRI54. Putative hybrid between [*D. barbeyi*] and [*D. glaucum*].

*Delphinium occidentale* (S. Watson) S. Watson subsp. *quercicola* Ewan. HARRI54.

*Delphinium quercetorum* Greene, non Haussknecht. RYDBE06. Type: Gunnison Co.: Cerro Summit, 12 July 1901, Baker 412 (ND-G). Type specimen from Colorado.

***Delphinium menziesii* De Candolle**

PORTE74; EWAN45. Porter report applies to *D. nuttallianum*.

**Delphinium nuttallianum Pritzell ex Walpers**

HITCH55.

*Delphinium dumetorum* Greene. Type: Montrose Co.: Cimarron, 6 June 1901, Baker 35 (ND-G). Type specimen from Colorado.

*Delphinium nelsonii* Greene. HARRI54.

*Delphinium nelsonii* Greene forma *dumetorum* (Greene) Ewan. EWAN45.

**Delphinium ramosum Rydberg var. alpestre (Rydberg) W. A. Weber**

WEBER84B.

*Delphinium alpestre* Rydberg. HARRI54; EWAN45; WARNO89. Type: Park Co.: mts. NW of Como, 3,300 m, 31 July 1895, Crandall & Cowen 1948 [1848 in protologue] (CS). Type specimen from Colorado.

**Delphinium ramosum Rydberg var. ramosum**

HARRI54. Type: El Paso Co.: N. Cheyenne Canyon, 14 July 1896, Bessey s.n. (NY). Type specimen from Colorado.

*Delphinium elongatum* Rydberg. EWAN45. Type: Larimer Co.: foothills, 6,800 ft., 19 Aug. 1895, Crandall & Cowen 15 (NY). Type specimen from Colorado.

*Delphinium ramosum* Rydberg forma *sidalceoides* Ewan. EWAN51. Type: Saguache Co.: 4 mi W Cochetopa Pass, 28 July 1950, Weber 5798 (COLO). A trivial form on volcanic ash. Type specimen from Colorado.

**Delphinium robustum Rydberg**

HARRI54; WARNO89. Lectotype: Huerfano Co.: Wahatoya Cr., 7 July 1900, Rydberg & Vreeland 6217 (NY). Type specimen from Colorado.

***Delphinium scopulorum* A. Gray**

PORTE74. Report applies to *D. ramosum*.

**Delphinium wootonii Rydberg**

WARNO81. SE corner of Colorado; no COLO collections.

*Delphinium carolinianum* Walter subsp. *wootonii* (Rydberg) Ewan. HARRI54; WARNO81.

*Delphinium virescens* Nuttall subsp. *wootonii* (Rydberg) Ewan. WARNO81.

**Psychrophila Berchtold & Presl, 1823****Psychrophila leptosepala (De Candolle) W. A. Weber**

WEBER82B.

*Caltha chionophila* Greene. Type: Mineral Co.: Pagosa Peak, 11,000 ft., 28 Aug. 1899, Baker (ND-G). Type specimen from Colorado.

*Caltha leptosepala* De Candolle. HARRI54.

*Caltha rotundifolia* (Huth) Greene. RYDBE06.

*Caltha sagittata* DeCandolle. TORRE27.

*Psychrophila auriculata* Rafinesque. Based on Torrey's description in 1827.

**Trollius L., 1753****Trollius albiflorus (A. Gray) Rydberg**

RYDBE06. Annotated by G. A. Rhinehalt, 1988.

*Trollius laxus* Salisbury subsp. *albiflorus* (A. Gray) Löve et al.. LOVE71.

*Trollius laxus* Salisbury var. *albiflorus* A. Gray. HARRI54. Type: Clear Creek Co.: headwaters of Clear Creek, Parry 83 (GH). See discussion in Hooker, Fl. Bor.-Amer. under *T. americanus* (the eastern American plant). Type specimen from Colorado.

***Trollius laxus* Salisbury**

PORTE74. Eastern North America.

**HIPPURIDACEAE**



**Hippuris L., 1753****Hippuris vulgaris L.**

RYDBE06; HARRI54.

**HYDRANGEACEAE****Fendlera Engelmann & Gray, 1852****Fendlera rupicola A. Gray**

HARRI54.

**Fendlerella Heller, 1898****Fendlerella utahensis (S. Watson) Heller**

HARRI54.

**Jamesia Torrey & Gray, 1840 HOLMG89****Jamesia americana Torrey & Gray**

HARRI54; HOLMG89. Type: along the Platte or Canadian River, near the Rocky Mountains, July 1820 [probably at camp at mouth of the Platte], James (NY). Type specimen from Colorado.

Edwinia americana (Torrey &amp; Gray) Heller. RYDBE06. Jamesia Torrey &amp; Gray is conserved over Jamesia Rafinesque.

Jamesia americana Torrey &amp; Gray forma tristyla Kuntze. HOLMG89. Type: Colorado, Sept. or Oct. 1974, O. Kuntze s.n. (US). Type specimen from Colorado.

**Philadelphus L., 1753 HU54**

Hu's monograph is very artificial, confused, and unreliable

**Philadelphus microphyllus A. Gray**

HARRI54.

Philadelphus argenteus Rydberg. HU54.

Philadelphus microphyllus A. Gray subsp. occidentalis (A. Nelson) C. L. Hitchcock. HARRI54.

Philadelphus minutus Rydberg. Type: Montrose Co.: Black Canyon, 27 June 1901, Baker 266 (RM). Type specimen from Colorado.

Philadelphus nitidus A. Nelson. Type: Gunnison Co.: Sapinero, 1898, Wheeler 425 (RM). Type specimen from Colorado.

Philadelphus occidentalis A. Nelson. RYDBE06.

**HYDROCHARITACEAE****Elodea Michaux, 1803 STJOH62; COOK85****Elodea bifoliata St. John**

STJOH62; COOK85.

Elodea longivaginata St. John. STJOH65; COOK85.

**Elodea canadensis Richardson in Michaux**

HARRI54.

Philotria angustifolia (Mühlenberg) Britton. RYDBE06.

**Elodea nuttallii (Planchon) St. John**

HARRI54.

Philotria minor (Engelmann) Small. RYDBE06.

**Vallisneria L., 1753**

Erroneous Report

**Vallisneria spiralis L.**

HARRI54. Report is based on floating leaves of Sparganium.

**HYDROPHYLLACEAE****Ellisia L., 1763 CONST42**

Nomen conserv. over Ellisia P. Browne, 1756

**Ellisia nyctelea (L.) L.**

HARRI54.

Ellisia nyctelea (L.) L. var. coloradensis Brand. Type: Montrose Co.: Cerro Summit, Baker 154 (first coll. cited). Type specimen from Colorado.

Ipomoea nyctelea L..

Macrocalyx nyctelea (L.) Kuntze. RYDBE06.

**Hesperochiron S. Watson, 1871**

**Hesperochiron pumilus (Douglas) T. C. Porter**

WEBER55. Montezuma Co. Evidently extinct in Colorado.

**Hydrophyllum L., 1753**

**Hydrophyllum capitatum Douglas ex Bentham**

RYDBE06; HARRI54; CONST42.

**Hydrophyllum fendleri (A. Gray) Heller**

RYDBE06; HARRI54; CONST42.

*Hydrophyllum virginicum* L.

PORTE74. Report applies to *H. fendleri*.

**Nama L., 1753**

**Nama densum Lemmon**

WEBER66.

**Nama dichotomum (Ruiz & Pavon) Choisy**

WEBER66, 83A; HITCH33.

*Marilaunidium angustifolium* (A. Gray) Kuntze. RYDBE06.

*Nama dichotomum* (Ruiz & Pavon) Choisy var. *angustifolium* A. Gray. PORTE74; RYDBE06.

*Nama hispidum* A. Gray

WEBER66. Misidentification by Hitchcock and Harrington. The species was not recognized as new by Hitchcock and later described by Howell.

**Nama retrorsum J. T. Howell**

MONTEZUMA CO.: Brandegee 5277 in 1875; 25 mi WSW of Dolores, 4100-5200 ft., 27 May 2995, Hartman 50852; between Rincon Canyon and E. McElmo Canyon, 5100 ft., 23 Aug. 1977, Ratzloff 1569).

**Nemophila Nuttall, 1822**

**Nemophila breviflora A. Gray**

RYDBE06; HARRI54; CONST41.

**Phacelia Jussieu, 1789 ATWOO75**

**Phacelia alba Rydberg**

ATWOO75. Type: Custer Co.: Sangre de Cristo Cr., 2 July 1900, Rydberg & Vreeland 5755 (NY). Type specimen from Colorado.

**Phacelia bakeri (Brand) Macbride**

ATWOO75.

*Phacelia crenulata* Torrey var. *bakeri* Brand. ATWOO75. Type: Ouray Co.: 10 Aug. 1901, Baker 758 (not mentioned in protologue, but so annotated at RM). Type specimen from Colorado.

*Phacelia glandulosa* Nuttall var. *australis* Brand. ATWOO75. Lectotype: Conejos Co.: Cumbres, 7 Sept. 1899, Baker 549 (US). Type specimen from Colorado.

**Phacelia constancei Atwood**

KELLE84,89.

**Phacelia crenulata Torrey**

CRONQ72.

*Phacelia corrugata* A. Nelson. HARRI54; CRONQ72. Type: Garfield Co.: Rifle, 23 June 1900, Osterhout 2129 (RM). Type specimen from Colorado.

**Phacelia demissa A. Gray**

HARRI54.

**Phacelia denticulata Osterhout**

HARRI54. Endemic. Type: Larimer Co.: The Glades, near Livermore, 18 June 1915, Osterhout 5233 (RM). Type specimen from Colorado.

**Phacelia formosula Osterhout**

HARRI54. Endemic. Type: Jackson Co.: near Walden, along road descending to Michigan Cr., 6 Aug. 1918, Osterhout 5794 (RM). Type specimen from Colorado.

**Phacelia glandulosa Nuttall**

RYDBE06; HARRI54.

**Phacelia hastata Douglas ex Lehmann**

HECKA60.

*Phacelia alpina* Rydberg. RYDBE06; HECKA60.

*Phacelia leucophylla* Torrey. RYDBE06; HARRI54, as synonym; HECKA60.

***Phacelia heterophylla* Pursh**

RYDBE06; HARRI54.

*Phacelia circinata* Jacquin ex A. De Candolle. PORTE74.

*Phacelia nervosa* Rydberg. Type: Clear Creek Co.: Silver Plume, 24 Aug. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

*Phacelia idahoensis* L. Henderson

HARRI54; GILLE61. Reports apply to *P. sericea* subsp. *ciliosa*.

***Phacelia incana* Brand**

WEBER79A.

***Phacelia integrifolia* Torrey**

PORTE74; RYDBE06; ATWOO75; WEBER79A; GOODM95. Porter reported from "SE Colorado, F. R. Diffenderffer." One modern collection: Montezuma Co. (!Atwood). Type loc., based on James' diary, is in Oklahoma or New Mexico fide GOODM95.

***Phacelia ivesiana* Torrey**

HARRI54.

*Miltizia pinnatifida* Osterhout. Type: Moffat Co.: Craig, 18 June 1925, Osterhout 6393 (RM). Type specimen from Colorado.

*Phacelia neomexicana* Thurber ex Torrey

PORTE74; RYDBE06; HARRI54; ATWOO75. Arizona and New Mexico. Reports apply to *P. alba*.

*Phacelia popei* Torrey & Gray

PORTE74. Texas and New Mexico. Report applies to *P. alba*.

***Phacelia sericea* (R. Graham) A. Gray subsp. *ciliosa* (Rydberg) G. W. Gillett**

GILLE61.

*Phacelia ciliosa* Rydberg. RYDBE06.

*Phacelia sericea* (R. Graham) A. Gray var. *ciliosa* Rydberg. Type: Rio Blanco Co.: north of Meeker, 9 June 1902, Osterhout 2619 (NY). Type specimen from Colorado.

***Phacelia sericea* (R. Graham) A. Gray subsp. *sericea***

RYDBE06; HARRI54.

***Phacelia splendens* Eastwood**

HARRI54. Endemic. Type: Mesa Co.: Grand Junction, May 1892, Eastwood (CAS). Type specimen from Colorado.

*Phacelia glandulosa* Nuttall subsp. *splendens* (Eastwood) Brand. Type specimen from Colorado.

***Phacelia submutica* J. T. Howell**

HARRI54; HOWEL44; HALSE81. Endemic. Type: Mesa Co.: DeBeque, 19 May 1911, Osterhout 4458 (RM). Halse makes this a synonym of *P. scopulina* (A. Nelson) J. T. Howell. We are doubtful. Type specimen from Colorado.

*Phacelia tanacetifolia* Bentham in A. De Candolle

PORTE74. Report applies to *P. bakeri*.

## HYPERICACEAE

### *Hypericum* L., 1753

***Hypericum formosum* Humboldt, Bonpland, & Kunth**

RYDBE06; HARRI54.

*Hypericum scouleri* Hooker. PORTE74.

***Hypericum majus* (A. Gray) Britton**

RYDBE06; HARRI54.

***Hypericum perforatum* L.**

HARRI54. Alien.

## HYPOLEPIDACEAE

### *Pteridium* Gleditsch, 1760 TRYON41

***Pteridium aquilinum* (L.) Kuhn subsp. *lanuginosum* (Bongard) Hultén**

HULTE41; LOVE71.

*Pteridium aquilinum* (L.) Kuhn var. *latiusculum* (Desvaux) Underwood. HARRI54.

*Pteridium aquilinum* (L.) Kuhn var. *pubescens* Underwood. HARRI54.

**HYPOXIDACEAE****Hypoxis L., 1753****Hypoxis hirsuta (L.) Coville**

HARRI54.

*Hypoxis juncea* J. E. Smith. PORTE74.**IRIDACEAE****Iris L., 1753****Iris missouriensis Nuttall**

HARRI54.

*Iris tenax* DouglasPORTE74. Report applies to *I. missouriensis*.**Sisyrinchium L., 1753 HENDE76***Sisyrinchium bermudiana* L.PORTE74. Report applies to *S. montanum*.**Sisyrinchium demissum Greene**

HARRI54.

*Sisyrinchium halophilum* Greene

RYDBE06; HARRI54; HENDE76. A Great Basin species.

**Sisyrinchium idahoense Bicknell var. occidentale (Bicknell) D. Henderson**

HENDE76.

*Sisyrinchium angustifolium* auctt. non P. Miller. RYDBE06; HENDE76.*Sisyrinchium occidentale* Bicknell. HARRI54.**Sisyrinchium montanum Greene**

HARRI54; HENDE76. Lectotype: Montezuma Co.: Mancos, Baker, Earle, &amp; Tracy 113 (ND-G). Type specimen from Colorado.

*Sisyrinchium alpestre* Bicknell. RYDBE06.*Sisyrinchium heterocarpum* Bicknell. HARRI54.*Sisyrinchium juncellum* Greene. Type: Gunnison Co.: Gunnison Nat. Forest, 9,100 ft., Mast (US). Type specimen from Colorado.**Sisyrinchium pallidum Cholewa & Henderson**

CHOLE84. Endemic. Type: Park Co.: Antero Reservoir 16 mi. N of junction, 13 July 1979, Cholewa 456 (ID). Type specimen from Colorado.

**ISOETACEAE****Isoetes L., 1753****Isoetes bolanderi Engelmann**

HARRI54.

**Isoetes lacustris L.**

HITCH55.

*Isoetes occidentalis* L. Henderson. HARRI54.*Isoetes pauperula* (Engelmann) A. A. Eaton. RYDBE06.**Isoetes setacea Lamarck subsp. muricata (Durieu) Holub**

HITCH55; HOLUB64. El Paso Co.: Seven Lakes, Pikes Peak, Clements &amp; Clements 493,1 [sic] (GH, MO, US); recent collection from Rocky Mt. Nat. Park.

*Isoetes echinospora* Durieu subsp. *muricata* (Durieu) Löve & Löve. LOVE61.*Isoetes muricata* Durieu. HARRI54.**JUGLANDACEAE****Juglans L., 1753**

Erroneous Report

*Juglans rupestris* Engelmann var. *major* Torrey

HARRI54. "reported from Colorado, but doubtfully".

**JUNCACEAE****Juncus L., 1753 HERMA75****Juncus acuminatus Michaux**

HARRI54.

**Juncus albescens (J. Lange) Fernald**

HARRI54; HERMA77.

Juncus triglumis L. subsp. albescens (J. Lange) Hultén. HERMA77.

**Juncus alpino-articulatus Chaix in Villars**

HAMET80.

Juncus alpinus Villars. HARRI54.

Juncus alpinus Villars var. insignis E. Fries. PORTE74.

**Juncus arcticus Willdenow subsp. ater (Rydberg) Hultén**

HULTE62.

Juncus ater Rydberg. Janice Coffey (corresp.) claims this differs from both J. arcticus and J. balticus, inter alii in stamen length.

Juncus balticus Willdenow var. montanus Engelm. PORTE74; HARRI54. non J. montanus Lamarck.

Juncus balticus Willdenow var. vallicola Rydberg. HARRI54.

**Juncus articulatus L.**

HARRI54. Alien.

**Juncus biglumis L.**

HOLM23; WEBER55.

**Juncus brachycephalus (Engelmann) Buchenau**

WEBER55.

**Juncus brevicaudatus (Engelmann) Fernald**

HERMA75. El Paso Co.: Black Squirrel Creek NE of Falcon, Aug. 25, 1957, Penland 4935 (CC, WIS-Oshkosh) !Hermann.

**Juncus bryoides F. J. Hermann**

WEBER66.

**Juncus bufonius L. var. bufonius**

HARRI54.

Juncus ambiguus Gusson.

**Juncus bufonius L. var. occidentalis F. J. Hermann**

Juncus sphaerocarpus auctt., non Nees. HARRI54 HITCH55; HERMA75.

**Juncus castaneus J. E. Smith**

HARRI54.

**Juncus compressus Jacquin**

HERMA75. Alien.

**Juncus confusus Coville**

HARRI54. Type: Jackson Co.: North Park, 6 Sept. 1890, Crandall (US). Type specimen from Colorado.

Juncus exilis Osterhout. Type: Routt Co.: Steamboat Springs, 11 July 1913, Osterhout 4965 (RM). Type specimen from Colorado.

**Juncus drummondii E. Meyer**

HARRI54.

Juncus drummondii E. Meyer var. subtriflorus (E. Meyer) C. L. Hitchcock. HITCH55.

**Juncus dudleyi Wiegand**

HARRI54.

Juncus tenuis Willdenow var. dudleyi (Wiegand) F. J. Hermann. HERMA75. We disagree with Hermann and maintain J. dudleyi.

**Juncus effusus L.**

WEBER89C. Alien. Boulder Co.: South Boulder Cr. on Rolling Rock Ranch near Marshall, 20 July 1988, D. J. Cooper 1653.

**Juncus ensifolius Wikström**

HERMA75. Routt, Pitkin counties.

**Juncus filiformis L.**

HARRI54.

**Juncus gerardii Loiseleur**

WEBER55; HERMA75. Alien.

**Juncus hallii Engelmann**

HARRI54. Type: Lake Ranch, Hall & Harbour 562 (MO). Type specimen from Colorado.

**Juncus interior Wiegand**

HARRI54.

Juncus arizonicus Wiegand. RYDBE06; HERMA75.

**Juncus longistylis Torrey**

HARRI54.

Juncus menziesii A. Gray. PORTE74.

**Juncus marginatus Rostkovius**

HARRI54.

**Juncus mertensianus Bongard**

HARRI54.

**Juncus nevadensis S. Watson**

HERMA75.

Juncus badius Suksdorf. HARRI54.

Juncus mertensianus Bongard subsp. gracilis (Engelmann) F. J. Hermann. Siddiqi annotations in herb.

Juncus mertensianus Bongard var. badius (Suksdorf) F. J. Hermann. HERMA64,75.

Juncus nevadensis S. Watson var. badius (Suksdorf) C. L. Hitchcock. HERMA75.

Juncus truncatus Rydberg. HERMA75. Type: El Paso Co.?: Meadow Height, 17 Aug. 1898, Shear & Bessey 4323 (NY). Type specimen from Colorado.

**Juncus nodosus L.**

HARRI54.

**Juncus parryi Engelmann**

HARRI54. Type: 1861, Parry 360 (MO). Type specimen from Colorado.

**Juncus platyphyllus (Wiegand) Fernald**

WEBER61. Alien.

**Juncus saximontanus A. Nelson**

HARRI54.

Juncus brunnescens Rydberg. Type: Archuleta Co.: Pagosa Springs, July 1899, Baker 245 (NY). Type specimen from Colorado.

Juncus parous Rydberg. HERMA75. Type: Costilla Co.: Fort Garland, 17 July 1896, Shear 3666 (NY). Type specimen from Colorado.

Juncus saximontanus A. Nelson forma brunnescens (Rydberg) F. J. Hermann. HERMA75. A trivial form.

Juncus xiphioides E. Meyer var. montanus Engelmann. PORTE74.

**Juncus tenuis Willdenow**

PORTE74; HERMA75. Alien. Porter report probably applies to J. dudleyi). Hermann treats J. dudleyi as a synonym of this.

Juncus tenuis Willdenow var. multicornis E. Meyer. HARRI54; HERMA75.

**Juncus torreyi Coville**

HARRI54.

Juncus nodosus L. var. megacephalus Torrey. PORTE74.

**Juncus tracyi Rydberg**

WEBER66.

**Juncus triglumis L.**

HERMA77.

**Juncus tweedyi Rydberg**

WEBER89C. Larimer Co.: Rocky Mt. Nat. Park, Moraine Park, Yeatts 1943.

**Juncus vaseyi Engelmann**

HARRI54.

**Luzula De Candolle, 1805**

*Luzula campestris (L.) De Candolle*

CRONQ72. misidentification of L. comosa.

**Luzula comosa E. Meyer**

J. Coffey (corresp.).

Juncoides comosum (E. Meyer) Sheldon. RYDBE06.

*Juncoides intermedium* (Thuillier) Rydberg. RYDBE06.

*Luzula multiflora* (Retzius) Lejeune

HARRI54. Colorado reports are misidentifications of *L. comosa*, fide J. Coffey (corresp.).

***Luzula parviflora* (Ehrhart) Desvaux**

HARRI54.

*Juncoides parviflorum* (Ehrhart) Coville. RYDBE06

f.

*Luzula spadicea* De Candolle var. *parviflora* (Ehrhart) Ledebour. PORTE74.

***Luzula spicata* (L.) De Candolle**

HARRI54.

*Juncoides spicatum* (L.) Kuntze. RYDBE06.

***Luzula subcapitata* (Rydberg) Harrington**

HARRI54. Endemic.

*Juncoides subcapitatum* Rydberg. Type: Clear Creek Co.: Silver Plume, 24 Aug. 1895, Shear 4611 (NY). Type specimen from Colorado.

## JUNCAGINACEAE

### *Triglochin* L., 1753

***Triglochin debilis* (Jones) Löve & Löve**

LOVE58.

*Triglochin concinna* Davy var. *debilis* (Jones) J. T. Howell. HOWEL47. COLO has good recent collections, contrary to Harrington's statement.

***Triglochin maritima* L.**

HARRI54.

***Triglochin palustris* L.**

HARRI54.

## KRAMERIACEAE

### *Krameria* L., 1758

***Krameria lanceolata* Torrey**

HARRI54.

*Krameria parviflora* Benth var. *glandulosa* (Rose & Painter) Macbride

HARRI54. The single record is Nelson 1034, Parosela, Adobe clay slopes, Durango, Colo. May 13, 1925 (!RM). Above Nelson's number is written in pencil the number 10440. The plant is out of range, and I suspect the labels were mixed.

## LAMIACEAE

### *Agastache* Clayton, 1762 SANDE87

***Agastache foeniculum* Kuntze**

HARRI54.

*Agastache anethiodora* (Nuttall) Britton. RYDBE06.

*Lophanthus anisatus* Benth. PORTE74; RYDBE06.

*Agastache pallidiflora* (Heller) Rydberg subsp. *neomexicana* (Briquet) Lint & Epling

HARRI54; SANDE87. Erroneous Report.

***Agastache pallidiflora* (Heller) Rydberg subsp. *pallidiflora* var. *greenei* (Briquet) R. Sanders**

HARRI54; SANDE87.

*Agastache montana* Greene. RYDBE06.

*Brittonastrum greenei* Briquet. RYDBE06.

*Brittonastrum pallidiflorum* Heller. RYDBE06, as the species.

***Agastache urticifolia* (Benth) Kuntze**

RYDBE06; HARRI54; SANDE87.

*Lophanthus urticifolius* Benth. PORTE74; RYDBE06.

### *Clinopodium* L., 1753

***Clinopodium vulgare* L.**

RYDBE06; HARRI54. Alien.

*Calamintha clinopodium* Benth. PORTE74.

*Satureja vulgaris* (L.) Fritsch var. *neogaea* Fernald. WEBER66.

**Dracocephalum L., 1753**

**Dracocephalum parviflorum Nuttall**

TORRE27; PORTE74; RYDBE06; CRONQ72.

*Moldavica parviflora* (Nuttall) Britton. HARRI54.

**Galeopsis L., 1753**

**Galeopsis bifida Bönningshausen**

HULTE87; TUTIN64. Alien.

*Galeopsis tetrahit* L.

HARRI54. Erroneous report; see *G. bifida*.

**Glecoma L., 1753**

**Glecoma hederacea L.**

HARRI54. Alien.

**Hedeoma Persoon, 1806 EPLIN39**

**Hedeoma drummondii Bentham**

HARRI54.

*Hedeoma dentata* Torrey var. *nana* Torrey. RYDBE06.

*Hedeoma nana* (Torrey) Greene. RYDBE06.

*Hedeoma piperita* Bentham. PORTE74.

**Hedeoma hispidum Pursh**

RYDBE06; HARRI54.

*Hedeoma hirta* Nuttall. PORTE74.

**Hyssopus L., 1753**

**Hyssopus officinalis L.**

WEBER82B. Alien. Not naturalized.

**Lamium L., 1753**

**Lamium amplexicaule L.**

HARRI54. Alien.

**Lamium purpureum L.**

HARRI54. Alien. Boulder Co.: Bluebell Canyon, Cockerell. *Rhodora* 28:112.1926.

**Leonurus L., 1753**

**Leonurus cardiaca L.**

RYDBE06; HARRI54. Alien.

**Lycopus L., 1753**

**Lycopus americanus Mühlenberg ex W. Barton**

RYDBE06; HARRI54.

*Lycopus lucidus* Turczaninow var. *americanus* A. Gray. RYDBE06, as the species; HARRI54.

**Lycopus asper Greene**

FERNA50; GOODM95.

*Lycopus sinuatus* Elliott. PORTE74; RYDBE06.

**Lycopus uniflorus Michaux**

HARRI54.

*Lycopus virginicus* L.

TORRE27. Misidentification of *L. asper*, fide GOODM95.

**Marrubium L., 1753**

**Marrubium vulgare L.**

RYDBE06; HARRI54. Alien.

**Mentha L., 1753**



***Mentha arvensis* L.**

HARRI54.

*Mentha arvensis* L. var. *canadensis* (L.) Briquet.*Mentha arvensis* L. var. *penardii* Briquet. RYDBE06. Type: Boulder, (Penard) (G). Type specimen from Colorado.*Mentha borealis* Michaux. RYDBE06.*Mentha canadensis* L. var. *glabrata* Benth. RYDBE06.*Mentha penardii* (Briquet) Rydberg.***Mentha piperita* L.**

WEBER83A. Alien.

***Mentha spicata* L.**

RYDBE06; HARRI54. Alien.

*Mentha viridis* L.. RYDBE06.**Monarda L., 1753*****Monarda fistulosa* L. var. *mentifolia* (R. Graham) Fernald**

TORRE27; HARRI54.

*Madronella dentata* (Rydberg) Rydberg. RYDBE06.*Monarda comata* Rydberg. Type: Huerfano Co.: Wahatoya Cr., 7 July 1900, Rydberg & Vreeland 5673 (NY). Type specimen from Colorado.*Monarda mentifolia* Benth. RYDBE06.*Monarda mollis* L.. RYDBE06.*Monarda ramaleyi* A. Nelson. Type: Boulder Co.: Boulder Cr., 27 June 1900, Ramaley 92 (RM). Type specimen from Colorado.*Monarda stricta* Wooton. RYDBE06.*Monardella dentata* Rydberg. Type: Clear Creek Co.: Gray's Peak, Aug., Sept. 1872, Torrey s.n. (NY). Type specimen from Colorado.***Monarda pectinata* Nuttall**

RYDBE06; HARRI54.

*Monarda aristata* Nuttall. PORTE74.*Monarda citriodora* Coulter, non Cervantes. RYDBE06.*Monarda nuttallii* A. Nelson. RYDBE06.***Monarda punctata* L.**PORTE74. Report applies to *M. fistulosa*.**Monardella Benth. 1834 EPLIN25*****Monardella odoratissima* Benth.**

HARRI54.

*Madronella parvifolia* (Greene) Rydberg. RYDBE06.*Monardella parvifolia* Greene. Type: Montrose Co.: Gunnison Canyon near Cimarron, 1 Aug. 1901, Baker 678 (ND-G). Type specimen from Colorado.**Nepeta L., 1753*****Nepeta cataria* L.**

RYDBE06; HARRI54. Alien.

***Physostegia* Benth., 1829**

Erroneous Report

***Physostegia parviflora* Nuttall ex A. Gray**

RYDBE06; CANTI82. RYDB06: "exact locality not given".

*Dracocephalum nuttallii* Britton. RYDBE06; HARRI54. reported without locality. Records from Albany Co., WY, suggest that it should be present in northern Larimer Co.***Poliomintha* A. Gray, 1870*****Poliomintha incana* (Torrey) A. Gray**

RYDBE06; KELLE89. Montezuma Co.: near state line E of Aneth, 6,000 ft., 19 June 1968, Harrington 10107 (CS).

**Prunella L., 1753*****Prunella vulgaris* L.**

RYDBE06; HARRI54.

*Brunella vulgaris* L.. PORTE74.

***Pycnanthemum Michaux, 1803 GRANT43***

Erroneous Report

***Pycnanthemum virginianum (L.) Durand & Jackson***

GRANT43; HARRI54; WEBER66. Basis of report is an undocumented dot on the distribution map in GRANT43, p. 222, vicinity of Denver.

*Pycnanthemum lanceolatum* Pursh. PORTE74. "Near Denver, Dr. [Benjamin] Smith." The specimen is possibly at PH. If once present, the species is now extinct.**Salvia L., 1753****Salvia aethiopsis L.**

WEBER61. Alien.

**Salvia azurea Michaux & Lamarck var. grandiflora Bentham**

RYDBE06; HARRI54. Alien.

*Salvia pitcheri* Torrey. PORTE74; RYDBE06.**Salvia nemorosa L.**Alien. According to Flora Europaea, this is the correct name for *S. sylvestris* auctt., non L. The latter is a hybrid between *S. nemorosa* and *S. pratensis*.**Salvia pratensis L.**

Alien. Sp. Pl. 25.1753. Boulder Co.: hay field W of Longmont, 4 Sept. 1994, Wittmann 19109.

**Salvia reflexa Hornemann**

HARRI54.

*Salvia lanceolata* Willdenow. PORTE74; RYDBE06.*Salvia trichostemmoides* Pursh. PORTE74.**Salvia sclarea L.**

WEBER82B. Alien. Not naturalized.

***Salvia sylvestris L.***HARRI54. Alien. See *S. nemorosa*.**Scutellaria L., 1753 EPLIN42****Scutellaria brittonii T. C. Porter**

RYDBE06; HARRI54.

*Scutellaria brittonii* T. C. Porter var. *virgulata* (A. Nelson) Rydberg. RYDBE06.*Scutellaria virgulata* A. Nelson. RYDBE06.**Scutellaria galericulata L. var. epilobiifolia (Hamilton) Jordal**

RYDBE06, as the species; HARRI54.

**Scutellaria lateriflora L.**

HARRI54; EPLIN42. Yuma Co.: Wray (herb.?).

**Scutellaria resinosa Torrey**PORTE74; RYDBE06; WEBER84B. Alien. Old reports apply to *S. brittonii*.**Stachys L., 1753****Stachys palustris L. subsp. pilosa (Nuttall) Epling**

HARRI54.

*Stachys cordata* Riddell. PORTE74.*Stachys palustris L.* var. *cordata* (Riddell) A. Gray. PORTE74.*Stachys scopulorum* Greene. RYDBE06. Pittonia 3:342-343.1898. Type: Bear Cr., 23, 25 July 1889, Greene (ND-G); No specimens cited in protologue. Type specimen from Colorado.*Stachys teucrifolia* Rydberg. RYDBE06, error for *teucrifolmis*.*Stachys teucrifolmis* Rydberg. Bull. Torr. Bot. Club 31:640-641.1905. Type: Weld Co.: New Windsor, 5 July 1894, Osterhout s.n. (NY). Type specimen from Colorado.**Teucrium L., 1753****Teucrium canadense L. subsp. occidentale (A. Gray) W. A. Weber**

WEBER83A.

*Teucrium canadense L.* var. *occidentale* (A. Gray) McClintock & Epling. HARRI54.*Teucrium occidentale* A. Gray. RYDBE06; GOODM95.**Teucrium laciniatum Torrey**

HARRI54.

Melosmon laciniatum (Torrey) Small. RYDBE06.

## LEMNACEAE

**Lemna L., 1753 LANDO75,80A,B**

**Lemna gibba L.**

HARRI54. Report doubtful.

**Lemna minor L.**

HARRI54.

**Lemna minuscula Herter**

HARTO70; WEBER89C. Grand Co., AL, Rio Blanco Co..

Lemna minima Philippi. HARRI54. "no specimens have been seen".

**Lemna trisulca L.**

HARRI54.

**Lemna turionifera Landolt**

LANDO75,80A,B; WEBER89C.

**Lemna valdiviana Philippi**

HARRI54. Report doubtful.

**Spirodela Schleiden, 1839**

**Spirodela polyrhiza (L.) Schleiden**

HARRI54. Alien.

**Wolffia Horkel ex Schleiden, 1844 LANDO94**

**Wolffia borealis (Engelmann) Landolt**

BROOK81, as *W. punctata*; LANDO80.

**Wolffia columbiana Karsten**

BROOK81.

*Wolffia punctata Grisebach*

BROOK81. Landolt shows that the name is misapplied to *W. borealis*.

## LENTIBULARIACEAE

**Utricularia L., 1753**

*Utricularia gibba L.*

PORTE74. Report probably applies to *U. minor*.

**Utricularia macrorhiza LeConte**

TAYLO89.

**Utricularia minor L.**

RYDBE06; HARRI54.

**Utricularia ochroleuca R. Hartman**

CESKA73. Chaffee Co.: Chalk Cr., 7,500 ft., Hitchcock et al. 1938 (CAS).

*Utricularia vulgaris L.*

TORRE27; RYDBE06; HARRI54; TAYLO89. Restricted to the Old World. Colorado plants belong to *U. macrorhiza*.

## LILIACEAE

**Erythronium L., 1753**

**Erythronium grandiflorum Pursh**

PORTE74; HARRI54.

*Erythronium grandiflorum* Pursh subsp. *chrysandrum* Applegate. HARRI54. Most Colorado specimens have yellow anthers. Red anthers occur in some populations.

*Erythronium grandiflorum* Pursh var. *parviflorum* S. Watson. RYDBE06.

*Erythronium parviflorum* (S. Watson) Goodding. RYDBE06.

**Fritillaria L., 1753**

**Fritillaria atropurpurea Nuttall**

HARRI54.

**Fritillaria pudica (Pursh) Sprengel**

HARRI54.

**Leucocrinum Nuttall, 1837****Leucocrinum montanum Nuttall ex A. Gray**

PORTE74; HARRI54. Question as to family position, possibly Funkiaceae.

**Lilium L., 1753****Lilium philadelphicum L.**

PORTE74; WEBER67.

Lilium montanum A. Nelson. RYDBE06.

Lilium umbellatum Pursh. HARRI54.

**Lloydia Reichenbach, 1830****Lloydia serotina (L.) Salisbury ex Reichenbach**

TORRE27; PORTE74; HARRI54.

Fenelonina bracteata (Torrey) Rafinesque. Atlantic J. 1:145.1832.

Omithogalum bracteatum Torrey. TORRE27. Ann. Lyc. Nat. Hist. N.Y. 2:251, 1827. Type: Pikes Peak, James. Type specimen from Colorado.

**LIMNANTHACEAE****Floerkea Willdenow, 1801****Floerkea proserpinacoides Willdenow**

HARRI54.

Floerkea occidentalis Rydberg. RYDBE06 (as Floerkia).

**LIMONIACEAE****Armeria Willdenow, 1809****Armeria scabra Pallas subsp. sibirica (Turczaninov ex Boissier) Hylander**

HYLAN45 p. 257.

Armeria labradorica Wallroth. HARRI54.

Armeria maritima (P. Miller) Willdenow subsp. labradorica (Wallroth) Hultén. HULTE58.

Armeria maritima (P. Miller) Willdenow subsp. sibirica (Turczaninov ex Boissier) Nyman. TUTIN64.

**LINACEAE****Adenolinum Reichenbach, 1837****Adenolinum grandiflorum (Desvaux) W. A. Weber**

WEBER84B,C. Alien. Not naturalized.

**Adenolinum lewisii (Pursh) Löve & Löve**

BAKER65; LOVE82B. A. lewisii is homostylous, self-compatible, A. perenne heterostylous, self-incompatible; barriers between these taxa are strong.

Linum lewisii Pursh. TORRE27; HARRI54; BAKER65.

**Adenolinum perenne (L.) Reichenbach**

PORTE74. Old reports of this apply to A. lewisii.

**Adenolinum pratense (Norton) W. A. Weber**

WEBER84B.

Linum pratense Norton. WEBER81A.

**Linum L., 1753****Linum usitatissimum L.**

HARRI54. Alien.

**Mesyniopsis W. A. Weber, 1991**

**Mesyniopsis kingii (S. Watson) W. A. Weber**

WEBER91A.

Cathartolinum kingii (S. Watson) Small.

Linum kingii S. Watson. HARRI54.

**Mesynium Rafinesque, 1837****Mesynium aristatum (Engelmann in Wislizenus) W. A. Weber**

WEBER84B.

Linum aristatum Engelmann in Wislizenus. RYDBE06; WEBER81A.

**Mesynium australe (Heller) W. A. Weber**

WEBER84B.

Linum australe Heller. RYDBE06; HARRI54.

**Mesynium puberulum (Engelmann in A. Gray) W. A. Weber**

WEBER84B.

Linum puberulum Engelmann in A. Gray. RYDBE06; HARRI54.

**Mesynium rigidum (Pursh) Löve & Löve**

Taxon 31:348.1982.

Linum arkansanum Osterhout. Bull. Torr. Bot. Club 28:644.1901. Type: OT: Rocky Ford, 9 June 1900, Osterhout 2037 (RM). Type specimen from Colorado.

Linum berlandieri Hooker. HARRI54.

Linum compactum A. Nelson. HARRI54.

Linum rigidum Pursh. TORRE27; HARRI54.

Linum rigidum Pursh var. berlandieri (Hooker) Torrey &amp; Gray. ROGER68.

Linum rigidum Pursh var. compactum (A. Nelson) C. M. Rogers. ROGER68.

**LOASACEAE****Acrolasia K. Presl, 1831 DARLI34, as Mentzelia****Acrolasia albicaulis (Douglas ex Hooker) Rydberg**

RYDBE06; THOMS55. Bull. Torr. Bot. Club 30:277.1908. Hexaploid; lvs regularly pinnatifid.

Acrolasia ctenophora (Rydberg) Rydberg. RYDBE06.

Mentzelia albicaulis Douglas ex Hooker. HARRI54.

Mentzelia ctenophora Rydberg. Bull. Torr. Bot. Club 28:33.1901. Type: Huerfano Co.: Cuchara R. below La Veta, 2100 m, 30 May 1900, Rydberg &amp; Vreeland 5769 (NY). Type specimen from Colorado.

**Acrolasia dispersa (S. Watson) Davidson**

Bull. So. Calif. Acad. Sci. 5:14.1906.

Acrolasia compacta (A. Nelson) Rydberg. RYDBE06.

Acrolasia integrifolia (S. Watson) Rydberg. RYDBE06.

Acrolasia latifolia Rydberg. Bull. Torr. Bot. Club 31:567.1904. Type: Boulder Co.: mts. between Sunshine &amp; Ward, Aug. 1902, Tweedy 5149 (NY). Type specimen from Colorado.

Acrolasia montana Davidson.

Mentzelia dispersa S. Watson. HARRI54.

Mentzelia dispersa S. Watson var. compacta (A. Nelson) Macbride. HARRI54.

Mentzelia dispersa S. Watson var. latifolia (Rydberg) Macbride. HARRI54.

Mentzelia montana (Davidson) Davidson.

**Acrolasia gracilis Rydberg**

THOMP55. Bull. Torr. Bot. Club 31:566.1904. Type: LR: foothills, 1 June 1895, Cowen (NY). octoploid; lvs entire or irregularly divided. Type specimen from Colorado.

**Acrolasia humilis Osterhout**

Bull. Torr. Bot. Club 49:183.1922. Type: Mesa Co.: N side Grand Junction near coal mines, 30 May 1921, Osterhout 6086 (RM). Type specimen from Colorado.

Acrolasia thompsonii (Glad) W. A. Weber. WEBER84B.

Mentzelia thompsonii Glad. GLAD76. Madroño 23:288.1976. Type: MN: 7 mi E Montrose, 30 May 1952, Weber 7470 (COLO). Type specimen from Colorado.

**Acrolasia veatchiana Kellogg**

HARRI54. A species of the Far West.

Mentzelia albicaulis Douglas ex Hooker var. veatchiana (Kellogg) Urban &amp; Gilg. HARRI54; THOMS55.

**Mentzelia L., 1753****Mentzelia oligosperma Nuttall ex Sims**

TORRE27; RYDBE06; HARRI54. That James might have collected this on Sheep Mountain, Jefferson Co., as stated by GOODM95, is extremely unlikely. It does not occur north of the Arkansas drainage.

**Nuttallia Rafinesque, 1817****Nuttallia argillosa (J. Darlington) W. A. Weber**

WEBER85B.

*Mentzelia argillosa* J. Darlington. WEBER84C.

**Nuttallia chrysantha (Engelmann ex Brandegee) Greene**

*Mentzelia chrysantha* Engelmann ex Brandegee. HARRI54. Bull. U. S. Geol. Geogr. Surv. Terr. 2:237.1876. Type: Cañon City, Sept. 1874, Engelmann. Type specimen from Colorado.

*Mentzelia lutea* Greene. Pittonia 3:99-100.1896. Type: Alkaline soil, Cañon City, 7 Sept. 1896, Greene (ND-G). Type specimen from Colorado.

*Touterea chrysantha* (Engelmann) Rydberg. RYDBE06.

*Touterea lutea* (Greene) Rydberg. RYDBE06.

**Nuttallia cronquistii (Thompson & Prigge) W. A. Weber**

WEBER87A. Endemic.

*Mentzelia cronquistii* Thompson & Prigge. THOMP86. Type from SW Utah.

**Nuttallia decapetala (Pursh ex Sims) Greene**

*Bartonia ornata* Pursh. TORRE27.

*Mentzelia decapetala* (Pursh ex Sims) Urban & Gilg. HARRI54.

*Touterea decapetala* (Pursh) Rydberg. RYDBE06.

**Nuttallia densa (Greene) Greene**

OKANE88. Endemic.

*Mentzelia densa* Greene. HARRI54. Pittonia 3:99.1896. Type: Arkansas R. Canyon, Greene (ND-G). Type specimen from Colorado.

*Touterea densa* (Greene) Rydberg. RYDBE06.

**Nuttallia humilis (A. Gray) Rydberg**

Erroneous Report.

*Mentzelia humilis* (A. Gray) J. Darlington. HARRI54. Out of range.

**Nuttallia laciniata (Rydberg) Wootton & Standley**

*Mentzelia laciniata* (Rydberg) J. Darlington. HARRI54.

*Touterea laciniata* Rydberg. Bull. Torr. Bot. Club 31:565.1904. Type: Archuleta Co.: Pagosa Springs, July 1899, Baker 470 (NY). Type specimen from Colorado.

**Nuttallia marginata Osterhout**

Endemic. Bull. Torr. Bot. Club 49:183.1922. Type: Mesa Co.: DeBeque, 22 Aug. 1918, Osterhout 5842 (RM). Type specimen from Colorado.

*Mentzelia marginata* (Osterhout) Thompson & Prigge. THOMP86.

**Nuttallia multicaulis (Osterhout) Osterhout**

*Mentzelia multicaulis* (Osterhout) Goodman. HARRI54.

*Touterea multicaulis* Osterhout. Bull. Torr. Bot. Club 30:326.1903. Type: EA: Wolcott, 11 July 1902, Osterhout 2663 (RM). Type specimen from Colorado.

**Nuttallia multiflora (Nuttall) Greene**

*Mentzelia multiflora* (Nuttall) A. Gray. HARRI54.

*Mentzelia multiflora* (Nuttall) A. Gray subsp. *leucopetala* Thompson & Zavortink, ined.. Ochroleucous race.

*Touterea multiflora* (Nuttall) Rydberg. RYDBE06.

**Nuttallia nuda (Pursh) Greene**

*Bartonia nuda* Sims. TORRE27.

*Hesperaster strictus* Osterhout. Bull. Torr. Bot. Club 29:174.1902 [as *H. stictus*, orthogr. error]. Type: Weld Co.: New Windsor, 22 July 1901, Osterhout 2488 (RM). Type specimen from Colorado.

*Mentzelia nuda* (Pursh) Torrey & Gray. HARRI54.

*Mentzelia nuda* (Pursh) Torrey & Gray var. *stricta* (Osterhout) Harrington. HARRI54.

*Touterea nuda* (Nuttall) Eaton & Wright. RYDBE06.

*Touterea stricta* (Osterhout) Osterhout. RYDBE06.

**Nuttallia pterosperma (Eastwood) Greene**

Endemic.

*Mentzelia integra* (Jones) Tidestrom.

*Mentzelia pterosperma* Eastwood. HARRI54. Proc. Calif. Acad. Sci. (2)6:290.1896. Type: Mesa Co.: Grand Junction, Eastwood (CAS). Type specimen from Colorado.

*Nuttallia pumila* (Nuttall) Greene

Out of range.

*Mentzelia pumila* (Nuttall) Torrey & Gray. HARRI54.

***Nuttallia reverchonii* (Urban & Gilg) W. A. Weber**

WEBER84B.

*Mentzelia wrightii* A. Gray. PORTE74.

***Nuttallia rusbyi* (Wooton) Rydberg**

*Mentzelia nuda* (Pursh) Torrey & Gray var. *rusbyi* (Wooton) Harrington. HARRI54.

*Mentzelia rusbyi* Wooton.

*Nuttallia hastata* Osterhout. Bull. Torr. Bot. Club 46:53.1919. Type: Jackson Co.: Walden, 6 Aug. 1918, Osterhout 5796 (RM). Type specimen from Colorado.

*Touterea rusbyi* (Wooton) Rydberg. RYDBE06.

***Nuttallia sinuata* (Rydberg) Daniels**

DANIE11.

*Mentzelia sinuata* (Rydberg) R. J. Hill. HILL76.

*Touterea sinuata* Rydberg. Bull. Torr. Bot. Club 31:566.1904. Type: Boulder Co.: Boulder, 2 Sept. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

***Nuttallia speciosa* (Osterhout) Greene**

*Mentzelia aurea* Osterhout, non Baillon ex Gilg nec Nuttall. Bull. Torr. Bot. Club 28:644.1901. Type: LR: Estes Park, 18 July 1900, Osterhout 2203 (RM). Type specimen from Colorado.

*Mentzelia speciosa* Osterhout. HILL76. Bull. Torr. Bot. Club 28:689.1901. Type: LR: 18 July 1900, Osterhout 2203 (RM). Type specimen from Colorado.

*Touterea speciosa* (Osterhout) Osterhout. RYDBE06.

## LYCOPODIACEAE

### ***Diphasiastrum* Holub, 1975**

*Diphasiastrum alpinum* (L.) Holub

Flora North America, Vol. 2, lists this for Colorado, but the manuscript did not include it, and it is not known how this error occurred.

### ***Huperzia* Bernhardt, 1801**

Sometimes accorded family rank (Huperziaceae)

***Huperzia haleakalae* (Brackenridge) Beitel**

FNA93.

*Huperzia selago* (L.) Bernhardt

WEBER67. Erroneous Report.

*Lycopodium selago* L.. HARRI54.

### ***Lycopodium* L., 1753**

***Lycopodium annotinum* L.**

HARRI54.

***Lycopodium dubium* Zoëga**

WEBER82A.

## LYTHRACEAE

### ***Ammannia* L., 1753**

*Ammannia coccinea* Rottboel

RYDBE06; HARRI54. Reports refer to *A. robusta*.

***Ammannia robusta* Heer & Regel**

GRAHA79.

### ***Lythrum* L., 1753**

***Lythrum alatum* Pursh**

RYDBE06; HARRI54.

**Lythrum salicaria L.**

WEBER79A. Alien.

**Rotala L., 1753****Rotala ramosior (L.) Koehne**

WEBER81B.

**MALVACEAE****Abutilon P. Miller, 1754****Abutilon incanum (Link) Sweet**

HARRI54.

**Abutilon parvulum A. Gray**

RYDBE06; WEBER50.

**Abutilon theophrasti Medicus**

WEBER83B. Alien.

**Alcea L., Sp. Pl. 687. 1753. FRYXE88****Alcea rosea L.**

FRYXE88. Alien.

**Anoda Cavanilles, 1785****Anoda cristata (L.) Schlechtendal**

WILKE78. Alien.

**Callirhoë Nuttall, 1821****Callirhoë involucrata (Torrey & Gray) A. Gray**

RYDBE06; HARRI54.

**Hibiscus L., 1753****Hibiscus trionum L.**

HARRI54. Alien.

**Iliamna Greene, 1906 WIGGI36****Iliamna crandallii (Rydberg) Wiggins**

WIGGI36. Endemic.

Sphaeralcea crandallii Rydberg. Bull. Torr. Bot. Club 31:564.1904. Type: Routt Co.: Steamboat Springs, 14 July 1894, Crandall 97 (NY, not located by TIEHM89). Type specimen from Colorado.

**Iliamna grandiflora (Rydberg) Wiggins**

WIGGI36.

Sphaeralcea grandiflora Rydberg. Bull. Torr. Bot. Club 31:565.1904. Type: Montezuma Co.: Mesa Verde, 14 June 1901, Vreeland 882 (NY). Type specimen from Colorado.

**Iliamna rivularis (Douglas) Greene**

HARRI54; WIGGI36.

Sphaeralcea rivularis (Hooker) Torrey. RYDBE06.

**Malva L., 1753****Malva crispa (L.) L.**

RYDBE06; FRYXE88. Alien.

Malva verticillata L. var. crispa L.. GREAT86; FRYXE88.

**Malva neglecta Wallroth**

HARRI54. Alien.

**Malva parviflora L.**RYDBE06; HARRI54. Alien. Rydberg's report, from Delta Co.: Hotchkiss, is *M. neglecta*, fide Harrington MS. Weld Co: near Eaton, 4,800 ft., 25 June 1951, B. Klinger s.n. (CS) is verified.**Malva rotundifolia L.**RYDBE06. Reports apply to *M. neglecta*.**Malvella Jaubert & Spach, 1855**



*Malvella lepidota* (A. Gray) Fryxell

FRYXE88. Erroneous Report.

*Sida lepidota* A. Gray. HARRI54. Misidentification of *M. sagittifolia*.**Malvella leprosa (Ortega) Krapovickas**

FRYXE88. Otero Co. (CS).

*Sida hederacea* (Douglas) Torrey ex A. Gray. HARRI54.**Malvella sagittifolia (A. Gray) Fryxell**

FRYXE74.

*Disella sagittifolia* (A. Gray) Greene.*Sida sagittifolia* (A. Gray) Rydberg. RYDBE06.**Sidalcea A. Gray, 1849 HITCH57****Sidalcea candida A. Gray**

RYDBE06; HARRI54; HITCH57.

*Sidalcea candida* A. Gray var. *glabrata* C. L. Hitchcock.**Sidalcea neomexicana A. Gray**

RYDBE06; HARRI54.

*Sidalcea malviflora* A. Gray. PORTE74.**Sphaeralcea St. Hilaire, 1825****Sphaeralcea angustifolia (Cavanilles) G. Don var. cuspidata A. Gray**

HARRI54.

*Sida stellata* Torrey. TORRE27. Ann. Lyc. Nat. Hist. N.Y. 2:171.1827. Type: Otero Co.: Packers Gap, James fide GOODM95. Type specimen from Colorado.*Sphaeralcea cuspidata* (A. Gray) Britton. RYDBE06.*Sphaeralcea stellata* (Torrey) Torrey & Gray. Fl. N. Amer. 1:228.1838.**Sphaeralcea coccinea (Pursh) Rydberg subsp. coccinea**

HARRI54.

*Malva coccinea* Nuttall. TORRE27.*Malvastrum coccineum* (Pursh) A. Gray. PORTE74.**Sphaeralcea coccinea (Pursh) Rydberg subsp. dissecta (Nuttall) Kearney**

HARRI54.

**Sphaeralcea coccinea (Pursh) Rydberg subsp. elata (E. G. Baker) Kearney**

HARRI54.

*Malvastrum coccineum* (Pursh) A. Gray var. *elatum* E. G. Baker. RYDBE06.*Malvastrum elatum* (E. G. Baker) A. Nelson. RYDBE06.**Sphaeralcea fendleri A. Gray**

HARRI54.

**Sphaeralcea leptophylla (A. Gray) Rydberg**

HARRI54.

*Malvastrum leptophyllum* A. Gray. RYDBE06.**Sphaeralcea parvifolia A. Nelson**

HARRI54.

*Sphaeralcea marginata* York ex Rydberg. Bull. Torr. Bot. Club 33:145-146.1906. Type: Mesa Co.: Grand Junction, 11 June 1901, Baker 93 (NY). Type specimen from Colorado.**MARSILEACEAE****Marsilea L., 1753****Marsilea mucronata A. Braun**

FERNA50. Perhaps only a race of the next.

*Marsilea vestita* Hooker & Greville

HARRI54. Far Western species.

**MARTYNIACEAE****Proboscidea Schmidel, 1763**

**Proboscoidea louisianica (P. Miller) Thellung**

*Martynia louisianica* P. Miller. RYDBE06; HARRI54.

*Martynia proboscoidea* Gloxin. TORRE27; RYDBE06.

**MELANTHIACEAE****Anticlea Kunth, 1843****Anticlea elegans (Pursh) Rydberg**

PREECE ined..

*Anticlea coloradensis* (Rydberg) Rydberg. RYDBE06.

*Zigadenus chloranthus* Richardson. TORRE27.

*Zigadenus coloradensis* Rydberg. Bull. Torr. Bot. Club 27:534-535.1900. Type: Clear Creek Co: Idaho Springs, Aug. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

*Zigadenus elegans* Pursh. TORRE27; HARRI54. Torrey's report applies to *Toxicoscordion venenosum* fide GOODM95.

*Zygadenus alpinus* Gandoger, non Blankinship. Bull. Soc. Bot. France 66:293.1920. Type: Larimer Co.: 10,000 ft., Crandall (LY). Type specimen from Colorado.

*Zygadenus dilatatus* Greene. Pl. Baker. 1:51.1901. Type: La Plata Co.: Little Kate Mine, La Plata Mts., 13 July 1898, Baker, Earle, & Tracy 522 (ND-G). Type specimen from Colorado.

*Zygadenus glaucus* Nuttall. PORTE74.

**Anticlea vaginata Rydberg**

OKANE89. Moffat Co.: Dinosaur Nat. Mon., O'Kane 3037.

*Zigadenus vaginatus* (Rydberg) Macbride.

**Anticlea virescens (Kunth) Rydberg**

Gunnison, Pitkin, Grand, Routt counties. Madrean species disjunct from southern New Mexico and Arizona.

*Anticlea mexicana* Kunth. Enum. 4:193.1843.

*Helonias virescens* Kunth. Nov. Gen. Sp. Plantarum 1:267.1815. Type from Mexico.

*Zygadenus mexicanus* (Kunth) Hemsley.

**Toxicoscordion Rydberg, 1903****Toxicoscordion paniculatum (Nuttall) Rydberg**

Some question remains as to whether our plants are really this.

*Zigadenus paniculatus* (Nuttall) S. Watson. HARRI54.

**Toxicoscordion venenosum (S. Watson) Rydberg**

*Toxicoscordion falcatum* Rydberg. RYDBE06.

*Toxicoscordion gramineum* Rydberg. RYDBE06.

*Zigadenus gramineus* Rydberg. HARRI54.

*Zigadenus venenosus* S. Watson var. *gramineus* (Rydberg) Walsh ex M. Peck.

*Zygadenus falcatus* Rydberg. Bull. Torr. Bot. Club 27:536-537.1900. Type: LR: Fort Collins, 23 May 1893, Crandall s.n. (NY). Type specimen from Colorado.

*Zygadenus nuttallii* A. Gray. PORTE74.

**Veratrum L., 1753 KUPCH61*****Veratrum californicum* E. M. Durand**

HARRI54. A species of the Far West. Reports apply to *V. tenuipetalum*.

*Veratrum speciosum* Rydberg. RYDBE06.

***Veratrum tenuipetalum* Heller**

KUPCH61.

**MENYANTHACEAE****Menyanthes L., 1753*****Menyanthes trifoliata* L.**

RYDBE06; HARRI54; SJORS88. Sjors gives a very good account of morphology, distribution and autecology.

**MIMOSACEAE****Desmanthus Willdenow, 1806 LUCKO93*****Desmanthus cooleyi* (A. Eaton) Trelease**

HARRI54.

**Desmanthus illinoensis (Michaux) MacMillan ex Robinson & Fernald**

HARRI54.

Acuan illinoensis (Michaux) Kuntze. RYDBE06.

**Mimosa L., 1753**

**Mimosa borealis A. Gray**

HARRI54.

**Prosopis L., 1767**

**Prosopis glandulosa Torrey**

WEBER89C. Las Animas Co.: NE of Branson, Weber & Hogan 17516.

**Schrankia Willdenow, 1806**

**Schrankia occidentalis (Wooton & Standley) Standley**

HARRI54.

**Schrankia uncinata Willdenow**

PORTE74; CORRE70.

Morongia uncinata (Willdenow) Britton. RYDBE06.

Schrankia nuttallii (De Candolle) Standley. HARRI54.

**MOLLUGINACEAE**

**Mollugo L., 1753**

**Mollugo verticillata L.**

HARRI54. Alien.

**MONOTROPACEAE**

**Hypopitys J. Hill, 1756**

**Hypopitys monotropa Crantz**

Monotropa hypopitys L. var. latisquama (Rydberg) Kearney & Peebles. HARRI54.

**Pterospora Nuttall, 1818**

**Pterospora andromedea Nuttall**

RYDBE06; HARRI54.

**MORACEAE**

**Maclura Nuttall, 1818**

**Maclura pomifera (Rafinesque) C. K. Schneider**

WEBER85A. Alien.

**Morus L., 1753**

**Morus alba L.**

WEBER85A. Alien.

**NAJADACEAE**

**Najas L., 1753**

**Najas guadalupensis (Sprengel) Magnus**

HARRI54. Alien.

**NOLINACEAE**

**Nolina Michaux, 1803**

*Nolina microcarpa* S. Watson

WEBER73. Out of range.

**Nolina texana S. Watson**

WEBER73, GAMBI83. One modern collection, LA.

*Nolina greenii* S. Watson ex Trelease. Proc. Amer. Phil. Soc. 50:418-1419.1911. Type: between the Purgatory and Apishapa Rivers, north of Trinidad, Jan. 1889, Greene (GH). Type specimen from Colorado.

## NYCTAGINACEAE

### *Abronia* Jussieu, 1789

#### ***Abronia argillosa* Welsh & Goodrich**

WELSH80.

#### ***Abronia carletonii* Coulter & Fisher**

RYDBE06; HARRI54; GALLO75. Bot. Gaz. 17:349.1892. Type: "eastern Colorado", M. A. Carleton 459 (F). Type specimen from Colorado.

#### ***Abronia elliptica* A. Nelson**

GALLO75.

*Abronia bakeri* Greene. GALLO75. Pl. Baker. 3:32-33.1901. Type not designated; 4 specimens in ND-G. Possibly = *A. elliptica*. Type specimen from Colorado.

*Abronia fragrans* Nuttall ex Hooker var. *elliptica* (A. Nelson) Jones. HARRI54; GALLO75.

*Abronia glabra* Rydberg. GALLO75. Bull. Torr. Bot. Club 29:685.1902. Type: Mesa Co.: Grand Junction, 9 July 1883, Jones s.n. (US). Type specimen from Colorado.

*Abronia salsa* Rydberg. HARRI54. (not evaluated by GALLO75).

#### ***Abronia fragrans* Nuttall ex Hooker**

TORRE27; PORTE74; HARRI54.

*Abronia fragrans* Nuttall ex Hooker var. *glaucescens* A. Nelson. HARRI54; GALLO75.

#### ***Abronia nana* S. Watson**

WEBER89C. Proc. Amer. Acad. 14:294.1870. Montrose Co.: Sinbad Valley, T49N R19W S27, 30 May 1995, [Sivinski, Lowrey & Hartman 3043].

### *Allionia* L., 1753

#### ***Allionia choisyi* Standley**

HARRI54. Rocky Ford. Det. C. L. Porter; specimen lacks basal parts; possibly a misidentification of *A. incarnata*, but specimen should be reexamined.

#### ***Allionia incarnata* L.**

PORTE74; HARRI54.

*Allionia glabra* Standley, non Kuntze.

*Allionia incarnata* L. forma *glabra* Heimerl.

*Wedelia incarnata* (L.) Kuntze. RYDBE06.

### *Mirabilis* L., 1753

#### ***Mirabilis alipes* (S. Watson) Pilz**

PILZ78.

*Hermidium alipes* S. Watson. Bot. King's Exped. 5:268.1871.

#### ***Mirabilis froebelii* (Behr) Greene**

Reports apply to *M. glandulosa*.

#### ***Mirabilis glandulosa* (Standley) W. A. Weber**

WEBER79A.

*Mirabilis multiflora* (Torrey) A. Gray var. *glandulosa* (Standley) Macbride. PILZ78. Type specimen from Colorado.

*Quamoclidion cordifolium* Osterhout. Bull. Torr. Bot. Club 55:75.1928. Type: Mesa Co.: hills across Colorado R. from Grand Junction, 18 June 1926, Osterhout 6559 (RM). Not *Mirabilis cordifolia* Heimerl. Type specimen from Colorado.

*Quamoclidion multiflorum* Torrey subsp. *glandulosum* Standley. Contr. U. S. Nat. Herb. 12:359.1909. Type: Mesa Co.: Grand Junction, 12 May 1894, Crandall 423 (US). Type specimen from Colorado.

#### ***Mirabilis multiflora* (Torrey) A. Gray**

PORTE74; HARRI54.

*Mirabilis multiflora* (Torrey) A. Gray var. *pubescens* S. Watson.

*Oxybaphus multiflorus* Torrey. TORRE27; PORTE74. Ann. Lyc. Nat. Hist. N.Y. 2:237-238.1827. Type: Probably in Pueblo Co., fide GOODM95. Type specimen from Colorado.

*Quamoclidion multiflorum* Torrey. PORTE74; RYDBE06.

#### ***Mirabilis oxybaphoides* (A. Gray) A. Gray**

HARRI54.

*Allioniella oxybaphoides* (A. Gray) Rydberg. RYDBE06.

*Quamoclidion oxybaphoides* A. Gray. PORTE74.

### **Oxybaphus L'Heritier, 1797**

#### **Oxybaphus carletonii (Standley) Weatherby**

STAND30. Said to be distinct by glabrous fruit and fine short stem pubescence.

*Allionia carletonii* Standley. STAND09. Contr. U. S. Nat. Herb. 12:355.1909. Type from Barber Co., Kansas.

*Mirabilis carletonii* (Standley) Standley. HARRI54.

#### **Oxybaphus comatus (Small) Weatherby**

HARRI54. La Plata and Archuleta counties.

*Mirabilis comata* (Small) Standley. STAND30.

#### **Oxybaphus decumbens (Nuttall) Sweet**

STAND09; WEBER89C. Cited from Cañon City, as *Allionia*, Brandegee 1873. *O. bodinii* also cited from same place and collector!

*Allionia bodinii* (Holzinger) Morong. RYDBE06; STAND09.

*Allionia decumbens* (Nuttall) Sprengel. STAND09.

*Calymenia decumbens* Nuttall.

*Oxybaphus bodinii* Holzinger. Contr. U.S. Nat. Herb. 1:287.1893. Type: Pueblo Co.: Pueblo, J. E. Bodin 236 (US). Type specimen from Colorado.

#### **Oxybaphus exaltatus (Standley) Weatherby**

GREAT86. Similar to *O. glaber* but very tall, with much broader leaves and possibly more glaucous.

#### **Oxybaphus glaber S. Watson**

WEBER89C. Phillips, Prowers, and Weld counties.

*Mirabilis glabra* (S. Watson) Standley. STAND30.

#### **Oxybaphus hirsutus (Pursh) Sweet in De Candolle**

PORTE74.

*Allionia hirsuta* Pursh. RYDBE06.

*Allionia hirsuta* Pursh subsp. *coloradensis* Standley. STAND09. Contr. U.S. Nat. Herb. 12:353.1909. Type: El Paso Co.: Manitou, 20 Aug. 1885, Fritchey 28 (MO). Extremely well-marked population, uniformly densely hirsute all over. Type specimen from Colorado.

*Allionia lanceolata* Rydberg. Bull. Torr. Bot. Club 29:691.1902. Type: Larimer Co.: Estes Park, 10 July 1897, Osterhout 1556 (NY). Type specimen from Colorado.

*Allionia pilosa* (Nuttall) Rydberg. RYDBE06.

*Allionia sessilifolia* Osterhout. Bull. Torr. Bot. Club 32:611.1905. Type: Larimer Co.: Livermore, 25 July 1893, Osterhout 179 (RM). Type specimen from Colorado.

*Mirabilis hirsuta* (Pursh) MacMillan. HARRI54.

*Mirabilis lanceolata* (Rydberg) Standley.

*Oxybaphus lanceolatus* (Rydberg) Standley. STAND30. Hybrids, *O. linearis* x *O. hirsuta*.

*Oxybaphus pilosus* (Nuttall) Sweet. STAND09, as *Allionia*.

#### **Oxybaphus linearis (Pursh) B. L. Robinson**

*Allionia divaricata* Rydberg. STAND09. Bull. Torr. Bot. Club 29:691.1902. Type: LP: Durango, 18 July 1898, Baker, Earle, & Tracy 512 (NY). Type specimen from Colorado.

*Allionia linearis* Pursh. RYDBE06.

*Allionia montanensis* Osterhout. *Muhlenbergia* 1:139.1906. Type: LR: forks of Thompson R. canyon, 16 Aug. 1905, Osterhout 3078 (RM). Type specimen from Colorado.

*Mirabilis decipiens* (Standley) Standley.

*Mirabilis linearis* (Pursh) Heimerl. HARRI54.

*Oxybaphus angustifolius* Sweet. TOIRRE27.

*Oxybaphus linearis* (Pursh) B. L. Robinson var. *decipiens* (Standley) Kearney & Peebles.

#### **Oxybaphus nyctagineus (Michaux) T. C. Porter in Porter & Coulter**

*Allionia nyctaginea* Michaux. RYDBE06.

*Mirabilis nyctaginea* (Michaux) MacMillan. HARRI54.

*Oxybaphus floribundus* Choisy in De Candolle. STAND09, as *Allionia*.

*Oxybaphus nyctagineus* (Michaux) T. C. Porter in Porter & Coulter var. *cervantesii* (Lagasca) A. Gray. PORTE74. Report, Cañon City, may apply to *O. rotundifolius*.

*Oxybaphus nyctagineus* (Michaux) T. C. Porter in Porter & Coulter var. *oblongifolius* A. Gray. PORTE74.

#### **Oxybaphus rotundifolius (Greene) Standley**

STAND30.

Allionia polytricha Standley. STAND09. Contr. U. S. Nat. Herb. 12:346-347.1909. Type: Cañon City, 13 Aug. 1877, Brandegee 437 (US). Type specimen from Colorado.

Allionia rotundifolia Greene. Pl. Baker. 3:33.1901. Type: Swallow's, between Pueblo and Cañon City, 1 June 1901, Baker 3 (ND-G). Type specimen from Colorado.

Mirabilis rotundifolia (Greene) Standley. HARRI54.

Oxybaphus polytrichus (Standley) Barneby. BARNE47.

**Tripterocalyx Hooker ex Standley, 1909 GALLO75**

**Tripterocalyx carneus (Greene) Galloway var. wootonii (Standley) Galloway**

GALLO75, as carnea.

Tripterocalyx wootonii Standley. HARRI54.

**Tripterocalyx micranthus (Torrey) Hooker**

HARRI54; GALLO75.

Abronia cycloptera A. Gray. PORTE74; RYDBE06; GALLO75.

Abronia micrantha A. Gray. RYDBE06.

**NYMPHAEACEAE**

**Nuphar J. E. Smith, 1809**

**Nuphar lutea Sibthorp & Smith subsp. polysepala (Engelmann) Beal**

BEAL56. The genus name has been officially conserved as feminine.

Nuphar polysepala Engelmann. PORTE74; HARRI54.

Nymphaea polysepala (Engelmann) Greene. RYDBE06.

**Nymphaea L., 1753**

**Nymphaea odorata Solander in Aiton**

WEBER79A. Alien. Not naturalized.

**OLEACEAE**

**Forestiera Poiret, 1812**

**Forestiera pubescens Nuttall**

CORRE70.

Adelia neomexicana (A. Gray) Kuntze. RYDBE06.

Forestiera neomexicana A. Gray. HARRI54.

**Fraxinus L., 1753**

**Fraxinus americana L.**

HARRI54. Alien. Not naturalized.

**Fraxinus anomala Torrey ex S. Watson**

RYDBE06; HARRI54.

**Fraxinus pennsylvanica H. Marshall var. lanceolata (Borkhausen) Sargent**

HARRI54. Alien.

**Menodora Humboldt & Bonpland, 1809**

**Menodora scabra (Engelmann) A. Gray**

PORTE74; HARRI54.

**ONAGRACEAE**

**Calylophus Spach, 1835**

**Calylophus berlandieri Spach**

TOWNE77. Probably extinct in Colorado. Once found on Raton Pass.

**Calylophus hartwegii (Bentham) Raven subsp. pubescens (A. Gray) Towner & Raven**

TOWNE77.

Oenothera greggii A. Gray. HARRI54.

**Calylophus lavandulifolius (Torrey & Gray) Raven**

TOWNE77.

Calylophus hartwegii (Bentham) Raven subsp. lavandulifolius (Torrey & Gray) Towner & Raven. TOWNE70.

*Galpinsia lavandulifolia* (Torrey & Gray) Small. RYDBE06.

*Oenothera hartwegii* Bentham var. *lavandulifolia* Torrey & Gray. PORTE74.

*Oenothera lavandulifolia* Torrey & Gray. TORRE27; HARRI54. Fl. N. Amer. 1:501.1840. Type from northeastern Colorado, between Julesburg and Crook, fide GOODM95. Type specimen from Colorado.

*Oenothera lavandulifolia* Torrey & Gray var. *glandulosa* Munz. HARRI54.

### ***Calylophus serrulatus* (Nuttall) Raven**

TOWNE77. *serrulata* is an incorrect spelling.

*Meriolix melanoglottis* Rydberg. RYDBE06; MUNZ65.

*Meriolix serrulata* Rafinesque. RYDBE06; MUNZ65.

*Oenothera serrulata* Nuttall. HARRI54.

## **Camissonia Link, 1818 RAVEN69**

### ***Camissonia andina* (Nuttall) Raven**

RAVEN69.

*Oenothera andina* Nuttall. HARRI54.

### ***Camissonia breviflora* (Torrey & Gray) Raven**

RAVEN69.

#### *Camissonia contorta* (Douglas) Kearney

RAVEN69. Erroneous Report.

*Oenothera contorta* Douglas ex Hooker. HARRI54.

### ***Camissonia eastwoodiae* (Munz) Raven**

RAVEN69.

#### *Camissonia graciliflora* (Hooker & Arnott) Raven

RAVEN69. Out of range.

*Taraxia graciliflora* (Hooker & Arnott) Raimann. RYDBE06. Mislabeling of a Frémont collection from California, "Arkansas River, above Pueblo".

### ***Camissonia minor* (A. Nelson) Raven**

RAVEN69.

*Oenothera minor* (A. Nelson) Munz.

*Sphaerostigma minutiflora* (S. Watson) Rydberg. RYDBE06.

*Sphaerostigma tortum* (Léveillé) A. Nelson var. *eastwoodiae* A. Nelson. RAVEN69. Bot. Gaz. 40:61. 1905. Type: Mesa Co.: Grand Junction, May 1892, Eastwood (MO).

#### *Camissonia multijuga* (S. Watson) Raven

RAVEN69. Out of range.

*Oenothera multijuga* S. Watson. RAVEN69.

### ***Camissonia parvula* (Nuttall ex Torrey & Gray) Raven**

RAVEN69.

#### *Camissonia pubens* (S. Watson) Raven

RAVEN69. Out of range.

*Sphaerostigma pubens* (S. Watson) Rydberg. RYDBE06. Misidentification (of?).

### ***Camissonia scapoidea* (Torrey & Gray) Raven**

RAVEN69.

*Chylismia scapoidea* (Nuttall) Small. RYDBE06.

*Oenothera scapoidea* Torrey & Gray. HARRI54.

### ***Camissonia subacaulis* (Pursh) Raven**

RAVEN69.

*Oenothera heterantha* Nuttall. HARRI54.

*Taraxia subacaulis* (Pursh) Rydberg. RYDBE06.

### ***Camissonia walkeri* (A. Nelson) Raven**

RAVEN69.

*Chylismia walkeri* A. Nelson. Bot. Gaz. 56:66.1913. Type: SM: Paradox Valley, 1 July 1912, Walker 200 (RM). Type specimen from Colorado.

## **Chamerion Rafinesque, 1833**

### ***Chamerion danielsii* D. Löve**

LOVE71. Taxon 17:89.1968. *C. platyphyllum* was preoccupied.

*Chamaenerion angustifolium* (L.) Scopoli subsp. *circumvagum* (Mosquin) Moldenke. RYDBE06, as the species.

*Chamaenerion angustifolium* (L.) Scopoli var. *platyphyllum* Daniels. DANIE11.

*Chamerion platyphyllum* (Daniels) Löve & Löve. Bot. Not. 128:526.1976 [1975]. *Chamerion*, not *Chamaenerion*, is the correct spelling.

*Epilobium angustifolium* (L.) Scopoli subsp. *circumvagum* Mosquin.

*Epilobium angustifolium* auctt., non (L.) Scopoli.

*Epilobium danielsii* D. Löve.

***Chamerion subdentatum* (Rydberg) Löve & Löve**

Bot. Not. 128:516.1976 [1975].

*Epilobium latifolium* auctt., non L.. RYDBE06; HARRI54.

***Circaea* L., 1753**

*Circaea alpina* L. subsp. *alpina*

RYDBE06; HARRI54. European race.

***Circaea alpina* L. subsp. *pacifica* (Ascherson & Magnus) Raven**

Can. J. Bot. 43:1396.1965.

*Circaea pacifica* Ascherson & Magnus. RYDBE06; HARRI54.

***Epilobium* L., 1753**

*Epilobium alpinum* L.

PORTE74; RYDBE06; MUNZ65. This name was applied to a variety of taxa.

***Epilobium anagallidifolium* Lamarck**

RYDBE06; MUNZ65.

***Epilobium brachycarpum* K. Presl**

HOCH77.

*Epilobium adenocladon* (Haussknecht) Rydberg. RYDBE06.

*Epilobium jucundum* A. Gray var. *viridifolium* Suksdorf. MUNZ65. Werdenda 1:29.1927. Type: "Hab. in montib. territ. Colorado leg. Canby". Type specimen from Colorado.

*Epilobium paniculatum* Nuttall ex Torrey & Gray. RYDBE06; HARRI54.

*Epilobium paniculatum* Nuttall forma *adenocladon* Haussknecht. MUNZ65.

***Epilobium ciliatum* Rafinesque subsp. *glandulosum* (Lehmann) Hoch & Raven**

HOCH77.

*Epilobium adenocaulon* Haussknecht. RYDBE06; HARRI54.

*Epilobium adenocaulon* Haussknecht var. *occidentale* Trelease. HARRI54.

*Epilobium brevistylum* Barbey. RYDBE06; HARRI54.

*Epilobium glandulosum* Lehmann. HARRI54.

*Epilobium occidentale* (Trelease) Rydberg. RYDBE06.

***Epilobium clavatum* Trelease**

RYDBE06; HARRI54.

***Epilobium halleanum* Haussknecht**

HARRI54.

***Epilobium hornemannii* Reichenbach**

RYDBE06; HARRI54.

*Epilobium ovatifolium* Rydberg. MUNZ65. Bull. Torr. Bot. Club 31:567-568.1904. Type: CC: Empire, 10 Aug. 1892, Patterson 205 (NY). Type specimen from Colorado.

***Epilobium lactiflorum* Haussknecht**

HARRI54. Oesterr. Bot. Zeitschr. 29:89.1879.

*Epilobium hornemannii* Reichenbach var. *lactiflorum* (Haussknecht) D. Löve. Taxon 17:89.1968.

***Epilobium leptocarpum* Haussknecht var. *macounii* Trelease**

WEBER55.

***Epilobium leptophyllum* Rafinesque**

HARRI54.

*Epilobium lineare* auctt., non Mühlenberg. RYDBE06; MUNZ65.

***Epilobium palustre* L. var. *grammadophyllum* Haussknecht**

PORTE74, as the species; HARRI54.

*Epilobium wyomingense* A. Nelson. RYDBE06; MUNZ65.



**Epilobium saximontanum Haussknecht**

HARRI54.

*Epilobium drummondii* Haussknecht. RYDBE06; MUNZ65.*Epilobium palmeri* Rydberg. RYDBE06; MUNZ65.*Epilobium rubescens* Rydberg. MUNZ65. Bull. Torr. Bot. Club 31:568.1904. Type: Archuleta Co.: Pagosa Springs, July 1899, Baker s.n. (NY). Type specimen from Colorado.*Epilobium stramineum* Rydberg. Munz 65. Bull. Torr. Bot. Club 31:568.1904. Type: CC: Idaho Springs, 26 Aug. 1895 [1905 in protologue], Rydberg s.n. (NY). Type specimen from Colorado.***Epilobium tetragonum* L.**PORTE74. A European species. Report possibly applies to *E. hornemannii*.**Gaura L., 1753 MUNZ38,65****Gaura coccinea Nuttall ex Pursh**

RYDBE06.

*Gaura coccinea* Nuttall ex Pursh var. *glabra* (Lehmann) Munz. HARRI54.*Gaura coccinea* Nuttall ex Pursh var. *parvifolia* (Torrey) Torrey & Gray. HARRI54.*Gaura glabra* Lehmann. RYDBE06.*Gaura marginata* Lehmann ex Hooker. RYDBE06.*Gaura parvifolia* Torrey. RYDBE06.**Gaura mollis James**

TORRE27. Long Exped. (Phila. ed.) 2:77.1823. Type from Las Animas Co.: Bachicha Canyon, James, fide GOODM95. Goodman &amp; Lawson discuss the priority of this name. Type specimen from Colorado.

*Gaura parviflora* Douglas ex Lehmann. RYDBE06.*Gaura parviflora* Douglas ex Lehmann var. *lachnocarpa* Weatherby. HARRI54.**Gaura neomexicana Wootton subsp. coloradensis (Rydberg) Raven & Gregory**

WEBER83A.

*Gaura coloradensis* Rydberg. Bull. Torr. Bot. Club 31:572.1904. Type: LR: Fort Collins, 8 July 1893, Cowen (NY). Type specimen from Colorado.*Gaura neomexicana* Wootton var. *coloradensis* (Rydberg) Munz. HARRI54.**Gaura neomexicana Wootton subsp. neomexicana**

RYDBE06.

**Gaura villosa Torrey**

HARRI54.

**Gayophytum Jussieu, 1832 LEWIS64****Gayophytum decipiens Lewis & Szwejkowski**

LEWIS64. Status unsettled.

**Gayophytum diffusum Torrey & Gray subsp. parviflorum Lewis & Szwejkowski**

LEWIS64.

*Gayophytum intermedium* Rydberg. RYDBE06; LEWIS64. Bull. Torr. Bot. Club 31:569.1904. Type: Ouray Co.: Ouray, 9 Sept. 1901, Underwood & Selby 193 (NY). Type specimen from Colorado.*Gayophytum lasiospermum* Greene. HARRI54.*Gayophytum nuttallii* Torrey & Gray. RYDBE06; HARRI54.**Gayophytum racemosum Torrey & Gray**

RYDBE06; HARRI54.

*Gayophytum helleri* Rydberg var. *glabrum* Munz. HARRI54.**Gayophytum ramosissimum Torrey & Gray**

RYDBE06; HARRI54.

**Oenothera L., 1753 DIETR97****Oenothera acutissima W. L. Wagner**

WAGNE81. Endemic. Syst. Bot. 6:153-158.1981. Type from Utah.

**Oenothera albicaulis Pursh**

HARRI54.

*Anogra albicaulis* (Pursh) Britton. RYDBE06.*Anogra perplexa* Rydberg. Fl. Rocky Mts. 596,1064.1917. Type: DL: Dolores, 12 June 1901, Vreeland 880 (NY). Type specimen from Colorado.

*Oenothera pinnatifida* Nuttall. PORTE74.

*Oenothera biennis* L.

PORTE74. Report applies to *O. villosa*.

*Oenothera brachycarpa* A. Gray

Colorado plants are *O. howardii*.

*Lavauxia brachycarpa* (A. Gray) Britton. RYDBE06.

*Oenothera brachycarpa* A. Gray var. *wrightii* (A. Gray) Léveillé

HARRI54. See *O. howardii*.

***Oenothera caespitosa* Nuttall ex Fraser subsp. *caespitosa***

WAGNE85.

*Oenothera caespitosa* Nuttall ex Fraser var. *montana* (Nuttall) E. M. Durand. HARRI54.

*Pachylophus caespitosus* (Nuttall ex Fraser) Raimann. RYDBE06.

***Oenothera caespitosa* Nuttall ex Fraser subsp. *macroglottis* (Rydberg) W. L. Wagner et al.**

WAGNE85.

*Pachylophus hirsutus* Rydberg. WAGNE85. Bull. Torr. Bot. Club 31:571.1904. Type: CC: Georgetown, 18 Aug. 1895, Rydberg (NY). Type specimen from Colorado.

*Pachylophus macroglottis* Rydberg. WAGNE85. Bull. Torr. Bot. Club 30:259.1903. Type: Huerfano Co.: Turkey Cr. [vicin. La Veta Pass], 8-9 June 1900, Rydberg & Vreeland 5857 (NY). Type specimen from Colorado.

***Oenothera caespitosa* Nuttall ex Fraser subsp. *marginata* (Nuttall) W. L. Wagner et al.**

WAGNE85.

*Oenothera caespitosa* Nuttall ex Fraser var. *eximia* (A. Gray) Munz. HARRI54.

*Oenothera caespitosa* Nuttall ex Fraser var. *marginata* (Nuttall) Munz. HARRI54.

*Pachylophus exiguus* (A. Gray) Rydberg. RYDBE06.

*Pachylophus marginatus* (Nuttall) Rydberg. RYDBE06.

***Oenothera caespitosa* Nuttall ex Fraser subsp. *navajoensis* W. L. Wagner et al.**

WAGNE85. Bull. Torr. Bot. Club 31:571.1904. Type: CC: Georgetown, 18 Aug. 1895, Rydberg (NY). Type specimen from Colorado.

*Pachylophus caulescens* Rydberg. WAGNE85. Bull. Torr. Bot. Club 31:571.1904. Type: Mesa Co.: Palisade, 29 May 1894, Crandall 12 (NY). Type specimen from Colorado.

***Oenothera canescens* Torrey & Frémont**

PORTE74; HARRI54.

*Gaurella guttata* (Geyer) Small. RYDBE06.

***Oenothera coronopifolia* Torrey & Gray**

TORRE27; RYDBE06; HARRI54. Fl. N. Amer. 1:495.1840. Type from western Nebraska, fide GOODM95. Torrey confused this in his report with *O. pinnatifida* Nuttall. Type specimen from Colorado.

*Anogra coronopifolia* (Torrey & Gray) Britton. RYDBE06.

***Oenothera elata* Humboldt, Bonpland, & Kunth subsp. *hirsutissima* (A. Gray ex S. Watson) Dietrich & Wagner**

WAGNE83A.

*Oenothera biennis* L. var. *hirsutissima* A. Gray ex S. Watson. DIETR97.

*Oenothera hookeri* Torrey & Gray subsp. *angustifolia* (Gates) Munz. HARRI54.

*Oenothera hookeri* Torrey & Gray subsp. *hewettii* Cockerell. HARRI54. Type from NM.

*Oenothera hookeri* Torrey & Gray subsp. *hirsutissima* (A. Gray) Munz. HARRI54.

*Oenothera elata* Kunth subsp. *hookeri* (Torrey & Gray) Dietrich & Wagner

DIETR97. Californian.

*Anogra hookeri* (Torrey & Gray) Small. RYDBE06.

*Oenothera hookeri* Torrey & Gray. DIETR97.

*Oenothera engelmannii* (Small) Munz

HARRI54. The record is based on Baca Co.: Cimarron River, 31 AZug. 1949, Weber 5173. Annotated by Peter Raven, as *O. latifolia*.

***Oenothera flava* (A. Nelson) Garrett**

HARRI54.

*Lavauxia flava* A. Nelson. RYDBE06.

***Oenothera grandis* (Britton) Smyth**

DIETR88. SW: 1 mi S Julesburg, Stephens & Brooks 24058 (UWL).

***Oenothera harringtonii* W. L. Wagner et al in W. L. Wagner**

PORTE74; WAGNE83A. Endemic. Ann. Mo. Bot. Gard. 70:195.1983. Type: El Paso Co.: Colorado Springs, Ehlers 7461 (MICH). Porter,

in 1874, noted this plant but only compared it to *O. eximia* of Fendler's collections. Type specimen from Colorado.

***Oenothera howardii* (A. Nelson) W. L. Wagner**

WAGNE83A.

*Oenothera jamesii* Torrey & Gray

RYDBE06; HARRI54. Collected by James, probably in Oklahoma.

*Anogra jamesii* (Torrey & Gray) Small. RYDBE06.

***Oenothera kleinii* Wagner & Mill**

WAGNE84. Alien. Syst. Bot. 9:50-52.1984. Type: Mineral Co.: below Wolf Cr. Pass, 2440 m, 18 Sept. 1981, Wagner 4531 (MO). Probably adventive where discovered, later extirpated by road-building. A taxon of Mohavean affinities. Type specimen from Colorado.

*Oenothera laciniata* J. Hill

DIETR88. Map suggests that this must be in eastern Colorado counties (in Nebr, Kans. and Okla., right to Colorado line!).

***Oenothera latifolia* (Rydberg) Munz**

HARRI54.

*Anogra cinerea* Rydberg. MUNZ65. Bull. Torr. Bot. Club 31:570.1904. Type: between Bent's Fort and Pueblo, 1845, Frémont 234 (NY). Type specimen from Colorado.

*Anogra latifolia* Rydberg. RYDBE06.

*Oenothera pallida* Lindley subsp. *latifolia* (Rydberg) Munz. MUNZ65.

***Oenothera longissima* Rydberg**

WEBER55; DIETR97.

*Oenothera missouriensis* Sims

PORTE74. Without locality. Probably collected east of Colorado, Hall & Harbour 174.

***Oenothera nuttallii* Sweet**

HARRI54. Sweet's names from Hortus Britannicus are only illegitimate in ed. 3. This name dates from ed. 2. Torrey listed this as *O. albicaulis* Nutt.

*Anogra nuttallii* (Sweet) A. Nelson. RYDBE06.

*Oenothera breviflora* Nuttall. PORTE74.

***Oenothera pallida* Lindley subsp. *pallida***

HARRI54.

***Oenothera pallida* Lindley subsp. *runcinata* (Engelmann) Munz & Klein**

MUNZ65.

***Oenothera pallida* Lindley subsp. *trichocalyx* (Nuttall ex Torrey & Gray) Munz & Klein**

MUNZ65.

*Anogra violacea* A. Nelson. RYDBE06.

*Anogra vreelandii* Rydberg. MUNZ65. Bull. Torr. Bot. Club 31:570.1904. Type: Montezuma Co.: McElmo Canyon, 10 June 1901, Vreeland 861 (NY). Type specimen from Colorado.

*Oenothera trichocalyx* Nuttall ex Torrey & Gray. HARRI54.

*Oenothera parviflora* L. var. *oakesiana* (Robbins) Fernald

MUNZ65. A taxon of eastern U.S.

*Anogra oakesiana* (A. Gray) Britton. RYDBE06. Misidentification, probably of *O. villosa*.

*Oenothera triloba* Nuttall

PORTE74. Report applies to *O. flava*.

***Oenothera villosa* Thunberg subsp. *strigosa* (Rydberg) Dietrich & Raven**

DIETR76.

*Oenothera strigosa* (Rydberg) Mackenzie & Bush. HARRI54.

*Anogra strigosa* Rydberg. RYDBE06.

**Stenosiphon Spach, 1835**

***Stenosiphon linifolius* (Nuttall ex E. James) Heynhold (1847)**

RYDBE06. Baca County: sandy field north of Cimarron River, along road M between roads 46 and 49, 12 June 1991, Weber & Wittmann 18219. -siphon is Greek, masculine, hence the epithet is *linifolius*! Britton made the same combination in 1894!.

*Gaura linifolia* Nuttall ex E. James.

*Stenosiphon virgatus* Spach. PORTE74.

**ONOCLEACEAE**

***Onoclea* L., 1753**

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**Onoclea sensibilis L.**

HARRI54. One collection, DA, now evidently extinct.

**OPHIOGLOSSACEAE****Botrychium Swartz, 1801 WAGNE83B,86*****Botrychium boreale* Milde**

WEBER66. Misidentifications of *B. pinnatum*.

**Botrychium campestre Wagner & Farrar**

WAGNE86. P. Root has observed this at YM: Bonny Reservoir. Collection voucher not yet deposited at COLO.

**Botrychium echo W. H. Wagner**

WAGNE83B. Type: Boulder Co.: Glacier Lake, 2800 m, Bethel & Clokey 3937a (US). Type specimen from Colorado.

**Botrychium hesperium (Maxon & Clausen) Wagner & Lellinger**

WAGNE83B. Hybrid.

*Botrychium matricariifolium* A. Braun ex K. Koch subsp. *hesperium* Maxon & Clausen. HARRI54. Mem. Torr. Bot. Club 19:88.1938.  
Type: Boulder Co.: Glacier Lake, Bethel s.n. (US). Type specimen from Colorado.

**Botrychium lanceolatum (S. G. Gmelin) Ångström**

HARRI54.

**Botrychium lineare W. H. Wagner**

WAGNE94. Type from Oregon. Colorado specimens cited: Boulder Co.: Arapahoe Moraine, Univ. Camp, Weber 3431 (KANU) (COLO sheet is [*B. echo*]); Pikes Peak, [Hauk] (MICH).

**Botrychium lunaria (L.) Swartz subsp. occidentalis Löve et al.**

LOVE71.

**Botrychium minganense Victorin**

WAGNE86,90.

*Botrychium lunaria* (L.) Swartz var. *minganense* (Victorin) Dole.

**Botrychium multifidum (S. G. Gmelin) Ruprecht subsp. coulteri (Underwood) Clausen**

HARRI54.

**Botrychium pallidum W. H. Wagner**

WAGNE90. TL, Boulder Co..

**Botrychium pinnatum St. John**

WAGNE86; ROOT87.

**Botrychium simplex E. Hitchcock**

HARRI54.

**Botrypus Michaux, 1803****Botrypus virginianus (L.) Holub subsp. europaeus (Ångström) Holub**

*Botrychium virginianum* (L.) Swartz subsp. *europaeum* (Ångström) Clausen. HARRI54.

**ORCHIDACEAE****Calypso Salisbury, 1807****Calypso bulbosa (L.) Oakes**

HARRI54.

*Calypso borealis* Salisbury. RYDBE06.

*Cytherea bulbosa* (L.) House. RYDBE06.

**Coeloglossum C. J. Hartman, 1820****Coeloglossum viride (L.) C. J. Hartman subsp. bracteatum (Mühlenberg ex Willdenow) Hultén**

HYLAN66.

*Coeloglossum bracteatum* (Willdenow) Parlato. RYDBE06.

*Habenaria bracteata* (Mühlenberg ex Willdenow) R. Brown. HARRI54.

*Habenaria viridis* (L.) R. Brown var. *bracteata* (Mühlenberg ex Willdenow) A. Gray.

**Corallorhiza Gagnebin, 1755****Corallorhiza maculata Rafinesque**

HARRI54.

*Corallorhiza multiflora* Nuttall. PORTE74; RYDBE06.

***Corallorhiza striata* Lindley**

HARRI54.

*Corallorhiza striata* Lindley var. *vreelandii* (Rydberg) L. Williams. HARRI54.

*Corallorhiza vreelandii* Rydberg. Bull. Torr. Bot. Club 28:271.1901. Type: Huerfano Co.: La Veta Mt., 4 June 1900, Rydberg & Vreeland 6418 (NY). Type specimen from Colorado.

***Corallorhiza trifida* (L.) Chatelain**

HARRI54.

*Corallorhiza corallorhiza* (L.) Karsten. RYDBE06.

*Corallorhiza corallorhiza* (L.) Karsten subsp. *coloradensis* Cockerell. *Torreya* 16:231.1916. Type: LR: Long's Peak Inn, 21 June 1916, Cockerell. Type specimen from Colorado.

***Corallorhiza wisteriana* Conrad**

HARRI54.

*Corallorhiza ochroleuca* Rydberg. RYDBE06.

***Epipactis* Zinn, 1757**

***Epipactis gigantea* Douglas ex Hooker**

HARRI54.

***Epipactis helleborine* (L.) Crantz**

Alien. Alien weed in yard, Boulder.

***Goodyera* R. Brown, 1813**

***Goodyera oblongifolia* Rafinesque**

HARRI54.

*Goodyera menziesii* Lindley. PORTE74.

*Peramium menziesii* (Lindley) Morong. RYDBE06.

***Goodyera repens* (L.) R. Brown**

HARRI54.

*Peramium ophioides* (Fernald) Rydberg. RYDBE06.

***Limnorchis* Rydberg, 1903**

***Limnorchis dilatata* (Pursh) Rydberg subsp. *albiflora* (Chamisso) Löve & Simon**

LOVE68.

*Habenaria dilatata* (Pursh) Hooker. PORTE74; HARRI54.

*Limnorchis borealis* (Chamisso) Rydberg. RYDBE06.

*Orchis dilatata* Pursh. TORRE27. Misidentification of *L. hyperborea*, fide GOODM95.

***Limnorchis ensifolia* Rydberg**

W. Jennings, in litt.

*Limnorchis laxiflora* Rydberg. RYDBE06. W. Jennings, in litt.

***Limnorchis hyperborea* (L.) Rydberg**

According to Löve, our plants are all *L. saccata*, but this is not supported by field observations.

*Habenaria hyperborea* (L.) R. Brown. PORTE74; HARRI54.

*Limnorchis viridiflora* (Chamisso) Rydberg. RYDBE06.

***Limnorchis sparsiflora* (S. Watson) Rydberg**

Colorado material is referred to *L. ensifolia*.

*Habenaria sparsiflora* S. Watson. HARRI54.

***Limnorchis stricta* (Lindley) Rydberg**

RYDBE06.

*Habenaria saccata* Greene. HARRI54.

*Limnorchis purpurascens* Rydberg. Bull. Torr. Bot. Club 28:269.1901. Type: Huerfano Co.?: Iron Mt.[E of Sierra Blanca], 21 June 1900, Rydberg & Vreeland 6414 (NY). Type specimen from Colorado.

*Limnorchis saccata* (Greene) Löve & Simon. LOVE68. W. Jennings, in litt..

*Platanthera saccata* (Greene) Hultén.

***Limnorchis zothecina* (Higgins & Welsh) W. A. Weber**

WELSH86A; WEBER89B.

*Habenaria zothecina* Higgins & Welsh. WELSH86A.

**Listera R. Brown, 1813**

**Listera borealis Morong**

WEBER66.

*Ophrys borealis* (Morong) Rydberg. RYDBE06.

**Listera convallarioides (Swartz) Nuttall**

HARRI54.

**Listera cordata (L.) R. Brown subsp. nephrophylla (Rydberg) Löve & Löve**

LOVE65.

*Listera nephrophylla* Rydberg. RYDBE06.

*Ophrys nephrophylla* (Rydberg) Rydberg. RYDBE06.

**Lysiella Rydberg, 1900**

**Lysiella obtusata (Banks ex Pursh) Britton & Rydberg**

LOVE68.

*Habenaria obtusata* (Banks ex Pursh) Richardson. PORTE74; HARRI54.

**Malaxis Solander ex Swartz, 1788**

**Malaxis monophyllos (L.) Solander ex Swartz subsp. brachypoda (A. Gray) Löve & Löve**

Taxon 18:312.1969.

*Acroanthes monophylla* (L.) Greene. RYDBE06.

*Malaxis monophyllos* (L.) Swartz var. *brachypoda* (A. Gray) Morris & Eames. HARRI54.

**Piperia Rydberg, 1901**

**Piperia unalascensis (Sprengel) Rydberg**

RYDBE06.

*Habenaria unalascensis* (Sprengel) S. Watson. HARRI54.

**Spiranthes L. C. Richard, 1817**

**Spiranthes diluvialis Sheviak**

SHEVI84.85. *Brittonia* 36:8-14.1984. Type: JF: Clear Creek just W of junction of Hwy. 6 & 58, Golden, 17 July 1982, Sheviak et al. 2257 (NYS). An amphidiploid derived from *S. romanzoffiana* and another species, probably *S. magnicamporum*. Type specimen from Colorado.

*Spiranthes porrifolia* Lindley

HARRI54. According to Jennings, this collection by Engelmann (MO) may actually be *S. magnicamporum* Sheviak.

*Ibidium porrifolium* (Lindley) Rydberg. RYDBE06. "Camp Harding, near Pikes Peak." The specimen (!NY) is *S. diluvialis*.

**Spiranthes romanzoffiana Chamisso**

HARRI54.

*Ibidium strictum* (Rydberg) House. RYDBE06.

**OROBANCHACEAE**

**Aphyllon Mitchell, 1769**

**Aphyllon fasciculatum (Nuttall) Torrey & Gray**

PORTE74.

*Orobanche fasciculata* Nuttall. HARRI54.

*Orobanche fasciculata* Nuttall var. *lutea* (Parry) Achey. HARRI54. Sporadic mutant with yellow flowers.

*Thalesia fasciculata* (Nuttall) Britton. RYDBE06.

**Aphyllon uniflorum (L.) Torrey & Gray**

PORTE74. *Aphyllon* Mitchell (1769) predates *Thalesia Rafinesque* (1818).

*Orobanche uniflora* L. var. *sedi* (Suksdorf) Achey. HARRI54.

**Conopholis Wallroth, 1825 HAYNE71**

**Conopholis alpina Liebmann var. mexicana (A. Gray ex S. Watson) Haynes**

WEBER83B; HAYNE71.

**Orobanche L., 1753**

**Orobanche ludoviciana Nuttall**

TORRE27; RYDBE06; HARRI54. Torrey's report is a misidentification of *O. multiflora*, fide GOODM95.

*Myzorhiza ludoviciana* (Nuttall) Rydberg. RYDBE06.

*Phelipaea ludoviciana* G. Don. PORTE74.

***Orobanche multiflora* Nuttall var. *arenosa* (Suksdorf) Munz**

HARRI54.

***Orobanche multiflora* Nuttall var. *multiflora***

RYDBE06; HARRI54.

*Myzorhiza multiflora* (Nuttall) Rydberg. RYDBE06.

*Phelipaea erianthera* Engelm in A. Gray. MUNZ30. Proc. Amer. Acad. 7:372.1867. Type: Huerfano Co.: Huerfano Valley, Parry 147 (GH). Type specimen from Colorado.

## OXALIDACEAE

### *Oxalis* L., 1753 EITEN63

***Oxalis dillenii* Jacquin**

EITEN63.

*Xanthoxalis dillenii* (Jacquin) Holub.

***Oxalis stricta* L.**

RYDBE06; HARRI54. Alien.

*Oxalis coloradensis* Rydberg. Bull. Torr. Bot. Club 29:243-244.1902. Type: CT: Sangre de Cristo Cr., 2 July 1900, Rydberg & Vreeland 5920 (NY). Type specimen from Colorado.

*Oxalis europaea* Jordan. HARRI54.

*Oxalis europaea* Jordan var. *bushii* (Small) Wiegand. HARRI54.

*Xanthoxalis coloradensis* Rydberg. RYDBE06.

*Xanthoxalis stricta* (L.) Small. RYDBE06.

***Oxalis violacea* L.**

HARRI54.

## PAPAVERACEAE

### *Argemone* L., 1753

***Argemone hispida* A. Gray**

OWNBE58.

*Argemone platyceras* Link & Otto. HARRI54.

***Argemone mexicana* L.**

TORRE27; PORTE74; RYDBE06; HARRI54. Reports apply to *A. polyanthemos*.

***Argemone polyanthemos* (Fedde) G. Ownbey**

OWNBE58.

*Argemone alba* James, non Rafinesque. Long Exped. (Phila. ed.) 2:461.1823.

*Argemone intermedia* Sweet. RYDBE06; HARRI54.

*Argemone mexicana* L. var. *albiflora* DeCandolle. TORRE27.

***Argemone squarrosa* Greene**

OWNBE58.

### *Eschscholzia* Chamisso, 1820

***Eschscholzia californica* Chamisso**

HARRI54. Alien.

### *Glaucium* P. Miller, 1754

***Glaucium corniculatum* (L.) Rudolph**

Alien. Boulder Co.: Boulder Ranch Open Space, July, 1994, A. Cooper.

***Glaucium flavum* Crantz**

WEBER73A. Alien.

### *Papaver* L., 1753

***Papaver alpinum* L.**

PORTE74. Report applies to *P. kluanense*.

***Papaver croceum* Ledebour**

WEBER79A; POPOV37. Alien. A species of Middle Asia.

**Papaver kluanense D. Löve**

WEBER67. Bot. Not. 178-180.1956. Hexaploid, n=42, fide LOVE69 Widely distributed from Alaska to New Mexico, with a gap in Montana.

Papaver coloradense Fedde var. aurantiellum Cockerell. COCKE15. Invalid variety based on unpublished species.

Papaver coloradense Fedde, in synonym. FEDDE09. An unpublished name.

Papaver nudicaule L. subsp. radicum (Rottboel) var. coloradense Fedde. FEDDE09. Fedde, Repert. Sp. Nov. 7:256.1909. Co-types: Clear Creek Co.: Grays Peak trail, 1892, Crandall (US), Parry 147, 1891 (US). Type specimen from Colorado.

*Papaver nudicaule L. var. radicum (Rottboel) De Candolle*

HARRI54. Reports represent misidentifications.

Papaver radicum Rottboel. RYDBE06.

**Papaver orientale L.**

Alien. A common escape from gardens.

*Papaver pygmaeum Rydberg*

Bull. Torr. Bot. Club 29:145-160.1902. Type from Montana. Diploid, n=14 fide LOVE69. Replacing P. kluanense in Montana. Belongs to a different section of the genus.

## PARNASSIACEAE

### Parnassia L., 1753

**Parnassia fimbriata König**

HARRI54.

Parnassia rivularis Osterhout ex Rydberg. N. Amer. Flora 22(1):78.1905. Type: Jackson Co.: North Park, 25 July 1898, Osterhout 1778 (NY). Type specimen from Colorado.

**Parnassia kotzebuei Chamisso & Schlechtendal**

WEBER55.

**Parnassia parviflora De Candolle**

HARRI54.

## PINACEAE

### Abies P. Miller, 1754

**Abies arizonica Merriam**

Abies lasiocarpa (Hooker) Nuttall var. arizonica (Merrill) Lemmon. HARRI54.

**Abies bifolia A. Murray**

HUNT79; PARKE84; FNA93.

Abies lasiocarpa (Hooker) Nuttall. HARRI54; FNA93.

**Abies concolor (Gordon & Glendower) Lindley ex Hildebrand**

HARRI54.

*Abies grandis (Douglas ex D. Don) Lindley*

PORTE74. Report applies to A. concolor.

### Picea A. Dietrich, 1824

**Picea engelmannii Parry ex Engelmann**

HARRI54. Trans. Acad. Sci. St. Louis. 2:212-214.1866. Type: none cited. Probably CC: Parry (MO).

Abies engelmannii Parry. PORTE74. Nomen nudum.

**Picea pungens Engelmann**

HARRI54. Gard. Chron. n.s. 11:334.1879, Parry in 1861. Type specimen from Colorado.

Abies menziesii Lindley. PORTE74.

Abies menziesii Lindley var. parryana Andre. L'Illustr. Hort. 23:199.1876.

Picea parryana (André) Sargent. RYDBE06.

Picea parryana Hort. ex Parry, Gard. Chron. n.s. 11:725.1883.

### Pinus L., 1753

**Pinus aristata Engelmann**

HARRI54. Trans. Acad. Sci. St. Louis 2:205-207.1866. Type: Pikes Peak and high mts. of Snowy Range, 1861, 1862, Parry (MO). Type specimen from Colorado.

**Pinus contorta Douglas ex Loudon var. latifolia Engelmann**



HARRI54; CRITC57.

*Pinus contorta Douglas ex Loudon var. murrayana (Greville & Balfour in A. Murray) Engelm*

Erroneous Report.

*Pinus murrayana* Greville & Balfour in A. Murray. RYDBE06.

***Pinus edulis* Engelm**

HARRI54; BETAN87. BETAN87 discusses the Owl Canyon paleoecology.

*Caryopitys edulis* (Engelmann) Small. RYDBE06.

***Pinus flexilis* James**

HARRI54. Long Exped. (Phila. ed.) 2:27, 34-35.1823. Type: El Paso Co.: Pikes Peak, James. Type specimen from Colorado.

*Pinus flexilis* (James) Rydberg. RYDBE06.

***Pinus ponderosa Douglas ex P. & C. Lawson subsp. scopulorum (S. Watson) W. A. Weber***

HARRI54, as the species; WEBER82B.

*Pinus scopulorum* (S. Wats.) Lemmon. RYDBE06.

*Pinus resinosa* L.

TORRE27. Misidentificatuion of *P. ponderosa*.

***Pinus strobiformis* Engelm**

WEBER87B,89C. D. Cooper alleges that this is abundant in the Wet Mountains and Sangre de Cristos.

***Pseudotsuga Carrire, 1867***

***Pseudotsuga menziesii (Mirbel) Franco***

FRANC53.

*Abies douglasii* Lindley. PORTE74.

*Pseudotsuga mucronata* (Rafinesque) Sudworth. RYDBE06.

*Pseudotsuga taxifolia* (Poiret) Britton. HARRI54.

**PLANTAGINACEAE**

***Plantago L., 1753***

***Plantago elongata* Pursh**

HARRI54.

*Plantago myosuroides* Rydberg. RYDBE06.

***Plantago eriopoda* Torrey**

TORRE27; RYDFBE06; HARRI54. The type collection came from the Platte River, in Nebraska, James.

*Plantago retrorsa* Greene. Pl. Baker. 3:32.1901. Type: Gunnison Co.: Doyles[ville], 28 June 1901, Baker 627 (ND-G). Type specimen from Colorado.

***Plantago lanceolata* L.**

RYDBE06; HARRI54. Alien.

***Plantago major* L.**

RYDBE06; HARRI54. Alien.

*Plantago asiatica* auctt., non L.. RYDBE06; HARRI54; TUTIN64; GREAT86.

***Plantago patagonica* Jacquin**

HITCH55.

*Plantago gnaphalodes* Nuttall. TORRE27.

*Plantago patagonica* Jacquin var. *aristata* A. Gray. PORTE74.

*Plantago patagonica* Jacquin var. *gnaphaloides* A. Gray. PORTE74.

*Plantago patagonica* Jacquin var. *spinulosa* (Decaisne ex De Candolle) A. Gray. HITCH55.

*Plantago purshii* Roemer & Schultes. RYDBE06; HARRI54.

*Plantago spinulosa* Decaisne ex De Candolle. HARRI54.

***Plantago tweedyi* A. Gray**

RYDBE06; HARRI54.

**POACEAE**

***Achnatherum P. Beauvois 1812 BARKW93***

***Achnatherum aridum (Jones) Barkworth***

BARKW93.

*Stipa arida* Jones. HARRI54.

***Achnatherum contractum* (B; L. Johnson) Barkworth**

Doubtful specimen from DeBeque.

*Oryzopsis hymenoides* (Roemer & Schultes) Ricker ex Piper var. *contracta* B. L. Johnson.

***Achnatherum hymenoides* (Roemer & Schultes) Barkworth**

BAR KW93.

*Eriocoma cuspidata* Nuttall. TORRE27; PORTE74; RYDBE06.

*Oryzopsis hymenoides* (Roemer & Schultes) Ricker ex Piper. HARRI54.

*Stipa hymenoides* Roemer & Schultes. WELSH87, p.783. Syst. Veg. 2:339. 1817.

***Achnatherum lettermanii* (Vasey) Barkworth**

BAR KW93.

*Stipa lettermanii* Vasey. HARRI54. Bull. Torr. Bot. Club 13:53. 1886.

*Stipa minor* (Vasey) Scribner. RYDBE06.

*Stipa occidentalis* Thurber ex S. Watson var. *minor* (Vasey) C. L. Hitchcock.

*Stipa viridula* Trinius var. *minor* Vasey. BAR KW82. Contr. U. S. Nat. Herb. 3:50.1892. Type: CC: Mt. Kelso, Letterman 95 (NY). Type specimen from Colorado.

***Achnatherum nelsonii* (Scribner) Barkworth**

BAR KW93.

*Stipa columbiana* Macoun. HARRI54; ICBN88 nomen rejiciendum. Our plants so-called are *S. nelsonii*.

*Stipa columbiana* Macoun var. *nelsonii* (Scribner) A. S. Hitchcock. HARRI54.

*Stipa nelsonii* Scribner. BAR KW82.

*Stipa occidentalis* Thurber ex S. Watson var. *nelsonii* (Scribner) C. L. Hitchcock. HITCH55.

*Stipa williamsii* Scribner. HARRI54; CRONQ72.

*Achnatherum occidentale* (Thurber) Barkworth

BAR KW93. Erroneous Report.

*Stipa occidentalis* Thurber ex S. Watson. HITCH55.

***Achnatherum pinetorum* (Jones) Barkworth**

BAR KW93.

*Stipa pinetorum* Jones. HARRI54. Proc. Calif. Acad. Sci. (2)5:724. 1895.

***Achnatherum richardsonii* (Link) Barkworth**

BAR KW93.

*Stipa richardsonii* Link. HARRI54. Hort. Berol. 2:245. 1883.

***Achnatherum robustum* (Vasey) Barkworth**

BAR KW93.

*Stipa robusta* (Vasey) Scribner. HARRI54; MONDR78.

*Stipa vaseyi* Scribner. RYDBE06.

***Achnatherum scribneri* (Vasey) Barkworth**

BAR KW93.

*Stipa scribneri* Vasey. HARRI54. Bull. Torr. Bot. Club 11:125. 1884.

***Achnatherum speciosum* (Trinius & Ruprecht) Barkworth**

BAR KW93.

*Stipa speciosa* Trinius & Ruprecht. HARRI54. Mem. Acad. Imp. Sci. St. Petersburg. 5:45. 1842.

*Achnatherum webberi* (Thurber) Barkworth

BAR KW93. Erroneous Report.

*Eriocoma webberi* Thurber. RYDBE06.

*Eriocoma webberi* Thurber in S. Watson. Bot. Calif. 2:283. 1880.

*Oryzopsis webberi* (Thurber) Benth. HARRI54.

*Stipa webberi* (Thurber) B. L. Johnson. HARRI54. Bot. Gaz. 107:25.1945. The Colorado report is evidently incorrect.

***Achnatherum x bloomeri* (Bolander) Barkworth**

BAR KW93.

*Oryzopsis bloomeri* (Bolander) Ricker. HARRI54.

*Stipa x bloomeri* Bolander. Proc. Calif. Acad. Sci. 4:168. 1872. Hybrids between *S. hymenoides* and other *Stipa* species.

*Stiporyzopsis bloomeri* (Bolander) B. L. Johnson. JOHNS45.

***Agropyron Gaertner, 1770 DEWEY83; SARKA56***

*Agropyron cristatum* (L.) Gaertner

LOVE84; SARKA56. This is a Siberian species, with densely villous spikelets, often almost black in color.

**Agropyron desertorum Fischer ex Link**

HARRI54; SARKA56. Alien.

*Agropyron cristatum* (L.) Gaertner subsp. *desertorum* (Fischer) Löve. LOVE84.

**Agropyron mongolicum Keng**

Alien.

*Agropyron cristatum* (L.) Gaertner subsp. *fragile* (Roth) Löve. LOVE84.

**Agropyron pectiniforme Roemer & Schultes**

SARKA56. Alien.

**Agrostis L., 1753***Agrostis canina* L.

PORTE74; RYDBE06. "Hall & Harbour 671;" identity unknown without examination of the collection. A European species.

*Agrostis capillaris* L.

HITCH35. A European species.

*Agrostis vulgaris* Withering. PORTE74. Report possibly applies to *A. scabra*.

**Agrostis exarata Trinius**

HARRI54. Alien.

*Agrostis asperifolia* Trinius. RYDBE06; HITCH35.

**Agrostis gigantea Roth**

HYLAN53. Alien.

*Agrostis alba* auctt., non P. Miller. HARRI54. See *A. gigantea*.

*Agrostis hyemalis* (Walter) Britton, Sterns, & Poggenberg

RYDBE06; BJORK60. Colorado plants are *A. scabra*.

**Agrostis idahoensis Nash**

HARRI54.

*Agrostis bakeri* Rydberg. WEBER81A. Bull. Torr. Bot. Club 36:532.1909. Type: Mineral Co.: Pagosa Peak, Aug. 1899, Baker 150 (NY). Type specimen from Colorado.

*Agrostis idahoensis* Nash var. *bakeri* (Rydberg) W. A. Weber. WEBER85B.

*Agrostis tenuiculmis* Nash. RYDBE06.

**Agrostis mertensii Trinius**

WIDEN71.

*Agrostis borealis* auctt., non C. J. Hartman. HARRI54.

**Agrostis scabra Willdenow**

HARRI54.

*Agrostis scabra* Willdenow var. *geminata* (Trinius) Swallen. HARRI54.

**Agrostis stolonifera L.**

Alien.

*Agrostis depressa* Vasey. RYDBE06. Bull. Torr. Bot. Club 13:54. 1886. Type: CC: Clear Creek Canyon, 1885, Patterson (US). Type specimen from Colorado.

*Agrostis palustris* Hudson. HARRI54.

**Agrostis variabilis Rydberg**

HARRI54.

**Alopecurus L., 1753****Alopecurus aequalis Sobolewski**

HARRI54; GOODM95.

*Alopecurus aristulatus* Michaux. PORTE74.

*Alopecurus alpinus* L. subsp. *alpinus*

HARRI54. The Eurasian race.

**Alopecurus alpinus L. subsp. glaucus (Lessing) Hultén**

HULTE67; LOVE71.

*Alopecurus occidentalis* Scribner. RYDBE06.

**Alopecurus carolinianus Walter**

HARRI54. Alien. WN: Akron, 24 June 1909, Schantz (US).

***Alopecurus geniculatus* L.**

HARRI54. Alien.

***Alopecurus pratensis* L.**

WEBER66. Alien.

***Andropogon* L., 1753**

***Andropogon gerardii* Vitman**

HARRI54.

*Andropogon chrysocomus* Nash. RYDBE06.

*Andropogon furcatus* Mühlenberg. TORRE27; RYDBE06.

*Andropogon hallii* Hackel var. *grandiflorus* Scribner. HITCH35. USDA Div. Agrost. Bull. 5:21.1897. Type: Shear 749 US). Type specimen from Colorado.

***Andropogon hallii* Hackel**

HARRI54; GREAT86. Sitzungsber. Akad. Wiss. Math. Naturw. (Wien) 89:127.1884. Type: Hall & Harbour in Nebraska. See GREAT86 for justification. Type specimen from Colorado.

*Andropogon hallii* Hackel var. *muticus* Hackel in De Candolle. HITCH35. Monogr. Phan. 6:444. 1889. Type: Brighton, Vasey) (G). Type specimen from Colorado.

***Anisantha* K. Koch, 1848**

***Anisantha diandra* (Roth) Tutin**

TZVEL76. Alien.

*Bromus rigidus* auctt., non Roth. WEBER55.

***Anisantha sterilis* (L.) Nevski**

TZVEL76. Alien.

*Bromus sterilis* L.. HARRI54.

***Anisantha tectorum* (L.) Nevski**

TZVEL76. Alien.

*Bromus tectorum* L.. HARRI54.

*Bromus tectorum* L. var. *glabratus* Spenner. HARRI54.

***Anthoxanthum* L., 1753**

***Anthoxanthum odoratum* L.**

HARRI54. Alien. Not naturalized.

***Apera* Adanson, 1763**

***Apera interrupta* (L.) P. Beauvois**

WEBER89C. Alien. YM: 3 mi NE Beecher Island, Neely 5114.

***Argillochloa* W. A. Weber, 1984**

***Argillochloa dasyclada* (Hackel ex Beal) W. A. Weber**

WEBER84B.

*Festuca dasyclada* Hackel ex Beal. IRVIN78.

***Aristida* L., 1753**

***Aristida adscensionis* L.**

HARRI54. Alien.

*Aristida fasciculata* Torrey. TORRE24A; RYDBE06. Ann. Lyc. Nat. Hist. N. Y. 1:154-155.1824. Type: Probably Texas Panhandle, fide GOODM95.

***Aristida arizonica* Vasey**

HARRI54.

***Aristida basiramea* Engelmann**

HARRI54; GREAT96.

*Aristida basiramea* Engelmann var. *curtissii* (A. Gray) Shinners. GREAT86.

*Aristida curtissii* (A. Gray) Nash. HARRI54.

***Aristida divaricata* Humboldt & Bonpland ex Willdenow**

HARRI54.

***Aristida havardii* Vasey**

Trent in herb.

*Aristida oligantha* Michaux

PORTE74. Report applies to *A. adscensionis*.

***Aristida purpurea* Nuttall var. *longiseta* (Stuedel) Vasey**

CRONQ72.

*Aristida longiseta* Stuedel. HARRI54.

*Aristida longiseta* Stuedel var. *rariflora* A. S. Hitchcock. HARRI54.

*Aristida longiseta* Stuedel var. *robusta* Merrill. HARRI54.

***Aristida purpurea* Nuttall var. *purpurea***

HARRI54; ALLRD84.

*Aristida ternipes* Cavanilles var. *hamulosa* (Henrard) Trent

TRENT90. Attribution of this to Colorado was a lapsus calami, according to Allred (personal communication, 11 Feb. 1991).

***Aristida wrightii* Nash**

HARRI54.

**Arrhenatherum P. Beauvois, 1812**

***Arrhenatherum elatius* (L.) P. Beauvois ex J. & K. Presl**

HARRI54. Alien.

**Avena L., 1753**

***Avena fatua* L. var. *fatua***

HARRI54. Alien.

***Avena fatua* L. var. *sativa* (L.) Haussknecht**

Alien.

*Avena sativa* L.. HARRI54.

**Avenula Hooker, 1868**

***Avenula hookeri* (Scribner in Hackel) Holub**

HOLUB76.

*Avena americana* (Scribner) Scribner. RYDBE06.

*Avena hookeri* Scribner in Hackel.

*Avenochloa hookeri* (Scribner in Hackel) Holub.

*Helictotrichon hookeri* (Scribner in Hackel) Henrard. HARRI54.

**Beckmannia Host, 1805**

*Beckmannia eruciformis* (L.) Host

PORTE74; RYDBE06. A European species. Report applies to *B. syzigachne*.

***Beckmannia syzigachne* (Stuedel) Fernald subsp. *baicalensis* (Kuznetzow) Koyama & Kuwano**

TORRE27; HARRI54; KOYAM64.

**Blepharoneuron Nash, 1898**

***Blepharoneuron tricholepis* (Torrey) Nash**

HARRI54.

*Vilfa tricholepis* Torrey. PORTE74.

**Bothriochloa Kuntze, 1891**

***Bothriochloa barbinodis* (Lagasca) Herter**

Rev. Sudamer. Bot. 6:135.1940.

*Andropogon barbinodis* Lagasca. WEBER61.

***Bothriochloa bladhii* (Retzius) S. T. Blake**

WEBER89C. Alien. KC: 6 mi W of Stratton exit on I-70, 1 Sept. 1981, Brooks 15630 (COLO).

*Andropogon bladhii* Retzius.

***Bothriochloa ischaemum* (L.) Keng var. *songarica* (Ruprecht ex Fischer & Meyer) Celarier & Harlan**

WEBER90. Alien. YM, JF, DV, CH.

*Andropogon ischaemum* L..

***Bothriochloa laguroides* (De Candolle) Herter subsp. *torreyana* (Stuedel) Allred & Gould**

ALLRE83.

*Amphilophis torreyana* (Steudel) Nash. RYDBE06.

*Andropogon argenteus* Elliott. PORTE74.

*Andropogon glaucum* Torrey. TORRE24,27; GOODM95. Non Retzius, 1789. Ann. Lyc. Nat. Hist. N. Y. 1:153-154.1824. Type: SE Colorado, or adjacent New Mexico, Texas, or Oklahoma, fide GOODM95. Type specimen from Colorado.

*Andropogon jamesii* Torrey.

*Andropogon saccharoides* Swartz. HARRI54.

*Andropogon torreyanus* Steudel. Nom. Bot. ed. 2:1:93.1840. Based on *A. glaucum* Torrey.

*Bothriochloa saccharoides* (Swartz) Rydberg.

#### ***Bothriochloa springfieldii* Gould**

Las Animas Co.: Mesa de Maya, 1993, Dina Clark.

#### ***Bouteloua Lagasca*, 1805**

#### ***Bouteloua curtispindula* (Michaux) Torrey var. *caespitosa* Gould & Kapadia**

GOULD64. Southern edge of Colorado.

#### ***Bouteloua curtispindula* (Michaux) Torrey var. *curtispindula***

HARRI54.

*Atheropogon curtispindulus* (Michaux) Fournier. RYDBE06. as *Antheropogon*.

#### ***Brachypodium* P. Beauvois, 1812**

#### ***Brachypodium distachyon* (L.) P. Beauvois**

HARRI54. Alien. Never naturalized.

#### ***Briza* L., 1753**

#### ***Briza maxima* L.**

RYDBE06. Alien. Reported from Gunnison, but not found in recent times.

#### ***Briza media* L.**

Alien. Boulder Co.: Boulder Open Space, Cooper 1585.

#### ***Bromelica* Farwell, 1919**

#### ***Bromelica bulbosa* (Geyer ex Porter & Coulter) W. A. Weber**

WEBER84B.

*Melica bulbosa* Geyer ex Porter & Coulter. HARRI54. Syn. Fl. Colorado 149.1874. Type: Ute Pass and Twin Lakes, Coulter. Older uses were nomina nuda. Type specimen from Colorado.

#### ***Bromelica spectabilis* (Scribner) W. A. Weber**

WEBER84B.

*Melica spectabilis* Scribner. HARRI54.

#### ***Bromelica subulata* (Grisebach) Farwell**

WIPFF94. Gunnison Co.: McClure Pass, 24 July 1992, J. K. Wipff & S. D. Jones 9509 (TEX, UTC).

*Bromus subulatus* Grisebach.

*Melica subulata* (Grisebach) Scribner.

#### ***Bromopsis* Fourreau, 1869**

#### ***Bromopsis canadensis* (Michaux) Holub subsp. *canadensis***

HOLUB73.

*Bromopsis ciliata* (L.) Holub. HOLUB73.

*Bromus ciliatus* L.. PORTE74; HARRI54.

#### ***Bromopsis canadensis* (Michaux) Holub subsp. *richardsonii* (Link) Tsvelev**

TZVEL76.

*Bromopsis richardsonii* (Link) Holub. HOLUB73.

*Bromus richardsonii* Link.

#### ***Bromopsis frondosa* (Shear) Holub**

HOLUB73. *B. ciliatus* complex.

*Bromus frondosus* (Shear) Wooton & Standley. HARRI54.

#### ***Bromopsis inermis* (Leysser) Holub**

HOLUB73. Alien.

*Bromus inermis* Leysser. HARRI54.

#### ***Bromopsis lanatipes* (Shear) Holub**

**HOLUB73.**

*Bromus anomalus* Ruprecht ex Fournier var. *lanatipes* (Shear) A. S. Hitchcock. HARRI54.

*Bromus lanatipes* Shear. WAGNO52.

*Bromus porteri* (Coulter) Nash var. *lanatipes* Shear. USDA Div. Agrost. Bull. 23:37.1900. Type: CC: Idaho Springs, Shear 739 (US). Type specimen from Colorado.

***Bromopsis porteri* (Coulter) Holub****HOLUB73.**

*Bromus anomalus* auctt., non Ruprecht ex Fournier. HARRI54.

*Bromus ciliatus* L. var. *montanus* Vasey ex Beal. Grasses N. Amer. 2:619.1896. Type: Patterson 264 (US). Type specimen from Colorado.

*Bromus kalmii* A. Gray var. *porteri* Coulter. PORTE74, as the species. Man. Rocky Mts. 425.1885. Type: LK: Twin Lakes, Porter. Type specimen from Colorado.

*Bromus porteri* (Coulter) Nash. WAGNON52.

***Bromopsis pubescens* (Mühlenberg ex Willdenow) Holub****HOLUB73; WEBER89C; ICBN88. *Bromus purgans* L., *nominum rejiciendum*.**

*Bromus ciliatus* L. var. *laeviglumis* Scribner. HARRI54; WAGNO52. Some reports of *B. purgans* attributed to this.

*Bromus latiglumis* A. S. Hitchcock. HARRI54; WAGNO52.

*Bromus pubescens* Mühlenberg ex Willdenow. WAGNO52; GREAT86.

***Bromopsis pumpelliana* (Scribner) Holub****HOLUB73.**

*Bromopsis inermis* (Leysser) Holub subsp. *pumpelliana* (Scribner) W. A. Weber. WEBER76A.

*Bromus ciliatus* L. var. *coloradensis* Vasey ex Beal. Grasses N. Amer. 2:619. 1896. Type: Colo. Expl. 100th Merid., Wolf 1158 (US). Type specimen from Colorado.

*Bromus inermis* Leysser subsp. *pumpellianus* (Scribner) Wagnon. WAGNO52.

*Bromus inermis* Leysser subsp. *pumpellianus* (Scribner) Wagnon var. *purpurascens* (Hooker) Wagnon. WAGNO52.

*Bromus pumpellianus* Scribner. HARRI54.

*Bromus pumpellianus* Scribner var. *melicoides* Shear. U.S.D.A. Div. Agrost. Bull. 23:50. 1900. Type: Beaver Creek Camp, 1896, Pammel (US). Type specimen from Colorado.

*Bromus pumpellianus* Scribner var. *tweedyi* Scribner. HARRI54.

***Bromus purgans* L.****HOLUB73; GREAT86. *Nomen ambiguum*; our material is *Bromopsis pubescens*.**

*Bromus ciliatus* L. var. *laeviglumis* Scribner. HARRI54; WAGNO52. Some reports of *B. purgans* attributed to this.

*Bromus latiglumis* A. S. Hitchcock. HARRI54; WAGNO52.

*Bromus pubescens* Mühlenberg ex Willdenow. WAGNO52; GREAT86.

***Bromus* L., 1753*****Bromus berterianus* Colla****PAVLI95. *Erroneous Report*.**

*Bromus trinii* Desvaux in Gay. HARRI54; CLAYT86; CRONQ72(illus.). Sect. *Neobromus*; a Chilean species; report dates from HITCH35 (US?); Huerfano Co.: La Veta Pass, 9100 ft. (Vasey, fide Harrington). Probably this was incorrect, the specimen may have come from California, the label incorrectly transcribed COL, not CAL.

*Trisetum trinii* (Desvaux) Louis-Marie. LOUIS28.

***Bromus briziformis* Fischer & Meyer****HARRI54. *Alien*.*****Bromus commutatus* Schrader****HARRI54. *Alien*.*****Bromus hordeaceus* L.****RYDBE06; HYLAN53; WEBER79A. *Alien*.**

*Bromus mollis* L..

***Bromus japonicus* Thunberg****HARRI54. *Alien*.**

*Bromus patulus* Mertens & Koch. RYDBE06.

***Bromus racemosus* L.****HARRI54. *Alien*.*****Bromus secalinus* L.****HARRI54. *Alien*.**

**Bromus squarrosus L.**

WEBER79A. Alien.

**Buchloë Engelmann, 1859****Buchloë dactyloides (Nuttall) Engelmann**

HARRI54.

Bulbilis dactyloides (Nuttall) Rafinesque. RYDBE06.

**Calamagrostis Adanson, 1763****Calamagrostis canadensis (Michaux) P. Beauvois**

HARRI54.

Calamagrostis canadensis (Michaux) P. Beauvois var. acuminata Vasey ex Rydberg & Shear. USDA Div. Agrost. Bull. 5:26.1897. Type: CC: Georgetown, 17 Aug. 1895, Shear 615 (LT: US). Type specimen from Colorado.

Calamagrostis canadensis (Michaux) P. Beauvois var. robusta Vasey in Rothrock. Rep. U.S. Survey 100th Meridian (Wheeler) 6:285.1878. Type: Lake Co.: Twin Lakes, Wolf 1093]. The form with hairy collars (C. scribneri). Type specimen from Colorado.

Calamagrostis scribneri Beal. RYDBE06; HARRI54. A minor variant.

**Calamagrostis langsdorfii (Link) Trinius**

RYDBE06. A European species; see C. canadensis.

**Calamagrostis montanensis (Scribner) Scribner in Vasey**

HARRI54. Larimer Co.: Larimer River Valley, 11 Aug. 1935, Lane (CS 2271) !Weber, 1991.

**Calamagrostis purpurascens R. Brown in Richardson**

HARRI54.

**Calamagrostis rubescens Buckley**

HARRI54. Moffat Co., Routt Co..

**Calamagrostis scopulorum Jones**

HARRI54.

Calamagrostis scopulorum Jones var. bakeri Stebbins. Rhodora 32:47.1930. Type: Mineral Co.: Pagosa Peak, 9000 ft., Aug. 1899, Baker 162 (GH). Type specimen from Colorado.

**Calamagrostis stricta (Timm) Koeler**

PORTE74; LOVE70.

Calamagrostis hyperborea J. Lange. RYDBE06.

Calamagrostis hyperborea J. Lange var. americana (Vasey) Kearney. RYDBE06.

Calamagrostis hyperborea J. Lange var. elongata Kearney. RYDBE06.

Calamagrostis hyperborea J. Lange var. stenodes Kearney. U.S.D.A. Div. Agrost. Bull. 11:39. 1898. Type: Marshall Pass, Clements 206. Type specimen from Colorado.

Calamagrostis inexpansa A. Gray. HARRI54.

Calamagrostis micrantha Kearney. RYDBE06.

Calamagrostis neglecta (Ehrhart) Gaertner. HARRI54.

Calamagrostis stricta (Timm) Koeler var. brevior Vasey in Rothrock. Cat. U. S. Geogr. Surv. 100th Merid. 285.1878. Type: Mosquito, 1873 Wolf 1098 (US). Type specimen from Colorado.

Calamagrostis stricta (Timm) Koeler var. robusta Vasey in Rothrock. Cat. U. S. Geogr. Surv. 100th Merid. 285.1878. Type: Twin Lakes, 1873 Wolf 1099). Type specimen from Colorado.

Calamagrostis sylvatica Besser var. americana Vasey. PORTE74; HITCH35. Contr. U.S. Nat. Herb. 3:83.1892. Type: Pen Gulch, 1884, Vasey (US). Type specimen from Colorado.

**Calamovilfa (A. Gray) Hackel ex Scribner, 1890****Calamovilfa gigantea (Nuttall) Scribner & Merrill**

HARRI54.

**Calamovilfa longifolia (Hooker) Scribner in Hackel**

HARRI54; REEDE59.

Calamagrostis longifolia Hooker. PORTE74.

**Catabrosa P. Beauvois, 1812****Catabrosa aquatica (L.) P. Beauvois**

HARRI54.

**Cenchrus L., 1753**



**Cenchrus longispinus (Hackel in Kneucker) Fernald**

DELIS63.

Cenchrus pauciflorus Benth. var. longispinus (Hackel ex Kneucker) Jansen &amp; Wachter.

**Cenchrus pauciflorus Benth.**

HARRI54. Erroneous Report.

**Cenchrus tribuloides L.**PORTE74; RYDBE06. Report applies to *C. longispinus*.**Ceratochloa De Candolle & P. Beauvois, 1812****Ceratochloa carinata (Hooker & Arnott) Tutin**

TUTIN64. Alien.

Bromus carinatus Hooker &amp; Arnott. HARRI54.

Bromus marginatus Nees in Steudel. RYDBE06; HARRI54.

Bromus marginatus Nees in Steudel var. latior Shear. RYDBE06.

Bromus polyanthus Scribn. RYDBE06; HARRI54.

Ceratochloa marginata (Nees ex Steudel) W. A. Weber. WEBER81B.

Ceratochloa polyantha (Scribn.) W. A. Weber. WEBER81.

**Ceratochloa unioloides (Willdenow) P. Beauvois**

RAVEN60A. Alien. Harrington ms. indicates all records are of cultivars. Bromus unioloides Willdenow, non Humboldt, Bonpland, &amp; Kunth, but Ceratochloa unioloides is not preoccupied.

Bromus unioloides (Willdenow) Humboldt, Bonpland, &amp; Kunth. RYDBE06.

Bromus willdenowii Kunth. HARRI54; WEBER82B; RAVEN60A.

**Chloris Swartz, 1788****Chloris verticillata Nuttall**

HARRI54.

**Chloris virgata Swartz**

HARRI54. Alien.

**Chondrosum Desvaux, 1810 CLAYT86****Chondrosum barbatum (Lagasca) Clayton**

CLAYT86.

Bouteloua barbata Lagasca. HARRI54.

Bouteloua polystachya (Benth.) Torrey. RYDBE06.

**Chondrosum eriopodum Torrey**

Bouteloua eriopoda (Torrey) Torrey. HARRI54.

**Chondrosum gracile Humboldt, Bonpland, & Kunth**

Bouteloua gracilis (Humboldt, Bonpland, &amp; Kunth) Lagasca ex Griffiths. HARRI54.

Bouteloua oligostachya (Nuttall) Torrey. PORTE74; RYDBE06.

**Chondrosum hirsutum (Lagasca) Sweet**

Bouteloua hirsuta Lagasca. HARRI54.

**Chondrosum prostratum (Lagasca) Sweet**

Alien.

Bouteloua prostrata Lagasca. RYDBE06.

Bouteloua simplex Lagasca. HARRI54.

**Cinna L., 1753****Cinna latifolia (Treviranus) Grisebach in Ledebour**

HARRI54.

**Critesion Rafinesque, 1819****Critesion brachyantherum (Nevski) Barkworth & Dewey**

BARKW85; WEBER89B. Alien.

Critesion jubatum (L.) Nevski subsp. breviaristatum (Bowden) Löve. LOVE75C.

Hordeum boreale Scribn. &amp; Smith. RYDBE06.

Hordeum brachyantherum Nevski. HARRI54.

Hordeum jubatum L. subsp. breviaristatum Bowden.

**Critesion glaucum (Steudel) Löve**

LOVE84. Alien.

Critesion murinum L. subsp. glaucum (Steudel) W. A. Weber. WEBER82A.

**Critesion jubatum (L.) Nevski**

Hordeum jubatum L.. HARRI54.

Hordeum jubatum L. var. caespitosum (Scribner) A. S. Hitchcock. HARRI54.

**Critesion pusillum (Nuttall) Löve**

Taxon 29:166.1980.

Hordeum pusillum Nuttall. HARRI54.

**Critesion secalinum (Schreber) Löve**

LOVE84. Erroneous Report.

Hordeum pratense Hudson. PORTE74. Report probably applies to C. brachyantherum.

**Crypsis Aiton, 1789****Crypsis alopecuroides (Piller & Mitterp) Schrader**

WEBER82A. Alien.

**Cylindropyrum Löve, 1984****Cylindropyrum cylindricum (Host) Löve**

LOVE84. Alien.

Aegilops cylindrica Host. HARRI54.

**Cynodon L. C. Richard, 1805****Cynodon dactylon (L.) Persoon**

HARRI54. Alien.

**Cynosurus L., 1753****Cynosurus cristatus L.**

HARRI54. Alien. Harrington said the records are probably all from parks or plantings.

**Dactylis L., 1753****Dactylis glomerata L.**

HARRI54. Alien.

**Danthonia De Candolle, 1805****Danthonia californica Bolander**

HARRI54.

**Danthonia intermedia Vasey**

HARRI54.

**Danthonia parryi Scribner**

HARRI54. Bot. Gaz. 21:133. 1896. Colorado, Hall &amp; Harbour 622 (US). Type specimen from Colorado.

**Danthonia sericea Nuttall**

PORTE74. A species of eastern U.S. Report probably applies to D. parryi.

**Danthonia spicata (L.) P. Beauvois ex Roemer & Schultes var. pinetorum Piper**

HARRI54.

**Danthonia unispicata (Thurber) Munro**

HARRI54.

**Dasyochloa Willdenow, 1840****Dasyochloa pulchella (Humboldt, Bonpland, & Kunth) Willdenow ex Rydberg**

RYDBE06.

Erioneuron pulchellum (Humboldt, Bonpland, &amp; Kunth) Tateoka. TATEO61.

Tridens pulchellus (Humboldt, Bonpland, &amp; Kunth) A. S. Hitchcock. HARRI54.

**Deschampsia P. Beauvois, 1812****Deschampsia cespitosa (L.) P. Beauvois subsp. alpicola (Rydberg) Löve et al.**

LOVE71.

Deschampsia alpicola Rydberg. Bull. Torr. Bot. Club 32:601.1905. Type: El Paso Co.: Pikes Peak, 3600 m, 4 Sept. 1901, Underwood

20 (NY). Type specimen from Colorado.

**Deschampsia cespitosa (L.) P. Beauvois subsp. cespitosa**

HARRI54.

*Aira cespitosa* L. PORTE74.

*Deschampsia cespitosa* (L.) P. Beauvois var. *alpina* Vasey ex Beal, non Ducommun. Grasses N. Amer. 2:368. 1896. Type; Colorado, Letterman (US). Type specimen from Colorado.

*Deschampsia curtifolia* Scribner. RYDBE06. Misidentification of *D. cespitosa*.

*Deschampsia danthonioides* (Trinius) Munro ex Bentham

HITCH35. An annual of low altitudes west of our range.

*Aira danthonioides* Trinius. PORTE74. "summit of Gray's Peak, Dr. Smith." Extremely unlikely, possibly a case of mislabelling of a plant from another area.

**Dichanthelium Gould, 1974**

**Dichanthelium acuminatum (Swartz) Freckmann var. sericeum (Schmoll) Freckmann**

Box Canyon Hot Springs, Ouray.

**Dichanthelium acuminatum (Swartz) Gould & Clark var. acuminatum**

GREAT86. Combination made in Ann. Mo. Bot. Gard. 65:1121. 1979 "1978".

*Dichanthelium acuminatum* (Swartz) Gould & Clark var. *fasciculatum* (Torrey) Freckmann. GREAT86.

*Dichanthelium lanuginosum* (Elliott) Gould. GREAT86.

*Dichanthelium lanuginosum* (Elliott) Gould var. *fasciculatum* (Torrey) Spellberg. SPELL75.

*Panicum huachucae* Ashe. HARRI54.

*Panicum lanuginosum* Elliott.

*Panicum tennesseense* Ashe. HARRI54.

**Dichanthelium linearifolium (Scribner) Gould**

GOULD78.

*Dichanthelium perlongum* (Nash) Freckmann. GREAT86. Phytologia 39:269.1978.

*Panicum perlongum* Nash. HARRI54.

**Dichanthelium oligosanthos (Schultes) Gould var. scribnerianum (Nash) Gould**

GOULD78.

*Panicum oligosanthos* Schultes var. *scribnerianum* (Nash) Fernald. FERNA50.

*Panicum scribnerianum* Nash. HARRI54.

**Dichanthelium wilcoxianum (Vasey) Freckmann**

GREAT86. Phytologia 39:269.1978.

**Digitaria Heister, 1759**

**Digitaria californica (Bentham) Henrard**

*Trichachne californica* (Bentham) Chase. HARRI54.

*Trichachne saccharatum* (Buckley) Nash. RYDBE06.

**Digitaria ischaemum (Schreber) Schreber ex Mühlenberg**

HARRI54. Alien.

*Syntherisma humifusum* (Persoon) Rydberg. RYDBE06.

**Digitaria sanguinalis (L.) Scopoli**

HARRI54. Alien.

*Syntherisma sanguinale* (L.) Dulac. RYDBE06.

**Diplachne P. Beauvois, 1812 MCNEI79**

*Diplachne acuminata* Nash in Britton

RYDBE06. Misidentification of *D. fascicularis*.

**Diplachne dubia (Kunth) Scribner**

MCNEI79. Las Animas Co.: Upper Cottonwood Creek, 1993, D. Clark (COLO).

*Leptochloa dubia* (Kunth) Nees.

**Diplachne fascicularis (Lamarck) P. Beauvois**

MCNEI79.

*Leptochloa fascicularis* (Lamarck) A. Gray. HARRI54.

*Leptochloa mucronata* (Michaux) Kunth. RYDBE06. "Locality not given (Letterman)".

*Diplachne uninervia* (C. Presl) Parodi

MCNEI79. Erroneous Report.

*Leptochloa uninervia* (J. Presl in K. Presl) A. S. Hitchcock. HARRI54. Harrington evidently did not see a specimen. His MS notes that it was reported by Hitchcock, and by Swallen (citation?) [from El Paso county according to the Manual]. The report should be treated as doubtful, since the species is Mexican and S. American.

### ***Distichlis Rafinesque, 1819***

#### ***Distichlis stricta* (Torrey) Rydberg**

HARRI54; SAVIL79. Savile argues that morphology plus different fungal parasite *Puccinia* species argue for retention as a species.  
*Brizopyrum spicatum* (L.) Hooker & Arnott var. *strictum* A. Gray ex S. Watson. PORTE74.  
*Distichlis spicata* (L.) Greene subsp. *stricta* (Torrey) Thorne. Aliso 9:195.1978.  
*Uniola?* *stricta* Torrey. Ann. Lyc. Nat. Hist. N. Y. 1:155-156.1824. Type: probably Texas panhandle or western Oklahoma, fide GOODM95.

### ***Echinochloa P. Beauvois, 1812***

#### ***Echinochloa crus-galli* (L.) P. Beauvois**

TORRE27; HARRI54. Alien. Found by James at Rocky Ford in 1820!.  
*Echinochloa crus-galli* (L.) P. Beauvois var. *frumentacea* (Roxburgh) W. F. Wight. HARRI54.  
*Echinochloa crus-galli* (L.) P. Beauvois var. *mitis* (Pursh) Peterman. HARRI54. Annotations by Reyna, 1985.  
*Echinochloa crus-galli* (L.) P. Beauvois var. *zelayensis* (Humboldt, Bonpland, & Kunth) A. S. Hitchcock. HARRI54.  
*Panicum crus-galli* L. var. *pygmaeum* Kuntze. TORRE27; PORTE74, as the species. Rev. Gen. 2:783.1891. Type: "Colorado". Type specimen from Colorado.

### ***Eleusine Gaertner, 1788***

#### ***Eleusine indica* (L.) Gaertner**

HARRI54. Alien.

### ***Elymus L., 1753***

#### ***Elymus arizonicus* (Scribner & Smith) Gould**

LOVE84. Erroneous Report.  
*Agropyron arizonicum* Scribner & Smith. RYDBE06. Misidentification (of?).

#### ***Elymus canadensis* L.**

*Elymus brachystachys* Scribner & Ball. RYDBE06.  
*Elymus canadensis* L. var. *brachystachys* (Scribner & Ball) Farwell.  
*Elymus canadensis* L. var. *robustus* (Scribner & Smith) Mackenzie & Bush.  
*Elymus robustus* Scribner & Smith. RYDBE06.

#### ***Elymus elymoides* (Rafinesque) Swezey**

LOVE84. A misprint on p. 465 gave the type species as *E. sitanion*; this was corrected by hand to *E. elymoides* (Rafinesque) Swezey. Löve's species concept is conservative. See WILSO63 for a more liberal treatment.

*Aegilops hystrix* Nuttall. TORRE27.  
*Elymus sitanion* Schultes. PORTE74.  
*Sitanion brevifolium* J. G. Smith. RYDBE06.  
*Sitanion hystrix* (Nuttall) J. G. Smith. HARRI54; LOVE84.  
*Sitanion molle* J. G. Smith. RYDBE06.  
*Sitanion pubiflorum* J. G. Smith. RYDBE06.

#### ***Elymus glaucus* Buckley**

HARRI54; GOODM95. GOODM95 suggests that James' *E. striatus* was this, but it seems too far out on the plains for this; *E. canadensis* seems more likely, but the collection was not examined.

#### ***Elymus lanceolatus* (Scribner & Smith) Gould**

LOVE84.  
*Agropyron albicans* Scribner & Smith. LOVE84.  
*Agropyron dasystachyum* (Hooker) Scribner var. *riparium* (Scribner & Smith) Bowden. LOVE84.  
*Agropyron griffithsii* Scribner & Smith. LOVE84.  
*Agropyron lanceolatum* Scribner & Smith. RYDBE06.  
*Agropyron riparium* Scribner & Smith. LOVE84.  
*Elytrigia albicans* (Scribner & Smith) W. A. Weber. LOVE84.  
*Elytrigia dasystachya* (Hooker) Löve & Löve. LOVE84.  
*Elytrigia dasystachya* (Hooker) Löve & Löve subsp. *albicans* (Scribner & Smith) D. Dewey. LOVE84.

#### ***Elymus longifolius* (J. G. Smith) Gould**

LOVE84.

*Sitanion longifolium* J. G. Smith. HARRI54; LOVE84.

***Elymus macounii* Vasey**

RYDBE06; HARRI54. hybrid.

*Agrohordeum macounii* (Vasey) Lepage. Nat. Canad. 79:242.1952. Proposed as an intergeneric hybrid, *Critesion* x *Elymus*.

***Elymus multisetus* (J. G. Smith) Davy**

LOVE84.

*Sitanion jubatum* J. G. Smith. HARRI54; LOVE84.

***Elymus saundersii* Vasey**

Bull. Torr. Bot. Club 11:126.1884. Type: Huerfano Co.: La Veta Pass, Vasey; probably a hybrid, *E. elymoides* x *Elymus* cf. *trachycaulus*. Type specimen from Colorado.

*Agropyron saundersii* (Vasey) A. S. Hitchcock. HARRI54.

*Agrositanion saundersii* (Vasey) Bowden. BOWDE67.

***Elymus saxicola* Scribner & Smith**

Hybrid between species of *Elymus*.

*Agrositanion saxicola* (Scribner & Smith) Bowden. WILKE78.

***Elymus scribneri* (Vasey) Jones**

LOVE84.

*Agropyron scribneri* Vasey. HARRI54.

***Elymus trachycaulus* (Link) Gould ex Shinnars subsp. andinus (Scribner & Smith) Löve & Löve**

LOVE84.

*Agropyron andinum* (Scribner & Smith) Rydberg. RYDBE06.

*Agropyron latiglume* (Scribner & Smith) Rydberg.

*Agropyron richardsonii* (Trinius) Schrader. RYDBE06.

*Agropyron subsecundum* (Link) A. S. Hitchcock var. *andinum* (Scribner & Smith) A. S. Hitchcock.

*Agropyron violaceum* (Hornemann) Vasey. RYDBE06.

*Agropyron violaceum* Vasey var. *andinum* Scribner & Smith. USDA Div. Agrost. Bull. 4:30.1897. Type: CC: Gray's Peak, Jones 720. Type specimen from Colorado.

***Elymus trachycaulus* (Link) Gould ex Shinnars subsp. bakeri (E. Nelson) Löve**

LOVE84.

*Agropyron bakeri* E. Nelson. Bot. Gaz. 38:378.1904. Type: Mineral Co.: Pagosa Peak, 2750 m, June 1899, Baker 139 (RM). Type specimen from Colorado.

*Elymus bakeri* (E. Nelson) Löve. LOVE84.

***Elymus trachycaulus* (Link) Gould ex Shinnars subsp. subsecundus (Link) Löve & Löve**

LOVE84.

*Agropyron caninum* (L.) P. Beauvois. RYDBE06.

*Agropyron subsecundum* (Link) A. S. Hitchcock.

*Agropyron unilaterale* Cassidy, non P. Beauvois. Bull. Colo. Agr. Exp. Sta. 12:63.1890. "Colorado". Type specimen from Colorado.

*Triticum caninum* L.. PORTE74.

***Elymus trachycaulus* (Link) Gould ex Shinnars subsp. trachycaulus**

LOVE84.

*Agropyron tenerum* Vasey. Bot. Gaz. 10:258.1885. Lectotype (Hitchcock 1935): Fort Garland, 1884, Vasey s.n. (US). Type specimen from Colorado.

*Agropyron trachycaulum* (Link) Malte. HARRI54.

***Elymus virginicus* L.**

HARRI54.

*Elymus virginicus* L. var. *australis* (Scribner & Ball) A. S. Hitchcock. LOVE84.

***Elytrigia* Desvaux, 1810**

***Elytrigia repens* (L.) Nevski**

LOVE84. Alien.

*Agropyron occidentale* Scribner. RYDBE06.

*Agropyron pseudorepens* Scribner & Smith. HARRI54. Not listed by LOVE84.

*Agropyron pseudorepens* Scribner & Smith var. *magnum* Scribner & Smith. USDA Div. Agrost. Bull. 4:35.1897. Type: Enterprise, Rydberg 2401. Type specimen from Colorado.

*Agropyron repens* (L.) P. Beauvois. HARRI54; LOVE84.

Triticum repens L.. PORTE74.

**Enneapogon Desvaux ex P. Beauvois, 1812**

**Enneapogon desvauxii P. Beauvois**

KELLE89. MN: Sewemup Mesa, Kelley & Ballard 87-106a (CS).

**Eragrostis N. M. Wolf, 1781**

**Eragrostis barrelieri Daveau in Morot**

HARRI54. Alien.

**Eragrostis cilianensis (Allioni) F. T. Hubbard**

HARRI54. Alien.

Eragrostis major Host. RYDB06.

**Eragrostis curtipedicellata Buckley**

HARRI54.

**Eragrostis curvula (Schrader) Nees**

WILKE78. Alien.

**Eragrostis hypnoides (Lamarck) Britton, Sterns, & Poggenberg**

HARRI54. Alien.

**Eragrostis lutescens Scribner**

WEBER89C. JF: pond W of Church's Lake, Weber 8660.

**Eragrostis mexicana (Hornemann) Link subsp. virescens (J. Presl in K. Presl) Koch & Sanchez**

KOCH85.

Eragrostis orcuttiana Vasey. HARRI54.

**Eragrostis minor Host**

Alien.

Eragrostis perplexa Harvey. HARRI54.

Eragrostis poaeoides P. Beauvois. WEBER83B.

**Eragrostis pilosa (L.) P. Beauvois**

HARRI54. Alien.

Eragrostis diffusa Buckley. HARRI54.

Eragrostis pectinacea (Michaux) Nees. HARRI54.

Eragrostis purshii Schrader. PORTE74; RYDBE06.

**Eragrostis secundiflora J. Presl in K. Presl subsp. oxylepis (Torrey) S. D. Koch**

Rhodora 80:397.1978.

Eragrostis beyrichii J. G. Smith. WEBER66; GREAT86.

Eragrostis oxylepis (Torrey) Torrey. HARRI54.

**Eragrostis spectabilis (Pursh) Steudel**

HARRI54; KELLE89 (western slope report).

**Eragrostis trichodes (Nuttall) Wood**

HARRI54. Alien.

**Eremopyrum Jaubert & Spach**

**Eremopyrum triticeum (Gaertner) Nevski**

LOVE84. Alien.

Agropyron triticeum Gaertner. HARRI54.

**Eriochloa Humboldt, Bonpland, & Kunth, 1816**

**Eriochloa contracta A. S. Hitchcock**

HARRI54. BN, OT, PR.

**Erioneuron Nash, 1903**

**Erioneuron pilosum (Buckley) Nash**

TATEO61; GOODM95.

Tricuspis acuminata Munro. PORTE74.

Tridens pilosus (Buckley) A. S. Hitchcock. HARRI54.

Triodia pilosa (Buckley) Merrill.

**Festuca L., 1753 AIKEN90****Festuca arizonica Vasey**

HARRI54.

*Festuca scabrella* Torrey in Hooker var. *vaseyana* Hackel ex Beal. Grasses N. Amer. 2:605. 1896. [evidently based on same type as *F. vaseyana*, *ibid.*, p. 601. Type specimen from Colorado.

*Festuca vaseyana* Hackel ex Beal. Grasses N. Amer. 2:605. 1896. Type: Huerfano Co.: La Veta Pass, Vasey (US). Type specimen from Colorado.

**Festuca arundinacea Schreber**

HYLAN53. Alien.

*Festuca elatior* L. var. *arundinacea* (Schreber) Celakovsky. HARRI54.

**Festuca baffinensis Polunin**

WEBER61.

**Festuca brachyphylla Schultes subsp. coloradensis Fredriksen**

FREDE82. Summit Co.: Dry tundra slope, Hoosier Ridge E of Hoosier Pass summit, 12,000 ft., 18 Aug. 1960, Weber, Porsild, & Holmen 11118 (C, Isotype COLO). Type specimen from Colorado.

*Festuca brevifolia* R. Brown, non Mühlenberg. PORTE74.

*Festuca ovina* L. var. *brachyphylla* (Schultes) Piper. HARRI54.

*Festuca ovina* L. var. *duriuscula* A. Gray ex Porter & Coulter, non K. Koch. PORTE74.

**Festuca campestris Rydberg**

Aiken annotations in herb., 1983.

*Festuca fratercula Ruprecht*RYDBE06; PIPER06,13. A Mexican species. Colorado plants are *F. sororia*.**Festuca hallii (Vasey) Piper**

WEBER67.

*Festuca altaica* Trinius ssp. *hallii* (Vasey) V. Harms. HARMS85.

*Festuca scabrella* Torrey subsp. *hallii* (Vasey) W. A. Weber. WEBER61.

*Melica hallii* Vasey. Bot. Gaz. 6:296-297.1881. Type: Hall & Harbour 621 (US). Type specimen from Colorado.

**Festuca idahoensis Elmer**

HARRI54.

*Festuca ingrata* (Hackel) Rydberg. RYDBE06.

*Festuca ingrata* (Hackel) Rydberg var. *nudata* (Vasey) Rydberg. RYDBE06.

*Festuca ovina* L. var. *nudata* Vasey. RYDBE06.

**Festuca minutiflora Rydberg**

FREDE82. Bull. Torr. Bot. Club 32:608-609.1905. Type: LR: Cameron Pass, 13 July 1896, Baker s.n. (NY).

*Festuca brachyphylla* Schultes var. *endotera* (St.-Yves) Litard. HARRI54.

*Festuca brevifolia* R. Brown var. *endotera* St.-Yves. FREDE82. *Candollea* 2:254.1925. Type: Mineral Co.: Pagosa Peak, Aug. 1889, Baker 176). Type specimen from Colorado.

*Festuca brevifolia* R. Brown var. *utahensis* St.-Yves. FREDE82. *Candollea* 2:257.1925. Type: Mineral Co.: Pagosa Peak, Aug. 89, Baker 175. Type specimen from Colorado.

*Festuca ovina* L.

PORTE74; HARRI54. *F. ovina* does not occur outside of cultivation in America. Recently introduced in Rocky Mt. Nat. Park. Other reports refer to the *F. brachyphylla* group.

**Festuca pratensis Hudson**HYLAN53; HARRI54. Alien. *F. elatior* in part. See also *F. arundinacea*.**Festuca rubra L.**

HARRI54.

*Festuca earlei* Rydberg. HITCH35. Bull. Torr. Bot. Club 32:608.1905. Type: La Plata Co.: La Plata Canyon, 11 July 98, Baker, Earle & Tracy 920 (NY). Type specimen from Colorado.

*Festuca rubra* L. var. *lanuginosa* Mertens & Koch

HARRI54. Erroneous Report.

**Festuca saximontana Rydberg**

HOLME64; FREDE82. Rydberg, Bull. Torr. Bot. Club 36:536. 1909 acknowledges that he mistook this for the European *F. pseudovina* Hackel.

*Festuca pseudovina* Rydberg, non Hackel. RYDBE06; TUTIN64. A European species.

**Festuca saximontana Rydberg subsp. purpusiana (Saint-Yves) Frederiksen & Pavlick**

Herbarium annotations by S. Aiken, 1995, CC, Gunnison Co..

*Festuca scabrella* Torrey

HARRI54. Colorado records refer to *F. campestris*.

**Festuca sororia** Piper

HARRI54. See notes under *F. fratercula*.

**Festuca subulata** Trinius

Rio Blanco Co.

*Festuca jonesii* Vasey. RYDBE06. "Western Colorado." No specimen or locality cited.

**Festuca thurberi** Vasey in Rothrock

HARRI54. Cat. Pl. Survey W. 100th Merid. 56. 1874. Type: South Park, Wolf 1154 (US). Type specimen from Colorado.

**Glyceria R. Brown, 1810**

**Glyceria borealis** (Nash) Batchelder

HARRI54.

**Glyceria elata** (Nash ex Rydberg) Jones

HARRI54.

**Glyceria grandis** S. Watson in A. Gray

HARRI54; LOVE71. Diploid, 2n=20.

*Glyceria maxima* (C. J. Hartman) Holmboe subsp. *grandis* (S. Watson) Hultén. HULTE41.

*Panicularia americana* (Torrey) MacMillan. RYDBE06.

*Glyceria maxima* (Hartman) Holmberg

TUTIN64. Hexaploid, 2n=60.

*Glyceria aquatica* Wahlenberg, non (L.) J. & K. Presl. PORTE74. Report applies to *G. grandis*.

**Glyceria striata** (Lamarck) A. S. Hitchcock var. *stricta* (Scribner) Fernald

HARRI54.

**Helictotrichon Besser, 1827**

**Helictotrichon mortonianum** (Scribner) Henrard

HARRI54.

*Avena mortoniana* Scribner. Bot. Gaz. 21:133. pl. 11. 1896. Type: CC: Silver Plume, Shear 697 US). Type specimen from Colorado.

**Hesperostipa (Elias) Barkworth 1993 BARKW93**

**Hesperostipa comata** (Trinius & Ruprecht) Barkworth

BARKW93.

*Stipa comata* Trinius & Ruprecht. HARRI54. Mem. Acad. Imp. Sci. St. Petersburg. 5:75. 1842.

*Stipa comata* Trinius & Ruprecht var. *intermedia* Scribner & Tweedy. HARRI54.

*Stipa tweedyi* Scribner. RYDBE06.

**Hesperostipa neomexicana** (Thurber) Barkworth

BARKW93.

*Stipa neomexicana* (Thurber ex Coulter) Scribner. HARRI54.

*Stipa pennata* L. var. *neomexicana* Thurber. BARKW. Coulter, Man. Bot. Rocky Mts. 408. 1855.

**Hesperostipa spartea** (Trinius) Barkworth

BARKW93.

*Stipa spartea* Trinius. HARRI54. Mem. Acad. Imp. St. Petersburg. 1:82. 1830.

**Hierochloë R. Brown, 1810; WEIMA71**

**Hierochloë hirta** (Schrank) Borbas subsp. *arctica* (J. Presl in K. Presl) G. Weimarck

WEIMA71.

*Hierochloë borealis* Roemer & Schultes. PORTE74.

*Hierochloë odorata* (L.) P. Beauvois

HARRI54; WEIMA71. Erroneous Report.

*Savastana odorata* (L.) Scribner. RYDBE06.

**Hilaria Humboldt, Bonpland, & Kunth, 1816**

**Hilaria jamesii** (Torrey) Benth

HARRI54.



*Pleuraphis jamesii* Torrey. TORRE24,27; PORTE74. Ann. Lyc. Nat. Hist. N. Y. 1:148.1824. Type: South-central Otero Co., fide GOODM95. Type specimen from Colorado.

*Hilaria mutica* (Buckley) Bentham

RYDBE06. Reported on no evidence.

*Hilaria rigida* (Thurber) Bentham

WEBER87B,89C. SM: McIntyre Canyon (not collected), by Clair Button. Very doubtful unless verified!

**Holcus L., 1753**

**Holcus lanatus L.**

HARRI54. Alien.

**Hordeum L., 1753**

**Hordeum vulgare L. var. trifurcatum (Schlechtendal) Alefeld**

HARRI54. Alien.

**Hordeum vulgare L. var. vulgare**

HARRI54. Alien.

**Koeleria Persoon, 1805**

**Koeleria macrantha (Ledebour) Schultes**

ARNOW80,94. ARNOW80,94, provides the best summation of a problem tackled by Shinnars, Greuter and many others.

*Koeleria cristata* (L.) Persoon. HARRI54. Nomen ambiguum.

*Koeleria elegantula* Domin. Bibl. Bot. 65:172. 1907. Type: Gunnison Co.: Gunnison, Baker 578. Type specimen from Colorado.

*Koeleria gracilis* Persoon. Nomen confusum.

*Koeleria nitida* Nuttall var. *breviculmis* Domin. Bibl. Bot. 65:236. 1907. Type: Colorado, Baker, Earle & Tracy 114. Type specimen from Colorado.

**Leersia Swartz, 1788**

**Leersia oryzoides (L.) Swartz**

HARRI54. Alien.

*Homalocenchrus oryzoides* (L.) Pollich. RYDBE06.

**Leucopoa Grisebach, 1852**

**Leucopoa kingii (S. Watson) W. A. Weber**

WEBER66.

*Festuca confinis* Vasey. Bull. Torr. Bot. Club 11:126.1884. Type: Pen Gulch, Vasey (US). Type specimen from Colorado.

*Festuca kingii* (S. Watson) Scribner.

*Festuca kingii* Cassidy. HITCH35. See Hitchcock 1935, p. 883. Evidently based on *Poa kingii* S. Watson, not giving a basionym but a description. Type: LR: North Poudre. Specimen (CS) lost. Type specimen from Colorado.

*Hesperochloa kingii* (S. Watson) Rydberg. HARRI54.

*Poa kingii* S. Watson.

*Wasatchia kingii* (S. Watson) Jones.

**Leymus Hochstetter, 1848**

**Leymus ambiguus (Vasey & Scribner) D. Dewey**

LOVE84.

*Elymus ambiguus* Vasey & Scribner. Contr. U.S. Nat. Herb. 1:280.1893. Type: Clear Creek Co.: Pen Gulch, 1884, Vasey. Type specimen from Colorado.

*Elymus ambiguus* Vasey & Scribner var. *strigosus* (Rydberg) A. S. Hitchcock.

*Elymus strigosus* Rydberg. Bull. Torr. Bot. Club 32:609.1905. Type: Boulder Co.: near Boulder, 31 July 1886, Letterman 553 (NY). Type specimen from Colorado.

*Elymus villiflorus* Rydberg. Bull. Torr. Bot. Club 32:608.1905. Type: Boulder Co.: near Boulder, July 1902, Tweedy 4818 (NY). Type specimen from Colorado.

*Leymus innovatus* (Beal) Pilger subsp. *ambiguus* (Vasey & Scribner) Löve. Taxon 29:168.1980.

**Leymus cinereus (Scribner & Merrill) Löve**

LOVE84.

*Elymus cinereus* Scribner & Merrill. HARRI54.

*Leymus condensatus* (K. Presl) Löve

RYDBE06. Misidentification of *L. cinereus*.

*Elymus condensatus* K. Presl. PORTE74.

**Leymus salina (Jones) Löve**

LOVE84. The spelling "Salina" was chosen by Jones deliberately and is not an error but a noun in apposition referring to a locality, Salina.  
Elymus salina Jones. HARRI54.

**Leymus triticoides (Buckley) Pilger**

LOVE84.  
Elymus simplex Scribner & Williams. RYDBE06. LOVE84 makes this Leymus multiflorus (Gould) A. Löve.  
Elymus triticoides Buckley var. pubescens A. S. Hitchcock in Jepson.  
Elymus triticoides Buckley var. simplex (Scribner & Williams) C. L. Hitchcock. HARRI54.

**Lolium L., 1753****Lolium perenne L. subsp. italicum (A. Braun) Syme**

LOVE74. Alien.  
Lolium multiflorum Lamarck. HARRI54.

**Lycurus Humboldt, Bonpland, & Kunth, 1816 REEDE85*****Lycurus phleoides Humboldt, Bonpland, & Kunth***

HARRI54; KELLE89, western slope report; REEDE85. Species from Mexico, west Texas, S New Mexico.

**Lycurus setosus (Nuttall) C. Reeder**

REEDE85. Characterized by terminal seta on leaf blade, and acute or acuminate ligule.  
Pleopogon setosus Nuttall. Proc. Acad. Nat. Sci. Phila. 4:25.1848. Type from New Mexico.

**Melica L., 1753****Melica porteri Scribner**

HARRI54.  
Melica mutica Walter var. parviflora T. C. Porter in Porter & Coulter. Syn. Fl. Colorado 149.1874. Type: Glen Eyrie, Porter, is the first specimen cited. Type specimen from Colorado.  
Melica parviflora Scribner. Mem. Torr. Bot. Club 5:50.1894. Based on M. mutica var. parviflora. M. parviflora is preoccupied.

**Miscanthus Andersson, 1855****Miscanthus sinensis Andersson**

HARRI54. Alien. Cultivated, very rarely escaped and probably not persisting.

**Monroa Torrey, 1857****Monroa squarrosa (Nuttall) Torrey**

Monroa original spelling.  
Munroa squarrosa auctt., non Torrey. HARRI54.

**Muhlenbergia Schreber, 1789****Muhlenbergia andina (Nuttall) A. S. Hitchcock**

HARRI54.  
Muhlenbergia comata (Thurber ex A. Gray) Benth. RYDBE06.  
Vaseya comata Thurber ex A. Gray. Proc. Phila. Acad. 15:79-80.1863. Type: Hall & Harbour 685 (GH). Type specimen from Colorado.

**Muhlenbergia arenacea (Buckley) A. S. Hitchcock**

HARRI54.

**Muhlenbergia arenicola Buckley**

HARRI54.

**Muhlenbergia asperifolia (Nees & Meyen ex Trinius) Parodi**

HARRI54.  
Sporobolus asperifolius (Nees & Meyer) Thurber. RYDBE06.  
Vilfa asperifolia Nees & Meyen ex Trinius. PORTE74.

**Muhlenbergia brevis Goodding**

HARRI54. Conejos Co.

**Muhlenbergia cuspidata (Torrey) Rydberg**

HARRI54.  
Vilfa cuspidata Torrey. PORTE74.

**Muhlenbergia depauperata Scribner**

WEBER83B.

**Muhlenbergia filiculmis Vasey**

HARRI54. Contr. U. S. Nat. herb. 1:267-268.1893. Type: El Paso Co.: Ute Pass, Green Mt. Falls, 8500 ft., 2 Aug. 1892, Sheldon 321 (US). Type specimen from Colorado.

*Muhlenbergia thurberi* Rydberg. RYDBE06.

**Muhlenbergia filiformis (Thurber ex S. Watson) Rydberg**

HARRI54.

*Muhlenbergia aristata* (Rydberg) Rydberg, non Persoon. RYDBE06.

*Muhlenbergia aristulata* Rydberg. Nom. nov. for *M. aristata*.

*Muhlenbergia simplex* (Scribner) Rydberg. RYDBE06.

*Sporobolus aristatus* Rydberg. RYDBE06.

*Sporobolus simplex* Scribner. U.S.D.A. Div. Agrost. Bull. 11:48-49.f.6.1898. Type: CC: Georgetown, 19 Aug. 1895, Rydberg (US). Type specimen from Colorado.

***Muhlenbergia glomerata* (Willdenow) Trinius**

POHL69. Misidentification of *M. racemosa*.

***Muhlenbergia gracilis* (Humboldt, Bonpland, & Kunth) Kunth**

RYDBE06. Misidentification of *M. montana*.

**Muhlenbergia mexicana (L.) Trinius**

HARRI54.

*Muhlenbergia sylvatica* Torrey & Gray var. *setiglumis* S. Watson. PORTE74; CRONQ72.

**Muhlenbergia minutissima (Steudel) Swallen**

HARRI54.

**Muhlenbergia montana (Nuttall) A. S. Hitchcock**

HARRI54.

*Muhlenbergia gracilis* Trinius var. *breviaristata* Vasey in Rothrock. Cat. Pl., Survey W. 100th Meridian 54. 1874. Type: LK: Twin Lakes, 1873, Wolf 1090 (US). Type specimen from Colorado.

*Muhlenbergia subalpina* Vasey. RYDBE06.

**Muhlenbergia pauciflora Buckley**

HARRI54. One record, LP. No COLO specimens.

**Muhlenbergia porteri Scribner**

HARRI54.

*Muhlenbergia texana* Thurber. PORTE74.

**Muhlenbergia pungens Thurber ex A. Gray**

HARRI54. Proc. Phila. Acad. Sci. 15:78.1863. Type: Hall & Harbour 632 [probably on the eastern plains]. Type specimen from Colorado.

**Muhlenbergia racemosa (Michaux) Britton, Sterns, & Poggenberg**

HARRI54.

***Muhlenbergia ramulosa* (Humboldt, Bonpland, & Kunth) Swallen**

HITCH35. A Mexican species.

*Vilfa ramulosa* Humboldt, Bonpland, & Kunth. PORTE74. The report applies to *M. wolfii*.

**Muhlenbergia richardsonis (Trinius) Rydberg**

HARRI54.

*Vilfa depauperata* Torrey in Hooker. PORTE74.

**Muhlenbergia schreberi J. F. Gmelin**

HARRI54. Alien. Not naturalized.

**Muhlenbergia thurberi (Scribner) Rydberg**

WEBER85A.

**Muhlenbergia torreyi (Kunth) A. S. Hitchcock ex Bush**

HARRI54.

*Agrostis caespitosa* Torrey non Salisbury. TORRE24A; GOODM95. Ann. Lyc. Nat. Hist. N. Y. 1:152-153.1824. Type: Arkansas River below Turkey Creek, near Pueblo, fide GOODM95. Type specimen from Colorado.

*Muhlenbergia gracillima* Torrey. PORTE74; RYDBE06.

**Muhlenbergia wolfii (Vasey) Rydberg**

RYDBE06; HARRI54; SWALL47. Teller Co.: Clyde; Twin Lakes, Halfway House. A Peterson 1989 annotation of a Chihuahuan specimen indicates that he considers this a synonym of *M. ramulosa* (HBK) Swallen.

*Sporobolus confusus* Vasey. RYDBE06.

*Sporobolus wolfii* Vasey. Nom. nov. in *Sporobolus*, for *Vilfa minima*.

*Vilfa minima* Vasey in Rothrock, non Trinius. HITCH35. Cat. U.S. Geogr. Surv. 100th Merid. 282.1878. Type: Lake Co.: Twin Lakes, Wolf 1077 US). Type specimen from Colorado.

***Muhlenbergia wrightii* Vasey ex Coulter**

HARRI54.

*Muhlenbergia coloradensis* Mez. Fedde, Repert. Sp. Nov. 17:213.1921. Type: El Paso Co.: Cheyenne Canyon, Jones 806 !Reeder (corresp.). Type specimen from Colorado.

***Nassella Desvaux 1854 BARKW93***

***Nassella viridula* (Trinius) Barkworth**

BARKW93.

*Stipa viridula* Trinius. HARRI54; MONDR78.

***Oryzopsis Michaux, 1803***

***Oryzopsis asperifolia* Michaux**

HARRI54.

***Oryzopsis exigua* Thurber**

HARRI54.

***Oryzopsis pungens* (Torrey ex Sprengel) A. S. Hitchcock**

HARRI54.

***Panicum L., 1753***

*Panicum amarum* Elliott

PORTE74. A plant of coastal dunes. Report applies to *P. virgatum*.

***Panicum capillare* L.**

HARRI54. Alien.

*Panicum capillare* L. var. *occidentale* Rydberg. HARRI54.

***Panicum dichotomiflorum* Michaux**

HARRI54. Alien.

*Panicum gymnocarpum* Elliott

WEBER79A. The specimen has been re-examined. Bent County: McClave, 13 July 1961, G. Zonitch (CS 42841). It is a very immature specimen of *P. virgatum*.

***Panicum hallii* Vasey**

HARRI54.

***Panicum hillmanii* Chase**

WEBER83B.

***Panicum miliaceum* L.**

HARRI54. Alien.

***Panicum obtusum* Humboldt, Bonpland, & Kunth**

HARRI54.

*Panicum tenue* Mühlenberg

A species of the southeastern U.S.

*Panicum unciphyllum* Trinius

RYDBE06. Misidentification.

***Panicum virgatum* L.**

HARRI54.

*Panicum virgatum* L. var. *glaucophyllum* Cassidy. Colo. Agr. Exp. Sta. Bull. 12:29. 1890. Type: "Colorado". Type specimen from Colorado.

***Pascopyrum Löve, 1980***

***Pascopyrum smithii* (Rydberg) Löve**

LOVE84.

*Agropyron molle* (Scribner & Smith) Rydberg. RYDBE06.

*Agropyron palmeri* (Scribner & Smith) Rydberg. RYDBE06.

*Agropyron smithii* Rydberg. HARRI54.

*Agropyron smithii* Rydberg forma *molle* (Scribner & Smith) Gillett & Senn.

*Agropyron smithii* Rydberg var. *molle* (Scribner & Smith) Jones. HARRI54.  
*Agropyron smithii* Rydberg var. *palmeri* (Scribner & Smith) Heller. HARRI54.

**Paspalum L., 1753**

**Paspalum dilatatum Poiret**

HARRI54. Alien.

**Paspalum pubiflorum Ruprecht ex Fournier var. glabrum Vasey & Scribner**

WEBER55. Alien.

**Paspalum racemosum Lamarck**

HARRI54. Alien.

*Paspalum setaceum Michaux*

PORTE74. A species of SE U.S. Report possibly applies to a *Paspalum* collected on the eastern plains.

**Paspalum setaceum Michaux var. stramineum (Nash) D. Banks**

BANKS66. Alien.

*Paspalum stramineum* Nash. HARRI54; BANKS66.

**Pennisetum L. C. Richard ex Persoon, 1805**

**Pennisetum setaceum (Forskål) Chiovenda**

HARRI54. Alien. Not naturalized.

**Pennisetum villosum R. Brown**

HARRI54. Alien. Not naturalized.

**Phalaris L., 1753**

**Phalaris canariensis L.**

HARRI54. Alien.

**Phalaris caroliniana Walter**

HARRI54. Alien.

**Phalaris minor Retzius**

HARRI54. Alien.

**Phalaroides N. M. Wolf, 1781**

**Phalaroides arundinacea (L.) Rauschert**

TSVEL76. Alien. Fedde Repert. Sp. Nov. 79:409.1969.

*Phalaris arundinacea* L. HARRI54.

*Phalaris arundinacea* L. var. *picta* L. HARRI54.

**Phippsia R. Brown, 1823**

**Phippsia algida (Phipps) R. Brown**

HARRI54; WEBER54.

**Phleum L., 1753**

*Phleum alpinum* L.

HARRI54; HYLAN53. Our plants are *P. commutatum*.

**Phleum commutatum Gaudin**

HYLAN53; LOVE71.

**Phleum pratense L.**

HARRI54. Alien.

**Phragmites Adanson, 1763**

**Phragmites australis (Cavanilles) Trinius ex Steudel**

CLAYT68.

*Phragmites communis* Trinius. HARRI54.

*Phragmites phragmites* (L.) Karsten. RYDBE06.

**Piptatherum P. Beauvois 1812 BARKW93**

**Piptatherum micranthum (Trinius & Ruprecht) Barkworth**

BARKW93.

*Oryzopsis micrantha* (Trinius & Ruprecht) Thurber. HARRI54.

Urachne micrantha Trinius & Ruprecht) Barkworth. Mem. Acad. Imp. Sci. St. Petersb. 5:16. 1842.

***Piptochaetium K. Presl, 1830***

Erroneous Report

***Piptochaetium avenaceum (L.) Parodi***

Erroneous Report.

*Stipa avenacea* L..

*Stipa barbata* Michaux. TORRE27. Misidentification of *Hesperostipa comata*.

***Piptochaetium fimbriatum (Humboldt, Bonpland, & Kunth) A. S. Hitchcock***

WEBER66. Erroneous Report.

**Poa L., 1753 SOREN85**

***Poa abbreviata R. Brown subsp. pattersonii (Vasey) Löve et al.***

LOVE71. SOREN85 maintains as a species.

*Poa pattersonii* Vasey. HARRI54. Contr. U. S. Nat. Herb. 1:275.1893. Type: vicinity of Gray's Peak, 1885, Patterson 154 (US). Type specimen from Colorado.

***Poa agassizensis Boivin & D. Löve***

BOIVI60. SOEN85 lumps with [*P. pratensis*].

***Poa alpina L.***

HARRI54.

***Poa annua L.***

HARRI54. Alien.

***Poa arctica R. Brown***

HARRI54.

*Poa alpicola* Nash. RYDBE06.

*Poa arctica* R. Brown subsp. *grayana* (Vasey) Löve et al.. LOVE71.

*Poa callichroa* Rydberg. RYDBE06; HITCH35. Bull. Torr. Bot. Club 32:603.1905. Type: El Paso Co.: Dead Lake, Pike's Peak, 14 Aug. 1901, Clements & Clements 457 (NY). Type specimen from Colorado.

*Poa chiogenes* Gandoger. Bull. Soc. Bot. France 66:302.1919. Type: CC: Gray's Peak, Crandall. Type specimen from Colorado.

*Poa grayana* Vasey. Contr. U. S. Nat. Herb. 1:272.1893. Type: Gray's Peak, 1885, Patterson 14 (US). Type specimen from Colorado.

*Poa longipila* Nash ex Rydberg. Mem. N. Y. Bot. Gard. 1:46.1900. Type from Yellowstone Park.

*Poa phoenicea* Rydberg. HITCH35. Bull. Torr. Bot. Club 32:605.1905. Type: El Paso Co.: Pikes Peak Valley, 21 Aug. 1901, Clements & Clements 466 (NY). Type specimen from Colorado.

*Poa tricholepis* Rydberg. HITCH35. Bull. Torr. Bot. Club 32:606.1905. Type: Mineral Co.: Pagosa Peak, Aug. 1899, Baker 210 (NY). Type specimen from Colorado.

***Poa arctica R. Brown subsp. aperta (Scribner & Merrill) Soreng***

SOREN85.

*Poa aperta* Scribner & Merrill. RYDBE06.

***Poa arida Vasey***

HARRI54.

*Poa andina* Nuttall. PORTE74.

*Poa glaucifolia* Scribner & Williams. HARRI54. SOREN85 calls this a shade or mesic form. Hybrid.

*Poa pratericola* Rydberg. RYDBE06.

*Poa pseudopratensis* Scribner & Rydberg. RYDBE06.

*Poa sheldonii* Vasey. HITCH35. Contr. U. S. Nat. Herb. 1:276.1893. Type: Chaffee Co.: Cottonwood Cr., Buena Vista, 4 July 1892, Sheldon 615 (US). Type specimen from Colorado.

***Poa bigelovii Vasey & Scribner***

RYDBE06; HARRI54. Las Animas Co.: Purgatoire near Trinidad; El Paso Co.: Colorado Springs, 1879, Jones (COLO).

***Poa bulbosa L.***

HARRI54. Alien.

***Poa cenisea Allioni***

RYDBE06. A European species.

***Poa compressa L.***

HARRI54. American material seems to be distinct from European.

***Poa cusickii Vasey subsp. cusickii***

HARRI54; SOREN91. Erroneous report.

**Poa cusickii Vasey subsp. epilis (Scribner) W. A. Weber**

WEBER82B.

*Poa epilis* Scribner. HARRI54. USDA Div. Agrost. Circ. 9:5.1899. Type: Buffalo Pass, 13 Aug. 1898, Shear & Bessey 1457 (US). Type specimen from Colorado.

*Poa subpurpurea* Rydberg. RYDBE06.

**Poa cusickii Vasey subsp. pallida Soreng**

SOREN85.

*Poa nematophylla* Rydberg. SOREN91. Bull. Torr. Bot. Club 32:606.1905. Type: Rio Blanco Co.: Meeker, 8 June 1902, Osterhout 2601 (NY). Putative hybrid of *P. cusickii* subsp. *pallida* and *P. fendleriana*. Type specimen from Colorado.

*Poa subaristata* Scribner, non Philippi. SOREN91.

**Poa fendleriana (Steudel) Vasey**

HARRI54.

*Poa andina* Nuttall var. *spicata* Vasey in Rothrock. HITCH35. Cat. U. S. Geogr. Surv. 100th Merid. 289-290.1878. Type: "Colorado", 1873, Wolf 1135-7 (US). Type specimen from Colorado.

*Poa brevipaniculata* Scribner & Williams. HITCH35. USDA Div. Agrost. Circ. 9:2-3.1899. Type: Table Rock, 25 May 1891, Breninger 554 (US). Type specimen from Colorado.

*Poa brevipaniculata* Scribner & Williams var. *subpallida* T. A. Williams. USDA Div. Agrost. Cir. 10:5.1889. Type: Hall & Harbour 674 pr.p.. Type specimen from Colorado.

*Poa longipedunculata* Scribner. RYDBE06.

*Poa longipedunculata* Scribner var. *virescens* T. A. Williams. RYDBE06.

*Poa scabriuscula* T. A. Williams. RYDBE06.

**Poa fendleriana (Steudel) Vasey subsp. longiligula (Scribner & Williams) Soeng**

SOREN85.

*Poa longiligula* Scribner & Williams. HARRI54; SOREN85.

**Poa glauca M. Vahl subsp. rupicola (Nash) W. A. Weber**

WEBER82B.

*Poa caesia* J. E. Smith var. *rigida* Vasey in Rothrock. Cat. U. S. Geogr. Surv. 100th Merid. 290.1878. Type: not designate (Park Co.-ST). Type specimen from Colorado.

*Poa caesia* J. E. Smith var. *strictior* Jones. PORTE74.

*Poa glauca* M. Vahl var. *rupicola* (Nash) Boivin.

*Poa rupicola* Nash. HARRI54.

**Poa leptocoma Trinius**

RYDBE06; HARRI54. Uncomfortably close to *P. reflexa*.

*Poa crandallii* Gandoger. HITCH35. Bull. Soc. Bot. France 66:301-302.1919. Type: LR: 1898, Crandall. Type specimen from Colorado.

**Poa lettermanii Vasey**

HARRI54. Contr. U. S. Nat. Herb. 1:273-274.1893. Type: CC: Gray's Peak, 1885, Letterman 7 (US). Löve believes this is not a *Poa*. Type specimen from Colorado.

*Poa brandegei* Scribner in Beal. Grasses N. Amer. 2:544. 1896. Type: CC: Gray's Peak, Jones 714 (US). Type specimen from Colorado.

*Poa monteivansii* L. Kelso. Biol. Lfl. 29:2.1945. Type: CC: Mt. Evans, Kelso 427. HITCH35 recognized this as a species. Type specimen from Colorado.

*Puccinellia lettermanii* (Vasey) Ponert.

**Poa macroclada Rydberg**

Bull. Torr. Bot. Club 32:604.1905. Type: Gunnison Co.: Roger's, Gunnison Watershed, 14 Aug. 1901, Baker 802 (NY). Type specimen from Colorado.

**Poa nemoralis L. subsp. interior (Rydberg) W. A. Weber**

WEBER82B. SOREN85 maintains as a species.

*Poa crocata* Michaux. RYDBE06.

*Poa interior* Rydberg. RYDBE06; HARRI54.

*Poa nemoralis* L. var. *interior* (Rydberg) Butters & Abbe.

**Poa nervosa (Hooker) Vasey**

HARRI54.

*Poa subreflexa* Rydberg. HITCH35. Bull. Torr. Bot. Club 36:535.1909. Type: Routt Co.: mts. north of Steamboat Springs, 26 July 1891, (coll.?) 3731 (NY). Type specimen from Colorado.

*Poa vaseyana* Scribner in Beal. Grasses N. Amer. 2:532. 1896. Type: CC. Georgetown, 1886, Patterson (US). Type specimen from Colorado.

*Poa wheeleri* Vasey in Rothrock. HITCH35. Cat. U.S. Geogr. Surv. 100th Merid. 291. 1878. Type: Park Co.: South Park, 1873, Vasey 1131 (US). Type specimen from Colorado.

### ***Poa occidentalis* Vasey**

HARRI54.

*Poa flexuosa* J. E. Smith var. *occidentalis* Vasey in Rothrock. Cat. U.S. Geogr. Surv. 100th Merid. 290-291.1878. Type: LK: Twin Lakes, 1873, Wolf (US). Type specimen from Colorado.

*Poa flexuosa* J. E. Smith var. *robusta* Vasey. Contr. U. S. Nat. Herb. 1:271-272.1893. Type: "mts. of Colorado," 1868, Vasey 673 (US). Type specimen from Colorado.

*Poa platyphylla* Nash & Rydberg. RYDBE06.

### ***Poa palustris* L.**

HARRI54.

*Poa serotina* Ehrhart ex Schrader. PORTE74; RYDBE06.

### ***Poa pratensis* L.**

HARRI54. Alien.

### ***Poa reflexa* Vasey & Scribner**

HARRI54. Contr. U. S. Nat. Herb. 1:276.1893. Type: CC: Mt. Kelso, 1885, Letterman (US). Type specimen from Colorado.

*Poa pudica* Rydberg. RYDBE06; HITCH35. Bull. Torr. Bot. Club 32:603.1905. Type: CC: Stevens Mine, Gray's Peak, 23 Aug. 1895, Rydberg 2443 (NY). Type specimen from Colorado.

### ***Poa secunda* J. Presl in K. Presl**

HARRI54; ARNOW81.

*Poa ampla* Merrill. HARRI54. SOREN85: a phase of *P. secunda*.

*Poa buckleyana* Nash. RYDBE06.

*Poa canbyi* (Scribner) T. J. Howell. HARRI54.

*Poa gracillima* Vasey. HARRI54. See discussion in Intermountain Flora.

*Poa juncifolia* Scribner. HARRI54.

*Poa juncifolia* Scribner var. *ampla* Dorn. DORN88C.

*Poa laevigata* Scribner. RYDBE06.

*Poa lucida* Vasey. Contr. U. S. Nat. Herb. 1:274.1893. Type: CC: Georgetown, 1885, Patterson 73 (US). Type specimen from Colorado.

*Poa nevadensis* Vasey ex Scribner. HARRI54.

*Poa sandbergii* Vasey. ARNOW81.

*Poa scabrella* (Thurber) Benth. HARRI54.

*Poa tenuifolia* Nuttall ex S. Watson, non L.. PORTE74.

*Poa tenuifolia* Nuttall ex S. Watson, non L. var. *elongata* Vasey in Rothrock. U. S. Survey W 100th Meridian, Rep. 6:290. 1878. Type: LK: Twin Lakes, Wolf 1141 (US). Type specimen from Colorado.

*Poa truncata* Rydberg. HITCH35 (sub *P. ampla*). Bull. Torr. Bot. Club 32:607.1905. Type: ST: Dillon, 26 Aug. 1896, Clements 373 (NY). Type specimen from Colorado.

### ***Poa stenantha* Trinius**

HARRI54. Erroneous Report.

### ***Poa tracyi* Vasey**

SOREN83.

*Poa occidentalis* Rydberg, non Vasey. HARRI54.

### ***Poa trivialis* L.**

HARRI54. Alien. Occasional in wetlands, Boulder area.

## **Podagrostis Scribner & Merrill 1910 BJORK60**

### ***Podagrostis humilis* (Vasey) Björkman**

BJORK60.

*Agrostis humilis* Vasey. HARRI54.

### ***Podagrostis thurberiana* (A. S. Hitchcock) Hultén**

BJORK60.

*Agrostis thurberiana* A. S. Hitchcock. HARRI54.

## **Polypogon Desfontaines, 1798**

### ***Polypogon elongatus* Humboldt, Bonpland, & Kunth**

Boulder Co.: Ertl property, Boulder Creek, 21 July 1972, G. A. Brown 450 (CS!). Misidentification of *P. interruptus*.

### ***Polypogon interruptus* Humboldt, Bonpland & Kunth**



CRONQ72. Alien. Arapahoe Co.: sandy streamside, E. Toll Gate Cr. between Chambers Rd. and Centratech Pkwy., Yeatts & Wingate 3025 COLO.

**Polypogon monspeliensis (L.) Desfontaines**

HARRI54. Alien.

**Polypogon viridis (Gouan) Breistroffer**

TUTIN64. Alien. Breistroffer, Bull. Soc. Bot. Fr. 110 (Sess. Extr.):56.1966. Baca and Montezuma counties (CS!).

Agrostis semiverticillata (Forskål) C. Christensen. HARRI54.

Polypogon semiverticillatus (Forskål) Hylander. HYLAN53.

**Psathyrostachys Nevski, 1934****Psathyrostachys juncea (Fischer) Nevski**

LOVE84. Alien.

Elymus junceus Fischer. WEBER66.

**Pseudoroegneria Löve, 1980****Pseudoroegneria spicata (Pursh) Löve subsp. inermis (Scribner & Smith) Löve**

LOVE84.

Agropyron inerme (Scribner & Smith) Rydberg. HARRI54.

Agropyron spicatum (Pursh) Scribner & Smith var. inerme Heller.

**Pseudoroegneria spicata (Pursh) Löve subsp. spicata**

LOVE84.

Agropyron divergens Nees. RYDBE06.

Agropyron spicatum (Pursh) Scribner & Smith. HARRI54.

Agropyron strigosum (Thurber in S. Watson) Coulter. RYDBE06.

Agropyron vaseyi Scribner & Smith. RYDBE06.

Triticum strigosum Thurber ex S. Watson, non Lessing. PORTE74.

**Ptilagrostis Grisebach, 1852*****Ptilagrostis mongholica (Turczaninov ex Trinius) Grisebach***

Erroneous Report.

*Stipa mongholica* Turczaninov. PORTE74. Our plant is *P. porteri*.

***Ptilagrostis porteri (Rydberg) W. A. Weber***

WEBER66.

*Ptilagrostis mongholica* (Turczaninov ex Trinius) Grisebach subsp. *porteri* (Rydberg) Barkworth. BARKW83. We do not agree on the taxonomic level.

*Stipa porteri* Rydberg. HARRI54. Bull. Torr. Bot. Club 32:599.1905. Rydberg provided the name and cited the description by PORTE74.

**Puccinellia Parlatores, 1848*****Puccinellia airoides Watson & Coulter***

HARRI54. *Poa airoides* Nuttall, non *Poa airoides* Koeler, 1802. But ICBN rule 72 allows use of the specific epithet in *Puccinellia*.

*Glyceria airoides* Thurber. PORTE74.

*Phippsia airoides* (Watson & Coulter) Löve & Löve.

*Puccinellia nuttalliana* (Schultes) A. S. Hitchcock.

***Puccinellia distans (L.) Parlatores***

HARRI54. Alien. Some doubt that we actually have this in the flora.

*Glyceria distans* (L.) Wahlenberg. PORTE74.

***Puccinellia lemmonii (Vasey) Scribner***

WILKE78. Alien. Specimens doubtfully identified (CS).

**Redfieldia Vasey, 1887*****Redfieldia flexuosa (Thurber ex A. Gray) Vasey***

HARRI54.

*Grappheporum flexuosum* Thurber ex A. Gray. Proc. Amer. Acad. 15:78.1863. Type: Hall & Harbour 635 (no locality given). Type specimen from Colorado.

**Schedonnardus Steudel, 1854*****Schedonnardus paniculatus (Nuttall) Trelease***

HARRI54.

*Lepturus paniculatus* Nuttall. PORTE74.

**Schizachne Hackel, 1909**

**Schizachne purpurascens (Torrey) Swallen**

HARRI54.

*Avena striata* Michaux, non Lamarck. PORTE74; RYDBE06.

**Schizachyrium Nees, 1829**

**Schizachyrium scoparium (Michaux) Nash**

GOULD67. Gould provides a key to the segregate genera and all new combinations.

*Andropogon scoparius* Michaux. HARRI54.

**Sclerochloa P. Beauvois, 1812**

**Sclerochloa dura (L.) P. Beauvois**

HARRI54. Alien.

**Scleropogon Philippi, 1870**

**Scleropogon brevifolius Philippi**

HARRI54.

**Secale L., 1753**

**Secale cereale L.**

HARRI54. Alien.

**Setaria P. Beauvois, 1812**

**Setaria glauca (L.) P. Beauvois**

REEDE51; TERRE76. Alien.

*Chaetochloa glauca* (L.) Scribner. RYDBE06.

*Setaria lutescens* (Weigel) F. T. Hubbard. HARRI54; TERRE76.

*Setaria pumila* (Poiret) Roemer & Schultes. KARLS87. Karlsson uses this name in preference to *S. glauca*, but does not explain. Does he follow CLAYT79 (paper not seen)?.

**Setaria italica (L.) P. Beauvois**

HARRI54. Alien. Escaped from cultivation, not naturalized.

**Setaria leucopila (Scribner & Merrill) K. Schumann**

EMERY57.

*Chaetochloa composita* (Humboldt, Bonpland, & Kunth) Scribner & Merrill. RYDBE06. See discussion in HITCH35, p. 963.

*Setaria macrostachya* Humboldt, Bonpland, & Kunth. HARRI54; EMERY57.

**Setaria verticillata (L.) P. Beauvois**

HARRI54. Alien.

**Setaria viridis (L.) P. Beauvois**

HARRI54; FAIRB59. Alien. *S. viridis* is diploid, *S. faberi* is tetraploid and differs only in pilose upper surface of lvs!.

*Chaetochloa viridis* (L.) Scribner. RYDBE06.

**Sorghastrum Nash, 1901**

**Sorghastrum avenaceum (Michaux) Nash**

BAUM67.

*Andropogon ciliatum* Elliott. GOODM95.

*Sorghastrum nutans* (L.) Nash. HARRI54.

*Sorghum nutans* (L.) A. Gray. PORTE74.

**Sorghum Moench, 1794**

**Sorghum halepense (L.) Persoon**

HARRI54. Alien.

**Sorghum vulgare Persoon**

HARRI54. Alien.

**Spartina Schreber, 1789**

*Spartina cynosuroides* (L.) Link

PORTE74; RYDBE06; TORRE27. An eastern American salt marsh species. Report applies to *S. pectinata*.

***Spartina gracilis* Trinius**

HARRI54. Alien.

***Spartina pectinata* Link**

HARRI54.

**Sphenopholis Scribner, 1906*****Sphenopholis obtusata* (Michaux) Scribner**

HARRI54; ERDMA65.

*Eatonia pennsylvanica* (De Candolle) A. Gray. RYDBE06.

*Eatonia robusta* (Vasey) Rydberg. RYDB06.

*Sphenopholis intermedia* (Rydberg) Rydberg. HARRI54; ERDMA65.

*Sphenopholis obtusata* (Michaux) Scribner var. *major* (Torrey) Erdman. ERDMA65.

**Sporobolus R. Brown, 1810*****Sporobolus airoides* (Torrey) Torrey**

HARRI54.

*Agrostis airoides* Torrey. TORRE24; GOODM95. Ann. Lyc. Nat. Hist. 1:151-152.1824. Type: "On the branches of the SArkansas, near the Rocky Mountains." Probably between Elephant Rock, El Paso Co., and Bachicha Creek, Las Animas Co., fide GOODM95. Type specimen from Colorado.

*Vilfa airoides* (Torrey) Trinius. PORTE74.

***Sporobolus asper* (Michaux) Kunth**

HARRI54.

***Sporobolus contractus* A. S. Hitchcock**

HARRI54.

***Sporobolus cryptandrus* (Torrey) A. Gray**

TORRE24A; GOODM95; HARRI54. Type probably from West Texas or Oklahoma, fide GOODM95. Type specimen from Colorado.

*Vilfa cryptandra* Torrey. PORTE74.

***Sporobolus flexuosus* (Thurber) Rydberg**

RYDBE06 (doubtfully); WEBER83B.

***Sporobolus giganteus* Nash**

HARRI54.

***Sporobolus heterolepis* (A. Gray) A. Gray**

HARRI54.

***Sporobolus nealleyi* Vasey**

RYDBE06. Contrib. U.S. Nat. Herb. 1:57.1890. Type from Texas. "Alamosa." Misidentification, fide HARRI54; new record: Pueblo Co.: Stone City road, gypsum flat, 11 June 1994, [Weber & Wittmann 18990].

***Sporobolus neglectus* Nash**

HARRI54.

*Sporobolus pyramidatus* (Lamarck) A. S. Hitchcock

HARRI54. Vasey specimen at NY evidently mislabeled, probably was an Arizona collection.

*Sporobolus argutus* (Nees) Kunth. RYDBE06.

***Sporobolus texanus* Vasey**

HARRI54.

**Thinopyrum Löve, 1980 BARKW85*****Thinopyrum intermedium* (Host) Barkworth & Dewey**

BARKW85. Alien.

*Agropyron intermedium* (Host) P. Beauvois. HARRI54.

*Elytrigia intermedia* (Host) Nevski. LOVE84.

*Trichopyrum intermedium* (Host) Löve. LOVE84.

***Thinopyrum intermedium* (Host) Barkworth & Dewey subsp. *barbulatum* (Schur) Barkworth & Dewey**

BARKW85. Alien.

*Agropyron trichophorum* (Link) Richter. HARRI54; LOVE84.

*Elytrigia intermedia* (Host) Nevski subsp. *barbulata* (Schur) Löve. LOVE84.

***Thinopyrum ponticum* (Podpera) Barkworth & Dewey**

BARKW85. Alien.

*Agropyron elongatum* (Host) P. Beauvois. HARRI54.

*Lophopyrum elongatum* (Host) Löve. LOVE84; BARKW85.

**Torreyochloa Church, 1949**

***Torreyochloa pauciflora* (J. Presl in K. Presl) Church**

CHURC49.

*Glyceria pauciflora* J. Presl in K. Presl. HARRI54.

*Panicularia holmii* Beal. *Torreya* 1:43.1901. Type: LR: Lamb's Ranch, Long's Peak, 8,600 ft., 8 July 1909, Holm 249. Type specimen from Colorado.

*Panicularia pauciflora* (K. Presl) Kuntze. RYDBE06.

***Tridens* Roemer & Schultes, 1817**

*Tridens albescens* (Vasey) Wootton & Standley

HARRI54. The report, "Colorado" is unsubstantiated and probably an error.

*Tridens flavus* (L.) Hitchcock

Erroneous Report.

*Tricuspis seslerioides* Torrey. TORRE27. Misidentification or incorrect locality, fide GOODM95.

***Tridens muticus* (Torrey) Nash var. *elongatus* (Buckley) Shinnery**

HARRI54. Harrington stated that the report of *T. muticus* was in error, but Mrs. Chase (letter, 3 Jan. 1945) said one specimen on reexamination turned out to be *T. elongatus*.

*Tricuspis mutica* Torrey. PORTE74. FN: Cañon City, 1873, Greene. Specimen is var *elongatus*.

*Tridens elongatus* (Buckley) Nash. HARRI54.

***Triplasis* P. Beauvois, 1812**

***Triplasis purpurea* (Walter) Chapman**

HARRI54.

*Tricuspis purpurea* (Walter) A. Gray. PORTE74.

***Trisetum* Persoon, 1805**

*Trisetum flavescens* (L.) P. Beauvois

HARRI54. Alien. Cultivar, according to Harrington.

*Trisetum interruptum* Buckley

HARRI54. The specimen (US) is from "western Colorado", no collector. Very likely a mistranscribed label.

***Trisetum montanum* Vasey**

HARRI54. Type from Mew Mexico, Las Vegas, Vasey in 1881.

*Graphephorum shearii* (Scribner) Rydberg. RYDBE06.

*Trisetum americanum* Gandoger. Type: not specified (specimens from Colorado and Idaho cited). Hultén equated this with subsp. *majus*, incorrectly. Type specimen from Colorado.

*Trisetum argenteum* Scribner, non Roemer & Schultes. Type: La Plata Co.: Animas Canyon below Silverton, 4 Aug. 1897, Shear 1214 (US). Type specimen from Colorado.

*Trisetum shearii* (Rydberg) Scribner. RYDBE06.

*Trisetum spicatum* (L.) Richter subsp. *montanum* (Vasey) W. A. Weber. WEBER76A.

***Trisetum spicatum* (L.) Richter subsp. *alaskanum* (Nash) Hultén**

HULTE59B.

*Trisetum alaskanum* Nash. Type from Alaska.

***Trisetum spicatum* (L.) Richter subsp. *congdonii* (Scribner & Merrill) Hultén**

HULTE59B.

*Trisetum congdonii* Scribner & Merrill.

*Trisetum majus* Rydberg. Nomen nudum. Fl. Colorado 33-34.1906. Pen Gulch, 1884, Vasey s.n. (NY).

*Trisetum spicatum* (L.) Richter subsp. *majus* (Vasey) Hultén. HULTE59B. *T. majus* Rydberg is a nomen nudum.

*Trisetum spicatum* (L.) Richter subsp. *molle* (Michaux) Hultén

HULTE59B. Erroneous Report.

*Trisetum spicatum* (L.) Richter subsp. *spicatum*

HARRI54. Arctic circumpolar.

*Trisetum airoides* (Koeler) P. Beauvois. TORRE24A; GOODM95.

*Trisetum subspicatum* (L.) P. Beauvois. PORTE74; RYDBE06.

***Trisetum wolfii* Vasey in Rothrock**

HARRI54. USDA Monthly Rep., Feb.-Mar. 156.1874. Type: Lake Co.: Twin Lakes, Wolf. Type specimen from Colorado.

*Grapphephorum muticum* (Bolander) Scribner. RYDBE06.

***Triticum* L., 1753**

***Triticum aestivum* L.**

HARRI54. Alien.

***Vahlodea* E. Fries, 1842**

*Vahlodea atropurpurea* (Wahlenberg) E. Fries subsp. *atropurpurea*

Erroneous Report.

*Aira atropurpurea* Wahlenberg.

*Deschampsia atropurpurea* (Wahlenberg) Scheele. HARRI54.

***Vahlodea atropurpurea* (Wahlenberg) E. Fries subsp. *latifolia* (Hooker) Porsild**

HYLAN53; HULTE86.

*Vahlodea atropurpurea* (Wahlenberg) E. Fries subsp. *paramushirensis* (Kudo) Hultén

HULTE86. Erroneous Report.

***Vulpia* C. C. Gmelin, 1805**

*Vulpia microstachya* (Nuttall) Munro ex Benth

Erroneous Report.

*Festuca microstachys* Nuttall. RYDBE06. "Western Colorado." Far out of range!.

***Vulpia octoflora* (Walter) Rydberg**

HYLAN53.

*Festuca octoflora* Walter. HARRI54.

***Zizania* L., 1753**

Erroneous Report

*Zizania aquatica* L. var. *angustifolia* A. S. Hitchcock

HARRI54. Alien. El Paso Co.: Planted in a pond, did not survive.

**POLEMONIACEAE**

***Aliciella* A. Brand PORTE98**

Type species: *Aliciella triodon* (Eastwood) A. Brand

***Aliciella haydenii* (A. Gray) J. M. Porter subsp. *crandallii* (Rydberg) J. M. Porter**

PORTE98. Corolla larger than in the type, externally glandular.

*Gilia crandallii* Rydberg. Bull. Torr. Bot. Club 31:634-635.1905. Type: La Plata Co.: Durango, 28 June 1898, Crandall 2053 (NY).

Type specimen from Colorado.

*Gilia montezumae* Tidestrom & Dayton. PORTE98. Bull. Torr. Bot. Club 55:73-74.1928. Type: Montezuma N.F., 18 Aug. 1922, Rose R-102 (RM). Type specimen from Colorado.

***Aliciella haydenii* (A. Gray) J. M. Porter**

PORTE98. Corolla 11-20 mm, corolla glabrous or nearly so.

*Gilia haydenii* A. Gray. RYDBE06; HARRI54. Proc. Amer. Acad. 11:85.1875. Type: Mesa San Juan, 1875, Brandegee (GH).

*Gilia subnuda* A. Gray subsp. *haydenii* (A. Gray) Brand. PORTE98.

***Aliciella leptomeria* (A. Gray) J. M. Porter**

PORTE98. Cited from Mesa and Gunnison counties.

*Gilia inconspicua* (J. E. Smith) Douglas var. *subacaulis* Brand. RYDBE06; PORTE98. See PORTE98 p. 39.

*Gilia leptomeria* A. Gray. RYDBE06; HARRI54; PORTE98.

*Gilia subacaulis* Rydberg. RYDBE06; PORTE98. See discussion in PORTE98 p. 39.

***Aliciella mcvickeriae* (M. E. Jones) J. M. Porter**

PORTE98. Type from Green River, Wyoming. Possibility of it occurring in Moffat County?.

*Gilia calcarea* Jones. HARRI54; PORTE98.

*Gilia pinnatifida* Nuttall var. *calcarea* A. Brand. PORTE98.

**Aliciella micromeria (A. Gray) J. M. Porter**

PORTE98.

*Gilia micromeria* A. Gray. WILKE78.**Aliciella pentstemonoides (M. E. Jones) J. M. Porter**

PORTE98. Type specimen from Colorado.

*Gilia pentstemonoides* Jones. RYDBE06; WEBER61; PORTE98. Type: Montrose Co: Cimarron, Sept. 1890, Jones (RSA) (original spelling!). Type specimen from Colorado.**Aliciella pinnatifida (Nuttall ex A. Gray) J. M. Porter**

PORTE98.

**Aliciella pinnatifida (Nuttall ex A. Gray) J. M. Porter**

PORTE98.

**Aliciella sedifolia (Brandege) J. M. Porter**

PORTE98.

*Aliciella pinnatifida* (Nuttall ex A. Gray) var. *integrescens* Brand. PORTE98. Holotype (B) destroyed no duplicates known. Type; Uncompahgre Range, Purpus 657. Porter places this in *A. pinnatifida* but the specific epithet, *integrescens* suggests *A. sedifolia*. The high altitude suggests this as well.*Gilia sedifolia* Brandege. RYDBE96. Bot. Gaz. 27:451.1899. Type: Uncompahgre Range, 12,000 ft. alt., Purpus 697. PORTE98 believes this might have referred to *Aliciella pinnatifida*, but the specimen came from 12,000 feet and the specific epithet suggests *A. sedifolia*. WAW. Type specimen from Colorado.**Aliciella stenothyrsa (A. Gray) J. M. Porter**

PORTE98. Type from Utah.

*Gilia stenothyrsa* A. Gray. PORTE98.*Ipomopsis stenothyrsa* (A. Gray) W. A. Weber. WEBER82B; PORTE98.***Aliciella subnuda* (Torrey ex A. Gray) J. M. Porter**

PORTE98. Range is Arizona, New Mexico, and Utah.

**Aliciella triodon (Eastwood) A. Brand**

PORTE98.

*Gilia leptomeria* A. Gray var. *tridentata* M. E. Jones. PORTE98.*Gilia triodon* Eastwood. WEBER84C; PORTE98.***Gilia subnuda* A. Gray**WEBER87B; PORTE09. Colorado specimens reported are *G. haydenii*.**Collomia Nuttall, 1818****Collomia grandiflora Douglas ex Lindley**

HARRI54.

**Collomia linearis Nuttall**

TORRE27; PORTE74; RYDBE06; HARRI54.

**Eriastrum Wooton & Standley, 1913****Eriastrum diffusum (A. Gray) Mason**

KELLE82. Alien.

**Gilia Ruiz & Pavon, 1794*****Gilia capillaris* Kellogg**WEBER55, 81A. Colorado specimens are *Allophyllum sinistruma*.**Gilia clokeyi Mason**

WEBER84C.

**Gilia inconspicua (J. E. Smith) Douglas**

GRANT56. One collection, Gunnison Co.: Gunnison, Baker 254.

**Gilia ophthalmoides Brand**

GRANT56.

**Gilia sinuata Douglas ex Bentham**

RYDBE06; HARRI54.

**Gilia tweedyi Rydberg**

WEBER84C.

**Giliastrum (Brand) Rydberg, 1917****Giliastrum rigidulum (Bentham) Rydberg subsp. acerosum (A. Gray) W. A. Weber**

WEBER82B.

Gilia acerosa (A. Gray) Britton. HARRI54.

Gilia rigidula Bentham subsp. acerosa (A. Gray) Wherry.

Gilia rigidula Bentham var. acerosa A. Gray.

**Gymnosteris Greene, 1898****Gymnosteris nudicaulis (Hooker & Arnott) Greene**

RYDBE06. A Great Basin species.

Gilia nudicaulis (Hooker & Arnott) A. Gray. PORTE74. Report applies to *G. parvula*.**Gymnosteris parvula Heller**

HARRI54.

**Ipomopsis Michaux, 1803****Ipomopsis aggregata (Pursh) V. Grant subsp. aggregata**

GRANT86.

Cantua aggregata Pursh. TORRE27.

Gilia aggregata (Pursh) Sprengel. RYDBE06; HARRI54.

Gilia pulchella Douglas ex Hooker. RYDBE06; GRANT86.

**Ipomopsis aggregata (Pursh) V. Grant subsp. arizonica (Greene) V. & A. Grant**

GRANT86.

Gilia arizonica (Greene) Rydberg. HARRI54.

Ipomopsis arizonica (Greene) Wherry. GRANT86. Erroneous Report.

**Ipomopsis aggregata (Pursh) V. Grant subsp. attenuata (A. Gray) V. & A. Grant**

GRANT86.

Gilia aggregata (Pursh) Sprengel var. attenuata A. Gray. Syn. Fl. 2(1):145.1878. Type: Middle Park, Parry (GH). Type specimen from Colorado.

Gilia attenuata (A. Gray) A. Nelson. HARRI54.

**Ipomopsis aggregata (Pursh) V. Grant subsp. candida (Rydberg) V. & A. Grant**

GRANT86.

Callisteris leucantha Greene. Lfl. Bot. Obs. Crit. 1:159-160.1905. Type: Upper Bear Cr., W of Denver, 26 July 1889, Greene (ND-G). Type specimen from Colorado.

Gilia candida Rydberg. HARRI54. Bull. Torr. Bot. Club 28:29-30.1901. Type: Huerfano Co.: La Veta, 11 July 1900, Vreeland 602 (NY). Type specimen from Colorado.

Ipomopsis candida (Rydberg) Wherry.

**Ipomopsis aggregata (Pursh) V. Grant subsp. collina (Greene) Wilken & Allard**

GRANT86.

Callisteris collina Greene. Lfl. Bot. Obs. Crit. 1:159.1905. Type: bluffs of Clear Cr., near Denver, July 1879, Greene (ND-G). Type specimen from Colorado.

Gilia candida Rydberg subsp. collina (Greene) Wherry. HARRI54.

Gilia scariosa Rydberg. GRANT86. Bull. Torr. Bot. Club 31:632-633.1905. Type: Huerfano Co.: La Veta Pass, 15 July 1896, Shear 3590 (NY). Type specimen from Colorado.

**Ipomopsis aggregata (Pursh) V. Grant subsp. formosissima (Greene) Wherry**

GRANT86.

Callisteris flavida Greene. GRANT86. Lfl. Bot. Obs. Crit. 1:160.1905. Type: Archuleta Co.: Arboles, Baker 532 (US). Type specimen from Colorado.

Gilia texana (Greene) Wootton &amp; Standley. GRANT86.

**Ipomopsis aggregata (Pursh) V. Grant subsp. weberi Grant & Wilken**

GRANT86. Endemic. Type specimen from Colorado.

**Ipomopsis congesta (Hooker) V. Grant subsp. congesta**

GRANT56.

Gilia congesta Hooker. HARRI54.

Gilia iberidifolia Bentham. RYDBE06.

Gilia spergulifolia Rydberg. RYDBE06.

**Ipomopsis congesta (Hooker) V. Grant subsp. crebrifolia (Rydberg) Day**

DAY80; OKANE88. O'Kane report from LP: 0.3 mi NE of LaBoca.

**Ipomopsis congesta (Hooker) V. Grant subsp. frutescens (Rydberg) Day**

DAY80.

**Ipomopsis globularis (Brand) W. A. Weber**

WEBER66. Endemic.

*Gilia globularis* Brand. HARRI54. Pflanzenr. IV. 250 (Heft 27). 120. 1907. Type: Hall & Harbour 461 (GH). Type specimen from Colorado.

*Gilia spicata* Nuttall var. *capitata* A. Gray. HARRI54; Proc. Amer. Acad. 8:274.1870. Type: Rocky Mts., Hall & Harbour 461 (GH). Type specimen from Colorado.

*Ipomopsis spicata* (Nuttall) V. Grant subsp. *capitata* (A. Gray) V. Grant. GRANT56; WILKE91.

**Ipomopsis gunnisonii (Torrey & Gray) V. Grant**

WEBER66.

*Gilia gunnisonii* Torrey & Gray. HARRI54.

**Ipomopsis laxiflora (Coulter) V. Grant**

GRANT56.

*Gilia laxiflora* (Coulter) Osterhout. RYDBE06; HARRI54.

**Ipomopsis longiflora (Torrey) V. Grant**

TORRE27; GRANT56. Type from Hemphill Co., Texas, fide GOODM95.

*Collomia longiflora* (Torrey) A. Gray. PORTE74.

*Gilia longiflora* (Torrey) G. Don. RYDBE06; HARRI54.

*Ipomopsis minutiflora* (Bentham) V. Grant

Erroneous Report.

*Gilia minutiflora* Bentham. RYDBE06. "Steamboat Springs." Perhaps Rydberg's report refers to *Gilia sinistra*, also taken at Steamboat Springs by Eastwood. It conforms to his key well enough.

**Ipomopsis multiflora (Nuttall) V. Grant**

Conejos Co.: Big Horn Cr., 3.6 mi. SW of Canyon, P. Douglas 1266 (CS).

**Ipomopsis polyantha (Rydberg) V. Grant**

GRANT56.

*Gilia exserta* A. Nelson. Bot. Gaz. 40:65.1905. Type: Archuleta Co.: Pagosa Springs, 28 July 1899, Baker 538 (RM). Type specimen from Colorado.

*Gilia polyantha* Rydberg. HARRI54. Bull. Torr. Bot. Club 31:634.1905. Type: Archuleta Co.: Pagosa Springs, 28 July 1899, Baker 538 (NY). Type specimen from Colorado.

**Ipomopsis polycladon Torrey**

GRANT56.

*Gilia polycladon* Torrey. RYDBE06; HARRI54.

**Ipomopsis pumila (Nuttall) V. Grant**

GRANT56.

*Gilia pumila* Nuttall. RYDBE06; HARRI54.

**Ipomopsis roseata (Rydberg) V. Grant**

GRANT56; WILKE91. Endemic.

*Gilia roseata* Rydberg. HARRI54. Bull. Torr. Bot. Club 31:633.1905. Type: Mesa Co.: Grand Junction, May 1892, Eastwood (NY). Type specimen from Colorado.

**Ipomopsis spicata (Nuttall) V. Grant**

GRANT56; WILKE91.

*Gilia pinnatifida* Torrey, non Nuttall. TORRE27; GOODM95; RYDBE06; CRONQ72. Torrey reported this from James' description, which seems better to apply to *Ipomopsis spicata*, a plant more likely to be found near Fort Morgan.

*Gilia spicata* Nuttall. PORTE74; RYDBE06; HARRI54.

*Ipomopsis spicata* (Nuttall) V. Grant subsp. *cephaloidea* (Rydberg) Wilken & Hartman

WILKE91. Wyoming and Montana.

*Gilia cephaloidea* Rydberg. RYDBE06; WILKE91.

**Ipomopsis tenuituba (Rydberg) V. Grant**

GRANT86,88.

*Callisteris violacea* Greene. GRANT88. Fedde, Rep. Sp. Nov. 13:324.1914. Type: Montezuma Nat. Forest, 1913 [La Plata Mts., in Delta, La Plata, or Ouray county, fide GRANT88]. Type specimen from Colorado.

*Gilia tenuituba* Rydberg. HARRI54.



**Leptodactylon Hooker & Arnott, 1839****Leptodactylon caespitosum Nuttall**

HARRI54.

**Leptodactylon pungens (Torrey) Rydberg**

RYDBE06; HARRI54.

*Cantua pungens* Torrey. TORRE27. Ann.Lyc. Nat. Hist. N.Y. 2:221.1827. Type probably from between Fort Morgan and Denver, fide GOODM95. Type specimen from Colorado.

*Gilia pungens* (Torrey) Bentham. PORTE74.

*Leptodactylon pungens* (Torrey) Rydberg subsp. *brevifolium* (Rydberg) Wherry.

**Leptodactylon watsonii (A. Gray) Rydberg**

RYDBE06; HARRI54.

**Linanthastrum Ewan, 1942***Linanthastrum floribundum* (A. Gray) Wherry

HARRI54; PATTE77. A Californian species.

*Linanthus floribundus* (A. Gray) Greene ex Milliken.

**Linanthastrum nuttallii (A. Gray) Ewan**

EWAN42.

*Leptodactylon nuttallii* (A. Gray) Rydberg. RYDBE06.

*Linanthus nuttallii* (A. Gray) Greene ex Milliken. PATTE77. We choose to follow Ewan on generic concept.

**Linanthus Bentham, 1833****Linanthus harknessii (Curran) Greene var. *septentrionalis* (Mason) Jepson & Bailey**

RYDBE06; HARRI54.

**Microsteris Greene, 1898***Microsteris gracilis* (Douglas ex Hooker) Greene subsp. *gracilis*

Erroneous Report.

*Collomia gracilis* Douglas ex Hooker. PORTE74.

**Microsteris gracilis (Douglas ex Hooker) Greene subsp. *humilis* (Greene) V. Grant**

*Microsteris humilis* (Douglas ex Hooker) Greene. HARRI54.

*Microsteris micrantha* (Kellogg) Greene. RYDBE06.

**Navarretia Ruiz & Pavon, 1794****Navarretia breweri (A. Gray) Greene**

HARRI54.

*Navarretia minima* NuttallRYDBE06; HARRI54. Colorado collections are *N. saximontana*.

*Gilia minima* (Nuttall) A. Gray. PORTE74. "Colorado", Vasey. The specimen may not have come from Colorado or the report applies to *N. saximontana*.

**Navarretia saximontana S. C. Spencer in ed.**

Spencer annotations.

**Phlox L., 1753***Phlox alyssifolia* GreeneRYDBE06. Probably refers to *P. kelseyi*. Hall & Harbour could have collected this in South Park. Specimens (NY) not reviewed.**Phlox andicola (Nuttall ex Torrey & Gray) E. Nelson**

RYDBE06; HARRI54.

*Phlox andicola* (Nuttall ex Torrey & Gray) E. Nelson subsp. *planitierum* (A. Nelson) Wherry. HARRI54.

**Phlox austromontana Coville**

HARRI54.

*Phlox austromontana* Coville subsp. *densa* (Brand) Wherry.

*Phlox densa* Brand.

*Phlox caespitosa* NuttallRYDBE06; HARRI54. Harrington's concept included *P. condensata* and *P. pulvinata*.**Phlox caryophylla Wherry**

HARRI54. Harrington's caryophyllea is a spelling error.

**Phlox condensata (A. Gray) E. Nelson**

RYDBE06; WEBER87B. Endemic.

Phlox caespitosa Nuttall var. condensata A. Gray. Proc. Amer. Acad. 8:254.1879. Type: Headwaters of Clear Creek and alpine ridges of Middle Park, 1862, Parry 298 (GH). Type specimen from Colorado.

*Phlox diffusa* **Bentham**

HARRI54. Misidentification of *P. multiflora*.

*Phlox diffusa* **Bentham** subsp. *scleranthifolia* (Rydberg) Wherry

WHERR55. Erroneous Report.

Phlox scleranthifolia Rydberg. RYDBE06. Out of range; report probably applies to a form of *P. multiflora*.

*Phlox douglasii* **Hooker**

PORTE74. Report applies to *P. multiflora*.

**Phlox hoodii** **Richardson**

HARRI54.

Phlox canescens Torrey & Gray. PORTE74; RYDBE06.

Phlox hoodii Richardson subsp. canescens (Torrey & Gray) Wherry. HARRI54.

Phlox hoodii Richardson subsp. glabrata (E. Nelson) Wherry. HARRI54.

*Phlox kelseyi* **Britton** subsp. *salina* (Jones) Wherry

RYDBE06, as the species; WHERR55. Park Co.: Antero Junction. Misidentification of *P. sibirica* subsp. *pulvinata*.

**Phlox longifolia** **Nuttall**

RYDBE06; HARRI54; PEABO77.

Phlox cernua E. Nelson. Rev. N. Am. Phlox 22.1899. Type: MN: Cimarron, 18 May 1898, Crandall (RM). Type specimen from Colorado.

Phlox cortezana A. Nelson. Amer. J. Bot. 18:434.1931. Type: Montezuma Co.: between Cortez and Mesa Verde, 11 May 1925, Nelson 10436 (RM). Type specimen from Colorado.

Phlox longifolia Nuttall subsp. calva Wherry. HARRI54.

Phlox longifolia Nuttall subsp. cortezana (A. Nelson) Wherry. HARRI54.

Phlox longifolia Nuttall subsp. humilis (Douglas) Wherry. HARRI54.

Phlox longifolia Nuttall subsp. longipes (Jones) Wherry. HARRI54.

**Phlox multiflora** **A. Nelson**

RYDBE06; HARRI54.

Phlox dasyphylla Brand. Pflanzenr. IV,250:80.1907. Type: Gunnison Co.: Jack's Cabin, 26 July 1901, Baker 620. Type specimen from Colorado.

Phlox depressa (E. Nelson) Rydberg. RYDBE06.

Phlox multiflora A. Nelson subsp. costata (Rydberg) Wherry. HARRI54.

Phlox multiflora A. Nelson subsp. depressa (E. Nelson) Wherry. HARRI54.

Phlox patula A. Nelson. HARRI54. Univ. Wyo. Publ. Bot. 1:48.1924. Type: Platte Canyon, 19 May 1894, Nelson (RM). Type specimen from Colorado.

**Phlox muscoides** **Nuttall**

Cronquist, CRONQ72, reduces this to a synonym of *P. hoodii*?

Phlox bryoides Nuttall. RYDBE06; HARRI54.

Phlox hoodii Richardson subsp. muscoides (Nuttall) Wherry.

**Phlox sibirica** **L.** subsp. *pulvinata* (Wherry) **W. A. Weber**

WEBER73.

Phlox caespitosa Nuttall subsp. pulvinata Wherry. Not. Nat. Acad. Nat. Sci. Phila. 87:10.1941. Type: Boulder Co.: Brainerd Lake, 21 June 1937, Wherry (PH). Type specimen from Colorado.

Phlox pulvinata (Wherry) Cronquist.

Phlox variabilis Brand. HARRI54. Pflanzenr. IV,250:87.1907. Type: Rocky Mts., Hall & Harbour 454. Type specimen from Colorado.

*Phlox stansburyi* (Torrey) **Heller**

RYDBE06; HARRI54; PEABO77. Colorado plants are *P. longifolia*.

**Polemonium L., 1753 DAVID50; GRANT89**

*Polemonium boreale* **Adams**

A species of the far north.

*Polemonium humile* Willdenow. PORTE74. The report applies to *P. pulcherrimum*.

**Polemonium brandegei (A. Gray) Greene**

RYDBE06; WEBER87B; GRANT89.

*Gilia brandegei* A. Gray. Proc. Amer. Acad. 11:85.1875. Type: perpendicular cliffs, San Juan [Wagon Wheel] Gap, 1875, Brandege (GH). Type specimen from Colorado.

*Polemonium confertum* A. Gray var. *mellitum* A. Gray. GRANT89. Proc. Phila. Acad. 15:73.1863. Type: "In crevices of rocks, wholly below the alpine region," Hall & Harbour 451 (GH). Type specimen from Colorado.

**Polemonium caeruleum L. subsp. amygdalinum (Wherry) Munz**

Aliso 4:96.1958.

*Polemonium occidentale* Greene. HARRI54. Pittonia 2:75-76. Lectotype: Gunnison Co.: Gunnison, 7 July 1901, Baker 367 (ND-G). Type specimen from Colorado.

**Polemonium confertum A. Gray**

RYDBE06; GRANT89. Proc. Phila. Acad. 15:73.1863. Type: Hall &amp; Barbour 450 (GH). Type specimen from Colorado.

*Polemonium grayanum* Rydberg. RYDBE06; WEBER87B; GRANT89. Bull. Torr. Bot. Club 31:635-636.1905. Type: Gray's Peak, 23 Aug. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

**Polemonium foliosissimum (A. Gray) A. Gray**

HARRI54. Proc. Amer. Acad. 8:281.1870. Lectotype: Headwaters of Clear Creek, 1861, Parry 275. Type specimen from Colorado.

*Polemonium archibaldiae* A. Nelson. Bot. Gaz. 31:397.1901. Type: Berwind, 1900, Archibald (RM). Type specimen from Colorado.

*Polemonium caeruleum* L. var. *foliosissimum* A. Gray. Proc. Amer. Acad. 8:281. 1873. Type: no specimens cited, nor state specified.

*Polemonium grande* Greene. Lfl. Bot. Obs. Crit. 1:153.1905. Type: Pagosa Peak, 5 Aug. 1. 899, Baker 544 (ND-G). Type specimen from Colorado.

*Polemonium molle* Greene. Lfl. Bot. Obs. Crit. 1:153.1905. Type: Archuleta Co.: Piedra, 12 July 1899, Baker 545 (ND-G). Type specimen from Colorado.

*Polemonium robustum* Rydberg. Bull. Torr. Bot. Club 31:635.1905. Type: La Plata Co.: Bob Cr., La Plata Mts., 1 July 1898, Baker, Earle & Tracy 274 (NY). Type specimen from Colorado.

*Polemonium mexicanum Cervantes ex Lagasca*TORRE27; DAVIDS50. A Mexican species related to *P. foliosissimum*. Torrey's reference to it is a misidentification of *P. foliosissimum*.**Polemonium pulcherrimum Hooker subsp. delicatum (Rydberg) Brand**LOVE71; GRANT89. According to GRANT89, Gray incorrectly called this plant *P. viscosum*.

*Polemonium delicatum* Rydberg. TORRE95; HARRI54. Bull. Torr. Bot. Club 28:29.1901. Type: Huerfano Co.: West Spanish Peak, 9 July 1900, Rydberg & Vreeland 5720 (NY). Type specimen from Colorado.

*Polemonium parviflorum* Nuttall ex Rydberg. RYDBE06. Bull. Torr. Bot. Club 24:253.1897. Nom. nov. for *P. mexicanum* Nuttall, non Cervantes. This name is not listed in Index Kewensis, nor was it noted by DAVID50 or GRANT89!

*Polemonium pulcherrimum* Hooker var. *delicatum* (Rydberg) Cronquist. HITCHC55.

*Polemonium scopulinum* Greene ex Rydberg. RYDBE06. Nomen nudum. Fl. Colorado 280.1906. Archuleta Co.: near Pagosa Peak, 6 Aug. 1899, Baker 546 (NY). Type specimen from Colorado.

**Polemonium viscosum Nuttall**

HARRI54; GRANT89.

*Polemonium speciosum* Rydberg. GRANT89. Bull. Torr. Bot. Club 28:29.1901. Type: El Paso Co.: Mt. Garfield, 1900, Clements s.n. (NY). Type specimen from Colorado.

**POLYGALACEAE*****Polygala* L., 1753***Polygala acanthoclada* A. GrayRYDBE06; HARRI54. "San Juan Valley." Report applies to *P. subspinosa*.***Polygala alba* Nuttall**

TORRE27; RYDBE06; HARRI54.

*Polygala jamesii* Rafinesque. GOODM95. Atlantic J. 1:146.1832. Based on *Polygala* n. sp. Torrey, Ann. Lyc.Nat. Hist. N.Y. 2:268.1827. Type specimen from Colorado.

*Polygala torreyi* G. Don. GOODM95. Gen. Hist. 1:360.1831. Based on *Polygala* n. sp. Torrey, Ann. Lyc. Nat. Hist. N.Y. 2:164.1827, James. Type specimen from Colorado.

***Polygala subspinosa* S. Watson**

RYDBE06; HARRI54.

*Polygala verticillata* L.PORTE74; RYDBE06; HARRI54. "Clear Creek." Reports apply to *P. alba*.**POLYGONACEAE**

**Acetosella Fourreau, 1869****Acetosella paucifolia (Nuttall) Löve**

Taxon 35:612.1986.

Rumex paucifolius Nuttall. HARRI54.

**Acetosella vulgaris (K. Koch) Fourreau**

Alien.

Rumex acetosella L.. HARRI54.

**Bistorta Adanson, 1763****Bistorta bistortoides (Pursh) Small**

GREEN04.

Bistorta calophylla Greene. Lfl. Bot. Obs. Crit. 1:19.1903. Type: LP: Chicken Creek, 9,000 ft., Baker, Earle &amp; Tracy 373 (ND-G). Type specimen from Colorado.

Bistorta lilacina Greene. Lfl. Bot. Obs. Crit. 1:18-19. Type: Pagosa Peak, 12,500 ft., 28 Aug. 1899, Baker (ND-G). Type specimen from Colorado.

Bistorta linearifolia (S. Watson) Greene. RYDBE06.

Bistorta scopulina Greene. Lfl. Bot. Obs. Crit. 1:20-21.1903. Type: LR: Cameron Pass, 16 July 1896, Baker (ND-G). Type specimen from Colorado.

Polygonum bistorta L. var. oblongifolium Meissner. PORTE74.

Polygonum bistortoides Pursh. HARRI54.

Polygonum bistortoides Pursh var. linearifolium (S. Watson) Small. HARRI54.

**Bistorta vivipara (L.) S. Gray**

Polygonum viviparum L.. TORRE27; HARRI54.

Polygonum viviparum L. var. capitatum Torrey. TORRE24,27. Ann. Lyc. Nat. Hist. N.Y. 1:34.1824. Type: Pikes Peak, James. Later he concluded the variety should not be maintained. Type specimen from Colorado.

**Eriogonum Michaux, 1803****Eriogonum acaule Nuttall**

PORTE74; RYDB06; HARRI54. HARRI54 had not seen specimens. Recent collections from Moffat Co. justify inclusion.

**Eriogonum annuum Nuttall**

HARRI54.

**Eriogonum batemanii Jones**

HARRI54, p.193.

**Eriogonum bicolor Jones**

HARRI54.

**Eriogonum brandegei Rydberg**

Endemic. Fl. Rocky Mts. 220,1061.1922. Type: southern Colorado [probably near Florence], 1 Sept. 73, Brandege (NY). Recognized by Reveal. Type specimen from Colorado.

**Eriogonum brevicaule Nuttall**

PORTE74; RYDBE06.

Eriogonum campanulatum Nuttall. RYDBE06; HARRI54.

Eriogonum campanulatum Nuttall subsp. leptothecum S. Stokes. Gen. Eriogonum 78.1936. Type: Boulder Co.: 5 mi N of Boulder, 2 Aug. 1934, S. Stokes 206 (CAS). Type specimen from Colorado.

Eriogonum viridulum Reveal. REVEA65. Reveal annotations; very close to E. brevicaule!.

**Eriogonum caespitosum Nuttall**

HARRI54. Erroneous Report.

**Eriogonum cernuum Nuttall**

HARRI54.

**Eriogonum chrysocephalum A. Gray**

RYDBE06; HARRI54. "reported from Colorado".

**Eriogonum clavellatum Small**

WEBER89C. Montezuma Co.: open slope NE of Four Corners, Harrington 10103 !Reveal; SE of Towaoc, O'Kane &amp; Anderson 2344.

**Eriogonum coloradense Small**

HARRI54. Bull. Torr. Bot. Club 33:53.1906. Type: Chaffee Co.: Mt. Harvard, 1896, Clements 66 (NY). Type specimen from Colorado.

**Eriogonum contortum Small in Rydberg**

HARRI54. Fl. Rocky Mts. & adj. Plains. 222. 1917. Type: Mesa Co.: arid plains, Grand Junction (NY). Type specimen from Colorado.

**Eriogonum corymbosum Bentham in A. De Candolle var. corymbosum**

HARRI54; REVEA67. Prodr. 14:17.1856. Type: Eagle Co.: NE of Piney Cr. near Colorado R., 4 Sept. 1845, Frémont 248 (NY). Type specimen from Colorado.

*Eriogonum salinum* A. Nelson. HARRI54.

**Eriogonum corymbosum Bentham in A. De Candolle var. orbiculatum (S. Stokes) Reveal & Brotherson**

REVEA67.

*Eriogonum corymbosum* Bentham var. *divaricatum* Torrey. RYDBE06.

*Eriogonum divergens* Small. RYDBE06.

**Eriogonum divaricatum Hooker**

HARRI54.

**Eriogonum effusum Nuttall**

HARRI54.

*Eriogonum effusum* Nuttall var. *nudicaule* Torrey. RYDBE06.

*Eriogonum microthecum* Nuttall var. *effusum* (Nuttall) Torrey & Gray. PORTE74.

*Eriogonum myrianthum* Gandoger. Illegitimate microspecies. Bull. Soc. Roy. Bot. Belg. 42:191.1906. Type: LR: Fort Collins, Crandall (first specimen cited). Type specimen from Colorado.

*Eriogonum nebraskense* Rydberg. HARRI54. Hybrid, *E. effusum* x *E. pauciflorum*.

*Eriogonum nudicaule* (Torrey) Small. RYDBE06; HARRI54.

**Eriogonum ephedroides Reveal**

REVEA68. Endemic. Type from E Utah.

**Eriogonum exilifolium Reveal**

REVEA67.

*Eriogonum glandulosum* Nuttall. RYDBE06.

**Eriogonum fendlerianum (Bentham in De Candolle) Small**

HARRI54. Reveal (1976) feels that the correct name for Colorado plants may be *E. ainsliei* Standley in Wootton & Standley.

*Eriogonum microthecum* Nuttall var. *fendlerianum* Bentham in De Candolle. PORTE74.

**Eriogonum flavum Nuttall**

HARRI54. Fraser's Catalog. 1813. Type from Montana.

*Eriogonum arcuatum* Greene. HARRI54. Pittonia 4:319-320.1901. Type: Archuleta Co.: Pagosa Springs, 17 July 1899, Baker (ND-G). Type specimen from Colorado.

*Eriogonum aureum* Nuttall. RYDBE06.

*Eriogonum flavum* Nuttall var. *foliatum* Gandoger. Bull. Soc. Bot. Belg. 42:189.1906. !Reveal. Type specimen from Colorado.

*Eriogonum jamesii* Bentham in A. De Candolle var. *flavescens* S. Watson.

*Eriogonum sericeum* Pursh. BENTH37; TORRE27; GOODM95. The James collection was the yellow-flowered plant called *E. jamesii* var. *flavescens*. Bentham synonymised *sericeum* with *flavum*.

**Eriogonum flavum Nuttall subsp. chloranthum (Greene) S. Stokes**

*Eriogonum chloranthum* Greene. Pl. Baker. 3:15.1901. Type: Mt. Ouray, 20 Aug. 1901, Baker 853 (ND-G). The capitate alpine race. Type specimen from Colorado.

*Eriogonum flavum* Nuttall var. *xanthum* (Small) S. Stokes.

*Eriogonum jamesii* Bentham in A. De Candolle var. *xanthum* (S. Stokes) Reveal. REVEA76B.

*Eriogonum xanthum* Small. Bull. Torr. Bot. Club 33:51.1906. Type: Mt. Harvard, 17 Aug. 1896, Shear 3789 (NY). Type specimen from Colorado.

*Eriogonum glandulosum (Nuttall) Nuttall ex Bentham in De Candolle*

HARRI54. Colorado specimens are *Stenogonum flexum*.

**Eriogonum gordonii Bentham**

PORTE74; HARRI54. Porter's reports probably apply to *E. cernuum*.

**Eriogonum heracleoides Nuttall**

PORTE74; HARRI54. Porter report, "Pleasant Park, Coulter," probably erroneous. Species known only from Moffat Co..

**Eriogonum hookeri S. Watson**

HARRI54.

**Eriogonum inflatum Torrey & Frémont var. fusiforme (Small) Reveal**

Aliso 7:222.1970.

*Eriogonum fusiforme* Small. Bull. Torr. Bot. Club 33:56.1906. Type: Mesa Co.: Grand Junction, 20 June 1893, Saunders (NY). Type specimen from Colorado.

**Eriogonum inflatum** Torrey & Frémont var. **inflatum**

HARRI54.

**Eriogonum jamesii** Bentham in A. De Candolle

HARRI54. Prodrromus 14:7.1856. The type was from Las Animas Co. fide GOODM55, hence must be the ochroleucous species.

Eriogonum bakeri Greene. Pl. Baker. 3:15.1901. Type: Montrose Co.: Black Canyon, 1 Aug. 1901, Baker 696 (ND-G). Type specimen from Colorado.

**Eriogonum lachnogynum** Torrey ex Bentham in A. De Candolle

HARRI54.

Eriogonum tetraeuris Small. HARRI54. Bull. Torr. Bot. Club 33:52.1906. Type: Pueblo Co.: Pueblo, 15 May 1900, Rydberg &amp; Vreeland 6324 (NY). Type specimen from Colorado.

**Eriogonum leptocladon** Torrey & Gray var. **leptocladon**

REVEA65; WEBER85A,89C. Mesa Co.: Rabbit Valley, Young 204.

**Eriogonum leptocladon** Torrey & Gray var. **ramosissimum** (Eastwood) Reveal

REVEA65; WEBER89C. Montezuma Co.: State line SE of Aneth, Scott (COLO 318876).

**Eriogonum leptophyllum** (Torrey) Wootton & Standley

HARRI54.

**Eriogonum lonchophyllum** Torrey & Gray

HARRI54.

Eriogonum salicinum Greene. HARRI54. Pl. Baker. 3:16.1901. Type: Montrose Co.: Black Canyon, 1 Aug. 1901, Baker 375 (ND-G). Type specimen from Colorado.

Eriogonum sarothrifforme Gandoger. Illegitimate microspecies. Bull. Roy. Soc. Bot. Belg. 42:192.1906. Type: Garfield Co.: Glenwood Springs, Osterhout (LY). Type specimen from Colorado.

Eriogonum scoparium Small. HARRI54. Bull. Torr. Bot. Club 33:54.1906. Type: Gunnison Co.: Gunnison, 12 Sept. 1901, Underwood &amp; Selby 376 (NY). Type specimen from Colorado.

Eriogonum tristichum Small. HARRI54. Bull. Torr. Bot. Club 33:55.1905. Type: Rosa, June 1899, Baker 286 (NY). Type specimen from Colorado.

**Eriogonum microthecum** Nuttall var. **laxiflorum** Hooker

Reveal in herb.

**Eriogonum microthecum** Nuttall var. **simpsonii** (Bentham in A. De Candolle) Reveal

Reveal, in Taxon 32:293-294 discusses reason for rejecting var foliosum according to the autonym rule.

Eriogonum microthecum Nuttall var. foliosum (Torrey) Reveal.

Eriogonum microthecum Nuttall var. rigidum Eastwood. Zoë 4:11-12.1893. Type: LP: mesas at Durango, Eastwood (CAS). Type specimen from Colorado.

Eriogonum simpsonii Bentham. HARRI54.

**Eriogonum ovalifolium** Nuttall

HARRI54.

Eriogonum ochroleucum Small ex Rydberg. HARRI54.

Eriogonum orthocaulon Small. HITCH55. Bull. Torr. Bot. Club 33:53.1906. Type: Garfield Co.: Rifle, 23 June 1900, Osterhout 2125 (NY). Type specimen from Colorado.

Eriogonum ovalifolium Nuttall var. purpureum (Nuttall) A. Nelson. HARRI54.

**Eriogonum palmerianum** Reveal in Munz

WEBER81A.

**Eriogonum pauciflorum** Pursh var. **gnaphalodes** (Bentham in Hooker) Reveal

LR, LO, WL.

Eriogonum pauciflorum Pursh var. nebraskense (Bentham in Hooker) Reveal.

**Eriogonum pauciflorum** Pursh var. **pauciflorum**

PORTE74; HARRI54.

Eriogonum multiceps Nees. PORTE74; HARRI54.

**Eriogonum pelinophilum** Reveal

REVEA73. Endemic. Great Basin Nat. 33:120-122.1973. Type: DT: Colo. Hwy 92, 8.6 mi W of west edge of Hotchkiss, 16 July 1972, Reveal 2780 (US). Type specimen from Colorado.

**Eriogonum racemosum** Nuttall

HARRI54.

*Eriogonum rotundifolium* Bentham in A. De Candolle

HARRI54. Early reports were incorrect. The species is limited to west Texas, eastern New Mexico and eastern Arizona.

**Eriogonum saurinum Reveal**

WEBER73A.

**Eriogonum scabrellum Reveal**

WEBER79A.

**Eriogonum shockleyi S. Watson var. longilobum (S. Stokes) Reveal**

Reveal in herb.

Eriogonum pulvinatum Small.

*Eriogonum spathulatum* A. GrayHARRI54. Misidentification of *E. brandegei* according to Reveal.**Eriogonum subalpinum Greene**HARRI54. Pittonia 3:18-19.1896. Type: No specimens cited. Gilpin Co.: E of Central City, 18 July 1871, Greene (ND-G). Reveal treats this as a race of *E. umbellatum* because of hybridization north of Colorado. Type specimen from Colorado.

Eriogonum umbellatum Torrey var. majus Hooker.

*Eriogonum subreniforme* S. WatsonHARRI54. The report applies to *E. wetherillii* (!Reveal).**Eriogonum tenellum Torrey**

TORRE27; PORTE74; HARRI54; GOODM95. Ann. Lyc. Nat. Hist. N.Y. 2:241.1827. Type: Las Animas Co.: Bachicha Canyon, near jct Hwy 389 and 160, fide GOODM95. Type specimen from Colorado.

**Eriogonum tumulosum (Barneby) Reveal**

Moffat Co.: Reveal in herb.

Eriogonum villiflorum A. Gray var. tumulosum Barneby.

**Eriogonum umbellatum Torrey subsp. subaridum (S. Stokes) Munz in Munz & Keck**

Reveal in herb.

**Eriogonum umbellatum Torrey var. aureum (Gandoger) Reveal**

Reveal in herb.

Eriogonum glaberrimum Gandoger var. aureum Gandoger. Bull. Soc. Roy. Bot. Belg. 42:195.1906. Lectotype: Larimer Co.: Fort Collins, Crandall (LY). Type specimen from Colorado.

Eriogonum marginale Gandoger. Bull. Soc. Bot. Belg. 42:195.1906. !Reveal. Type specimen from Colorado.

Eriogonum neglectum Greene. Pittonia 5:69.1902. Type: Summit Co.: Blue River, 6 Aug. 1875, Greene s.n. (ND-G).

Eriogonum umbelliferum Small. Bull. Torr. Bot. Club 33:51.1906. Type: Ouray Co.: W of Ouray, 9 Sept. 1901, Underwood 177b (NY). Type specimen from Colorado.

**Eriogonum umbellatum Torrey var. porteri (Small) S. Stokes**

Reveal in herb.

**Eriogonum umbellatum Torrey var. umbellatum**

TORRE27; HARRI54.

Eriogonum croceum Small. RYDBE06.

Eriogonum latum Small. RYDBE06.

Eriogonum umbellatum Torrey var. crandallii Gandoger. Bull. Soc. Bot. Belg. 42:198.1906. Type: Larimer Co.: Fort Collins, Crandall (LY). Type specimen from Colorado.

Eriogonum umbellatum Torrey var. monocephalum Torrey &amp; Gray. PORTE74.

**Eriogonum wetherillii Eastwood**

WEBER66.

*Eriogonum wrightii* Torrey ex Bentham

RYDBE06; HARRI54. "Colorado, Thurber." No specimens; way out of range!.

**Fagopyrum P. Miller, 1754****Fagopyrum esculentum Moench**

HARRI54. Alien. Not naturalized.

**Fallopia Adanson, 1763****Fallopia aubertii (Henry) Holub**

WEBER79A. Alien.

**Fallopia convolvulus (L.) Löve**

LOVE70; DECRA88. Alien. See DECRA88 for discussion of genera; n.b.: study based only on floral characters.

Bilderdykia convolvulus (L.) Dumont de Cours.

- Polygonum convolvulus* L. HARRI54.  
*Polygonum dumetorum* auct., non L.. PORTE74.  
*Tiniaria convolvulus* (L.) Webb & Moquin. RYDBE06.

**Fallopia scandens (L.) Holub**

- Alien. Folia Geobot. Phytotax. Praha 6:171-177.1970.  
*Bilderdykia scandens* (L.) Greene.  
*Polygonum scandens* L.. HARRI54.  
*Tiniaria scandens* (L.) Small. RYDBE06.

**Koenigia L., 1753****Koenigia islandica L.**

- WEBER55.

**Oxyria J. Hill, 1765****Oxyria digyna (L.) J. Hill**

- HARRI54.  
*Oxyria reniformis* R. Brown. TORRE24,27.

**Persicaria P. Miller, 1754****Persicaria amphibia (L.) S. Gray**

- Persicaria hartwrightii* (A. Gray) Small. RYDBE06.  
*Persicaria laetevirens* Greene. Lfl. Bot. Obs. Crit. 1:31.1904. Type: Gunnison Co.: Gunnison, 1891, Baker 806 (ND-G). Assignment tentative. Type specimen from Colorado.  
*Persicaria psychrophila* Greene. Lfl. Bot. Obs. Crit. 1:31.1904. Type: LR: Estes Park, Osterhout (RM). Assignment tentative. Type specimen from Colorado.  
*Polygonum amphibium* L. var. *stipulaceum* (Coleman) Fernald. HARRI54.  
*Polygonum amphibium* L. var. *terrestre* Willdenow. PORTE74.  
*Polygonum hartwrightii* A. Gray. RYDBE06.

**Persicaria bicornis (Rafinesque) Nieuwland**

- Sedgwick, Baca, and Kit Carson counties. Similar to *P. pensylvanicum*, but inflorescence dense, always pink; anthers or styles exserted.  
*Persicaria longistyla* (Small) Small.  
*Polygonum bicorne* Rafinesque. GREAT86.  
*Polygonum longistylum* Small.

**Persicaria coccinea (Mühlenberg ex Willdenow) Greene**

- Persicaria muhlenbergii* (S. Watson) Small. RYDBE06.  
*Persicaria muriculata* Greene. Lfl. Bot. Obs. Crit. 1:47-48.1904. Type: Weld Co.: New Windsor, 26 July 1901, Osterhout (RM). Assignment tentative. Type specimen from Colorado.  
*Persicaria wardii* Greene. Lfl. Bot. Obs. Crit. 1:40-41.1904. Type: Platte R. near Denver, Aug. 1881, Ward (ND-G). Assignment tentative. Type specimen from Colorado.  
*Polygonum coccineum* Mühlenberg ex Willdenow forma *natans* (Wiegand) Stanford. HARRI54.  
*Polygonum coccineum* Mühlenberg ex Willdenow forma *terrestre* (Willdenow) Stanford. HARRI54.  
*Polygonum muhlenbergii* S. Watson. RYDBE06.

**Persicaria hydropiper (L.) Opiz**

- Alien.  
*Polygonum hydropiper* L.. HARRI54.

**Persicaria lapathifolia (L.) S. Gray**

- Alien.  
*Persicaria incana* (K. Koch) S. Gray. RYDBE06.  
*Persicaria incarnata* (Elliott) Small. RYDBE06.  
*Polygonum incanum* F. W. Schmidt. HARRI54.  
*Polygonum incarnatum* Elliott. PORTE74; HARRI54.  
*Polygonum lapathifolium* L.. HARRI54.  
*Polygonum lapathifolium* L. var. *nodosum* (Persoon) Small. HARRI54.

**Persicaria maculata (L.) S. Gray**

- Alien.  
*Persicaria persicaria* (L.) Small. RYDBE06.  
*Polygonum persicaria* L.. HARRI54.



**Persicaria pensylvanica (L.) Gomez**

Alien.

Persicaria omissa (Greene) Small. RYDBE06.

Polygonum longistylum Greene var. omissum (Greene) Stanford. HARRI54.

Polygonum pensylvanicum L. var. laevigatum Fernald. HARRI54.

**Persicaria punctata (Elliott) Small**

Alien.

Polygonum punctatum Elliott var. confertiflorum (Meissner) Fassett. HARRI54.

Polygonum punctatum Elliott var. parviflorum Fassett. HARRI54.

**Polygonum L., 1753****Polygonum arenastrum Boreau**

WEIMA63. Alien.

Polygonum buxiforme Small. RYDBE06.

Polygonum flexile Greene. Pittonia 5:203.1903. Type: Plains near Denver, 1870, Greene (ND-G). Might key to *P. neglectum* Besser in Great Plains Flora. Possibly best assigned to *P. arenastrum*. Type specimen from Colorado.Polygonum rubescens Small. RYDBE06; BRENC50. Bull. Torr. Bot. Club 33:56.1906. Type: Gunnison Co.: Parlin, 16 Aug. 1901, Smith 55 (NY). D. Katz considers this (1987 pers. comm.) *P. aviculare* s.l.. Type specimen from Colorado.**Polygonum argyrocoleon Steudel ex Kuntze**

WEBER79A. Alien.

**Polygonum aviculare L. var. angustissimum Meissner**

HARRI54. Alien. Probably a valid species of Asiatic introduction. Taxonomic status in doubt.

**Polygonum aviculare L. var. aviculare**

HARRI54. Alien. D. Katz (1987 comm.) annotated several COLO specimens as this.

**Polygonum douglasii Greene**

HARRI54.

Polygonum commixtum Greene. Pl. Baker. 3:14.1901. Type: not designated, Grizzly Peak; Cameron Pass (no specimens found in ND-G list). Type specimen from Colorado.

Polygonum douglasii Greene var. latifolium (Engelmann) Greene.

Polygonum engelmannii Greene. HARRI54. Bull. Calif. Acad. Sci. 1:126.1884. Type: "Rocky Mountains of Colorado at considerably elevations." Type not listed in ND-G, probably at UC. Type specimen from Colorado.

Polygonum montanum (Small) Greene. RYDBE06; HARRI54.

Polygonum sawatchense Small. RYDBE06; HARRI54.

Polygonum tenue Michaux var. commune Engelmann ex A. Gray. Proc. Phila. Acad. 15:75.1863. Type: Parry 492 (GH). Type specimen from Colorado.

Polygonum tenue Michaux var. latifolium Engelmann ex A. Gray. Proc. Phila. Acad. 15:75.1863. Type: Parry 492 p.p. (GH). Type specimen from Colorado.

Polygonum triandrus Coolidge. WEBER73. According to Hickman, Calif. Flora (ined.) this is a synonym.

**Polygonum erectum L.**

PORTE74; HARRI54. Old reports apply to any number of species.

**Polygonum erectum L. subsp. achoreum (S. F. Blake) Löve & Löve**

LOVE82A p. 122. Alien.

Polygonum achoreum S. F. Blake. WEBER81A.

**Polygonum minimum S. Watson**

HARRI54.

**Polygonum polygaloides Meissner subsp. kelloggii (Greene) Hickman**

HICKM84.

Polygonum imbricatum Nuttall. PORTE74.

Polygonum kelloggii Greene. RYDBE06; HARRI54.

Polygonum watsonii Small. RYDBE06; HARRI54.

**Polygonum polygaloides Meissner subsp. polygaloides**

HARRI54. Erroneous Report.

Polygonum unifolium Small. RYDBE06.

**Polygonum ramosissimum Michaux**

HARRI54.

*Polygonum rurivagum* Jordan

Misinterpretation of *P. arenastrum*.

*Polygonum spergulariiforme* Small

HARRI54. Erroneous Report.

*Polygonum tenue* Michaux

PORTE74; WEBER55. Old reports apply to *P. douglasii*. Hickman identifies WEBER55 report as *P. douglasii*.

**Pterogonum Gross, 1913*****Pterogonum alatum* (Torrey) Gross**

*Eriogonum alatum* Torrey. HARRI54.

*Eriogonum triste* S. Watson. RYDBE06.

**Reynoutria Houttuyn, 1777*****Reynoutria japonica* Houttuyn**

Alien.

**Rheum L., 1753*****Rheum rhaponticum* L.**

HARRI54. Alien. Hardly naturalized.

**Rumex L., 1753 RECHI37*****Rumex altissimus* Wood**

RYDBE06; HARRI54.

***Rumex aquaticus* L. subsp. *occidentalis* (S. Watson) Hultén**

*Rumex bakeri* Greene. Pl. Baker. 3:15.1901. Gunnison Co.: wet meadows, Gunnison, 22 Aug. 1901, Baker 903 (ND-G). Type specimen from Colorado.

*Rumex longifolius* Meissner in De Candolle. PORTE74. Tentatively placed here by RECHI37.

*Rumex occidentalis* S. Watson. HARRI54.

*Rumex polyrrhizus* Greene. Pittonia 4:305.1901. Type: LR: not designated; LR: Lone Pine Creek, 22 Aug. 1900, Osterhout; Wyoming, Sherman, July 1893, Greene, cited. Not in ND-G computer list. Type specimen from Colorado.

***Rumex crispus* L.**

HARRI54. Alien.

***Rumex densiflorus* Osterhout**

HARRI54. Erythea 6:13.1898. Type: Jackson Co.: W side Flat Top on trail to Grand L., 22 July 1897 (fls); near Laramie River along state road to North Park, 28 Aug. 1897 (fr), Osterhout 1678 (RM). Type specimen from Colorado.

*Rumex praecox* Rydberg. HARRI54. Bull. Torr. Bot. Club 33:137.1906. Type: Huerfano Co.: Grayback mining camps and Placer Gulch, 25-27 June 1900, Rydberg & Vreeland 6328 (NY). Type specimen from Colorado.

*Rumex pycnanthus* Reehinger f.. HARRI54.

*Rumex subalpinus* Jones. RYDBE06.

***Rumex hymenosepalus* Torrey**

HARRI54.

*Rumex hymenosepalus* Torrey var. *salinus* (A. Nelson) Reehinger f.. HARRI54.

*Rumex salinus* A. Nelson. RYDBE06.

***Rumex maritimus* L. subsp. *fuiginus* (Philippi) Hultén**

PORTE74. Porter's report from "head of Clear Creek, 10,000 ft., Coulter," is doubtless incorrect.

*Rumex fuiginus* Philippi. HARRI54.

*Rumex maritimus* L. var. *fuiginus* (Philippi) Dusén. HITCH55.

*Rumex persicarioides* L.. RYDBE06.

***Rumex obtusifolius* L.**

RYDBE06; HARRI54. Alien. "Fort Collins." A small colony has persisted for many years on the Boulder campus, Univ. of Colorado.

*Rumex patientia* L.

RYDBE06. Records doubtfully listed. Adventive.

*Rumex pulcher* L.

The specimens mentioned by Harrington belong to *R. stenophyllus*.

*Rumex salicifolius* Weinmann

PORTE74; RECHI37. Reports apply to *R. triangulivalvis*.

**Rumex stenophyllus Ledebour**

WEBER55. Alien.

**Rumex triangulivalvis (Danser) Rechinger f.**

HARRI54.

Rumex salicifolius Weinmann subsp. triangulivalvis Danser. HITCH55.

**Rumex utahensis Rechinger f.**

HARRI54.

Rumex salicifolius Weinmann subsp. triangulivalvis Danser var. montigenitus Jepson.

**Rumex venosus Pursh**

HARRI54.

*Rumex verticillatus L.*OKANE88. WL: 7 mi N of Nunn. The specimen (CS) is *R. maritimus*!**Stenogonum Nuttall, 1848****Stenogonum flexum (Jones) Reveal & Howell**

REVEA76A.

Eriogonum flexum Jones.

**Stenogonum salsuginosum Nuttall**

REVEA76A.

Eriogonum salsuginosum (Nuttall) Hooker. HARRI54.

**Truellum Houttuyn, 1777****Truellum sagittatum (L.) Sojak**

Preslia 46:149.1974.

Polygonum sagittatum L. HARRI54.

Tracaulon sagittatum (L.) Greene.

**POLYPODIACEAE****Polypodium L., 1753***Polypodium amorphum Suksdorf*

LELLI85. Erroneous Report.

Polypodium montense Lang. Illegitimate.

**Polypodium hesperium Maxon**

HARRI54.

Polypodium vulgare L. var. columbianum Gilbert.

**Polypodium saximontanum Windham**

WINDH93; FNA93. Contrib. U. Mich. Herb. 19:47-48.1993. Type: La Plata Co.: E side Vallecito Creek 2.15 km NNE of its confluence with Fall Creek, 8240 ft., 25 June 1990, Windham 90-231 (UT).

**PONTEDERIACEAE****Heteranthera Ruiz & Pavon, 1794****Heteranthera limosa (Swartz) Willdenow**

HARRI54.

**Zosterella Small, 1913 GREAT86****Zosterella dubia (Jacquin) Small**

GREAT86.

Heteranthera dubia (Jacquin) MacMillan. WEBER82A. YM.

**PORTULACACEAE****Claytonia L., 1763****Claytonia lanceolata Pursh**

HARRI54.

Claytonia caroliniana Michaux var. lanceolata (Pursh) S. Watson. PORTE74.

**Claytonia megarhiza (Parry ex A. Gray) S. Watson**

HARRI54.

*Claytonia arctica* Adams var. *megarhiza* Parry ex A. Gray. Amer. J. Sci. (2)33:406.1862. Type: [probably Gray's Peak], 1861 Parry 142 (GH). Type specimen from Colorado.

**Claytonia rosea Rydberg**

HALLE66. Bull. Torr. Bot. Club 31:404-405.1904. Type: Huerfano Co.: La Veta, 18 May 1900, Rydberg & Vreeland 6300 (NY). Type specimen from Colorado.

**Claytonia rubra (Howell) Tidestrom**

J. M. Miller annotation. Jefferson Co., B. Anderson 1275.

*Claytonia virginiana* L.

RYDBE06. Misidentification of *C. rosea*.

**Crunocallis Rydberg, 1906**

**Crunocallis chamissoi (Ledebour ex Sprengel) Rydberg**

RYDBE32. Nilsson ined., annotations.

*Claytonia chamissonis* Eschscholtz & Ledebour. PORTE74.

*Montia chamissoi* (Ledebour ex Sprengel) Durand & Jackson. HARRI54.

**Erocallis Rydberg, 1906**

**Erocallis triphylla (S. Watson) Rydberg**

RYDBE32.

*Lewisia triphylla* (S. Watson) B. L. Robinson. HARRI54.

**Lewisia Pursh, 1814**

**Lewisia rediviva Pursh**

HARRI54.

**Montia L., 1753**

*Montia perfoliata* (Donn) T. J. Howell

EILKE78. Misidentification of *Claytonia rubra*.

*Limnia depressa* (A. Gray) Rydberg. RYDBE06.

**Oreobroma T. J. Howell, 1893 HOWEL93**

**Oreobroma nevadensis (A. Gray) T. J. Howell**

RYDBE32.

*Lewisia nevadensis* (A. Gray) B. L. Robinson. RYDBE32.

*Lewisia pygmaea* (A. Gray) B. L. Robinson var. *nevadensis* (A. Gray) Fosberg. HARRI54.

**Oreobroma pygmaea (A. Gray) T. J. Howell**

RYDBE32.

*Calandrinia pygmaea* (A. Gray) A. Gray. PORTE74.

*Lewisia pygmaea* (A. Gray) B. L. Robinson. HARRI54.

*Talinum pygmaeum* A. Gray. PORTE74.

**Portulaca L., 1753**

**Portulaca halimoides L.**

LEGRA62. J. F. Matthews (ined.) follows Legrand. MN, Mesa Co., BN, Baca Co..

*Portulaca parvula* A. Gray. HARRI54; WEBER83B. Matthews, ined.

**Portulaca oleracea L.**

TORRE27; HARRI54; MATTH93. Alien.

*Portulaca retusa* Engelm. RYDBE06; HARRI54; MATTH93.

*Portulaca pilosa* L.

TORRE27; MATTH85. Colorado reports are referred to *P. halimoides*.

**Talinum Adanson, 1763**

**Talinum calycinum Engelm**

HARRI54.

**Talinum parviflorum Nuttall ex Torrey & Gray**

HARRI54.

*Talinum teretifolium* Pursh

PORTE74. Species of eastern U.S. Report applies to *T. parviflorum*.

## POTAMOGETONACEAE

### Potamogeton L., 1753

#### **Potamogeton alpinus Balbis**

Named varieties appear to be trivial.

*Potamogeton alpinus* Balbis var. *subellipticus* (Fernald) Ogden. HARRI54; HARRI55.

*Potamogeton alpinus* Balbis var. *tenuifolius* (Rafinesque) Ogden. HARRI54; HARRI55.

#### **Potamogeton amplifolius Tuckerman**

HARRI54; HARRI55.

#### **Potamogeton crispus L.**

HARRI54; HARRI55. Alien.

#### **Potamogeton diversifolius Rafinesque**

HARRI54; FERNA32; HARRI55.

#### **Potamogeton epihydrus Rafinesque var. nuttallii (Chamisso & Schlechtendal) Fernald**

HARRI54; HARRI55.

#### **Potamogeton filiformis Persoon**

HARRI54; HARRI55.

*Potamogeton interior* Rydberg. RYDBE06; HARRI54.

#### **Potamogeton foliosus Rafinesque**

HARRI54; HARRI55; HAYNE74.

#### **Potamogeton gramineus L.**

HARRI54; HARRI55.

*Potamogeton gramineus* L. var. *maximus* Morong & Bennett. HARRI54; HARRI55.

*Potamogeton heterophyllus* Schreber. RYDBE06; TUTIN64.

#### **Potamogeton illinoensis Morong**

HARRI54; HARRI55.

#### *Potamogeton lateralis Morong*

HARRI55. Entered very doubtfully by HARRI55. Report could apply to *P. pusillus*.

#### *Potamogeton lonchites Tuckerman*

RYDBE06. misidentification.

#### *Potamogeton lucens L.*

RYDBE06. Misidentification. A European species.

#### **Potamogeton natans L.**

HARRI54; HARRI55.

#### **Potamogeton nodosus Poiret in Lamarck**

HARRI54; HARRI55.

#### **Potamogeton pectinatus L.**

HARRI54; HARRI55.

#### **Potamogeton perfoliatus L. subsp. richardsonii (Bennett) Hultén**

HULTE41.

*Potamogeton richardsonii* (Bennett) Rydberg. HARRI54; HARRI55.

#### **Potamogeton praelongus Wulfen**

HARRI54; HARRI55.

#### **Potamogeton pusillus L. var. pusillus**

HARRI54; HARRI55; HAYNE74.

#### **Potamogeton pusillus L. var. tenuissimus Mertens & Koch in Röhling**

HAYNE74. JA: Big Creek Lake, Porter 6433.

*Potamogeton berchtoldii* Fieber in Berchtold & Fieber. HARRI54; HARRI55.

#### **Potamogeton vaginatus Turczaninow**

HARRI54; HARRI55.

#### *Potamogeton zizii K. Koch ex Roth*

RYDBE06; TUTIN64. hybrid, *P. nodosus* x *P. lucens*. Misidentified.

## PRIMULACEAE

### *Anagallis* L., 1753

#### *Anagallis arvensis* L. f. *coerulea* (Schreber) Baumgartner

Alien. Boulder Co.: E of Valmont Power Plant, 15 June 1997, Pat Murphy 14.

#### *Anagallis minima* (L.) Krause in Sturm

TUTIN64.

*Centunculus minimus* L.. HARRI54.

### *Androsace* L., 1753 ROBBI44

#### *Androsace chamaejasme* Host subsp. *carinata* (Torrey) Hultén

PORTE74, as the species; HULTE41.

*Androsace carinata* Torrey. TORRE24,27; RYDBE06; HARRI54. Ann. Lyc. Nat. Hist. N.Y. 1:30.1824. Type: El Paso Co.: Pikes Peak. Hybrid.

*Douglasia johnstonii* A. Nelson. CONST38. Proc. Biol. Soc. Wash. 20:37.1937. Type: LR: Chasm L, Long's Peak, 16 Aug. 1906, Johnston 339 (RM). Type specimen from Colorado.

#### *Androsace filiformis* Retzius

RYDBE06; HARRI54.

*Androsace capillaris* Greene. Pittonia 4:148.1900. Type: not cited. Greene was simply re-naming the "*A. filiformis*" of America. Type specimen from Colorado.

#### *Androsace occidentalis* Pursh

RYDBE06; HARRI54.

#### *Androsace septentrionalis* L.

TORRE27; HARRI54; ROBBI44. So-called vars are environmental modifications.

*Androsace diffusa* Small. RYDBE06.

*Androsace pinetorum* Greene. Pittonia 4:149-150.2900 Type: Graham's Park, Los Pinos R., 7,800 ft., 12 May 1899, Baker (ND-G). Type specimen from Colorado.

*Androsace puberulenta* Rydberg. Bull. Torr. Bot. Club 30:260.1903. Type: Huerfano Co.: near La Veta Pass, 20 June 1900, Rydberg & Vreeland 5772 (NY). Type specimen from Colorado.

*Androsace septentrionalis* L. var. *glandulosa* St. John. HARRI54.

*Androsace septentrionalis* L. var. *puberulenta* (Rydberg) Knuth. HARRI54.

*Androsace septentrionalis* L. var. *subulifera* A. Gray. HARRI54.

*Androsace septentrionalis* L. var. *subumbellata* A. Nelson. HARRI54.

*Androsace subulifera* (A. Gray) Rydberg. RYDBE06.

*Androsace subumbellata* (A. Nelson) Small. RYDBE06.

### *Dodecatheon* L., 1753 THOMP53

#### *Dodecatheon meadia* L.

TORRE27; PORTE74. Report applies to *D. pulchellum*.

#### *Dodecatheon pulchellum* (Rafinesque) Merrill

HARRI54; THOMP53. Thompson was as yet unaware of the Rafinesque basionym when he selected *D. radicum* for the name of this species.

*Dodecatheon multiflorum* Rydberg. THOMP53 (as *D. radicum*). Bull. Torr. Bot. Club 31:631.1905. Type: Sangre de Cristo Cr., 2 July 1900, Rydberg & Vreeland 5781 (NY). Type specimen from Colorado.

*Dodecatheon pauciflorum* (E. M. Durand) Greene. RYDBE06.

*Dodecatheon philoscia* A. Nelson. RYDBE06.

*Dodecatheon radicum* Greene. RYDBE06; HARRI54.

*Dodecatheon radicum* Greene var. *sinuatum* Rydberg. Bull. Torr. Bot. Club 31:631.1905. Type: LR: foothills, 14 May 1890, Crandall s.n. (NY). Type specimen from Colorado.

*Dodecatheon sinuatum* Rydberg. RYDBE06.

### *Glaux* L., 1753

#### *Glaux maritima* L. var. *angustifolia* Boivin

RYDBE06; HARRI54 (as the species); BOIVI56A.

### *Lysimachia* L., 1753

**Lysimachia ciliata L.**

TORRE27.

Steironema ciliatum (L.) Rafinesque. RYDBE06.

**Lysimachia nummularia L.**

WEBER61. Alien. Boulder Co.: Irrigation ditches near Boulder.

**Lysimachia vulgaris L.**

Alien. Boulder Co.: Boulder, 8 Aug. 1951, Weber 7181.

**Naumburgia Moench, 1802****Naumburgia thyrsoflora (L.) Reichenbach**

RYDBE06. "Fort Collins." Also known from Moraine Park.

Lysimachia thyrsoflora L.. HARRI54.

**Primula L., 1753****Primula angustifolia Torrey**

TORRE24,27; HARRI54. Endemic. Ann. Lyc. N. Y. 1:24.t.3.f.3.1824. Type: El Paso Co.: Pikes Peak, James (NY). Type specimen from Colorado.

**Primula egaliksensis Wormskjold**

WEBER55.

*Primula farinosa L.*PORTE74. Report applies to *P. incana*.**Primula incana Jones**

HARRI54.

*Primula americana* Rydberg, non Torrey. RYDBE06.*Primula farinosa L.* var. *incana* (Jones) Fernald. RYDBE06.**Primula parryi A. Gray**

HARRI54. Amer. J. Sci. (2)34:257.1862. Type: Colorado, Parry (GH). Type specimen from Colorado.

**PYROLACEAE****Chimaphila Pursh, 1813****Chimaphila umbellata (L.) W. Barton subsp. occidentalis (Rydberg) Hultén**

RYDBE06; HULTE41.

*Chimaphila occidentalis* Rydberg.*Chimaphila umbellata (L.) W. Barton* var. *occidentalis* (Rydberg) S. F. Blake. HARRI54.**Moneses Salisbury, 1821****Moneses uniflora (L.) A. Gray**

RYDBE06; HARRI54.

*Pyrola uniflora L.***Orthilia Rafinesque, 1840 HABER74**

Autikon Botanikon 103. 1840

**Orthilia secunda (L.) House**

TUTIN64. Amer. Midl. Nat. 7:134.1921.

*Pyrola secunda L.* RYDBE06; HARRI54.*Ramischia secunda (L.) Opiz* ex Garcke. COPEL41.**Orthilia secunda (L.) House subsp. obtusata (Turczaninow) Boecher**

Bot. Tidsskr. 57:31.1961.

*Pyrola obtusata Turczaninow* ex Komarov. Trudy Bot. Sada 25:192.1905.*Pyrola secunda L.* var. *pumila* Chamisso. Linnaea 1:514.1825.*Ramischia obtusata (Turczaninow) Freyn*. Oesterr. Bot. Zeitschr. 14:467.1895.**Pyrola L., 1753****Pyrola chlorantha Swartz**

RYDBE06; HARRI54; HABER72.

*Pyrola virens* Schweigger.

*Pyrola elliptica* Nuttall

HARRI54. One specimen Harrington guessed might be this, but hardly likely.

**Pyrola minor** L.

RYDBE06; HARRI54.

**Pyrola picta** J. E. Smith

RYDBE06; HARRI54; HABER87.

**Pyrola rotundifolia** L. subsp. *asarifolia* (Michaux) Löve

LOVE75C.

*Pyrola asarifolia* Michaux. RYDBE06; HARRI54.

*Pyrola asarifolia* Michaux var. *purpurea* (Bunge) Fernald. HARRI54.

*Pyrola rotundifolia* L. var. *uliginosa* A. Gray. PORTE74; RYDBE06.

*Pyrola uliginosa* Torrey. RYDBE06.

**RANUNCULACEAE****Anemonastrum Holub, 1973****Anemonastrum narcissiflorum** (L.) Holub subsp. *zephyrum* (A. Nelson) W. A. Weber

WEBER79A.

*Anemonastrum zephyrum* (A. Nelson) Holub.

*Anemone albomerus* A. Nelson. Bot. Gaz. 12:52.1906. Nomen nudum.

*Anemone narcissiflora* L. subsp. *zephyra* (A. Nelson) Löve et al.. LOVE71.

*Anemone zephyra* A. Nelson. HARRI54. Bot. Gaz. 42:51.1906. Type: LR: summit of North Park Range, 10 Aug. 1903, Goodding 1834 (RM 51668 marked 'type' by Nelson). Type specimen from Colorado.

**Anemone L., 1753***Anemone caroliniana* Walter

PORTE74. Probably collected east of Colorado, Hall & Harbour 6.

**Anemone cylindrica** A. Gray

HARRI54.

**Anemone multifida** Poiret subsp. *saxicola* (Boivin) W. A. Weber

WEBER79A.

*Anemone multifida* Poiret var. *saxicola* Boivin.

**Anemone multifida** Poiret var. *globosa* (Nuttall) Torrey & Gray

The type locality of *A. multifida* was Straits of Magellan. Var. *globosa* might better be given subspecific rank!.

*Anemone globosa* Nuttall. HARRI54.

**Anemone parviflora** Michaux

HARRI54.

**Anemone riparia** Fernald

WEBER73. Evidently extinct (Cucharas Valley).

**Anemonidium Holob, 1974****Anemonidium canadense** (L.) Löve & Löve

LOVE82A, p. 124.

*Anemone canadensis* L.. HARRI54.

*Anemone pennsylvanica* L.. RYDBE06.

**Atragene L., 1753****Atragene columbiana** Nuttall

*Atragene diversiloba* (Rydberg) Rydberg. RYDBE06.

*Atragene pseudoalpina* (Kuntze) A. Nelson var. *diversiloba* Rydberg. Bull. Torr. Bot. Club 31:409.1904. Type: County?: mts. near Denver, Aug. 1869, Smith s.n. (NY). Taxonomic status in doubt.

*Atragene pseudoalpina* (Kuntze) Rydberg var. *pseudoalpina*. RYDBE06.

*Atragene tenuiloba* (A. Gray) Britton. RYDBE06.

*Clematis alpina* P. Miller var. *ochotensis* A. Gray in De Candolle. PORTE74.

*Clematis columbiana* (Nuttall) Torrey & Gray var. *tenuiloba* (A. Gray) J. Pringle. PRING71.

*Clematis pseudoalpina* (Kuntze) A. Nelson. HARRI54.



**Atragene occidentalis Hornemann**

*Clematis columbiana* auctt., non (Nuttall) Torrey & Gray. HARRI54; PRING71. See PRING71 for nomenclatural confusion.

**Batrachium S. Gray, 1831****Batrachium circinatum (Sibthorp) E. Fries subsp. subrigidum (Drew) Löve & Löve**

LOVE75C. But see Fl. USSR. which claims *B. foeniculaceus* (Gilib.) V. Krecz., based on *R. foeniculaceus* Gilib., Fl. Lithuan. 5:261.1782, antedates *R. circinatus*.

*Ranunculus circinatus* Sibthorp. HARRI54.

**Batrachium longirostre (Godron) F. Schultz**

*Ranunculus longirostris* Godron. HARRI54; BENSO48.

**Batrachium trichophyllum (Chaix) van den Bosch**

*Batrachium confervoides* E. Fries. RYDBE06; TUTIN64.

*Batrachium drouetii* (F. Schultz) Nyman. RYDBE06; TUTIN64.

*Batrachium flaccidum* (Persoon) Ruprecht. RYDBE06.

*Ranunculus aquatilis* L. var. *capillaceus* (Thuillier) De Candolle. HARRI54.

*Ranunculus trichophyllum* Chaix.

**Ceratocephala Moench, 1794****Ceratocephala orthoceras De Candolle**

GUTER75.

*Ceratocephala testiculata* (Crantz) Roth. TUTIN64.

*Ranunculus testiculatus* Crantz. HARRI54.

**Clematis L., 1753****Clematis ligusticifolia Nuttall ex Torrey & Gray**

HARRI54.

**Coriflora W. A. Weber, 1995 WEBER95****Coriflora hirsutissima (Pursh) W. A. Weber**

WEBER95.

*Clematis bakeri* Greene. Pittonia 4:147.1900. Type: Los Pinos, 19 May 1899, Baker (ND-G). Type specimen from Colorado.

*Clematis douglasii* Hooker. PORTE84.

*Clematis eriophora* Rydberg. Bull. Torr. Bot. Club 29:154.1902. Type: LR: Horsetooth, 26 April 1896, Cowen (NY). Type specimen from Colorado.

*Clematis hirsutissima* Pursh. HARRI54.

*Viorna bakeri* (Greene) Rydberg. RYDBE06.

*Viorna jonesii* (Kuntze) Rydberg. RYDBE06.

**Coriflora scottii (T. C. Porter in Porter & Coulter) W. A. Weber**

WEBER95.

*Clematis hirsutissima* Pursh var. *scottii* (T. C. Porter in Porter & Coulter) Erickson. HARRI54.

*Clematis scottii* T. C. Porter in Porter & Coulter. Syn. Fl. Colo. 1.1874. Type: FM: Soda Springs, 33 mi W of Cañon City, 1872, Scott. Type specimen from Colorado.

*Viorna scottii* (T. C. Porter) Rydberg. RYDBE06.

**Cyrtorhyncha Nuttall, 1838****Cyrtorhyncha ranunculina Nuttall ex Torrey & Gray**

*Cyrtorhyncha neglecta* Greene. Pittonia 4:146-147.1900. Type: JF: Golden, Morrison, May 1871, Greene (ND-G). Type specimen from Colorado.

*Cyrtorhyncha rupestris* Greene. Pl. Baker. 3:3.1901. Type: Black Canyon, 20 June 1901, Baker 198 (ND-G). Type specimen from Colorado.

*Ranunculus nuttallii* A. Gray. PORTE74.

*Ranunculus ranunculinus* (Nuttall) Rydberg. HARRI54.

**Halerpestes Greene, 1900****Halerpestes cymbalaria (Pursh) Greene subsp. saximontana (Fernald) Moldenke**

*Ranunculus cymbalaria* Pursh var. *saximontanus* Fernald. TORR27, as the species; HARRI54.

**Hecatonia Loureiro, 1790****Hecatonia sclerata (L.) Fourreau**

*Ranunculus eremogenes* Greene. RYDBE06.

*Ranunculus eremogenes* Greene var. *degener* Greene. Pittonia 4:144.1900. Lectotype: Archuleta Co.: Arboles, July 1899, Baker 329 (ND-G). Type specimen from Colorado.

*Ranunculus eremogenes* Greene var. *pilosulus* Greene. Pl. Baker. 3:2.1901. Type: Gunnison Co.: Gunnison, 7,680 ft., 17 July 1901, Baker 454 (ND-G). Type specimen from Colorado.

*Ranunculus sceleratus* L. var. *multifidus* Nuttall. HARRI54.

### Myosurus L., 1753

#### **Myosurus apetalus** Gay

RAVEN73, p.172.

*Myosurus aristatus* Bentham. RYDBE06; HARRI54.

#### **Myosurus cupulatus** S. Watson

WEBER66; CAMPB52. "At Montrose, Colorado". The report is unsubstantiated.

#### **Myosurus minimus** L. subsp. *minimus*

HARRI54.

#### **Myosurus minimus** L. subsp. *montanus* Campbell

HARRI54.

#### **Myosurus nitidus** Eastwood

HARRI54. Bull. Torr. Bot. Club 32:194. 1905. Type: Montezuma Co.: Mancos, June, 1891, [Eastwood] (CAS). Type specimen from Colorado.

### Pulsatilla P. Miller, 1754

#### **Pulsatilla ludoviciana** (Nuttall) Heller

LOVE54B. Tetraploid, 2n=32, American and east Asia; *P. patens* is diploid 2n=16, Eurasia. The taxa "clearly distinguishable through their common range".

*Anemone ludoviciana* Nuttall. TORRE27.

*Anemone patens* L. var. *nuttalliana* A. Gray.

*Pulsatilla patens* (L.) P. Miller subsp. *hirsutissima* Zamels.

### Ranunculus L., 1753

#### *Ranunculus abortivus* L.

HARRI54. Erroneous Report.

#### **Ranunculus abortivus** L. subsp. *acrolasius* (Fernald) Kapoor & Löve

Caryologia 23:576.1970.

#### **Ranunculus acriformis** A. Gray

HARRI54.

#### **Ranunculus adoneus** A. Gray

HARRI54. Proc. Phila. Acad. 15:56.1863. Type: from the headwaters of Clear Creek and the alpine ridges lying east of Middle Park, 1861, Parry 81 (cf. discussion in BENS048). Type specimen from Colorado.

*Ranunculus adoneus* A. Gray var. *alpinus* (S. Watson) L. Benson.

#### **Ranunculus alismifolius** Geyer ex Bentham var. *montanus* S. Watson

HARRI54.

*Ranunculus unguiculatus* Greene. Pittonia 4:143.1900. Type: Mineral Co.: near Pagosa Peak, 11,500 ft., 11 Aug. 1899, Baker 333 (ND-G). Type specimen from Colorado.

#### **Ranunculus cardiophyllus** Hooker

HARRI54.

*Ranunculus affinis* R. Brown var. *cardiophyllus* A. Gray. PORTE74.

*Ranunculus cardiophyllus* Hooker var. *coloradensis* L. Benson. Amer. J. Bot. 27:804.1940. Type: SA: Silverton, 3 July 1898, Colo. State Agr. Coll. 413 (NY). Type specimen from Colorado.

*Ranunculus cardiophyllus* Hooker var. *pinetorum* Greene. Pittonia 4:144.1900. Type: Graham's Park, 7,800 ft., 12 May 1899, Baker 327 (ND-G). Type specimen from Colorado.

*Ranunculus coloradensis* (L. Benson) L. Benson.

#### **Ranunculus eschscholtzii** Schlechtendal

HARRI54.

*Ranunculus eschscholtzii* Schlechtendal var. *eximius* (Greene) L. Benson. HARRI54.

*Ranunculus nivalis* R. Brown var. *eschscholtzii* S. Watson. PORTE74.

*Ranunculus ocreatus* Greene. RYDBE06. Pittonia 4:15.1899. Type: LP: Mt. Hesperus, 2 July 1898, Baker, Earle, & Tracy 912 (ND-G).

Type specimen from Colorado.

*Ranunculus fascicularis* Mühlenberg ex Bigelow var. *apricus* (Greene) Fernald

BENSO48; HARRI54. "SW (SE?) Colorado, Flint," as *Anemone parviflora*, ex herb. Dartmouth, ex herb. G. W. Nash (NY). EWAN81 has no evidence that Flint ever was in Colorado.

*Ranunculus flabellaris* Rafinesque

HARRI54. No COLO specimens. Probably reports are of *R. gmelinii*.

*Ranunculus gelidus* Karilin & Kirilow

HARRI54, as the species. Eurasian.

***Ranunculus gelidus* Karilin & Kirilow subsp. *grayi* (Britton) Hultén**

*Ranunculus drummondii* Greene. COX33.

*Ranunculus grayi* Britton. HARRI54; LOVE71. Löve argues for recognizing *R. grayi*.

***Ranunculus glaberrimus* Hooker var. *ellipticus* Greene**

HARRI54.

*Ranunculus ellipticus* Greene. RYDBE06.

*Ranunculus oreogenes* Greene. BENSO48. Pl. Baker. 3:2,3.1901. Type: Gunnison Co.: Cerro Summit, 7 June 1901, Baker 50. Benson gives this specific rank. *R. glaberrimus* is abundant at the type locality!. Type specimen from Colorado.

***Ranunculus gmelinii* De Candolle var. *hookeri* (D. Don) L. Benson**

HARRI54.

*Ranunculus amphibius* James. JAMES23. Long Exped. (Phila. ed.) 1:498.1823. Type: Adams Co.: South Platte River S of Brighton, James, fide GOODM95. This locality, on the plains seems unlikely. According to GOODM95, the type was incorrectly annotated as *Batrachium circinatum*. Type specimen from Colorado.

*Ranunculus multifidus* Pursh var. *repens* A. Gray. PORTE74.

*Ranunculus purshii* Richardson. TORRE27; RYDBE06.

***Ranunculus hyperboreus* Rottboel subsp. *intertextus* (Greene) Kapoor & Löve**

*Caryologia* 23:588.1970.

*Ranunculus hyperboreus* Rottboel var. *natans* C. A. Meyer. PORTE74.

*Ranunculus intertextus* Greene. BENSO48. Ottawa Nat. 16:33.1902. Lectotype: Upper Bear Creek, 1889, Greene (ND-G). Type specimen from Colorado.

*Ranunculus natans* C. A. Meyer var. *intertextus* (Greene) L. Benson. BENSO48.

***Ranunculus inamoenus* Greene**

HARRI54; BENSO48. *Pittonia* 3:91.1896. Lectotype: LR: "Dale Creek, Wyoming", Greene 2639, 1648 (ND-G). Type specimen from Colorado.

*Ranunculus alpeophilus* A. Nelson. RYDBE06.

*Ranunculus inamoenus* Greene var. *alpeophilus* (A. Nelson) L. Benson. HARRI54.

*Ranunculus micropetalus* (Greene) Rydberg. RYDBE06.

***Ranunculus jovis* A. Nelson**

HARRI54.

***Ranunculus macauleyi* A. Gray**

HARRI54. Proc. Amer. Acad. 15:45.1879. SA: Crystal Lake, 11,700 ft., 8 July 1878, Pease (GH). Type specimen from Colorado.

*Ranunculus macauleyi* A. Gray var. *brandegeei* L. Benson. HARRI54. Amer. Midl. Nat. 40:124.1948. Type: Custer Co.: source of Lake Creek, Sangre de Cristo Mts., 1874, Brandegee 883 (Park Co.). Type specimen from Colorado.

***Ranunculus macounii* Britton**

HARRI54.

*Ranunculus micranthus* Nuttall ex Torrey & Gray

RYDBE06; HARRI54. "Twin Lakes." Reported but no specimens located".

***Ranunculus pedatifidus* J. E. Smith**

HARRI54.

*Ranunculus affinis* R. Brown. RYDBE06.

*Ranunculus pensylvanicus* L. f.

RYDBE06; HARRI54. "Alamosa." Close relative of *R. macounii*; reported from AL, Archuleta Co.; no COLO specimens. Benson does not cite for Colorado.

***Ranunculus pygmaeus* Wahlenberg**

HARRI54.

***Ranunculus repens* L.**

PORTE74; HARRI54. Alien. Garden escape, naturalized. Porter's reports are dubious.

**Ranunculus reptans L. var. ovalis Torrey & Gray**

TUTIN64.

Ranunculus flammula L. var. filiformis (Michaux) Hooker. HARRI54.

Ranunculus flammula L. var. ovalis (Torrey &amp; Gray) L. Benson. HARRI54.

Ranunculus flammula L. var. reptans A. Gray. PORTE74.

Ranunculus reptans L. var. filiformis (Michaux) De Candolle.

**Ranunculus reptans L. var. reptans**

RYDBE06. The European race.

**Ranunculus uncinatus D. Don var. earlei (Greene) L. Benson**

HARRI54.

Ranunculus douglasii T. J. Howell. RYDBE06.

Ranunculus earlei Greene. Pittonia 4:15.1899. Lectotype: Montezuma Co.: Mancos river bottoms, 7,000 ft., Baker et al. 38 (GH). Type specimen from Colorado.

**Ranunculus uncinatus D. Don var. parviflorus (Torrey) L. Benson**

HARRI54.

Ranunculus bongardii Greene. RYDBE06.

**Trautvetteria Fischer & Meyer, 1835****Trautvetteria caroliniensis (Walter) Vail**

HARRI54.

**Viticella Moench, 1794****Viticella orientalis (L.) W. A. Weber**

WEBER84B. Alien.

Clematis orientalis L.. HARRI54.

**RESEDACEAE****Reseda L., 1753****Reseda lutea L.**

HARRI54. Alien.

**Reseda luteola L.**

WEBER66. Alien.

**RHAMNACEAE****Ceanothus L., 1753****Ceanothus fendleri A. Gray**

RYDBE06; HARRI54.

Ceanothus subsericeus Rydberg. Bull. Torr. Bot. Club 31:564.1904. Type: LR: vicinity Arthur's Rock, 20 July 1895, Cowen s.n. (NY, 82 CS). Possibly, as Rydberg suggests, the hybrid between this and *C. herbaceus*. Type specimen from Colorado.**Ceanothus herbaceus Rafinesque**

BRIZI64.

Ceanothus ovalis Bigelow. PORTE74.

Ceanothus ovatus Desfontaines. HARRI54.

Ceanothus pubescens (Torrey &amp; Gray) Rydberg. RYDBE06.

**Ceanothus martinii Jones**HARRI54; WEBER89C. Garfield Co., Rio Blanco Co.. Boulder County specimens alluded to by Harrington are hybrids of *C. herbaceus* x *C. fendleri*.**Ceanothus velutinus Douglas ex Hooker**

RYDBE06; HARRI54.

Ceanothus velutinus Douglas var. laevigatus Torrey &amp; Gray. PORTE74.

**Frangula P. Miller, 1754****Frangula alnus P. Miller**

WEBER82A. Alien. Boulder Co..

**Rhamnus L., 1753**

**Rhamnus cathartica L.**

RYDBE06; HARRI54. Alien.

**Rhamnus smithii Greene**

HARRI54. Pittonia 3:17.96. Type: Archuleta Co.: Pagosa Springs, 18 July 1893, B. H. Smith, (PH, isotype COLO). Type specimen from Colorado.

**ROSACEAE****Acomastylis Greene, 1906****Acomastylis rossii (R. Brown) Greene subsp. turbinata (Rydberg) W. A. Weber**

WEBER76A.

Acomastylis arapahoensis Daniels. DANIE11. Fl. Boulder Vic. 146.1911. Type: timberline, Arapahoe Peak, 11,500 ft., 1906, Daniels (UMO). A large, more hairy plant with several flowers per stem. Type specimen from Colorado.

Geum rossii (R. Brown) Seringe var. turbinatum (Rydberg) C. L. Hitchcock. PORTE74, as the species.

Geum turbinatum Rydberg. HARRI54.

Potentilla nivalis Torrey, non Lapeyrouse.. TORRE24; GOODM95. Type: Pikes Peak, James. Type specimen from Colorado.

Sieversia turbinata (Rydberg) Greene. RYDBE06.

**Agrimonia L., 1753****Agrimonia eupatoria L.**PORTE74. Report applies to *A. striata*.**Agrimonia striata Michaux**

HARRI54.

Agrimonia brittoniana Bicknell var. occidentalis Bicknell ex Rydberg. RYDBE06. Nomen Nudum. Colorado Flora p. 189. Type specimen from Colorado.

**Alchemilla L., 1753**

Erroneous Report

**Alchemilla alpina L.**

WEBER55. Historic report from Sangre de Cristos, evidently an instance of mixed labels.

**Amelanchier Medicus, 1789 JONES46****Amelanchier alnifolia Nuttall**

HARRI54.

Amelanchier canadensis Torrey &amp; Gray var. alnifolia Torrey &amp; Gray. PORTE74.

Amelanchier elliptica A. Nelson. Bot. Gaz. 40:66.1905. Type: LR: Beaver Creek, 4 July 1903, Goodding 1447 (RM). Type specimen from Colorado.

Amelanchier oreophila A. Nelson. Bot. Gaz. 40:65.1905. Type: Routt Co.: Camp Creek, 6 July 1903, Goodding 1456 (RM), first specimen listed. Type specimen from Colorado.

Amelanchier polycarpa Greene. Pittonia 4:127-127.1900. Type: Archuleta Co.: Piedra, 10 July 1899, Baker s.n.. The totally glabrous form. Type specimen from Colorado.

Amelanchier pumila Nuttall ex Torrey &amp; Gray. HARRI54.

**Amelanchier utahensis Koehne**

HARRI54.

Amelanchier bakeri Greene. Pittonia 4:128-129.1900. Type: Conejos Co.: Los Pinos, 16 May 1899, Baker (ND-G). Type specimen from Colorado.

Amelanchier prunifolia Greene. Pittonia 4:21.1899. Type: Montezuma Co.: Mancos, July 1898, Baker, Earle, &amp; Tracy 665 (ND-G). Type specimen from Colorado.

Amelanchier rubescens Greene. RYDBE06.

**Argentina J. Hill, 1756****Argentina anserina (L.) Rydberg var. anserina**

RYDBE98.

Potentilla anserina L.. HARRI54.

**Argentina anserina (L.) Rydberg var. concolor Rydberg**

RYDBE98, 06. RYDBE06 claimed that his var. concolor was not the same as that variety so named by Seringe.

Argentina argentea Rydberg. RYDBE06.

Potentilla anserina L. var. sericea (K. Koch) Hayne. HARRI54.

**Armeniaca Scopoli, 1754****Armeniaca vulgaris Lamareck**

Alien. Not naturalized.

*Prunus armeniaca* L.. WILKE78.

**Cerasus P. Miller, 1754****Cerasus pensylvanica (L. f.) Loiseleur**

*Prunus ignotus* A. Nelson. Bot. Gaz. 42:53.1906. Type: Larimer Co.: Cache La Poudre near Fort Collins, 12 May 1897, Crandall 670 (RM). Type specimen from Colorado.

*Prunus pensylvanica* L. f. subsp. *corymbulosa* (Rydberg) W. F. Wight. RYDBE06; HARRI54.

**Cerasus pumila (L.) Michaux subsp. besseyi (L. H. Bailey) W. A. Weber**

*Prunus besseyi* L. H. Bailey. RYDBE06; HARRI54.

**Cercocarpus Humboldt, Bonpland, & Kunth, 1824*****Cercocarpus fothersgilloides* Humboldt, Bonpland, & Kunth**

TORRE27. Misidentification.

*Cercocarpus argenteus* Rydberg. HARRI54.

*Cercocarpus montanus* Rafinesque var. *argenteus* (Rydberg) F. L. Martin.

*Cercocarpus parvifolius* Nuttall ex Torrey & Gray. RYDBE06. Fl. N. Amer. 1:427.1840. Type: Probably from Jefferson Co. at mouth of Platte Canyon, fide GOODM95. Type specimen from Colorado.

**Cercocarpus intricatus S. Watson**

HARRI54.

**Cercocarpus ledifolius Nuttall ex Torrey & Gray**

HARRI54.

**Cercocarpus montanus Rafinesque**

HARRI54. Atlantic J. 1:146.1832. Type: Jefferson Co., James, based on Torrey's description of *C. fothersgilloides*, fide GOODM95. Type specimen from Colorado.

*Cercocarpus argenteus* Rydberg. HARRI54.

*Cercocarpus montanus* Rafinesque var. *argenteus* (Rydberg) F. L. Martin.

*Cercocarpus parvifolius* Nuttall ex Torrey & Gray. RYDBE06. Fl. N. Amer. 1:427.1840. Type: Probably from Jefferson Co. at mouth of Platte Canyon, fide GOODM95. Type specimen from Colorado.

**Chamaerhodos Bunge, 1829****Chamaerhodos erecta (L.) Bunge subsp. nuttallii (Pickering ex Rydberg) Hultén**

RYDBE06.

*Chamaerhodos nuttallii* Pickering ex Rydberg. HARRI54.

**Coleogyne Torrey, 1853****Coleogyne ramosissima Torrey**

RYDBE06; HARRI54.

**Comarum L., 1753****Comarum palustre L.**

WEBER61,89C.

**Crataegus L., 1753****Crataegus chrysocarpa Ashe**

HARRI54. North Carolina College Agr. Mech. Arts Bull. 175:110.1900. Type: Larimer Co.: foothills, Cache La Poudre, 6,000 ft., 20 Aug. 1899, Ashe. Type specimen from Colorado.

*Crataegus doddsii* Ramaley. Bot. Gaz. 46:381.1908. Type: Boulder Co.: Pole Canyon, 10 Sept. 1908, Ramaley & Dodds 6181 (COLO). !Phipps. Type specimen from Colorado.

**Crataegus erythropoda Ashe**

HARRI54. North Carolina Coll. Agr. Mech. Arts Bull. 175:113.1900. Type: Larimer Co.: Cache La Poudre, Aug. 1899, Ashe. Type specimen from Colorado.

**Crataegus macracantha Loddiges var. occidentalis (Britton) Eggleston**

Phipps in herb.

*Crataegus coloradensis* A. Nelson. Proc. Biol. Soc. Wash. 17:175-176.1904. Type: Boulder Co.: Gregory Canyon, Andrews (COLO). Type specimen from Colorado.

*Crataegus colorado* Ashe. North Carolina College Agr. Mech. Arts Bull. 175:110.1900. Type: Larimer Co.: Cache la Poudre, 20 Aug. 1899, Ashe. Type specimen from Colorado.

*Crataegus coloradoides* Ramaley. Bot. Gaz. 46:383.1908. Type: Boulder Co.: Pole Canyon, 19 Sept. 1908, Ramaley & Dodds 6184 (COLO). Type specimen from Colorado.

*Crataegus occidentalis* Britton. Bull. N. Y. Bot. Gard. 1:448.1900. Type: JF: Golden, 1873, Greene (NY). Type specimen from Colorado.

### ***Crataegus rivularis* Nuttall**

HARRI54.

*Crataegus cernonis* A. Nelson. Bot. Gaz. 34:370.1902. Type specimen from Colorado.

### ***Crataegus saligna* Greene**

HARRI54. Endemic. Pittonia 3:99.1896. Type: lower Cimarron R., 30 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

*Crataegus wheeleri* A. Nelson. Bot. Gaz. 34:369.1902. Type: Gunnison Co.: Sapinero, 1898, Wheeler 532 (RM). Type specimen from Colorado.

### ***Crataegus succulenta* Schrader ex Link**

HARRI54. Alien. Only in cultivation and escaped, not naturalized.

## ***Cylactis Rafinesque, 1819***

### ***Cylactis arctica* (L.) W. A. Weber subsp. *acaulis* (Michaux) W. A. Weber**

WEBER85B.

*Rubus acaulis* Michaux. HARRI54.

*Rubus arcticus* L. subsp. *acaulis* (Michaux) Focke. HULTE68.

### ***Cylactis pubescens* (Rafinesque) W. A. Weber**

WEBER85B.

*Rubus pubescens* Rafinesque. HARRI54.

*Rubus triflorus* Richardson. PORTE74.

## ***Dasiphora* Rydberg**

Reveal (corresp.) maintains that the genus *Pentaphylloides* included the type of *Potentilla* and hence cannot be used

### ***Dasiphora floribunda* (Pursh) n. comb. ined.**

The combination has not yet been made in the genus.

*Pentaphylloides floribunda* (Pursh) Löve. LOVE54B.

*Potentilla floribunda* Pursh.

*Potentilla fruticosa* L. forma *humilis* Cockerell. Bull. Torr. Bot. Club 18:169.1891. Type: Custer Co.: Micawber Mine, Cockerell (no specimens saved?). Type specimen from Colorado.

### ***Dasiphora fruticosa* (L.) Rydberg**

RYDBE06. Rydberg meant to include the Colorado plants in this taxon. The species is Eurasian.

*Pentaphylloides fruticosa* (L.) O. Schwarz.

*Potentilla fruticosa* L.. TORRE27; HARRI54.

## ***Dryas* L., 1753**

### ***Dryas octopetala* L. subsp. *hookeriana* (Juzepczuk) Hultén**

TORRE27; RYDBE06; HARRI54. as *D. octopetala*.

## ***Drymocallis* Fourreau, 1908**

### ***Drymocallis arguta* (Pursh) Rydberg**

RYDBE06.

*Drymocallis arguta* (Pursh) Rydberg subsp. *convallaria* (Rydberg) Keck.

*Potentilla arguta* Pursh. HARRI54.

*Potentilla pensylvanica* L. var. *arguta* Seringe. TORRE27.

### ***Drymocallis fissa* (Nuttall) Rydberg**

RYDBE06.

*Potentilla fissa* Nuttall. HARRI54.

*Potentilla glandulosa* Lindley forma *subacaulis* Kuntze. Rev. Gen. Plant. 1:219.1891. Type: "Colorado, 2800 m." Assignment tentative. Type specimen from Colorado.

*Potentilla scopulorum* Greene. Erythea 1:4.1893. Type: "Open pine woods at middle elevations" [Upper Bear Cr., 23 July 1889] [Greene (ND-G). Type specimen from Colorado.

### ***Drymocallis glandulosa* (Lindley) Rydberg**

RYDBE06.

*Potentilla glandulosa* Lindley subsp. *glabrata* (Rydberg) Keck. PORTE74; HARRI54. Porter's report applies to *D. fissa*, as he indicated.

**Erythrocoma Greene, 1906****Erythrocoma triflora (Pursh) Greene**

*Erythrocoma australis* Greene. Lfl. Bot. Obs. Crit. 1:176.1906. Type: above Cimarron, Baker 214 (not in ND-G computer list). Type specimen from Colorado.

*Erythrocoma dissecta* Greene. Lfl. Bot. Obs. Crit. 1:177.1906. Type: Park Co.: Como, Crandall & Cowen (US). Type specimen from Colorado.

*Geum ciliatum* Pursh. HARRI54.

*Geum triflorum* Pursh. TORRE27. Torrey's report is a misidentification of *Acomastylis rossii*.

*Sieversia ciliata* (Pursh) G. Don. RYDBE06.

**Fallugia Endlicher, 1840****Fallugia paradoxa (D. Don) Endlicher**

HARRI54.

*Fallugia acuminata* (Wooton) Cockerell. RYDBE06.

**Fragaria L., 1753****Fragaria vesca L. subsp. bracteata (Heller) Staudt**

*Fragaria americana* (T. C. Porter) Britton. RYDBE06; HARRI54.

*Fragaria bracteata* Heller. RYDBE06.

*Fragaria prolifica* Baker & Rydberg in Rydberg. Mem. Dept. Bot. Columbia College 2:181.1898. Type: LR: Cameron Pass, 13 July 1896, Baker 28 (NY).

*Fragaria vesca* L. var. *bracteata* (Heller) R. Davis.

**Fragaria virginiana P. Miller subsp. glauca (S. Watson) Staudt**

*Fragaria glauca* (S. Watson) Rydberg. RYDBE06.

*Fragaria ovalis* (Lehmann) Rydberg. RYDBE06; HARRI54.

*Fragaria pauciflora* Rydberg. RYDBE06.

*Fragaria pumila* Rydberg. RYDBE06.

*Fragaria virginiana* P. Miller var. *glauca* S. Watson.

*Fragaria virginiana* P. Miller var. *illinoensis* A. Gray. PORTE74.

*Fragaria virginiana* P. Miller var. *platypetala* Hall.

**Geum L., 1753****Geum aleppicum Jacquin subsp. strictum (Aiton) Clausen**

FERNA35.

*Geum aleppicum* Jacquin subsp. *strictum* (Aiton) Clausen var. *decurrens* (Rydberg) W. A. Weber.

*Geum scopulorum* Greene. Pittonia 4:148.1900. Type: Archuleta Co.: Piedra, 14 July 1899, Baker (ND-G). Type specimen from Colorado.

*Geum strictum* Aiton. PORTE74; RYDBE06; HARRI54.

**Geum macrophyllum Willdenow var. perincisum Raup**

HARRI54.

**Geum rivale L.**

RYDBE06; HARRI54.

**Holodiscus Maximovicz, 1879****Holodiscus discolor (Pursh) Maximovicz**

The variation in leaf size is such that this species has to be regarded as a single variable entity. Large-leaves forms are most common in the Front Range in shaded sites.

*Holodiscus australis* Heller. RYDBE06.

*Holodiscus dumosus* (Nuttall ex Hooker) Heller. RYDBE06; HARRI54; LEY43. Some collections from El Paso Co. and from southern New Mexico have leaves as large as those of *H. discolor* of the Pacific Northwest.

*Holodiscus dumosus* (Nuttall ex Hooker) Heller var. *australis* (Heller) Ley.

*Holodiscus microphyllus* Rydberg. RYDBE06; HARRI54.

*Spiraea ariaefolia* J. E. Smith var. *discolor* (Pursh) Torrey & Gray.

*Spiraea discolor* Pursh. TORRE27. Erroneous Report.

*Spiraea dumosa* Nuttall. PORTE74.

**Ivesia Torrey & Gray, 1858****Ivesia gordonii (Hooker) Torrey & Gray**



HARRI54.

*Horkelia gordonii* Hooker. RYDBE06.

**Malus P. Miller, 1754**

**Malus domestica Borkhausen**

TUTIN64. Alien. Not naturalized.

*Malus pumila* P. Miller. HARRI54.

**Oreobatus Rydberg, 1903**

Bull. Torr. Bot. Club 30:274.1903

**Oreobatus deliciosus (James ex Torrey) Rydberg subsp. deliciosus**

Type specimen from Colorado.

*Rubus deliciosus* James ex Torrey. HARRI54; GOODM95. Ann. Lyc. N. Y. 2:196.1827. Type: "Rocky Mountains" [Sheep Mt., S. Platte Canyon], James (NY). Flower color incorrectly given as purple! Goodman notes that the typespecimen is not mixed with *Rubacera*. Type specimen from Colorado.

**Oreobatus deliciosus James ex Torrey subsp. neomexicanus (Gray) W. A. Weber**

WEBER95.

*Oreobatus neomexicanus* (A. Gray) Rydberg. Bull. Torr. Bot. Club 30:275.1903.

*Rubus neomexicanus* Gray. Pl. Wrightianae 2:255.1853. Type: New Mexico, Copper Mines. Gray was under the misapprehension that *R. deliciosus* had purple flowers!.

**Oreobatus rubicundus Wooton & Standley**

Contrib. U. S. Nat. Herb. 16:130.1913. Type from Organ Mts., New Mexico.

*Rubus exrubicundus* L. H. Bailey. HARRI54. Harrington listed this as "exrubicundus". The plants are *O. deliciosus*. The epithet *rubicundus* is available in *Oreobatus* but preoccupied in *Rubus*.

*Rubus rubicundus* (Wooton & Standley) Tidestrom.

**Padus P. Miller, 1754**

Date incorrectly given in Index Nominum Genericorum as 1854!

**Padus virginiana (L.) P. Miller subsp. melanocarpa (A. Nelson) W. A. Weber**

WEBER82B.

*Prunus melanocarpa* (A. Nelson) Rydberg. RYDBE06.

*Prunus virginiana* L. var. *melanocarpa* (A. Nelson) Sargent. HARRI54.

**Peraphyllum Nuttall ex Torrey & Gray, 1840**

**Peraphyllum ramosissimum Nuttall ex Torrey & Gray**

RYDBE06; HARRI54.

**Petrophyton (Nuttall ex Torrey & Gray) Rydberg, 1900**

**Petrophyton caespitosum (Nuttall) Rydberg**

HARRI54.

*Spiraea caespitosa* Nuttall.

**Physocarpus Maximovicz, 1879**

**Physocarpus alternans (Jones) J. T. Howell**

HARRI54.

**Physocarpus monogynus (Torrey) Coulter**

TORRE27; HARRI54.

*Opulaster bracteatus* Rydberg. Bull. Torr. Bot. Club 31:558.1904. Type: Weld Co.: New Windsor, 1898, Osterhout 23 (NY). Type specimen from Colorado.

*Opulaster glabratus* Rydberg. Bull. Torr. Bot. Club 31:559.1904. Type: West Spanish Peak, 1900, Rydberg & Vreeland 6027 (NY). Type specimen from Colorado.

*Opulaster monogynus* (Torrey) Kuntze. RYDBE06.

*Physocarpus torreyi* Maximovicz. RYDBE06.

*Spiraea monogyna* Torrey. Ann. Lyc. N. Y. 2:194.1827. Type: Rocky Mts., James (NY). Type specimen from Colorado.

*Spiraea opulifolia* L. var. *parvifolia* A. Gray. PORTE74. Error for var. *pauciflora* Torrey & Gray?.

*Spiraea opulifolia* L. var. *pauciflora* Torrey & Gray. Fl. N. Amer. 1:414.1840.

**Physocarpus opulifolius (L.) Maximovicz**

WEBER67.

*Opulaster intermedius* Rydberg. RYDBE06.

*Opulaster ramaleyi* A. Nelson. Bot. Gaz. 34:367.1902. Type: Boulder Co.: near Boulder, 1900, 1901, Ramaley 108 (RM). Evidently the hybrid between *P. monogynus* and *P. opulifolius*. Type specimen from Colorado.

*Physocarpus intermedius* Rydberg. HARRI54.

*Physocarpus opulifolius* (L.) Maximovicz var. *intermedius* (Rydberg) B. L. Robinson.

*Spiraea opulifolia* L.. PORTE74.

### **Potentilla L., 1753 JOHNS85**

#### **Potentilla ambigens Greene**

HARRI54. *Erythraea* 1:5.1893. Type: JF: Bear Creek, above Morrison, July 1899, Greene (ND-G). Type specimen from Colorado.

#### **Potentilla anglica Laicharding**

WEBER55. Alien.

#### **Potentilla argentea L.**

WEBER83B. Alien.

#### **Potentilla biennis Greene**

HARRI54.

*Potentilla lateriflora* Rydberg. RYDBE06.

#### **Potentilla concinna Richardson var. bicrenata (Rydberg) Welsh & Johnston**

WELSH82.

*Potentilla bicrenata* Rydberg. RYDBE06.

#### **Potentilla concinna Richardson var. concinna**

RYDBE06; HARRI54; JOHNS80.

*Potentilla humifusa* Nuttall. TORRE27; PORTE74.

*Potentilla nivea* L. var. *quinquefolia* Rydberg.

*Potentilla quinquefolia* (Rydberg) Rydberg. RYDBE06; HARRI54.

#### **Potentilla crinita A. Gray**

RYDBE06; HARRI54; JOHNS80.

#### **Potentilla diversifolia Lehmann**

HARRI54.

*Potentilla dissecta* Pursh. PORTE74; RYDBE06.

*Potentilla dissecta* Pursh var. *glaucophylla* (Lehmann) S. Watson. PORTE74; RYDBE06.

*Potentilla diversifolia* Lehmann var. *pinnatisecta* S. Watson.

*Potentilla intermittens* Rydberg. JOHNS80. N. Amer. Flora 22:318.1908. Type: LR: Cameron Pass, 10,000 ft., 13 July 1896, Baker s.n. (NY). Type specimen from Colorado.

*Potentilla pinnatisecta* S. Watson. RYDBE06. Tentative assignment.

#### **Potentilla effusa Douglas ex Lehmann**

RYDBE06; JOHNS80.

*Potentilla coloradensis* Rydberg. JOHNS80. Mem. Dept. Bot. Columbia Univ. 2:115.1898. Type: Park Co.: South Park, 24 July 1872, Porter s.n. (NY). Type specimen from Colorado.

*Potentilla effusa* Douglas ex Lehmann var. *filicaulis* Nuttall. RYDBE06.

*Potentilla filicaulis* (Nuttall) Rydberg. RYDBE06.

#### **Potentilla flabelliformis Lehmann**

Gunnison Co.: Doctor Gulch, Langenheim 334a, !B. Johnston.

#### **Potentilla gracilis Douglas**

HARRI54.

*Potentilla bakeri* Rydberg. Bull. Torr. Bot. Club 31:560.1904. Type: Park Co.: Grizzly Creek, 19 July 1896, Baker s.n. (NY; photo COLO). Type specimen from Colorado.

*Potentilla brunnescens* Rydberg. RYDBE06; HARRI54.

*Potentilla gracilis* Douglas subsp. *nuttallii* (Rydberg) Keck. HARRI54.

*Potentilla gracilis* Douglas var. *brunnescens* (Rydberg) C. L. Hitchcock.

*Potentilla gracilis* Douglas var. *rigida* S. Watson. PORTE74.

*Potentilla jucunda* A. Nelson. RYDBE06.

*Potentilla nuttallii* Lehmann. RYDBE06.

#### **Potentilla gracilis Douglas var. glabrata (Lehmann) C. L. Hitchcock**

Erroneous Report.

*Potentilla bakeri* Rydberg. Bull. Torr. Bot. Club 31:560.1904. Type: Park Co.: Grizzly Creek, 19 July 1896, Baker s.n. (NY; photo

COLO). Type specimen from Colorado.

*Potentilla brunnescens* Rydberg. RYDBE06; HARRI54.

*Potentilla gracilis* Douglas subsp. *nuttallii* (Rydberg) Keck. HARRI54.

*Potentilla gracilis* Douglas var. *brunnescens* (Rydberg) C. L. Hitchcock.

*Potentilla gracilis* Douglas var. *rigida* S. Watson. PORTE74.

*Potentilla jucunda* A. Nelson. RYDBE06.

*Potentilla nuttallii* Lehmann. RYDBE06.

*Potentilla grayi* S. Watson

PORTE74. Endemic to California. Porter's report ("Gray's Peak, Dr. Gray") is impossible to interpret without seeing the specimen.

**Potentilla hippiana Lehmann**

RYDBE06; HARRI54; JOHNS80. Stirp. Lehm. Prim. Descript. Pugillus 2:7-8.1830. Type: "sources of the Platte," 1820, James 130 (NY). Type specimen from Colorado.

*Potentilla leucophylla* Torrey, non Pallas. Ann. Lyc. N. Y. 2:197-198.1827. Type: Sources of the Platte, James (NY, photo COLO). Type specimen from Colorado.

*Potentilla pensylvanica* L. var. *hippiana* Torrey & Gray. PORTE74.

*Potentilla propinqua* Rydberg. RYDBE06.

**Potentilla hookeriana Lehmann**

WEBER61; HULTE45. Sojak has annotated several specimens as *P. prostrata* Rottboel subsp. *floccosa* Sojak. He has not yet published.

**Potentilla nivea L.**

RYDBE06; HARRI54; HULTE45.

**Potentilla norvegica L.**

HITCH55. Alien.

*Potentilla monspeliensis* L.. RYDBE06; HARRI54.

**Potentilla ovina Macoun**

WEBER79A; JOHNS80.

*Potentilla nelsoniana* Rydberg.

*Potentilla pectinsecta* Rydberg

HARRI54. Erroneous Report.

**Potentilla pensylvanica L.**

HARRI54; SOJAK87; KOHLI76. Var. *pensylvanica* has the longer petiolar hairs 1-2 mm long; var. *brevipila* Sojak (more northern, Canadian) has the longer hairs 0.6-1.0 mm long.

*Potentilla atrovirens* Rydberg. RYDBE06.

*Potentilla bipinnatifida* Douglas. RYDBE06.

*Potentilla bipinnatifida* Douglas var. *platyloba* Rydberg. RYDBE06.

*Potentilla pensylvanica* L. var. *arachnoidea* Lehmann. RYDBE06.

*Potentilla pensylvanica* L. var. *strigosa* Pursh. PORTE74; RYDBE06.

*Potentilla platyloba* (Rydberg) Rydberg. RYDBE06.

*Potentilla sibirica* T. Wolf. SOJAK87.

**Potentilla plattensis Nuttall ex Torrey & Gray**

RYDBE06; HARRI54.

**Potentilla pulcherrima Lehmann**

RYDBE06; HARRI54.

*Potentilla filipes* Rydberg. JOHNS80. Bull. Torr. Bot. Club 28:174-175.1901. Type: Huerfano Co.: Spanish Peaks, Wahatoya Canyon, 2,400 m, 13 June 1900, Rydberg & Vreeland 6039 (NY). Type specimen from Colorado.

*Potentilla gracilis* Douglas var. *pulcherrima* (Lehmann) Fernald.

*Potentilla pulcherrima* Lehmann var. *condensata* T. Wolf. JOHNS80. Bibl. Bot. 16(71):210.1908. Type: not cited, two specimens listed: Silverton, Colo., 2,900 m, Cloudcroft, N.M., 2,650 m. Not examined. Type specimen from Colorado.

**Potentilla recta L.**

WEBER73. Alien.

**Potentilla rivalis Nuttall ex Torrey & Gray**

RYDBE06; HARRI54.

*Potentilla leucocarpa* Rydberg. RYDBE06; HARRI54.

*Potentilla millegrana* Engelmann.

*Potentilla rivalis* Nuttall var. *millegrana* (Engelmann) S. Watson. PORTE74.

**Potentilla rubricaulis Lehmann**

HARRI54.

*Potentilla saximontana* Rydberg. Bull. Torr. Bot. Club 23:399.1896. Type: Colorado Terr., 1873, Wolf 366 (Wheeler Exped.) (GH, photo COLO). Type specimen from Colorado.

***Potentilla rupincola* Osterhout**

HARRI54; JOHNS80. Bull. Torr. Bot. Club 26:256.1899. Type: LR: Dale Cr., 21 July 1898, Osterhout 1780 (RM). Type specimen from Colorado.

*Potentilla effusa* Douglas ex Lehmann var. *rupincola* (Osterhout) T. Wolf. WOLF08.

***Potentilla subjuga* Rydberg**

HARRI54; JOHNS80. Bull. Torr. Bot. Club 23:397-398.1896. Type: CC: Near Empire, 28 July, 6 Sept. 1892, Patterson 192 (NY). Type specimen from Colorado.

*Potentilla concinna* Richardson var. *rubripes* (Rydberg) C. L. Hitchcock. HITCH55.

*Potentilla minutifolia* Rydberg. JOHNS80. Bull. Torr. Bot. Club 23:399.1896. Type: El Paso Co.: Pikes Peak, alpine, 27 Aug. 1895, Canby s.n. (US). Type specimen from Colorado.

*Potentilla osterhoutiana* T. Wolf. WOLF08; JOHN80. Bibl. Bot. 16(71):200-201.1908. Type: LR: Estes Park, Osterhout. Type specimen from Colorado.

*Potentilla rubricaulis* Lehmann forma *nana* Clements & Clements. HARRI54. Sched. Exsicc. Herb. Format. Colorad. 507 (post 1901). Type: El Paso Co.: Pikes Peak, Clements & Clements 507 (RM, NY). Type specimen from Colorado.

*Potentilla rubripes* Rydberg. JOHNS80. Bull. Torr. Bot. Club 33:143.1906. Type: El Paso Co.: Pikes Peak, 25 June 1896, Biltmore Exped. 1425 (NY). Type specimen from Colorado.

*Potentilla tenerrima* Rydberg. JOHNS80. Bull. Torr. Bot. Club 23:398.1896. Type: FN: Bergen's Park, 1874, Brandegee s.n. (NY). Type specimen from Colorado.

*Potentilla viridior* Rydberg. JOHNS80. N. Amer. Flora 22:342.1908. Type: LR: Estes Park, 12 July 1897, Osterhout (NY). Type specimen from Colorado.

***Potentilla subviscosa* Greene**

HARRI54. One collection, Los Animas Co..

***Potentilla supina* L. subsp. *paradoxa* (Nuttall ex Torrey & Gray) Sojak**

*Potentilla paradoxa* Nuttall ex Torrey & Gray. RYDBE06; HARRI54.

***Potentilla uniflora* Ledebour**

WEBER67; HULTE45.73. Hultén (1973) showed Porsild's argument (1951 p 226) favoring *P. ledebouriana* to be faulty.

*Potentilla ledebouriana* Porsild. HULTE68.

***Prunus* L., 1753**

***Prunus americana* H. Marshall**

RYDBE06; HARRI54.

***Prunus angustifolia* H. Marshall**

WILKE78.

*Prunus chिकासа* Michaux. PORTE74; VINES60. "Cañon City, Brandegee."

***Prunus gracilis* Engelmann & Gray**

WEBER82A.

***Prunus rivularis* Scheele**

Baca County: Upper Carrizo Creek, T33S R50W S30, 8 May 1991, Weber 18120.

***Purshia de Candolle* ex Poiret, 1816**

***Purshia stansburiana* (Torrey) Henrickson**

Phytologia 60:468.1986.

*Cowania mexicana* D. Don. HARRI54.

*Cowania stansburiana* Torrey.

*Purshia mexicana* (D. Don) Welsh var. *stansburyi* (Torrey) Welsh. WELSH86A.

***Purshia tridentata* (Pursh) De Candolle**

HARRI54.

*Kunzea tridentata* (Pursh) Sprengel. RYDBE06.

***Rosa* L., 1753**

***Rosa arkansana* T. C. Porter**

HARRI54. Syn. Fl. Colorado 39.1874. Type: Arkansas River near Cañon City, Brandegee (PH). Type specimen from Colorado.

*Rosa pratincola* Greene. RYDBE06. Pittonia 4:13.1899. No specimens mentioned. Greene insisted that his new species was a plant of the midwestern prairies and that *R. arkansana* does not occur in Colorado or anywhere near it..

*Rosa blanda* Aiton

PORTE74. Species of eastern U.S. Porter's report evidently applies to *R. woodsii*.

*Rosa majalis* J. Herrmann

TUTIN64. Erroneous Report.

*Rosa cinnamomea* L.. TUTIN64.

*Rosa fraxinifolia* Borkhausen. PORTE74. Report possibly applies to *R. sayi*.

***Rosa nutkana* K. Presl var. *hispida* Fernald**

HARRI54. A few typical specimens, solitary flowers, large hypanthii, glandular calyx lobes, from Routt Co. Intermediates X *R. woodsii* occur from Routt Co. to Moffat Co.. Lewis suggested [*R. sayi*] contributes to intermediacy.

*Rosa engelmannii* S. Watson. RYDBE06; HARRI54. Garden & Forest 2:376.1889. Probably this name can apply to intermediates with *R. woodsii* in western Colorado.

***Rosa rubiginosa* L.**

Alien. Escaped cultivar on Boulder Open Space.

*Rosa eglanteria* L..

***Rosa sayi* Schweinitz**

RYDBE06; LOVE71.

*Rosa acicularis* Lindley subsp. *sayi* (Schweinitz) W. H. Lewis. LEWIS59; LOVE71.

***Rosa woodsii* Lindley**

HARRI54.

*Rosa aciculata* (Cockerell) Cockerell. RYDBE06.

*Rosa bakeri* Rydberg. RYDBE06. Assignment tentative. Nomen nudum. Fl. Colorado 190, 191. 1906. Routt Co.: 4 Mile Hill, 2 July 1896, Baker s.n. (NY).

*Rosa fendleri* Crepin. RYDBE06.

*Rosa macounii* Greene. RYDBE06.

*Rosa manca* Greene. Pittonia 4:11-12.1899. Type: Montezuma Co.: West Mancos Canyon, 10,000 ft., July 1898 (ND-G). Type specimen from Colorado.

*Rosa maximiliani* Nees. RYDBE06.

*Rosa melina* Greene. Pittonia 4:10.1899. Type: Gunnison Co.: Cerro Summit, 30 Aug. 1896, Greene (ND-G). Type specimen from Colorado.

*Rosa nutkana* K. Presl var. *schedinorum* Payson. Univ. Wyo. Publ. Bot. 1:73.fig. 3.1924. Type: Lake Co.: Prospect Mt., Leadville, July 21, Schedin & Schedin s.n. (RM). Chimeric plant with white streaked petals. Type specimen from Colorado.

*Rosa oreophila* Rydberg. Bull. Torr. Bot. Club 31:561.1904. Type: Routt Co.: Four-mile Hill, 22 July 1896, Baker s.n. (NY). Type specimen from Colorado.

*Rosa pandorana* Greene. RYDBE06. Nomen nudum. Fl. Colorado. 191. 1906. San Miguel Co.: Pandora, Greene (ND-G).

*Rosa underwoodii* Rydberg. Bull. Torr. Bot. Club 31:560-561.1904. Type: Ouray Co.: Box Canyon, Ouray, 8 Sept. 1901, Underwood & Selby 122 (NY). Type specimen from Colorado.

**Rubacer Rydberg, 1903*****Rubacer parviflorum* (Nuttall) Rydberg**

RYDBE06.

*Rubus nutkanus* Moçifio. PORTE74.

*Rubus parviflorus* Nuttall. HARRI54.

**Rubus L., 1753*****Rubus discolor* Weihe & Nees**

Alien. Unawearp Seep.

***Rubus idaeus* L. subsp. *melanolasius* (Dieck) Focke**

HULTE68.

*Batidaea laetissima* Greene. Lfl. Bot. Obs. Crit. 1:240-241. Type: Middle or northern Colorado, lower foothills, 17 June 1895, Cowen (US). Type specimen from Colorado.

*Rubus idaeus* L. subsp. *sachalinensis* (Léveillé) Focke.

*Rubus idaeus* L. var. *peramoenus* (Greene) Fernald.

*Rubus idaeus* L. var. *strigosus* (Michaux) Maximovicz.

*Rubus strigosus* Michaux. PORTE74; RYDBE06; HARRI54.

***Rubus laciniatus* Willdenow**

WEBER73. Alien.

***Rubus occidentalis* L.**

RYDBE06; HARRI54. Alien.  
 Melanobatus occidentalis (L.) Greene.

### Sanguisorba L., 1753

#### **Sanguisorba minor Scopoli**

WEBER55. Alien.

### Sibbaldia L., 1753

#### **Sibbaldia procumbens L.**

TORRE27; HARRI54.

### Sorbus L., 1753

#### *Sorbus sambucifolia* (Chamisso & Schlechtendal) Roemer

JONES39. Erroneous Report.

*Pyrus sambucifolia* Chamisso & Schlechtendal. PORTE74. Most western American species went under this name for many years.

#### **Sorbus scopulina Greene**

HARRI54; JONES39. Pittonia 4:130. 1900. Type: Mineral Co.: near Pagosa Peak, 9,000 ft., 10 Aug. 1899, Baker (ND-G), fide Jones. Type specimen from Colorado.

### Spiraea L., 1753

#### **Spiraea douglasii Hooker var. menziesii (Hooker) K. Presl**

WEBER79A.

## RUBIACEAE

### Galium L., 1753

#### **Galium aparine L.**

RYDBE06; HARRI54. Alien.

#### **Galium bifolium S. Watson**

RYDBE06; HARRI54.

#### *Galium boreale* L.

RYDBE06; HARRI54. Eurasian species. Ours is *G. septentrionale*.

#### **Galium coloradoense W. F. Wight**

RYDBE06; HARRI54; DEMPS59. Zoë 5:54-55.1900. Type: Montezuma Co.: Mancos, June 1892, Eastwood (first coll. cited). Type specimen from Colorado.

#### *Galium flaviflorum* Heller ex Rydberg

Nomen nudum. Fl. Colorado 321, 322. 1906. Based on a New Mexico collection: Santa Fe Canyon, 7 July 1897, Heller & Heller (NY).

#### **Galium mexicanum Humboldt, Bonpland, & Kunth subsp. asperrimum (A. Gray) Dempster**

DEMPS76.

*Galium asperrimum* A. Gray. PORTE74.

*Galium mexicanum* Humboldt, Bonpland, & Kunth var. *asperrimum* (A. Gray) Higgins & Welsh ex Welsh. WELSH86A.

#### **Galium odoratum (L.) Scopoli**

TUTIN64. Alien. One old record, possibly a garden plant.

*Asperula odorata* L.. HARRI54.

#### *Galium proliferum* A. Gray

RYDBE06. "locality not given." A species of Trans-Pecos Texas.

#### **Galium septentrionale Roemer & Schultes**

LOVE54A. *G. septentrionale*, N. Amer. and East and central Asia, is hexaploid, 2n=66; *G. boreale* is tetraploid, 2n=44.

*Galium boreale* L. subsp. *septentrionale* (Roemer & Schultes) Hara. LOVE54A.

#### **Galium spurium L.**

MOORE75. Alien.

*Galium aparine* L. var. *echinospermum* (Wallroth) Farwell. HARRI54.

*Galium aparine* L. var. *vaillantii* K. Koch. RYDBE06.

*Galium spurium* L. forma *vaillantii* (De Candolle) R. J. Moore.

*Galium vaillantii* De Candolle. RYDBE06.

#### **Galium trifidum L. subsp. subbiflorum (Wiegand) Puff**

RYDBE06, as the species.

*Galium brandegei* A. Gray. RYDBE06; HARRI54. Proc. Amer. Acad. 12:58.1876. Type: Conejos Co.: Los Pinos Trail, valley of Rio Grande, New Mexico [Colo], Sept. 1875, Brandege. Type specimen from Colorado.

*Galium brevipes* Fernald & Wiegand. Rhodora 12:78.1910.

*Galium subbiflorum* (Wiegand) Rydberg. RYDBE06. Bull. Torr. Bot. Club 33:152.1906.

*Galium trifidum* L. subsp. *brevipes* (Fernald & Wiegand) Löve & Löve.

*Galium trifidum* L. var. *subbiflorum* Wiegand. RYDBE06; HARRI54. This epithet antedates *G. brevipes* Fernald & Wiegand (1910).

***Galium triflorum* Michaux**

RYDBE06; HARRI54.

***Galium verum* L.**

WEBER61. Alien.

***Hedyotis* L., 1753**

***Hedyotis nigricans* (Lamarck) Fosberg**

WEBER82A.

**RUPPIACEAE**

***Ruppia* L., 1753**

***Ruppia cirrhosa* (Petagna) Grande subsp. *occidentalis* (S. Watson) Löve & Löve**

*Ruppia maritima* L.

HARRI54. Erroneous Report.

**RUTACEAE**

***Ptelea* L., 1753: BAILE62**

***Ptelea trifoliata* L.**

BAILE62.

*Ptelea angustifolia* Benth. PORTE74; RYDBE06.

*Ptelea baldwinii* Torrey & Gray. HARRI54.

*Ptelea crenulata* Greene. RYDBE06.

*Ptelea nitens* Greene.

*Ptelea trifoliata* L. subsp. *pallida* (Greene) V. L. Bailey. BAILE62.

*Ptelea trifoliata* L. subsp. *polyadenia* (Greene) V. L. Bailey. BAILE62.

***Thamnosma* Torrey & Frémont, 1845**

***Thamnosma texana* (A. Gray) Torrey**

RYDBE06; HARRI54. Cañon City, Hooker (!K). Cañon City, Brandege (!UC). Rydberg cited this from "Soda Spring Ledge". The locality was destroyed in road construction.

**SALICACEAE**

***Populus* L., 1753 ECKEN77**

***Populus acuminata* Rydberg**

HARRI54; CRAWF74. Hybrid between *P. angustifolia* and *P. deltoides*. Hybrid.

*Populus andrewsii* Sargent. HARRI54.

***Populus angustifolia* James**

HARRI54; CRAWF74. Long Expedition (Phila. ed.) 1:497.1823. Type: along the Platte River, on the plains, James. GOODM95 suggests the locality was near Brighton, Adams Co. Type specimen from Colorado.

*Populus balsamifera* L. var. *angustifolia* (James) S. Watson. PORTE74.

*Populus coloradensis* Dode. Bull. Soc. Hist. Nat. Autun 18:216.1905. Type: paper not examined. Type specimen from Colorado.

***Populus balsamifera* L.**

HARRI54.

*Populus balsamifera* L. var. *candicans* A. Gray. PORTE74.

***Populus deltoides* H. Marshall subsp. *monilifera* (Aiton) Eckenwalder**

ECKEN77.

*Populus angulata* Aiton. PORTE74.

*Populus deltoides* H. Marshall var. *occidentalis* Rydberg.

*Populus occidentalis* (Rydberg) Britton. RYDBE06.

*Populus sargentii* Dode. HARRI54.

***Populus deltoides* H. Marshall subsp. *wislizenii* (S. Watson) Eckenwalder**

ECKEN77.

*Populus fremontii* Torrey subsp. *wislizenii* S. Watson.

*Populus wislizenii* (S. Watson) Sargent. HARRI54.

***Populus tremuloides* Michaux**

TORRE27; HARRI54.

*Populus aurea* Tidestrom.

*Populus tremula* L. subsp. *tremuloides* (Michaux) Löve & Löve. LOVE75C.

*Populus tremuloides* Michaux var. *aurea* (Tidestrom) Daniels. DANIE11.

***Salix* L., 1753**

***Salix alba* L. var. *vitellina* (L.) J. Stokes**

WEBER89C. Alien. JF. Not mentioned in HARRI54.

***Salix amygdaloides* Andersson**

HARRI54.

*Salix amygdaloides* Andersson forma *angustissima* E. C. Smith. HARRI54.

*Salix amygdaloides* Andersson forma *pilosiuscula* C. K. Schneider. HARRI54.

*Salix nigra* H. Marshall var. *amygdaloides* Andersson. PORTE74.

*Salix wrightii* Andersson. RYDBE06.

***Salix babylonica* L.**

Alien. Not mentioned in HARRI54. Hardly naturalized.

*Salix barclayi* Andersson

HARRI54; ARGUS73. Erroneous Report.

*Salix barclayi* Andersson var. *hebecarpa* Andersson

HARRI54. Erroneous Report.

***Salix bebbiana* Sargent**

HARRI54.

*Salix bebbiana* Sargent var. *perrostrata* (Rydberg) C. K. Schneider. HARRI54.

*Salix depressa* L. subsp. *rostrata* (Andersson) Hiitonen. ARGUS73.

*Salix livida* Wahlenberg var. *occidentalis* A. Gray. PORTE74.

*Salix perrostrata* Rydberg. RYDBE06.

***Salix boothii* Dorn**

DORN75.

***Salix brachycarpa* Nuttall**

HARRI54; ARGUS65. Argus now believes we cannot separate *S. brachycarpa* and *S. glauca* in Colorado.

*Salix brachycarpa* Nuttall var. *antimima* Raup. HARRI54.

*Salix brachycarpa* Nuttall var. *sansonii* Ball. HARRI54.

*Salix desertorum* Richardson. PORTE74.

*Salix glauca* L. var. *glabrescens* (Andersson) C. K. Schneider. HARRI54.

*Salix glauca* L. var. *pullata* Andersson. PORTE74.

*Salix glauca* L. var. *sericea* Andersson. PORTE74.

*Salix glaucops* Andersson. RYDBE06.

*Salix glaucops* Andersson var. *glabrata* Andersson. RYDBE06.

*Salix pseudolapponum* Seemen. RYDBE06; HARRI54. Engl. Bot. Jahrb. 29(Beibl.65):28.1900. Type: LP: Mt. Hesperus, Baker, Earle & Tracy 300.5 (Isotypes A, GH, RM). Type specimen from Colorado.

*Salix pseudolapponum* Seemen var. *kenosha* L. Kelso. DORN77. Biol. Lfl. 25:3.1944. Type: Park Co.: Kenosha Pass, L. & E. H. Kelso 534. Type specimen from Colorado.

*Salix pseudolapponum* Seemen var. *subincurva* E. H. Kelso. DORN77. Rhodora 36:195.1934. Type: Rocky Mt. Nat. Park, L. Kelso 3503. Type specimen from Colorado.

***Salix candida* Fluegge**

HARRI54; WEBER89C.

*Salix cascadenis* Cockerell

HARRI54. No specimens from Colorado are convincing.



*Salix cordata* Mühlenberg

PORTE74. Erroneous Report.

*Salix cordifolia* Pursh var. *callicarpaea* (Trautvetter) Fernald

HARRI54. Erroneous Report.

*Salix discolor* Mühlenberg

PORTE74. Erroneous Report.

**Salix drummondiana** Barratt

ARGUS73.

Salix pachnophora Rydberg. Bull. Torr. Bot. Club 31:403.1904. Type: LR: Chambers L., 30 July 1899, Crandall 4083 (NY).

Disposition according to Argus. Type specimen from Colorado.

Salix subcoerulea Piper. HARRI54.

**Salix eriocephala** Michaux

Logan Co.: S Platte River just S of Crook, floodplain, 17 June 1991, Dorn 5210.

**Salix exigua** Nuttall subsp. **exigua**

HARRI54.

Salix argophylla Nuttall. RYDBE06; DORN77.

Salix exigua Nuttall var. luteosericea (Rydberg) C. K. Schneider. HARRI54.

Salix exigua Nuttall var. stenophylla (Rydberg) C. K. Schneider. HARRI54.

Salix linearifolia Rydberg. RYDBE06.

Salix luteosericea Rydberg. RYDBE06.

Salix sessilifolia Nuttall. RYDBE06. "sessiliflora," incorrectly cited.

Salix stenophylla Rydberg. Bull. Torr. Bot. Club 28:271-272.1901. Type: Huerfano Co.: Cuchara R. below La Veta, 28 May 1900,

Rydberg &amp; Vreeland 6393 (NY). Type specimen from Colorado.

**Salix exigua** Nuttall subsp. **interior** (Rowlee) Cronquist

HITCH55.

Salix interior Rowlee. HARRI54.

Salix interior Rowlee var. pedicellata (Andersson) Ball. HARRI54.

**Salix fragilis** L.

HARRI54. Alien.

**Salix geyeriana** Andersson

HARRI54.

Salix geyeriana Andersson var. argentea (Bebb) C. K. Schneider. HARRI54.

Salix macrocarpa Nuttall. RYDBE06; HITCH55.

*Salix glauca* L.ARGUS65. Argus now believes all Colorado populations belong to *S. brachycarpa*.**Salix gooddingii** Ball

Mesa Co.: Colorado Nat. Monument, T1N R2W S32, 4,700 ft., white hills of Morrison formation, 17 May 1982, Siplivinsky 3274 (COLO),

!R. Dorn, 1992.

**Salix gracilis** AnderssonPORSI80. *S. petiolaris* auctt., non J. E. Smith, fide PORSI80, p. 232.*Salix petiolaris* auctt., non J. E. Smith.**Salix irrorata** Andersson

HARRI54.

**Salix lanata** L. subsp. **calcicola** (Fernald & Wiegand) Hultén

WEBER86A. PARK Co.: Horseshoe Cirque.

**Salix ligulifolia** (Ball ex C. K. Schneider) Ball ex E. C. Smith

ARGUS57; HITCH55. We are following ARGUS57 and Dorn.

Salix cordata Michaux var. angustata (Pursh) Andersson. RYDBE06.

Salix lutea Nuttall var. ligulifolia Ball. HARRI54.

Salix rigida Mühlenberg var. angustata (Pursh) Fernald. FERNA50.

Salix rigida Mühlenberg var. watsonii (Bebb) Cronquist. HITCH55.

**Salix lucida** Mühlenberg subsp. **caudata** (Nuttall) E. MurrayARGUS86. Argus' new combination is antedated by E. Murray, *Kalmia* 15:11.1984 (1985).

Salix caudata (Nuttall) Heller. HARRI54.

*Salix fendleriana* Andersson. RYDBE06.

***Salix lucida* Mühlenberg subsp. lasiandra (Bentham) E. Murray**

ARGUS86. Argus' new combination is antedated by E. Murray, *Kalmia* 15:11.1984 (1985).

*Salix lucida* Mühlenberg subsp. *lucida*

HARRI54. Erroneous Report.

*Salix lutea* Nuttall

HARRI54. Dorn does not recognize this in Colorado flora.

*Salix lutea* Nuttall var. *famelica* Ball. HARRI54.

*Salix lutea* Nuttall var. *platyphylla* Ball. HARRI54.

***Salix matsudana* Koidzumi**

WEBER87B. Alien. Cultivated and probably not hardy enough to survive on its own.

***Salix melanopsis* Nuttall**

Argus referred the collections to [*S. exigua*]. Dorn (1993) annotated three back to *S. melanopsis* Moffat, Park, Routt Counties..

*Salix melanopsis* Nuttall var. *tenerrima* (L. Henderson) Ball. HARRI54.

***Salix monticola* Bebb in Coulter**

HARRI54; DORN75. *Man. Bot. Rocky Mt. Reg.* 336.1885. Lectotype: Golden, 30 May 1870, Greene 8 (F). Type specimen from Colorado.

*Salix amelanchieroides* L. Kelso. DORN75. *Biol. Lfl.* 34:9.1947. Type: LK: Leadville, Evans Gulch, 3 Aug. 1946, Kelso 5419 (GH). Type specimen from Colorado.

*Salix barclayi* Andersson var. *cochetopiana* L. Kelso. DORN75. *Biol. Lfl.* 34:8.1946. Type: LK: Leadville, Evans Gulch, 3 Aug. 1946, Kelso 5418 (lost); neotype, same locality, Kelso 5575 (RM). Type specimen from Colorado.

*Salix barclayi* Andersson var. *resurrectionis* L. Kelso. DORN75. *Biol. Lfl.* 36:2.1947. Type: LK: Evans Gulch, Leadville, 3 Aug. 1946, Kelso 5519 (RM). Type specimen from Colorado.

*Salix barclayi* Andersson var. *uncompahgre* L. Kelso. DORN75. *Biol. Lfl.* 37:4.1947. Type: Ouray Co.: Ouray, Sneffels Creek, 11 Aug. 1946, Kelso 5673 (RM). Type specimen from Colorado.

*Salix barclayi* Andersson var. *veritomonticola* L. Kelso. DORN75. *Biol. Lfl.* 34:8.1946. Type: LR: Fall River, Rocky Mt. Nat. Park, 21 June 1933, Kelso 5 (lost); neotype, LK: Evans Gulch, Leadville, 9 July 1947, Kelso 6173 (RM). Type specimen from Colorado.

*Salix dissymetrica* L. Kelso. DORN75. *Biol. Lfl.* 61:3.1952. Type: LK: Leadville, road to Resurrection Mine, 28 July 1948, Kelso 6426 (CAN). Type specimen from Colorado.

*Salix padifolia* Rydberg, non Andersson. DORN75. *Bull. Torr. Bot. Club* 28:272-273.1901. Type: Huerfano Co.: tributaries of Turkey Cr., 8-9 June 1900, Rydberg & Vreeland 6389 (NY). Type specimen from Colorado.

*Salix padophylla* Rydberg. RYDBE06; DORN75. *Nom. nov. Bull. Torr. Bot. Club* 28:499.1901. Type specimen from Colorado.

*Salix pseudomonticola* Ball. HARRI54. Dorn maintains this as a distinct species.

*Salix pseudomonticola* Ball var. *padophylla* (Rydberg) Ball.

*Salix sawatchicola* L. Kelso. DORN77. *Biol. Lfl.* 34:9.1946. Type: LK: Leadville, Kelso 4872 (holotype RM). Type specimen from Colorado.

***Salix myrtilifolia* Andersson**

ARGUS73; WEBER89C. Park Co.: High Cr. Fen, South Park 10 mi S Fairplay, June 1989, Cooper (COLO).

***Salix nigra* Marshall**

Baca Co.: Picture Canyon, T35S R47W S6-7; floodplain, 13 July 1991, Weber & Wittmann 18263 (COLO) !R. Dorn, 1992.

***Salix nivalis* Hooker**

HARRI54; ARGUS97.

*Salix nivalis* Hooker var. *saximontana* (Rydberg) C. K. Schneider. HARRI54.

*Salix petiolaris* J. E. Smith

HARRI54. See *S. gracilis*.

***Salix petrophila* Rydberg**

RYDBE06; ARGUS97.

*Salix anglorum* Chamisso var. *antiplasta* C. K. Schneider. HARRI54; ARGUS97.

*Salix arctica* Pallas subsp. *petraea* (Andersson) Löve et al.. LOVE71.

*Salix arctica* Pallas var. *brownei* Andersson. PORTE74.

*Salix arctica* Pallas var. *petraea* Andersson. ARGUS97.

***Salix planifolia* Pursh**

HARRI54.

*Salix chlorophylla* Andersson. PORTE74; RYDBE06.

*Salix phylicifolia* L. subsp. *planifolia* (Pursh) Hiitonen. ARGUS73.

*Salix planifolia* Pursh var. *monica* (Bebb) C. K. Schneider. HARRI54.

*Salix planifolia* Pursh var. *nelsonii* (Ball) Ball ex Fraser & Russell. HARRI54.

*Salix pseudocordata* (Andersson) Rydberg

HARRI54. Our plants are *S. boothii* Dorn.

***Salix purpurea* L.**

HARRI54. Alien. El Paso Co., Boulder Co..

***Salix scouleriana* Barratt ex Hooker**

HARRI54.

*Salix nuttallii* Sargent. RYDBE06; HITCH55.

***Salix serissima* (L. H. Bailey) Fernald**

HARRI54. LR.

***Salix wolfii* Bebb**

HARRI54.

*Salix wolfii* Bebb var. *idahoensis* Ball. HARRI54.

**SALVINIACEAE**

***Azolla* Lamarck, 1783**

***Azolla mexicana* K. Presl**

HARRI54.

**SANTALACEAE**

***Comandra* Nuttall, 1818**

***Comandra umbellata* (L.) Nuttall subsp. *pallida* (A. De Candolle) Pihl**

Mem. Torr. Bot. Club 22:70.1965.

*Comandra pallida* A. De Candolle. HARRI54.

**SAPINDACEAE**

***Sapindus* L., 1753**

***Sapindus drummondii* Hooker & Arnott**

HARRI54.

*Sapindus saponaria* L. var. *drummondii* (Hooker & Arnott) L. Benson. BENSO43.

**SARCOLAENACEAE**

***Sarcobatus* Nees, 1841 BEHNK97**

New family, Sarcobataceae, based on sieve-element plastids linking this genus to Phytolaccaceae and Nyctaginaceae rather than Chenopodiaceae

***Sarcobatus vermiculatus* (Hooker) Torrey**

HARRI54; BEHNK97.

**SAURURACEAE**

***Anemopsis* Hooker & Arnott, 1840 HOWEL71**

***Anemopsis californica* Hooker**

HOWEL71. Alien.

*Anemopsis californica* Hooker var. *subglabrata* L. Kelso. HARRI54.

**SAXIFRAGACEAE**

***Chrysosplenium* L., 1753**

*Chrysosplenium alternifolium* L.

PORTE74. The report applies to *C. tetrandrum*.

***Chrysosplenium tetrandrum* (N. Lund) Th. Fries**

RYDBE06; HARRI54.

***Ciliaria* Haworth, 1821**

**Ciliaria austromontana (Wiegand) W. A. Weber**

WEBER82B; CALDE59.

Leptasea austromontana (Wiegand) Small. RYDBE06.

Saxifraga bronchialis L. subsp. austromontana (Wiegand) Piper. HARRI54.

**Ciliaria bronchialis (L.) Haworth**

Erroneous Report.

Saxifraga bronchialis L.. TORRE27; PORTE74. Colorado plants are Ciliaria austromontana.

**Conimitella Rydberg, 1905****Conimitella williamsii (D. C. Eaton) Rydberg**

WILKE78.

**Heuchera L., 1753****Heuchera bracteata (Torrey) Seringe**

RYDBE06; HARRI54.

Tiarella bracteata Torrey. TORRE27; GOODM95. Ann. Lyc. N. Y. 2:204.1827. Type: Rocky Mts, James (NY). Goodman suggests the locality might have been Sheep Mt. Type specimen from Colorado.

**Heuchera hallii A. Gray**

HARRI54. Proc. Phila. Acad. 15:62.1863. Type: Hall &amp; Harbour 205 p.p. (GH). Type specimen from Colorado.

**Heuchera parvifolia Nuttall ex Torrey & Gray var. nivalis (Rosendahl) Löve et al.**

LOVE71.

Heuchera nivalis Rosendahl, Butters, &amp; Lakela. HARRI54. Minn. Stud. Pl. Sci. 2:170-172.1936. Type: CC: Gray's Peak &amp; vicinity, Patterson 32 (MINN). Type specimen from Colorado.

**Heuchera parvifolia Nuttall ex Torrey & Gray var. parvifolia**

HARRI54. Fl. N. Amer. 1:581.1840. A James specimen is cited after a Nuttall one, fide GOODM95.

Heuchera parvifolia Nuttall ex Torrey &amp; Gray var. flavescens Rosendahl, Butters, &amp; Lakela. Minn. Stud. Pl. Sci. 2:164-165,167.1936. Southern Colorado form.

Heuchera parvifolia Nuttall ex Torrey &amp; Gray var. major Rosendahl, Butters, &amp; Lakela. Minn. Stud. Pl. Sci. 2:164,167.1936. Type: LR: foothills, May 1895, Osterhout (MINN 122986). Type specimen from Colorado.

Heuchera parvifolia Nuttall ex Torrey &amp; Gray var. microcarpa Rosendahl, Butters, &amp; Lakela. Minn. Stud. Pl. Sci. 2:165,168.1936. Type: El Paso Co.: Cheyenne Mt., 20 June 1912, Churchill (MO). Type specimen from Colorado.

**Heuchera richardsonii R. Brown**

HARRI54.

Heuchera hispida Pursh. RYDBE06.

**Heuchera rubescens Torrey in Stansbury**

WEBER55, 83B.

**Heuchera versicolor Greene**

WEBER85A.

**Hirculus Haworth, 1821****Hirculus flagellaris (Willdenow in Sternberg) Haworth**

European species.

Leptasea flagellaris (Willdenow in Sternberg) Small. RYDBE06.

Saxifraga flagellaris Willdenow in Sternberg. TORRE27; PORTE74; HARRI54. Colorado plants are Hirculus platysepalus.

**Hirculus platysepalus (Trautvetter) W. A. Weber subsp. crandallii (Gandoger) W. A. Weber**

WEBER83A.

Saxifraga platysepala Trautvetter subsp. crandallii (Gandoger) Tolmatchev.

**Hirculus prorepens (Fischer ex Sternberg) Löve & Löve**

RYDBE06; HARRI54. as Saxifraga hirculus; Taxon 31:344.1982.

Saxifraga hirculus L. subsp. coloradensis Hedberg. HEDBE92. Bot. J. Linn. Soc. 109:389. 1992. Type: Clear Creek Co.: Mt. Evans, Summit Lake, 3,900 msm, Weber s.n., living material, cultivated in Uppsals, Hedberg 63101). The combination under H. prorepens has not been made. Type specimen from Colorado.

**Hirculus ranunculoides Haworth**

LOVE83. European species.

Leptasea hirculus (L.) Small. RYDBE06.

Saxifraga hirculus L.. PORTE74.

**Hirculus serpyllifolius (Pursh) W. A. Weber subsp. chrysantha (A. Gray) W. A. Weber**

WEBER83A.

Saxifraga chrysantha A. Gray. HARRI54. Proc. Amer. Acad. 12:83-84.1876. Type: 1863, 62, Hall & Harbour 199 (GH). Type specimen from Colorado.

Saxifraga serpyllifolia Pursh subsp. chrysantha (A. Gray) W. A. Weber.

**Lithophragma Torrey & Gray, 1840 TAYLO65****Lithophragma glabrum Nuttall**

TAYLO65. phragma is neuter, not feminine.

Lithophragma bulbiferum Rydberg. HARRI54; TAYLO65.

**Lithophragma parviflorum (Hooker) Nuttall ex Torrey & Gray**

HARRI54; TAYLO65.

Tellima parviflora Hooker. PORTE74.

**Lithophragma tenellum Nuttall**

HARRI54; TAYLO65.

Lithophragma australis Rydberg. RYDBE06; TAYLO65.

**Micranthes Haworth, 1812***Micranthes arguta (D. Don) Small*

SMALL05; RYDBE06. Erroneous Report.

Saxifraga arguta D. Don. HARRI54; CALDE60. Colorado plants are *M. odontoloma*.

*Micranthes integrifolia (Hooker) Small*

A species of the Pacific Northwest.

*Micranthes nivalis (L.) Small*

Arctic species, not in Colorado.

Saxifraga micranthes L.. PORTE74.

Saxifraga nivalis L.. TORRE27.

**Micranthes odontoloma (Piper) Heller**

SMALL05.

Saxifraga odontoloma Piper. CALDE60.

Saxifraga punctata auctt., non L.. PORTE74.

**Micranthes oregana (T. J. Howell) Small**

SMALL05; ELVAN84.

Micranthes arnoglossa Small. N. Amer. Flora 22:138.1905. Type: Marshall Pass, 19 July 1901, Baker 509 (NY). Type specimen from Colorado.

Micranthes brachypus Small. RYDBE06.

Saxifraga montanensis Small. HARRI54.

Saxifraga oregana T. J. Howell. HARRI54.

Saxifraga oregana T. J. Howell var. montanensis (Small) C. L. Hitchcock. HITCH55.

**Micranthes rhomboidea (Greene) Small**

SMALL05.

Saxifraga rhomboidea Greene. HARRI54; ELVAN84. Pittonia 3:343.1898. Type: "Colorado Rocky Mts" (ND-G). Type specimen from Colorado.

Saxifraga rhomboidea Greene var. austrina A. Nelson. Bot. Gaz. 31:394.1901. Type: Berwind, 1900, Archibald 236 (RM). Glandular-pubescent. Type specimen from Colorado.

**Mitella L., 1753****Mitella pentandra Hooker**

HARRI54.

Pectiantia pentandra (Hooker) Rydberg. RYDBE06.

*Mitella stauropetala Piper var. stauropetala*

RYDBE06. Erroneous Report.

Ozomelis stauropetala (Piper) Rydberg. RYDBE06.

**Mitella stauropetala Piper var. stenopetala (Piper) Rosendahl**

HITCH55.

Mitella stenopetala Piper. HARRI54.

*Ozomelis parryi* (Piper) Rydberg. RYDBE06.

*Ozomelis stenopetala* (Piper) Rydberg. RYDBE06.

### **Muscaria Haworth, 1821**

#### **Muscaria adscendens (L.) Small**

SMALL05; RYDBE06. *M. adscendens* may be entirely Eurasian, which might justify using the name *M. oregonensis* (Rafinesque).

*Saxifraga adscendens* L.. HARRI54.

*Saxifraga adscendens* L. subsp. *oregonensis* (Rafinesque) Bacigalupi.

#### **Muscaria cespitosa (L.) Haworth**

Eurasian and eastern American Arctic.

*Saxifraga cespitosa* L.. PORTE74; HARRI54. Arctic and European.

#### **Muscaria delicatula Small**

SMALL05; RYDBE06; WEBER87B.

#### **Muscaria micropetala (Small) Fedde**

SMALL05; WEBER87B.

#### **Muscaria monticola (Small) Fedde**

SMALL05; WEBER87B.

### **Saxifraga L., 1753 SOLT196**

#### **Saxifraga cernua L.**

RYDBE06; HARRI54.

*Saxifraga simulata* Small. HARRI54.

#### **Saxifraga hyperborea R. Brown subsp. debilis (Engelmann ex A. Gray) Löve et al.**

LOVE71.

*Saxifraga debilis* Engelmann ex A. Gray. RYDBE06; HARRI54. Proc. Phila. Acad. 15:62.1863. Type: alpine, Parry 198 (GH). Type specimen from Colorado.

#### **Saxifraga rivularis L.**

WEBER55,66.

### **Spatularia Haworth, 1861**

#### **Spatularia foliolosa (R. Brown) Small**

*Saxifraga foliolosa* R. Brown. WEBER55.

*Saxifraga stellaris* L. var. *comosa* Willdenow. PORTE74.

#### **Spatularia vreelandii Small**

RYDBE06. Erroneous Report.

*Saxifraga vreelandii* (Small) Fedde. HARRI54. Colorado specimens so reported were *Spatularia foliolosa*, coll. by Greene.

### **Sullivantia Torrey & Gray, 1842 SOLT191**

#### **Sullivantia hapemanii (Coulter & Fisher) Coulter var. purpusii (Brandegee) Soltis**

RYDBE06; SOLT191. Endemic.

*Boykinia purpusii* Brandegee. RYDBE06. Bot. Gaz. 27:47.1899. Type: Montrose Co.: Black Canyon, 7,200 ft., Purpus 512) (UC). Type specimen from Colorado.

*Sullivantia purpusii* (Brandegee) Rosendahl. HARRI54.

### **Telesonix Rafinesque, 1837**

#### **Telesonix jamesii (Torrey) Rafinesque**

RYDBE06.

*Boykinia jamesii* (Torrey) Engler.

*Saxifraga jamesii* Torrey. TORRE27; HARRI54. Ann. Lyc. N. Y. 2:204.1827. Type: Rocky Mts [Pikes Peak], James (NY). Type specimen from Colorado.

## **SCROPHULARIACEAE**

### **Agalinis Rafinesque, 1837**

#### **Agalinis tenuifolia (M. Vahl) Rafinesque**

PENNE28.

*Gerardia besseyana* Britton. RYDBE06.

*Gerardia tenuifolia* M. Vahl. PORTE74; HARRI54.

**Bacopa Aublet, 1775****Bacopa rotundifolia (Michaux) Wettstein in Engler & Prantl**

HARRI54.

**Besseyia Rydberg, 1903****Besseyia alpina (A. Gray) Rydberg**

RYDBE06; HARRI54.

*Synthyris alpina* A. Gray. Amer. J. Sci. (2)34:251.1862. Type: Clear Creek Co.: "dividing ridge," alpine, Colorado, Parry 255 (GH). Type specimen from Colorado.

**Besseyia plantaginea (Benth in De Candolle) Rydberg**

HARRI54.

*Synthyris flavescens* A. Nelson. Bot. Gaz. 34:33-34.1902. Type: MN: Cimarron, 18 May 1898, Crandall (RM). Harrington listed this under *B. ritteriana* but it is more likely to belong to *B. plantaginea*, judging from the habitat. Type specimen from Colorado.

*Synthyris plantaginea* Benth in De Candolle. PORTE74.

*Veronica plantaginea* James. GOODM95. Trans. Amer. Phil. Soc., n.s. 2:173.1825. Type: El Paso Co., fide GOODM95. Type specimen from Colorado.

**Besseyia ritteriana (Eastwood) Rydberg**

RYDBE06; HARRI54.

*Synthyris reflexa* Eastwood. Proc. Calif. Acad. Sci. (3)1:124.1898. Type: LP: Cumberland Basin, SAug. 1892, Eastwood (CAS). Type specimen from Colorado.

*Synthyris ritteriana* Eastwood var. *obtusa* A. Nelson. Bot. Gaz. 34:34.1902. Type: La Plata Co.: Bear Cr. divide, west La Plata Mts., Baker, Earle, & Tracy 225 (RM). Type specimen from Colorado.

**Besseyia wyomingensis (A. Nelson) Rydberg**

Schaack annotation in herb.

*Besseyia cinerea* (Rafinesque) Pennell. HARRI54.

*Besseyia gymnocarpa* (A. Nelson) Rydberg. RYDBE06. "Wood's Ranch".

*Wulfenia gymnocarpa* A. Nelson. RYDBE06.

**Castilleja Mutis, 1782****Castilleja chromosa A. Nelson**

HARRI54.

*Castilleja buffumii* A. Nelson. HARRI54.

*Castilleja collina* A. Nelson. HARRI54.

*Castilleja dubia* A. Nelson. HARRI54.

*Castilleja stokesii* Brandegee. RYDBE06.

**Castilleja flava S. Watson**

RYDBE06; HARRI54.

*Castilleja brachyantha* Rydberg. HARRI54.

*Castilleja breviflora* A. Gray, non Benth. PORTE74; HARRI54.

*Castilleja curticalix* Nelson & Macbride. HARRI54.

**Castilleja haydenii (A. Gray) Cockerell**

RYDBE06; HARRI54.

*Castilleja pallida* Kunth var. *haydenii* A. Gray. Syn. Fl. N. Am. 2(1):297.1878. Type: CS: Sierra Blanca, 1877, Hayden, Hooker, & Gray (GH). Type specimen from Colorado.

**Castilleja integra A. Gray in Torrey**

HARRI54. Bot., Mex. Bound. Surv. 119:1859.

*Castilleja gloriosa* Britton. RYDBE06.

*Castilleja tomentosa* A. Gray. HARRI54.

*Euchroma purpurea* Nutt. ms.. TORRE27.

**Castilleja linariifolia Benth in De Candolle**

HARRI54.

*Castilleja cognata* Greene. Pl. Baker. 3:22-23.1901. Type: Jack's Cabin, 7 July 1901, Baker 616. Greene suspected hybrid with "*septentrionalis*". Type specimen from Colorado.

***Castilleja lindheimeri* A. Gray**

RYDBE06. "Mancos, Grand Junction." Misidentification.

**Castilleja lineata Greene**

HARRI54. *Pittonia* 4:151.1900. Type: Archuleta Co.: Pagosa Springs, 18 July 1899, Baker (ND-G). Type specimen from Colorado.

### ***Castilleja miniata* Douglas ex Hooker**

HARRI54.

*Castilleja confusa* Greene. *Pittonia* 4:1-2.1899. Type: between Ouray and Telluride, 10 Aug. 1901, Baker 753, 754 (ND-G. not cited in protologue). Type specimen from Colorado.

*Castilleja crista-galli* Rydberg. RYDBE06; HARRI54.

*Castilleja hispida* Bentham. RYDBE06.

*Castilleja lancifolia* Rydberg. HARRI54.

*Castilleja linearis* Rydberg. Bull. Torr. Bot. Club 28:25.1901. Type: West Spanish Peak, 6 July 1900, Rydberg & Vreeland 5619 (NY). Assignment tentative. Type specimen from Colorado.

*Castilleja pallida* Kunth var. *miniata* (Douglas) A. Gray. PORTE74.

*Castilleja parviflora* Bongard. PORTE74.

*Castilleja trinervis* Rydberg. HARRI54. Bull. Torr. Bot. Club 28:26.1901. Type: Costilla Co.: Sangre de Cristo Cr, 22 June 1900, Rydberg & Vreeland 5620 (NY). Assignment tentative. Type specimen from Colorado.

### ***Castilleja minor* A. Gray**

HARRI54.

*Castilleja exilis* A. Nelson. RYDBE06.

*Castilleja stricta* Rydberg, non De Candolle. RYDBE06.

### ***Castilleja occidentalis* Torrey**

RYDBE06; HARRI54. Ann. Lyc. Nat. Hist. N.Y. 2:230.1827. Type: Pikes Peak, fide GOODM95. Type specimen from Colorado.

*Castilleja pallida* Kunth var. *alpina* T. C. Porter. Syn. Fl. Colorado 96, 1874. Type: Summit of Pikes Peak, Porter (PH). Type specimen from Colorado.

*Castilleja pallida* Kunth var. *occidentalis* A. Gray. RYDBE06.

### *Castilleja pallida* Kunth

PORTE74. Report applies to *C. sulphurea*.

### ***Castilleja puberula* Rydberg**

HARRI54. Bull. Torr. Bot. Club 31:644-645.1905. Type: 1872, Parry s.n. (NY). Type specimen from Colorado.

*Castilleja brachyantha* auctt., non Rydberg. HARRI54.

*Castilleja brachyantha* Rydberg var. *subinflata* L. Kelso. *Rhodora* 37:227.1935. Type: CC: Echo Lake, 10,000 ft., 5 July 1932, Kelso 3387 (herb. Kelso).

*Castilleja brunnescens* Rydberg. Bull. Torr. Bot. Club 31:643-644.1905. Type: LR: Cameron Pass, 15 July 1896, Baker s.n. (NY). Type specimen from Colorado.

*Castilleja flavoviridis* L. Kelso. HARRI54.

### ***Castilleja rhexifolia* Rydberg**

RYDBE06; HARRI54.

*Castilleja lauta* A. Nelson. RYDBE06.

*Castilleja obtusiloba* Rydberg. Bull. Torr. Bot. Club 31:644.1905. Type: DT: Leroux Park, 19 July 1892, Cowen (NY). Type specimen from Colorado.

### ***Castilleja scabrida* Eastwood**

Bull. Torr. Bot. Club 29:523.1902. Type: Grand Junction, May 1892, Mrs. H. L. Long (CAS). HARRI54 erred in synonymizing this with *C. lineata*. Type specimen from Colorado.

### *Castilleja septentrionalis* Lindley

HARRI54. A species of Arctic America. Colorado reports apply to *C. sulphurea*.

### ***Castilleja sessiliflora* Pursh**

HARRI54.

*Castilleja grandiflora* Sprengel. HARRI54.

*Euchroma grandiflora* Nuttall. TORRE27.

### ***Castilleja sulphurea* Rydberg**

HITCH55.

*Castilleja luteovirens* Rydberg. Bull. Torr. Bot. Club 28:26-27.1901. Type: CT: Sangre de Cristo Cr., 2 July 1900, Rydberg & Vreeland 5616 (NY). Type specimen from Colorado.

*Castilleja rhexifolia* Rydberg var. *sulphurea* (Rydberg) Atwood ex Welsh. WELSH86A.

*Castilleja wyomingensis* Rydberg. RYDBE06.

## ***Chaenorrhinum* (De Candolle ex Duby) Reichenbach, 1828**

### ***Chaenorrhinum minus* (L.) J. Lange in Willkomm & Lange**



WEBER81A. For the spelling see Index Nominum Genericorum, addendum.

**Chionophila Bentham, 1846**

**Chionophila jamesii Bentham in De Candolle**

RYDBE06; HARRI54. Prodrum 10:331.1846. Type: Pikes Peak, James (K, isotype NY). Type specimen from Colorado.

**Collinsia Nuttall, 1817**

**Collinsia parviflora Douglas in Lindley**

RYDBE06; HARRI54; NEWSO29.

**Cordylanthus Nuttall, 1846**

*Cordylanthus kingii* S. Watson

RYDBE06; HARRI54. Misidentifications of *C. wrightii*, fide Chuang & Heckard.

*Adenostegia kingii* (S. Watson) Greene. HARRI54.

**Cordylanthus ramosus Nuttall**

HARRI54.

*Adenostegia ramosa* (Nuttall) Greene. HARRI54

f.

**Cordylanthus wrightii A. Gray**

HARRI54.

*Adenostegia wrightii* (A. Gray in Torrey) Greene. HARRI54.

**Cymbalaria Hill 1766**

**Cymbalaria muralis Gaertner, Meyer, & Scherbius**

Alien. ALIEN, Boulder Co., JF.

*Antirrhinum cymbalaria* L..

*Linaria cymbalaria* (L.) Miller.

**Digitalis L., 1753**

**Digitalis purpurea L.**

WEBER73. Alien.

**Gratiola L., 1753**

**Gratiola neglecta Torrey**

HARRI54.

*Gratiola virginiana* L.

PORTE74. Report applies to *G. neglecta*.

**Leiostemon Rafinesque, 1825**

**Leiostemon ambiguus (Torrey) Greene**

STRAW66; CROSS70. Crosswhite showed that Rafinesque was correct in his generic proposal and that Crosswhite erred in believing that *Leiostemon* was based on *Penstemon frutescens* Lambert, rather than on *P. frutescens* Pursh, nomen nudum.

*Penstemon ambiguus* Torrey. RYDBE06; HARRI54.

**Limosella L., 1753**

**Limosella aquatica L.**

RYDBE06; HARRI54.

**Linaria P. Miller, 1754**

**Linaria canadensis Dumont de Cours var. texana (Scheele) Pennell**

PORTE74, RYDBE06, as the species.

*Linaria texana* Scheele. HARRI54.

**Linaria genistifolia (L.) P. Miller subsp. dalmatica (L.) Maire et al.**

TUTIN64. Alien.

*Linaria dalmatica* (L.) P. Miller var. *macedonica* Fenzl. HARRI54.

**Linaria vulgaris P. Miller**

HARRI54. Alien.

*Linaria linaria* (L.) Karsten. RYDBE06.

**Lindernia Allioni, 1766**

**Lindernia dubia (L.) Pennell var. anagallidea (Michaux) Cooperrider**

Cooperrider, Castanea 41:224. 1976.

Lindernia anagallidea (Michaux) Pennell. HARRI54.

Lindernia dilatata Muhlenberg. TORRE27.

**Mimulus L., 1753****Mimulus breweri (Greene) Coville**

WEBER89C.

**Mimulus eastwoodiae Rydberg**

WEBER79; GRANT24.

**Mimulus floribundus Douglas in Lindley**

RYDBE06; HARRI54.

Capraria pusilla Torrey, non Bentham. TORRE24; GOODM95. Ann. Lyc. Nat. Hist. N. Y. 1:36.1824. Lectotype: "Between July 16-18, from near Denver to Royal Gorge at Cañon City", James fide GOODM95. Type specimen from Colorado.

**Mimulus gemmiparus W. A. Weber**

WEBER72. Madroño 21:423-425.1972. Type: Rocky Mt. Nat. Park, Fall River road, Weber 10462 [14062]. Type specimen from Colorado.

**Mimulus glabratus Humboldt, Bonpland, & Kunth var. fremontii (Bentham) Adele Grant**

HARRI54.

Mimulus geyeri Torrey. RYDBE06.

Mimulus jamesii Torrey & Gray in Bentham. RYDBE06.

Mimulus jamesii Torrey var. fremontii Bentham. PORTE74.

**Mimulus glabratus Humboldt, Bonpland, & Kunth var. utahensis Pennell**

HARRI54.

**Mimulus guttatus De Candolle**

HARRI54.

Mimulus guttatus De Candolle var. hallii (Greene) Adele Grant. A very depauperate modification.

Mimulus guttatus De Candolle var. puberulus (Greene) Adele Grant. GRANT 24. A form densely pubescent above.

Mimulus hallii Greene. Bull. Calif. Acad. Sci. 1:113.1885. Type: Hall & Harbour 398 (M). Type specimen from Colorado.

Mimulus langsдорфii Donn ex Greene. RYDBE06.

Mimulus luteus A. Gray, non L.. PORTE74; RYDBE06.

Mimulus nasutus Greene. RYDBE06.

Mimulus puberulus Greene. Lfl. Bot. Obs. Crit. 2:4.1909. Type: Archuleta Co.: Pagosa Springs, 27 July 1899, Baker (ND-G). RYDBE06 publication was a nomen nudum. Type specimen from Colorado.

**Mimulus lewisii Pursh**

RYDBE06; HARRI54.

**Mimulus moschatus Douglas in Lindley**

RYDBE06; HARRI54.

**Mimulus ringens L.**

HARRI54; PENNE35. Probably extinct in Colorado. One old record from Denver: "along the Platte, near Denver, July 1892, Eastwood" (NY). Harrington records the collection as being by Bethel CS.

**Mimulus rubellus A. Gray**

HARRI54.

Mimulus gratioides Rydberg. GRANT24. Bull. Torr. Bot. Club 28:27.1901. Type: Huerfano Co.: 5 mi SW of La Veta, 22 May 1900, Rydberg & Vreeland 5660 (NY, RM). Type specimen from Colorado.

**Mimulus suksdorfii A. Gray**

HARRI54. Harrington's reports apply to M. breweri or M. rubellus.

**Mimulus tilingii Regel**

HARRI54, as M. guttatus; CRONQ72.

Mimulus luteus L. var. alpinus A. Gray. Proc. Phila. Acad. Sci. 15:72.1863. Type: "alpine region," 1862, Parry 135a (GH). Type specimen from Colorado.

Mimulus minor A. Nelson. HITCH55. Proc. Biol. Soc. Wash. 17:178.1904. Type: Boulder Co.: Arapahoe Pass, 1904, Andrews 8 (RM). Type specimen from Colorado.

**Orthocarpus Nuttall, 1818 CHUAN92****Orthocarpus luteus Nuttall**

RYDBE06; HARRI54.

**Orthocarpus purpureoalbus A. Gray**

RYDBE06; HARRI54.

**Pedicularis L., 1753****Pedicularis bracteosa** Bentham in Hooker subsp. *paysoniana* (Pennell) W. A. WeberRYDBE06, as *bracteata*; WEBER83A.*Pedicularis bracteosa* Bentham in Hooker var. *paysoniana* (Pennell) Cronquist.*Pedicularis paysoniana* Pennell. HARRI54.*Pedicularis canadensis* L. subsp. *canadensis*

HARRI54. The eastern American race.

**Pedicularis canadensis** L. subsp. *fluviatilis* (Heller) W. A. Weber

RYDBE06, as the species; WEBER76.

**Pedicularis centranthera** A. Gray

HARRI54.

**Pedicularis crenulata** Bentham in De Candolle

RYDBE06; HARRI54.

*Pedicularis crenulata* Bentham in De Candolle forma *candida* Macbride. Contr. Gray Herb. n.s. 56:61.1918. Type: Gunnison Co.: Sapinero, 19 June 1901, Baker 174 (GH). An albino. Type specimen from Colorado.*Pedicularis flammea* L.TORRE27; GOODM95. Probably a misidentification of *P. parryi*. No specimen was found in James' collections.**Pedicularis groenlandica** Retzius

TORRE27; RYDBE06; HARRI54.

*Elephantella groenlandica* (Retzius) Rydberg. RYDBE06.**Pedicularis parryi** A. Gray subsp. *mogollonica* (Greene) Carr

CARR71.

**Pedicularis parryi** A. Gray subsp. *parryi*

HARRI54. Amer. J. Sci. (2)34:250.1862. Type: CC: headwaters Clear Cr., Parry (GH). Type specimen from Colorado.

**Pedicularis procera** A. Gray

CRONQ72. Amer. J. Sci. (2)34:251.1862. Type: CC: headwaters of Clear Cr., Parry. Not a later homonym as previously claimed.

*Pedicularis grayi* A. Nelson. RYDBE06; HARRI54.**Pedicularis racemosa** Douglas ex Hooker subsp. *alba* Pennell

RYDBE06; HARRI54 (as the species).

**Pedicularis scopulorum** A. Gray

RYDBE06; HARRI54. Synoptical Flora 2(1):308.1886. Type: Hall &amp; Harbour 421 (GH). Type specimen from Colorado.

*Pedicularis sudetica* Willdenow subsp. *scopulorum* (A. Gray) Hultén. HULTE64. The lumping was ill-advised; there are good morphological features of the corolla. Type specimen from Colorado.*Pedicularis sudetica* WilldenowPORTE74. Report applies to *P. scopulorum*.**Penstemon Schmidel, 1763****Penstemon acaulis** L. Williams var. *yampaënsis* (Penland) Neese

NEESE86.

*Penstemon yampaënsis* Penland. Madroño 14:156.1958, Type: Moffat Co: 5.5-6 mi. E of Elk Springs, 9 June 1953, Penland 4415 (COCO). Type specimen from Colorado.*Penstemon acuminatus* Douglas

PORTE74. A species of the Pacific Northwest.

**Penstemon albidus** Nuttall

RYDBE06; HARRI54.

**Penstemon angustifolius** Nuttall ex Pursh subsp. *angustifolius*

RYDBE06; HARRI54.

*Penstemon caeruleus* Nuttall. PORTE74.**Penstemon angustifolius** Nuttall ex Pursh subsp. *caudatus* (Heller) Keck

HARRI54.

*Penstemon angustifolius* Nuttall ex Pursh var. *caudatus* (Heller) Rydberg. RYDBE06.

**Penstemon angustifolius Nuttall var. vernalensis N. Holmgren**

HOLMG79.

**Penstemon arenicola A. Nelson**

HARRI54. One coll., Moffat Co. (COCO). Should be re-examined.

**Penstemon auriberbis Pennell**

HARRI54. Contr. U.S. Nat. Herb. 20:339.1920. Type: Pueblo Co.: E of Fountain Creek, NE of Pueblo, 5 June 1915, Pennell 5731 (NY). Type specimen from Colorado.

**Penstemon barbatus (Cavanilles) Roth subsp. torreyi (Bentham in De Candolle) Keck**

HARRI54.

Penstemon barbatus (Cavanilles) Roth var. torreyi (Bentham in De Candolle) A. Gray.

Penstemon torreyi Bentham in De Candolle. TORRE27, as *P. coeruleum?* Nuttall; RYDBE06. Prodrum 10:324.1846. Type: Monument Creek, El Paso Co., fide GOODM95. Type specimen from Colorado.**Penstemon barbatus Torrey subsp. trichander (A. Gray) Keck**

HARRI54.

Penstemon barbatus Torrey var. trichander A. Gray. Proc. Amer. Acad. 11:94.1875. Type: SW Colorado, 1875, Brandegee (GH). Type specimen from Colorado.

**Penstemon brandegei (T. C. Porter) T. C. Porter ex Rydberg**

RYDBE09.

Penstemon alpinus Torrey subsp. brandegei (T. C. Porter) Penland in Harrington. HARRI54.

Penstemon alpinus Torrey subsp. magnus (Pennell) Penland in Harrington. HARRI54.

Penstemon cyananthus Hooker var. brandegei T. C. Porter. Syn. Fl. Colo. 91.1874. Type: Pueblo Co.: Sierra Mojada (Wet Mts.), Brandegee (PH). Type specimen from Colorado.

Penstemon glaber Pursh var. brandegei (T. C. Porter ex Rydberg) Unger &amp; Latady, ined.

Penstemon magnus Pennell. Contr. U.S. Nat. Herb. 20:346.1920. Type: Jackson Co.: Teller, North Park, 30 July 1883, Sheldon 90 (US). Type specimen from Colorado.

**Penstemon breviculus (Keck) Nisbet & Jackson**

NISBE61.

Penstemon jamesii Bentham subsp. breviculus Keck. Bull. Torr. Bot. Club 65:241.1938. Type: Montezuma Co.: dry. plains below Mancos, 8 July 1898, Baker, Earle, &amp; Tracy 7232 (RSA). Type specimen from Colorado.

**Penstemon buckleyi Pennell**

HARRI54. Las Animas Co.: Andrix, Weber &amp; Wittmann 18530. See discussion in GREAT86.

Penstemon amplexicaulis Buckley, non Moench.

**Penstemon caespitosus Nuttall ex A. Gray**

RYDBE06.

Penstemon caespitosus Nuttall ex A. Gray var. humifusus R. Nelson ex A. Nelson. Univ. Wyo. Publ. Bot. 3:104.1937. Type: Jackson Co.: North Park, 19 July 1932 R. &amp; A. Nelson (RM). Type specimen from Colorado.

Penstemon caespitosus Nuttall ex A. Gray var. suffruticosus A. Gray. RYDBE06.

Penstemon crandallii A. Nelson subsp. atratus Keck. Type from Utah. Colorado specimen cited: MN: Naturita, Payson 361 (RM). Type specimen from Colorado.

Penstemon crandallii A. Nelson subsp. crandallii. HARRI54. Bull. Torr. Bot. Club 26:354.1899. Type: Park Co.: Como, July 1897, Crandall (RM). Type specimen from Colorado.

Penstemon crandallii A. Nelson subsp. glabrescens (Pennell) Keck. HARRI54.

Penstemon crandallii A. Nelson subsp. procumbens (Greene) Keck. HARRI54.

Penstemon glabrescens Pennell. Contr. U. S. Nat. Herb. 20:375.1920. Type: not designated; Archuleta Co.: Pagosa Springs, Bethel, is first cited. Type specimen from Colorado.

Penstemon procumbens Greene. Pl. Baker. 3:23.1901. Type: Gunnison Co.: Kebler Pass, 7 Aug. 1901, Baker 733 ND-G). Type specimen from Colorado.

Penstemon ramaleyi A. Nelson. Univ. Wyo. Publ. Bot. 3:106-107.1937. Type: Saguache Co.: Villa Grove, 9 July 1935, Ramaley 15116 (RM). Type specimen from Colorado.

Penstemon retrorsus Payson ex Pennell. HARRI54. Contr. U. S. Nat. Herb. 20:373.1920. Type: MN: dry adobe hill near Montrose, 1,740 m., 15 June 1915, Payson 673 (US). Type specimen from Colorado.

Penstemon suffrutescens Rydberg. Bull. Torr. Bot. Club 28:503.1901. Type: Ouray Co.: Ridgway, 20 June 1895, Tweedy 170 (NY). Type specimen from Colorado.

Penstemon teucroides Greene. HARRI54. Pl. Baker. 3:23.1901. Type: Gunnison Co.: Sapinero, 19 June 1901, Baker 186 (ND-G). Type specimen from Colorado.

Penstemon xylus A. Nelson. Bot. Gaz. 34:31.1902. Type: Gunnison Co.: Sapinero, 1898, Wheeler 446 (RM). Type specimen from Colorado.

**Penstemon cobaea Nuttall**

HARRI54. One coll., Baca Co.

**Penstemon comarrhenus A. Gray**

RYDBE06; HARRI54.

**Penstemon confertus Douglas in Lindley subsp. procerus (Douglas ex R. Graham) D. Clark**

ined?.

Penstemon confertus Douglas var. caeruleo-purpureus A. Gray. PORTE74.

Penstemon procerus Douglas ex R. Graham. RYDBE06; HARRI54.

**Penstemon cyanocaulis Payson**

HARRI54. Endemic. Bot. Gaz. 60:380.1915. Type: MN: dry mesas near Naturita, 25 May 1914, Payson 348 (RM). Type specimen from Colorado.

**Penstemon cyathophorus Rydberg**

HARRI54. Bull. Torr. Bot. Club 31:643.1905. Type: Jackson Co.: Pearl, 9 July 1901, Tweedy 4307 (NY). Type specimen from Colorado.

**Penstemon debilis O'Kane & Anderson**

OKANE87. Endemic. Brittonia 39:412-416.1987. Type: Garfield Co.: Roan Cliffs, S side Mt. Callahan, WSW of Parachute, 11 June 1986, O'Kane & Anderson 2424 (COLO). Type specimen from Colorado.

**Penstemon degeneri Crosswhite**

CROSS65A. Endemic. Amer. Midl. Nat. 74:434.1965. FN: S side of Royal Gorge, Degener & Degener 27041 (US). Type specimen from Colorado.

**Penstemon eatonii A. Gray subsp. eatonii**

HARRI54.

**Penstemon eatonii A. Gray subsp. undosus (Jones) Keck**

HARRI54.

**Penstemon eriantherus Pursh**

HARRI54.

Penstemon cristatus Nuttall. PORTE74. Report applies to *P. auriberbis*.

**Penstemon fendleri A. Gray**

Archuleta Co.: 12 mi N of Arboles, 16 June 1951, Weber & Livingston 6239.

**Penstemon fremontii Torrey & Gray var. fremontii**

RYDBE06; HARRI54.

**Penstemon fremontii Torrey & Gray var. glabrescens Dorn & Lichvar**

DORN90. Endemic. Madroño 37:195-199. 1990. Garfield Co.: 30 km SE Douglas Pass, 2440 msm, 7 July 1987, Dorn 4656 (RM). We believe this is unrelated to *P. fremontii* and is deserving of specific status. Type specimen from Colorado.

**Penstemon gibbensii Dorn**

WILKE84. Moffat Co..

**Penstemon glaber Pursh var. glaber**

PORTE74; Umber & Latady, ined..

Penstemon alpinus Torrey. TORRE24; HARRI54. Ann. Lyc. Nat. Hist. N. Y. 1:35-36.1824. Type: Pikes Peak, James (NY). The type was more likely collected at lower altitudes, fide GOODM95. Type specimen from Colorado.

Penstemon alpinus Torrey forma riparius (A. Nelson) Pennell. HARRI54.

Penstemon cyananthus Hooker. PORTE74.

Penstemon glaber Pursh var. alpinus A. Gray. PORTE74.

Penstemon glaber Pursh var. cyananthus (Hooker) A. Gray. PORTE74.

Penstemon glaber Pursh var. utahensis S. Watson. RYDBE06.

Penstemon oreophilus Rydberg. Bull. Torr. Bot. Club 31:642-643.1905. Type: Boulder Co.: Eldora to Baltimore, 20 June-10 July 1903, Tweedy 5711 (NY). Type specimen from Colorado.

Penstemon riparius A. Nelson. RYDBE06.

Penstemon utahensis (S. Watson) A. Nelson, non Eastwood. RYDBE06.

**Penstemon gracilis Nuttall**

RYDBE06; HARRI54.

Penstemon pubescens Solander var. gracilis (Nuttall) A. Gray. PORTE74.

**Penstemon grahamii Keck ex E. Graham**

WEBER81.

**Penstemon grandiflorus Nuttall**

RYDBE06; HARRI54. RYDBE06: "Gray's Peak," must be a lapsus; an impossible locality. A plains species.

**Penstemon gratus Umber & Moorman, ined.**

Endemic. Annotations in herb. Type specimen from Colorado.

**Penstemon griffinii A. Nelson**

CROSS65A. Bot. Gaz. 56:70.1913. Type: Mineral Co.: Wagon Wheel Gap, Griffin 145 (RM). Type specimen from Colorado.

**Penstemon hallii A. Gray**

HARRI54. Endemic. Proc. Amer. Acad. 6:70.1862. Type: CC: headwaters of Clear Creek, 1862, Parry, Hall & Harbour 388 (GH). Type specimen from Colorado.

**Penstemon harbourii A. Gray**

HARRI54. Endemic. Proc. Amer. Acad. 6:71.1862. Type: "high alpine region," Hall & Harbour 396 (GH). Type specimen from Colorado.  
Penstemon bakeri Greene. Pittonia 4:318-319.1901. Type: Mineral Co.: Pagosa Peak, 11,500 ft., 6 Aug. 1899, Baker (ND-G). Type specimen from Colorado.

**Penstemon harringtonii Penland**

PENLA58. Endemic. Madroño 14:153.1958. Type: Grand Co.: 3-5 mi NW of Green Mt. Dam, 19 May 1952, Penland 4296 (COCO). Type specimen from Colorado.

**Penstemon humilis Nuttall ex A. Gray**

PORTE74; RYDBE06; HARRI54. Porter's and Rydberg's reports apply to *P. virens*.

**Penstemon jamesii Bentham**

RYDBE06; HARRI54. One collection, Las Animas Co. Rydberg's collections are *P. auriberbis*.

**Penstemon laricifolius Hooker & Arnott subsp. exilifolius (A. Nelson) Keck**

RYDBE06, as the species; HARRI54.

**Penstemon lasiostemon Umber & Moorman, ined.**

annotations in herb.

**Penstemon lentus Pennell**

HARRI54. Contr. U. S. Nat. Herb. 20:359.1920. Type: Archuleta Co.: Arboles, 3 July 1899, Baker 596 (US). Type specimen from Colorado.

**Penstemon linarioides A. Gray**

RYDBE06; HARRI54.

Penstemon coloradoensis A. Nelson. Bull. Torr. Bot. Club 26:355.1899. Type: Montezuma Co.: Mancos, 1898, Baker, Earle & Tracy (RM). Type specimen from Colorado.

Penstemon linarioides A. Gray subsp. coloradoensis (A. Nelson) Keck. HARRI54.

Penstemon linarioides A. Gray var. viridis Keck. HARRI54.

**Penstemon mensarum Pennell**

HARRI54. Endemic. Contr. U. S. Nat. Herb. 20:380-381. Type: Battlement Nat. For., 2,700 m, 15 July 1912, McDuffie (RM). Type specimen from Colorado.

**Penstemon moffatii Eastwood**

HARRI54. Zoë 4:9-10.1893. Type: Mesa Co.: Grand Junction, Eastwood (CAS). Type specimen from Colorado.

Penstemon moffatii Eastwood subsp. paysonii (Pennell) Keck. HARRI54.

Penstemon paysonii Pennell. Contr. U. S. Nat. Herb. 20:342.1920. Type: MN: Naturita, 27 April 1914, Payson 257 (US). Type specimen from Colorado.

*Penstemon oliganthus Wootton & Standley*

HARRI54; CROSS65A. Reports apply to *P. griffinii*.

**Penstemon ophianthus Pennell**

Penstemon jamesii Bentham subsp. ophianthus (Pennell) Keck. HARRI54.

**Penstemon osterhoutii Pennell**

HARRI54. Endemic. Contr. U. S. Nat. Herb. 20:358.1920. Type: Garfield Co.; Glenwood Springs, 24 May 1911, Osterhout 4575 (US). Type specimen from Colorado.

**Penstemon pachyphyllus A. Gray ex Rydberg var. mucronatus (N. Holmgren) Neese**

NEESE86. MO, Rio Blanco Co..

Penstemon mucronatus N. Holmgren. HOLMG79.

**Penstemon parviflorus Pennell**

HARRI54. Endemic. Contr. U. S. Nat. Herb. 20:340-341.1920. Type: Montezuma Co.: Mancos, July 1890, Eastwood (US). Type specimen from Colorado.

**Penstemon penlandii W. A. Weber**

WEBER86B. Endemic. Phytologia 60:459-461.1986. Type: Grand Co.: 3.8 mi. N of Colorado R. along Troublesome Cr. road, 2,440 msm,

Weber & Dahnke 17230 (COLO). Type specimen from Colorado.

**Penstemon radicosus A. Nelson**

RYDBE06; HARRI54.

**Penstemon rostriflorus Kellogg**

CRONQ84. Type from California.

Penstemon bridgesii A. Gray. RYDBE06; HARRI54. Type from California.

**Penstemon rydbergii A. Nelson**

RYDBE06; HARRI54.

Penstemon erosus Rydberg. Bull. Torr. Bot. Club 28:28.1901. Type: Las Animas Co.: Indian Cr. Pass, 1900, Vreeland 615 (NY, not found by Tiehm). Type specimen from Colorado.

Penstemon lacerellus Greene. Lfl. Bot. Obs. Crit. 1:161.1906. Type: SH: Sargents, 5 July 1901, Baker 352 (US). !Keck. Type specimen from Colorado.

Penstemon latiusculus Greene. Lfl. Bot. Obs. Crit. 1:161-162.1906. Type: Gunnison Co.: Gunnison, 24 July 1901, Baker 588 (US).

!Keck. Type specimen from Colorado.

Penstemon rydbergii A. Nelson subsp. aggregatus (Pennell) Keck. HARRI54.

**Penstemon saxosorum Pennell**

HARRI54.

**Penstemon scariosus Pennell var. albifluvis (England) N. Holmgren**

CRONQ72.

Penstemon albifluvis England. Great Basin Nat. 42:367.1982.

**Penstemon scariosus Pennell var. cyanomontanus Neese**

NEESE86.

**Penstemon secundiflorus Bentham in De Candolle**

RYDBE06; HARRI54.

**Penstemon secundiflorus Bentham in DeCandolle subsp. lavendulus Pennell**

Contrib. U. S. Nat. Herb. 20:358.1920. Type: Pueblo Co.: Bac. ulite Mesa, 6 mi NE of Pueblo, 7 June 1915, Pennell 5739 (P, isotypes RM, US, MO, G). This is the dwarf plant of the parks, and may not have been collected in Pueblo Co., where Pennell collected *P. versicolor* two days before. Type specimen from Colorado.

**Penstemon strictus Bentham in De Candolle**

RYDBE06; HARRI54.

Penstemon strictiformis Rydberg. Bull. Torr. Bot. Club 31:642.1905. Type: Montezuma Co.: Mancos, 23 June 1898, Baker, Earle & Tracy 76 (NY). Type specimen from Colorado.

Penstemon strictus Bentham in De Candolle subsp. angustus Pennell. Contr. U. S. Nat. Herb. 20:356.1920. Type: Archuleta Co.: Piedra, Baker 604 (US). Type specimen from Colorado.

Penstemon strictus Bentham in De Candolle subsp. strictiformis (Rydberg) Keck. HARRI54.

**Penstemon utahensis Eastwood**

WEBER79A.

**Penstemon versicolor Pennell**

Contrib. U. S. Nat. Herb. 20:313-381.1920. Type: East of Pueblo, 5 June 1915, Pennell 5732 (NY). Type specimen from Colorado.

**Penstemon virens Pennell ex Rydberg**

HARRI54. Endemic. Fl. Rocky Mts. 773, 1066.1917. Type: JF: stony granitic hillside N of Morrison, 13 June 1915, Pennell 5821 (NY). Type specimen from Colorado.

**Penstemon virgatus A. Gray subsp. asa-grayi Crosswhite**

CROSS65B.

Penstemon unilateralis Rydberg. HARRI54. Bull. Torr. Bot. Club 33:150.1906. Nom. nov. for *P. secundiflorus* A. Gray, non Bentham. Type specimen from Colorado.

**Penstemon watsonii A. Gray**

RYDBE06; HARRI54. Type from Nevada.

Penstemon fremontii A. Gray var. parryi A. Gray ex D. C. Eaton. PORTE74. Bot. King's Exped. 218.1871. Type: Parry, Middle Park, 1861. Type specimen from Colorado.

Penstemon phlogifolius Greene.

**Penstemon whippleanus A. Gray**

HARRI54. Type from New Mexico., Sandias Mountains.

Penstemon glaucus R. Graham var. stenosepalus A. Gray. Proc. Amer. Acad. 6:70.1862. Type: CC: headwaters of Clear Creek, Parry 261 (GH). Rydberg's report of *P. glaucus* R. Graham represents the same plant, but PENNE35 does not mention the species proper. James collected this on Pikes Peak earlier. Type specimen from Colorado.

*Penstemon pallescens* Osterhout. Bull. Torr. Bot. Club 57:559.1931. Type: Grand Co.: Rabbit Ears Pass, 5 Aug. 1930, Osterhout 7280 (RM). The ochroleucous form. Type specimen from Colorado.

### **Pocilla Fourreau, 1869**

#### **Pocilla biloba (L.) W. A. Weber**

WEBER85B. Alien.

*Veronica biloba* L.. WEBER66.

#### **Pocilla persica (Poiret) Fourreau**

Misidentifications of *P. polita*.

*Veronica buxbaumii* Tenore, non F. W. Schmidt. RYDBE06; TUTIN64.

*Veronica persica* Poiret. HARRI54.

#### **Pocilla polita (E. Fries) Fourreau**

WEBER91B. Alien.

### **Rhinanthus L., 1753**

#### ***Rhinanthus crista-galli* L.**

PORTE74; RYDBE06. Reports apply to *R. minor*.

#### **Rhinanthus minor L. subsp. borealis (Sterneck) Löve**

TUTIN64.

*Rhinanthus rigidus* Chabert. HARRI54. Bull. Herb. Boiss. 7:516-517.1899. Type: Rocky Mts., Hall & Harbour 422 (G). Type specimen from Colorado.

### **Scrophularia L., 1753 SHAW62**

#### **Scrophularia lanceolata Pursh**

TORRE27; HARRI54.

*Scrophularia occidentalis* (Rydberg) Bicknell. RYDBE06.

*Scrophularia serrata* Rydberg. HARRI54.

#### ***Scrophularia nodosa* L.**

PORTE74. Report applies to *S. lanceolata*.

### **Verbascum L., 1753**

#### **Verbascum blattaria L.**

RYDBE06; HARRI54. Alien.

#### **Verbascum phlomoides L.**

HARRI54. Alien.

#### **Verbascum pterocaulon Franchet**

WEBER66. Alien. *V. blattaria* x *V. thapsus*. Hybrid.

#### **Verbascum thapsus L.**

RYDBE06; HARRI54. Alien.

### **Veronica L., 1753**

#### ***Veronica alpina* L.**

PORTE74. Report applies to *V. nutans*.

#### **Veronica americana Schweinitz ex Benth**

RYDBE06; HARRI54.

*Veronica americana* Schweinitz var. *crassula* Rydberg. RYDBE06.

*Veronica crenatifolia* Greene. RYDBE06.

#### **Veronica anagallis-aquatica L.**

HARRI54. Alien. Status doubtful in Colorado.

*Veronica anagallis* L.. RYDBE06.

#### ***Veronica arvensis* L.**

HARRI54. Harrington's ms said that Pennell credited this to Colorado, but no voucher was ever seen.

#### **Veronica catenata Pennell**

TORRE27, as *V. anagallis* L.; HITCH55, Vol. 4, p. 423. Alien.

*Veronica salina* Schur. HARRI54.

#### **Veronica nutans Bongard**



LOVE69; LOVE75A. Diploid (*V. wormskioldii* is tetraploid).

*Veronica alpina* A. Gray, non L.. RYDBE06.

***Veronica peregrina* L. subsp. *xalapensis* (Humboldt, Bonpland, & Kunth) Pennell**

HARRI54. Alien.

*Veronica xalapensis* Humboldt, Bonpland, & Kunth. RYDBE06.

***Veronica scutellata* L.**

HARRI54.

*Veronica wormskioldii* Roemer & Schultes

RYDBE06. Reports apply to *V. nutans*.

***Veronicastrum* L., 1759**

***Veronicastrum serpyllifolium* L. subsp. *humifusum* (Dickson) W. A. Weber**

WEBER87A.

*Veronica serpyllifolia* L. subsp. *humifusa* (Dickson) Pennell. RYDBE06, as the species; HARRI54.

**SELAGINELLACEAE**

***Selaginella* P. Beauvois, 1805**

***Selaginella densa* Rydberg**

HARRI54; REED64. REED64 is incorrect.

*Selaginella densa* Rydberg var. *scopulorum* (Maxon) Tryon. TRYON55.

*Selaginella densa* Rydberg var. *standleyi* (Maxon) Tryon. TRYON55.

*Selaginella scopulorum* Maxon. HARRI54; TRYON55.

*Selaginella standleyi* Maxon. HARRI54; TRYON55.

***Selaginella mutica* D. C. Eaton**

HARRI54.

*Selaginella rupestris* Spring

PORTER74. Report applies to *S. densa*.

***Selaginella selaginoides* (L.) Link**

RYDBE06; WHERR38. Wilken collected in Jackson Co. but did not make specimens.

***Selaginella underwoodii* Hieronymus**

HARRI54.

***Selaginella weatherbiana* Tryon**

TRYON50; WEBER55. Endemic. Type from New Mexico.

**SIMAROUBACEAE**

***Ailanthus* Desfontaines, 1788**

***Ailanthus altissima* (P. Miller) Swingle**

WEBER79A. Alien.

**SINOPTERIDACEAE**

***Argyrochosma* Windham, 1987 WINDH87**

***Argyrochosma fendleri* (Kunze) Windham**

WINDH87.

*Cheilanthes cancellata* Mickel. MICKE79.

*Notholaena fendleri* Kunze. HARRI54.

***Astrolepis* Benham & Windham 1992 BENHA92**

***Astrolepis integerrima* (Hooker) Benham & Windham**

BENHA92; FNA93. Las Animas Co.: Mesa de Maya, Jesus Mesa, Sept., 1994, D. Clark 582.

*Notholaena sinuata* (Lagasca ex Swartz) Kaulfuss var. *integerrima* Hooker. Sp. Fil. 5:108.1864.

***Cheilanthes* Swartz, 1806**

***Cheilanthes eatonii* J. G. Baker in Hooker & Baker**

HARRI54.

**Cheilanthes féei T. Moore**

HARRI54.

*Cheilanthes lanuginosa* Nuttall. PORTE74.**Cheilanthes fendleri Hooker**

HARRI54.

*Cheilanthes tomentosa* Link

PORTE74. Erroneous Report.

**Cheilanthes wootonii Maxon**

HARRI54. Baca and Prowers counties.

**Notholaena R. Brown**

!Windham 1993

**Notholaena standleyi Maxon**

HARRI54; FNA93.

*Cheilanthes standleyi* (Maxon) Mickel. MICKE79. !Windham 1993.**Pellaea Link, 1841****Pellaea atropurpurea (L.) Link**HARRI54; LELLI85. Apogamous triploid, hybrid, *P. glabella* x *P. ternifolia*. See Lellinger. Hybrid.**Pellaea breweri D. C. Eaton**

HARRI54.

**Pellaea glabella Mettenius ex Kuhn subsp. simplex Löve & Löve**

!Windham 1993.

*Pellaea glabella* Mettenius ex Kuhn var. *occidentalis* (E. Nelson) Butters. HARRI54.*Pellaea occidentalis* (E. Nelson) Rydberg. LELLI85.**Pellaea glabella Mettenius subsp. occidentalis (E. E. Nelson) Windham**

WINDH93; FNA93. Type from Wyoming (Laramie Hills).

*Pellaea glabella* Mettenius ex Kuhn var. *occidentalis* (E. Nelson) Butters. HARRI54.*Pellaea occidentalis* (E. Nelson) Rydberg. LELLI85.**Pellaea truncata Goodding**

CRONQ72.

*Pellaea longimucronata* Hooker. HARRI54.**Pellaea wrightiana Hooker**

PORTE74; LELLI85.

*Pellaea ternifolia* (Cavanilles) Link var. *wrightiana* (Hooker) Tryon. WEBER79A.**SMILACACEAE****Smilax L., 1753****Smilax lasioneuron Hooker**

WEBER67; WALLA79(key); MANGA68.

*Nemexia herbacea* (L.) Small subsp. *melica* A. Nelson. Proc. Biol. Soc. Wash. 17:175.1904. Type: Boulder Co.: Boulder Canyon, 1903, 1904, Andrews (RM). Type specimen from Colorado.*Nemexia lasioneura* (Hooker) Rydberg. RYDBE06, as *lasioneuron*.*Smilax herbacea* L. var. *lasioneuron* (Hooker) A. De Candolle. HARRI54.*Smilax rotundifolia* L.PORTE74. Report applies to *S. lasioneuron*.**SOLANACEAE****Chamaesaracha Bentham, 1876 AVERE73****Chamaesaracha conioides (Moricond) Britton**RYDBE06; HARRI54. (often spelled *conioides*).**Chamaesaracha coronopus (Dunal) A. Gray**

RYDBE06; HARRI54.

*Withania coronopus* (Dunal) Torrey. PORTE74.

**Datura L., 1753***Datura discolor* **Benth**

RYDBE06. "Colorado, according to Gray, no specimens seen".

**Datura stramonium L.**

RYDBE06; HARRI54. Alien.

*Datura tatula* L.. RYDBE06.

**Datura wrightii Regel**

*Datura meteloides* Dunal. RYDBE06; HARRI54.

**Hyoscyamus L., 1753****Hyoscyamus niger L.**

RYDBE06; HARRI54. Alien.

**Lycium L., 1753****Lycium barbarum L.**

TUTIN64; CRONQ72. Alien.

*Lycium halimifolium* P. Miller. HARRI54.

**Lycium pallidum Miers**

RYDBE06; HARRI54.

**Nicandra Adanson, 1763****Nicandra physalodes (L.) Persoon**

HARRI54. Alien.

**Nicotiana L., 1753****Nicotiana attenuata Torrey ex S. Watson**

PORTE74; RYDBE06; HARRI54. Porter's report, "Gray's Peak, Dr. Smith," is probably an incorrect locality.

*Nicotiana trigonophylla* **Dunal**

RYDBE06. "Southern Colorado, Parry." Misidentification.

**Physalis L., 1753 WATER58***Physalis angulata* **L.**

PORTE74. misidentification.

**Physalis foetens Poiret var. neomexicana (Rydberg) Waterfall**

WATER58. Cited: Porter, 1872 (PH), El Paso Co., Livingston 497 (DUKE).

**Physalis hederifolia A. Gray var. comata (Rydberg) Waterfall**

RYDBE06, as the species; WATER58.

*Physalis comata* Rydberg. RYDBE06.

*Physalis fendleri* A. Gray. RYDBE06; HARRI54.

**Physalis hederifolia A. Gray var. cordifolia (A. Gray) Waterfall**

WATER58.

*Physalis comata* Rydberg. RYDBE06.

*Physalis fendleri* A. Gray. RYDBE06; HARRI54.

**Physalis heterophylla Nees**

RYDBE06; HARRI54.

**Physalis pruinosa L.**

RYDBE06; HARRI54. Alien. "introduced: Ft. Collins".

*Physalis pubescens* **L.**

PORTE74; RYDBE06; HARRI54. Erroneous Report.

**Physalis pumila Nuttall subsp. hispida (Waterfall) Hinton**

RYDBE06, as the species; HINTO76.

*Physalis virginiana* P. Miller var. *hispida* Waterfall. WATER58.

**Physalis virginiana P. Miller**

RYDBE06; WATER58.

*Physalis lanceolata* Michaux. RYDBE06; HARRI54. But see HINTO76, who recognizes both *P. virginiana* and *P. lanceolata*.

*Physalis longifolia* Nuttall. RYDBE06; HARRI54.

*Physalis pensylvanica* L. var. *lanceolata* A. Gray. PORTE74.

*Physalis polyphylla* Greene. WATER58. Pittonia 4:150-151.1900. Type: Archuleta Co.: Piedra, 12 July 1899, Baker (ND-G). Type specimen from Colorado.

*Physalis subglabrata* Mackenzie & Bush. RYDBE06; HARRI54.

*Physalis virginiana* P. Miller var. *polyphylla* (Greene) Waterfall. WATER58.

*Physalis virginiana* P. Miller var. *sonorae* (Torrey) Waterfall. WATER58.

*Physalis virginiana* P. Miller var. *subglabrata* (Mackenzie & Bush) Waterfall. WATER58.

*Physalis viscosa* L.

PORTE74. misidentification.

### Quincula Rafinesque, 1832

#### Quincula lobata (Torrey) Rafinesque

RYDBE06; GREAT86.

*Physalis lobata* Torrey. TORRE27; HARRI54. Ann. Lyc. Nat. Hist. N.Y. 2:226.1827. Type: Las Animas Co.: Chacuaco Creek, James, fide GOODM95. Type specimen from Colorado.

### Solanum L., 1753

#### Solanum americanum P. Miller

STEBB49.

*Solanum interior* Rydberg. RYDBE06.

#### Solanum carolinense L.

HARRI54. Alien.

#### *Solanum douglasii* Dunal

RYDBE06. A Frémont collection, which Rydberg himself realized had to have come from California, a case of mixed labels.

#### Solanum dulcamara L.

HARRI54. Alien.

#### Solanum elaeagnifolium Cavanilles

RYDBE06; HARRI54. Alien.

*Solanum flavidum* Torrey. TORRE27. Ann. Lyc. Nat. Hist. N.Y. 2:227-228.1827. Type: Otero/Las Animas County line, fide GOODM95. Type specimen from Colorado.

#### *Solanum fendleri* A. Gray

HARRI54. "once collected in S. Colorado".

#### Solanum heterodoxum Dunal

PORTE74; HARRI54. Alien. "plains near Greeley".

#### Solanum jamesii Torrey

HARRI54. Ann. Lyc. NY. 2:227.1828. Type: James (NY). Type specimen from Colorado.

#### *Solanum nigrum* L.

PORTE74; RYDBE06; HARRI54. Misinterpretation of *S. americanum*.

#### Solanum physalifolium Rusby var. nitidibaccatum (Bitter) Edmonds

EDMON86. Alien.

#### Solanum rostratum Dunal

HARRI54. Alien.

*Androcera lobata* Nuttall. RYDBE06.

*Androcera rostrata* (Dunal) Rydberg. RYDBE06.

#### *Solanum sarrachoides* Sendtner ex Martius

HARRI54. See *S. physalifolium*.

#### Solanum triflorum Nuttall

HARRI54.

## SPARGANIACEAE

### Sparganium L., 1753

#### Sparganium angustifolium Michaux

HARRI54.

*Sparganium simplex* Hudson var. *angustifolium* (Michaux) Engelman. PORTE74.

**Sparganium emersum** Rehmann

CRONQ72.

Sparganium emersum Rehmann var. multipedunculatum (Morong) Reveal.

Sparganium multipedunculatum (Morong) Rydberg. RYDBE06; HARRI54.

**Sparganium eurycarpum** Engelmann ex A. Gray

HARRI54.

**Sparganium minimum** Wallroth

HARRI54.

**TAMARICACEAE****Tamarix L., 1753***Tamarix gallica* L.

HARRI54; BAUM78. Erroneous Report.

**Tamarix parviflora** De Candolle

BAUM78. Alien.

*Tamarix pentandra* Pallas

BAUM78. Erroneous Report.

**Tamarix ramosissima** LedebourBAUM78. Alien. Some claim that this is *T. sinensis*.**THELYPTERIDACEAE****Phegopteris Fee 1852****Phegopteris connectilis** (Michaux) Watt

Gunnison Co.: Cement Creek, ledges, 16 July 1948, Langenheim 622-48.

**Thalictrum L., 1753 BOIVI44; GREGO41****Thalictrum alpinum** L.

HARRI54.

Thalictrum alpinum L. var. hebetum Boivin. HARRI54.

Thalictrum scopulorum Greene. Lfl. Bot. Obs. Crit. 2:91-92.1910. Type: Hall &amp; Harbour 10 (US). Type specimen from Colorado.

Thalictrum suspensum Greene. Lfl. Bot. Obs. Crit. 2:92.1910. Type: LP: Durango, 24 July 1898, Baker et al. 437 (ND-G). Type specimen from Colorado.

**Thalictrum dasycarpum** Fischer & Ave-Lallemant

HARRI54.

**Thalictrum fendleri** Engelmann ex A. Gray

HARRI54.

Thalictrum stipitatum Rydberg. Fl. Rocky Mts. 290.1917. Type: El Paso Co.: Minnehaha, 1 July 1901, Clements &amp; Clements 243 (NY). Type specimen from Colorado.

**Thalictrum heliophilum** Wilken & DeMott

WILKE83. Endemic. Brittonia 35:156-158.1983. Type: Rio Blanco Co.: near confluence of Lake Cr. and Cathedral Cr., 14 July 1882, Wilken 13864 (RM). Type specimen from Colorado.

**Thalictrum revolutum** De CandolleArchuleta Co.: Piedra, Schmoll 1497; WL: Windsor, Osterhout. Differs from *T. dasycarpum* by having capitate trichomes on lower leaf surface. Perhaps not taxonomically significant.**Thalictrum sparsiflorum** Turczaninow ex Fischer & Ave-Lallemant

HARRI54.

**Thalictrum venulosum** TreleaseRYDBE06; HARRI54; BOIVI44. Distinctions between this and *T. fendleri* are not convincing.

Thalictrum confine Fernald var. greeneanum Boivin. Rhodora 46:442.1944. Type: Gunnison Co.: Gunnison, 23 July 1901, Baker 551 (GH). Type specimen from Colorado.

**THEMIDACEAE****Androstephium** Torrey, 1859 **FAY96**

Fay and Chase (1996) transfer this genus into the family Themidaceae Salisbury (1866) along with the Brodiaeae

**Androstephium breviflorum S. Watson**

HARRI54; FAY96.

*Brodiaea paysonii* A. Nelson. Bot. Gaz. 56:63.1913. Type: Montrose Co.: Montrose, 18 May 1912, Payson 33 (RM). Type specimen from Colorado.

**TRILLIACEAE****Trillium L., 1753****Trillium ovatum Pursh**

HARRI54.

**TYPHACEAE****Typha L., 1753****Typha angustifolia L.**

HARRI54.

**Typha domingensis Persoon**

WILKE78.

**Typha latifolia L.**

HARRI54.

**ULMACEAE****Celtis L., 1753***Celtis occidentalis L.*

HARRI54. Only present in cultivation.

**Celtis reticulata Torrey**

TORRE27. Ann. Lyc. Nat. Hist. N.Y. 2:247.1827. Type: Las Animas Co.: Chacuaco Creek, James, fide GOODM95. Type specimen from Colorado.

*Celtis rugosa* Rydberg. Bull. Torr. Bot. Club 39:304-305.1912. Type: JF: Golden, 29 Aug. 1895, Rydberg s.n. (NY). Type specimen from Colorado.

**Ulmus L., 1753***Ulmus americana L.*

HARRI54. Alien. cultivated only.

**Ulmus pumila L.**

HARRI54. Alien.

**URTICACEAE****Parietaria L., 1753***Parietaria floridana Nuttall*

HINTON69. Erroneous Report.

**Parietaria pensylvanica Mühlenberg ex Willdenow**

HINTON69.

*Parietaria obtusa* Rydberg. RYDBE06.

**Urtica L., 1753***Urtica dioica L.*

HARRI54. A Eurasian species.

**Urtica gracilenta Greene**

HARRI54; MARTI80. COLO has no specimens. Harrington records from San Juan, Mineral.

**Urtica gracilis Aiton subsp. gracilis**

WOODL82.

*Urtica dioica* L. subsp. *gracilis* (Aiton) Selander.

*Urtica dioica* L. var. *procera* (Mühlenberg) Weddell. HARRI54.

*Urtica viridis* Rydberg. FERN26. P.197. Fernald, recognizing this as a species, cited Gunnison Co.: Baker 601; Montezuma Co.: Baker, Earle, & Tracy 40.

***Urtica gracilis* Aiton subsp. *holosericea* (Nuttall) W. A. Weber**

WEBER85B.

*Urtica dioica* L. subsp. *gracilis* (Aiton) Selander var. *holosericea* (Nuttall) C. L. Hitchcock. HITCH55.*Urtica serra* Blume. MARTI80.**UVULARIACEAE*****Polygonatum* P. Miller, 1754**

Erroneous Report

***Polygonatum commutatum* (Schultes f.) A. Dietrich**

RYDBE06; OWNBE44. No record cited. Monographer found none.

*Salomonina commutata* (Schultes f.) Britton. RYDBE06.***Prosartes* D. Don SHINW94**Proc. Linn. Soc. London 1:48.1839. *Prosartes* more closely related to *Streptopus* than to *Disporum*; *Disporum* closer to *Uvularia* than to *Prosartes****Prosartes trachycarpa* S. Watson**

SHINW94.

*Disporum trachycarpum* (S. Watson) Bentham & Hooker. HARRI54; JONES51; SHINW94.***Streptopus* Michaux, 1803*****Streptopus amplexifolius* (L.) De Candolle**PORTE74; HARRI54. See *S. fassettii*.***Streptopus fassettii* Löve & Löve**

Taxon 30:511.1981.

*Streptopus amplexifolius* (L.) De Candolle var. *chalazatus* Fassett. HARRI54.**VALERIANACEAE*****Valeriana* L., 1753 MEYER51*****Valeriana arizonica* A. Gray**

HARRI54; MEYER51.

*Valeriana ovata* Rydberg. Bull. Torr. Bot. Club 31:645.1905. Type: El Paso Co.: Cameron's Cone [Pike's Peak], 26 June 1901, Clements 241 (NY). Type specimen from Colorado.***Valeriana capitata* Pallas ex Link subsp. *acutiloba* (Rydberg) F. G. Meyer**

HARRI54; MEYER51.

*Valeriana acutiloba* Rydberg. Bull. Torr. Bot. Club 28:24-25.1901. Type: Custer Co.: Grayback Mine, Sangre de Cristo Mts., 25-27 June 1900, Rydberg & Vreeland 5576 (NY). Type specimen from Colorado.*Valeriana crandallii* Gandoger. Bull. Soc. Bot. France 65:36.1918. Type: Silverton, 3 July 1898, Crandall 2080 (LY). Type specimen from Colorado.*Valeriana glacialis* Gandoger. Bull. Soc. Bot. France 65:36.1918. Type: Beaver Creek, 14 July 1898, Crandall 2076 (LY). Type specimen from Colorado.*Valeriana oreophila* Greene. RYDBE06.*Valeriana puberulenta* Rydberg. HARRI54.*Valeriana pubicarpa* Rydberg. HARRI54.***Valeriana dioica* L. subsp. *sylvatica* (Solander ex Richardson) F. G. Meyer**

MEYER51. A northern species, south to northern Wyoming.

***Valeriana edulis* Nuttall**

RYDBE06; HARRI54; MEYER51.

*Valeriana ceratophylla* (Hooker) Piper. HARRI54.*Valeriana furfurascens* A. Nelson. HARRI54.*Valeriana trachycarpa* Rydberg. MEYER51. Bull. Torr. Bot. Club 31:645.1905. Ouray Co.: Red Mt., S of Ouray, 11 Sept. 1901, Underwood & Selby 352 (NY). Type specimen from Colorado.***Valeriana occidentalis* Heller**

RYDBE06; HARRI54; MEYER51.

*Valeriana micrantha* A. Nelson. RYDBE06; HARRI54.**VERBENACEAE**

**Caryopteris Bunge, 1835****Caryopteris clandonensis A. Simmonds ex Rehder**

WEBER82A. Alien. as *C. incana*; not naturalized. Hybrid.

**Glandularia J. F. Gmelin, 1792****Glandularia bipinnatifida (Nuttall) Nuttall**

UMBER79.

*Verbena ambrosifolia* Rydberg ex Small. HARRI54. Fl. S.E. U.S. 1011, 1337. 1903. Type: OT: Rocky Ford, 8 June 1900, Osterhout s.n. (NY). Type specimen from Colorado.

*Verbena bipinnatifida* Nuttall. HARRI54.

*Verbena ciliata* Bentham. RYDBE06; HARRI54.

***Glandularia canadensis* (L.) Small**

HARRI54. Collected by Mrs. Brewster en route from Kansas to Colorado, where she settled. The taxon is in range for Kansas.

*Verbena canadensis* (L.) Britton. HARRI54.

***Glandularia gooddingii* (Briquet) Solbrig**

Umber 79. Out of range for Colorado.

*Verbena gooddingii* Briquet. HARRI54. "reported for Colorado; no specimens seen".

***Glandularia wrightii* (A. Gray) Umber**

UMBER79. W. Texas and northern Mexico.

*Verbena wrightii* A. Gray. HARRI54.

**Phyla Loureiro, 1790*****Phyla cuneifolia* (Torrey) Greene**

RYDBE06; HARRI54.

*Lippia cuneifolia* Torrey. RYDBE06.

***Phyla lanceolata* (Michaux) Greene**

WEBER82A. YM.

*Lippia lanceolata* Michaux. PORTE74.

**Verbena L., 1753*****Verbena aubletia* L.**

PORTE74. Report applies to *Glandularia bipinnatifida*.

***Verbena bracteata* Lagasca & Rodriguez**

HARRI54. Alien.

*Verbena rudis* Greene. Pittonia 4:152.1900. Type: Archuleta Co.: Arboles, 18 June 1899, Baker (ND-G). Type specimen from Colorado.

***Verbena hastata* L.**

HARRI54.

*Verbena hastata* L. var. *scabra* Moldenke. Phytologia 9:283.1963. Annotations in herb.

***Verbena macdougallii* Heller**

HARRI54.

***Verbena plicata* Greene**

Baca County: mouth of Gallinas Canyon, 1 June 1991, Wittmann & Weber 18170 (COLO).

***Verbena stricta* Ventenat**

HARRI54.

*Verbena stricta* Ventenat var. *mollis* Torrey. TORRE27. Ann. Lyc. Nat. Hist. N.U. 2:234.1827. Type probably from Logan or Washington Co., fide GOODM95. Type specimen from Colorado.

**VIOLACEAE****Hybanthus Jacquin, 1760*****Hybanthus verticillatus* (Ortega) Baillon**

HARRI54.

*Calceolaria verticillata* (Ortega) Kuntze. RYDBE06.

*Ionidium lineare* Torrey. PORTE74; RYDBE06.

*Ionidium polygalifolium* Ventenat. RYDBE06.

**Viola L., 1753 MCKIN92**



**Viola adunca J. E. Smith**

HARRI54; MCPHE74.

Viola adunca J. E. Smith subsp. ashtonae M. S. Baker. HARRI54.

Viola adunca J. E. Smith subsp. radicata M. S. Baker. HARRI54.

Viola inamoena Greene. Pl. Baker. 3:11.1901. Type: Gunnison Co.: Gunnison, riverside meadows, 25 July 1901, Baker 603 (ND-G). Assignment tentative. Type specimen from Colorado.

Viola retroscabra Greene. RYDBE06. Pittonia 4:290.1901. Type: not designated (ND-G). Type specimen from Colorado.

Viola unguiculata Greene. Pittonia 4:291.1901. Type: Fremont Co.: Greenhorn Mts., Greene s.n. (ND-G). Type specimen from Colorado.

**Viola biflora L.**

RYDBE06; HARRI54.

**Viola biternata Greene**

Pl. Baker. 3:12.1901. Type: locality not given, Baker 42, 233 (not in ND-G list). Type specimen from Colorado.

*Viola blanda Willdenow*RYDBE06. Colorado reports are *V. macloskeyi*.*Viola canadensis L.*PORTE74; HARRI54; WEBER89C. We are calling the Colorado plant *V. scopulorum*.*Viola canina L.*PORTE74. Report applies to *V. labradorica*.*Viola cucullata Aiton*PORTE74; MCKIN92. Report applies to *V. sororia*.*Viola epipsiloides Löve & Löve*LOEVE75C. Misidentification as to Colorado plants. See *V. macloskeyi*.

Viola epipsila Ledebour subsp. repens (Turczaninov) Becker. HULTE68.

**Viola kitaibeliana Roemer & Schultes var. rafinesquei (Greene) Fernald**

FERNA50. Alien.

Viola rafinesquei Greene. HARRI54.

**Viola labradorica Schrank**WEBER87B; MCPHE74. MCPHE lumps this with *V. adunca*].

Viola adunca J. E. Smith var. bellidifolia (Greene) Harrington. HARRI54.

Viola bellidifolia Greene. BAKER40. Pittonia 4:292. 1901. Type: LP: Slide Rock Canyon, W of Mt. Hesperus, 2 July 1898, Baker, Earle, &amp; Tracy 287 (ND-G). Type specimen from Colorado.

Viola demissa Greene. Pl. Baker. 3:10.1901. Type: Marshall Pass, 12,000 ft., 19 July 1901, Baker 501 (ND-G). Type specimen from Colorado.

Viola stenantha Greene. Pl. Baker. 3:10.1901. Type: Mesa Co.: Grand Mesa, 23 June 1901, Baker 230 (ND-G). Type specimen from Colorado.

**Viola macloskeyi Lloyd subsp. pallens (Banks ex De Candolle) M. S. Baker**

RYDBE06; DORN88.

Viola macloskeyi Lloyd var. pallens (Banks ex De Candolle) C. L. Hitchcock.

Viola pallens (Banks ex De Candolle) Brainerd.

Viola palustris L. subsp. brevipes M. S. Baker. HARRI54.

**Viola nuttallii Pursh**

RYDBE06; HARRI54.

**Viola odorata L.**

WEBER81A. Alien.

*Viola palustris L.*PORTE74; RYDBE06; HARRI54. Colorado collections are *V. macloskeyi*.*Viola pedata L.*

HARRI54. "A specimen from Wolf Cr. Pass is this species but the labels may have become mixed".

**Viola pedatifida G. Don**

RYDBE06; HARRI54; MCKIN92.

Viola delphinifolia Nuttall. PORTE74.

**Viola praemorsa Douglas ex Lindley subsp. linguifolia (Nuttall) Baker & Clausen**

BAKER49.

Viola linguifolia Nuttall. RYDBE06.

*Viola nuttallii* Pursh var. *linguifolia* (Nuttall) Jepson. HARRI54.

***Viola praemorsa* Douglas ex Lindley subsp. *major* (Hooker) M. S. Baker**

BAKER49.

*Viola gomphopetala* Greene. Pl. Baker. 3:11.1901. Type: Mesa Co.: Grand Mesa, 23 June 1901, Baker 225 (ND-G). Assignment tentative. Type specimen from Colorado.

*Viola nuttallii* Pursh var. *major* Hooker.

***Viola purpurea* Kellogg subsp. *venosa* (S. Watson) Baker & Clausen**

BAKER49.

*Viola purpurea* Kellogg var. *venosa* (S. Watson) Brainerd. HARRI54; BAKER49.

***Viola renifolia* A. Gray var. *brainerdii* (Greene) Fernald**

HARRI54.

*Viola rugulosa* Greene

HARRI54; WEBER89C. Type was from Minnesota. We are sticking with a Colorado type, *V. rydbergii* Greene.

*Viola canadensis* L. var. *rugulosa* (Greene) C. L. Hitchcock. HITCH55.

***Viola rydbergii* Greene**

WEBER89C. *V. rugulosa* of Colo. literature.

*Viola canadensis* L. var. *rydbergii* (Greene) House. RYDBE06.

***Viola scopulorum* (A. Gray) Greene**

WEBER89C.

*Viola canadensis* L. var. *neomexicana* (Greene) House. RYDBE06.

*Viola canadensis* L. var. *scopulorum* A. Gray. RYDBE06; HARRI54. Bot. Gaz. 11:291.1886. Type: CC: Clear Creek Canyon, Greene (GH). Type specimen from Colorado.

*Viola neomexicana* Greene. RYDBE06.

***Viola selkirkii* Pursh ex Goldie**

HARRI54.

*Viola sheltonii* Torrey

RYDBE06; HARRI54. *V. sheltonii* ranges from Washington to Oregon from the Cascade Mts. westward. The Colorado plants going under the name are much stouter than typical, and it is likely that *V. biternata* Greene is distinct.

***Viola sororia* Willdenow var. *affinis* (Le Conte) McKinney**

MCKIN92.

*Viola affinis* LeConte. Ann. Lyceum Nat. Hist. New York 2:138.1826.

*Viola cognata* Greene. RYDBE06; MCKIN92.

***Viola sororia* Willdenow var. *sororia***

MCKIN92. Enum. Pl. 1:72.1809.

*Viola nephrophylla* Greene. HARRI54; MCKIN92. Pittonia 3:144-145.1896. Type: Gunnison Co.: Cimarron River valley, 19 Aug. 1896, Greene s.n. (ND-G). Type specimen from Colorado.

*Viola papilionacea* Pursh. HARRI54; MCKIN92.

*Viola retusa* Greene. HARRI54; MCKIN92. Pittonia 4:6-7.1899. Type: Larimer Co.: Fort Collins, 2 May 1896, Baker s.n. (ND-G). McKinney annotations in herb., but the name not mentioned in his paper. Type specimen from Colorado.

***Viola utahensis* Baker & Clausen**

BAKER49.

***Viola vallicola* A. Nelson**

BAKER57.

*Viola nuttallii* Pursh var. *vallicola* (A. Nelson) St. John. HARRI54.

*Viola physalodes* Greene. Pl. Baker. 3:12.1901. Type: Gunnison Co.: Cimarron River, 7 June 1901, Greene 67 (ND-G). Type specimen from Colorado.

## VISCACEAE

### *Arceuthobium* Bieberstein, 1819

***Arceuthobium americanum* Nuttall ex Engelmann**

HARRI54; HAWKS72.

*Razoumofskya americana* (Nuttall) Kuntze. RYDBE06.

*Arceuthobium campylopodium* Engelmann in A. Gray

HARRI54; HAWKS72. Pacific states only.

**Arceuthobium cyanocarpum Coulter & Nelson**

HAWKS72.

Arceuthobium campylopodum Engelman in A. Gray forma cyanocarpum (A. Nelson) Gill. HARRI54; HAWKS72.

Razoumofskya cyanocarpa A. Nelson ex Rydberg. RYDBE06. Nomen nudum. Fl. Colorado 100-101. 1906. Based on a Wyoming collection, Ferris Mts., 24 July 1898, Nelson 4959 (NY).

**Arceuthobium divaricatum Engelman**

HAWKS72.

Arceuthobium campylopodum Engelman in A. Gray forma divaricatum (Engelman) Gill. HARRI54.

Razoumofskya divaricata (Engelman) Kuntze. RYDBE06.

**Arceuthobium douglasii Engelman**

HARRI54; HAWKS72.

Razoumofskya douglasii (Engelman) Kuntze. RYDBE06.

**Arceuthobium vaginatum (Willdenow) K. Presl subsp. cryptopodum (Engelman) Hawksworth & Wiens**

HAWKS72.

Arceuthobium cryptopodum Engelman. RYDBE06.

Arceuthobium robustum Engelman. PORTE74; RYDBE06.

Razoumofskya cryptopoda (Engelman) Coville. RYDBE06.

*Arceuthobium vaginatum (Willdenow) K. Presl subsp. vaginatum*

HARRI54; HAWKS72. The Mexican race.

**Phoradendron Nuttall, 1848***Phoradendron cockerellii Trelease*

HARRI54. The "Leadville" collection was a Schedin &amp; Schedin collection, which are notorious for incorrect or mixed labels!

**Phoradendron juniperinum Engelman**

HARRI54.

**VITACEAE****Parthenocissus Planchon, 1887**

Rehder, A. J. Arnold Arb. 20. 1939 (monograph)

**Parthenocissus quinquefolia (L.) Planchon**

RYDBE06. Alien. Cultivated, doubtfully surviving in the wild.

Ampelopsis quinquefolia (L.) Michaux.

Hedera quinquefolia L.. Species Plantarum 202.1753. "Habitat in Canada".

Parthenocissus inserta (Kerner) Fritsch. FERNA50; GLEAS47. GLEAS47 examined the type and found it was in fact P. quinquefolia making this a synonym.

Vitis inserta Kerner.

**Parthenocissus vitacea (Knerr) A. S. Hitchcock**

RYDBE06; HARRI54; GLEAS47.

Ampelopsis quinquefolia L. var. vitacea Knerr. Bot. Gaz. 18:71.1893.

Parthenocissus laciniata (Planchon) Small. RYDBE06.

Parthenocissus quinquefolia (L.) Planchon var. laciniata Planchon. RYDBE06.

**Vitis L., 1753 MOORE91****Vitis acerifolia Rafinesque**

MOORE91. According to Moore, Rafinesque's name has some months priority over V. longii.

Vitis longii Prince. HARRI54; MOORE91.

**Vitis riparia Michaux subsp. riparia**

PORTE74; FERNA50.

Vitis cordifolia Michaux var. riparia (Michaux) A. Gray. PORTE74.

*Vitis vulpina L.*

RYDBE06; HARRI54. Rydberg considered V. riparia synonymous with V. vulpina.

**WOODSIACEAE****Woodsia R. Brown, 1810**

*Woodsia mexicana* Fée

HARRI54; FNA93. Our plants are *W. neomexicana*.

**Woodsia neomexicana** Windham

WINDH93; FNA93. Type from New Mexico.

**Woodsia oregana** D. C. Eaton subsp. *cathcartiana* (Robinson) Windham

WINDH93. Lectotype from Minnesota. This is the widespread subspecies in Colorado.

*Woodsia oregana* D. C. Eaton forma *glandulosa* T. M. C. Taylor. HARRI54.

*Woodsia oregana* D. C. Eaton subsp. *oregana*

HARRI54; BROWN64; FNA93. Erroneous Report.

**Woodsia plummerae** Lemmon

WEBER85A.

**Woodsia scopulina** D. C. Eaton

HARRI54. Canad. Nat. (2)2:90.1865. Type: Parry 394. Type specimen from Colorado.

**Woodsia x schaackii** Windham

Windham, ined. hybrid, *W. oregana* x *W. neomexicana*.

**ZANNICHELLIACEAE*****Zannichellia* L., 1753*****Zannichellia palustris* L.**

HARRI54.

**ZYGOPHYLLACEAE*****Kallstroemia* Scopoli, 1777***Kallstroemia californica* (S. Watson) Vail var. *brachystylis* (Vail) Kearney & Peebles

WEBER66. Erroneous Report.

*Kallstroemia brachystylis* Vail. HARRI54.

*Kallstroemia hirsutissima* Vail

RYDBE06; HARRI54; PORTE69. Erroneous Report.

*Kallstroemia maxima* (L.) Hooker & Arnott

PORTE74; RYDBE06. Misidentification of *K. californica*.

*Kallstroemia brachystylis* Vail. HARRI54.

***Kallstroemia parviflora* Norton**

PORTE69.

***Larrea Cavanilles*, 1800**

Erroneous Report

*Larrea tridentata* De Candolle

Erroneous Report.

*Covillea tridentata* (De Candolle) Vail. RYDBE06. "So. Colo., exact location not given." There is no possibility of this occurring in Colorado.

***Tribulus* L., 1753*****Tribulus terrestris* L.**

HARRI54. Alien.