

Acarospora Massalongo, 1852 WEBER68**Acarospora badiofusca (Nylander) Th. Fries**

SHUSH69.

Acarospora asperata H. Magnusson. Göteborg. K. Vet. Vitterh. Samh. Handl. B,6(17):17-18.1956. Type: Boulder Co.: Steamboat Mt., 7 Feb. 1954, Weber & Shushan L-1489 (UPS).. Type specimen from Colorado.

Acarospora boulderensis H. Magnusson. SHUSH69. K. Vet. Vitt. Samh. Handl. B,6(17):16-17.1956. Type: BL: Bluebell Canyon, 5.ii.54, Weber & Shushan L-1429 (UPS).. Type specimen from Colorado.

Acarospora bullata Anzi

SHUSH69.

Acarospora fuscata (Nylander) Arnold

SHUSH69. First author given as Schrader by Zahlbruckner, but evidently the Schrader Lichen fuscatus was probably a synonym of *Protoparmelia badia* (*Lecanora badia* var *fuscata* Acharius)..

Acarospora glaucocarpa (Wahlenberg) Koerber

WEBER90.

Acarospora cervina Massalongo.

Acarospora gallica H. Magnusson. SHUSH69.

***Acarospora intercedens* H. Magnusson**

SHUSH69.

***Acarospora molybdina* (Wahlenberg ex Acharius) Trevisan**SHUSH69. Colorado plants are *A. nitida*.**Acarospora nitida H. Magnusson**

ANDER76.

Acarospora reagens ZahlbrucknerWEBER89, CLAUZ81. Clauzade regards this as a variety of *A. nodulosa*..**Acarospora schleicheri (Acharius) Massalongo**

SHUSH69.

Acarospora bella (Nylander) Jatta. SHUSH69.

Acarospora chrysops (Tuckerman) H. Magnusson. SHUSH69.

Acarospora evoluta H. Magnusson. MAGNU29; SHUSH69. Cited from Garden of the Gods, Plitt (UPS)..

Acarospora ocellata H. Magnusson. SHUSH69. K. Vet. Vitt. Samh. Handl. B,6(17):12-13.1956. Type: WN: 6 mi NW Akron, 6.vi.54, Shushan L-2491 (UPS).. Type specimen from Colorado.

Acarospora weldensis H. Magnusson. MAGNU56; SHUSH69. K. Vet. Vitt. Samh. Handl. B,6(17):15-16.1956. Type: Weld Co.: 1.5 mi N Rockport, 5.vi.54, Shushan L-2529 (UPS). HAFEL93A considers this a synonym of *P. chlorophana* but I doubt this.. Type specimen from Colorado.

Acarospora xanthophana (Nylander) Jatta. SHUSH69.

Lecanora schleicheri (Acharius) Nylander.

Lecanora xanthophana Nylander.

Lecanora xanthophana Nylander fma *dealbata* Tuckerman.

Acarospora sinopica (Wahlenberg ex Acharius) Koerber

ANDER74A. Taxonomic status in doubt.

Acarospora smaragdula (Wahlenberg ex Acharius) Massalongo

SHUSH69.

Acarospora coloradiana H. Magnusson. SHUSH69. Kgl. Sv. Vet.-Akad. Handl. 7(4):273.1929. Type: "Colorado", H. Willey, Lich. BorD-Amer. (W).. Type specimen from Colorado.

Acarospora strigata (Nylander) Jatta. SHUSH69.

Acarospora strigata (Nylander) Jatta fma *longispora* H. Magnusson. SHUSH69.

Placodium smaragdulum Müller-Argoviensis.

Adelolecia Hertel & Rambold HERTE95C**Adelolecia kolaensis Hertel & Rambold**

HERTE95C. Cited: Anderson 5325: Larimer Co.: Rocky Mt. Nat. Park, Spruce Canyon. . .

Lecidea conferenda Nylander. SHUSH69; HERTE95C.

Agonimia Zahlbruckner, 1909**Agonimia tristicula (Nylander) Zahlbruckner**

EGAN87.

Polyblastia tristicula (Nylander) Arnold. SHUSH69.

Alectoria Acharius, 1809

Alectoria nigricans (Acharius) Nylander

SHUSH69; BRODO77.

Allocetraria Kurokawa & Lai THELL95,98A; RANDL97

Allocetraria madreporiformis (Acharius) Kärnefelt & Thell

Cetraria madreporiformis (Acharius) Müller-Argoviensis. KARNE96; RANDL97.

Dactylina madreporiformis (Acharius) Tuckerman. SHUSH69; RANDL97.

Dactylina madreporiformis (Acharius) Tuckerman fma. *sorediata* Imshaug.

Dufourea madreporiformis Acharius. RANGL97.

Allocetraria stracheyi (Babington) Kurokawa & Lai

THELL95. Clear Creek Co.: Saddle between Mt. Evans and Mt. Epaulet, 13,500 ft., 15 July 1998, Weber, Corbridge & Wittmann L-93142. !Randlane. First report for Western Hemisphere. (China, India, Nepal, Taiwan).

Amandinea Choisy ex Scheidegger & Mayrhofer 1993 SCHEI93

Amandinea dakotensis (Magn.) Sheard

SHEAR98B.

Rinodina dakotensis H. Magnusson. WEBER90; SHEAR98B.

Amandinea punctata (Hoffmann) Coppins & Scheidegger

SCHEI93.

Buellia punctata (Hoffmann) Massalongo. SHUSH69.

Anaptychia Koerber, 1848

Anaptychia bryorum Poelt

POELT74C.

Anaptychia chondroidea (Weber & Awasthi) Kurokawa

Heterodermia chondroidea Weber & Awasthi. WEBER71A. Bryologist 74:181-183.1971. Type: BL: Boulder Canyon 1.5 mi above Boulder Falls, 21.vi.54, Weber L-2478 (COLO).. Type specimen from Colorado.

Anaptychia ulotrichoides (Vainio) Vainio

Moberg80, WEBER90.

Arctoparmelia Hale, 1986

Arctoparmelia centrifuga (L.) Hale

Parmelia centrifuga (L.) Acharius. SHUSH69. Probably misident. of *A. subcentrifuga*.

Arctoparmelia subcentrifuga (Oxner) Hale

ANDERS76, HALE86.

Parmelia subcentrifuga Oxner. SHUSH69.

Xanthoparmelia subcentrifuga (Oxner) Hale.

Arthonia Acharius, 1806

Arthonia glaucomaria Nylander

ALSTR90.

Celidium varians Arnold. WEBER90.

Arthonia glebosa Tuckerman

SHUSH69.

Toninia groenlandica Lynge. SHUSH69.

Arthonia lapidicola (Taylor) Branth & Rostrup

ANDER74A.

Arthonia species indet.

Coppine annotations. Boulder, Larimer, Grand counties. Rocky Mt. Nat. Park, Anderson L-30162. 30543, 30771, 35093, 35308. On *Abies*..

Arthrorhaphis T. Fries, 1860

Arthrorhaphis alpina (Schaerer) R. Santesson

Bacidia alpina (Schaerer) Vainio.

Aspicilia Massalongo, 1852 HAFEL91

Aspicilia caesiocinerea (Nylander ex Malbranche) Arnold

Lecanora caesiocinerea Nylander. SHUSH69.

Aspicilia calcarea (L.) Mudd

Lecanora calcarea (L.) Sommerfelt. SHUSH69. Old reports, all incorrect..

Aspicilia candida (Anzi) Hue

WEBER90.

Aspicilia cinerea (L.) Koerber

Lecanora cinerea (L.) Sommerfelt. SHUSH69.

Lichen cinereus L.. JOERG94A. Syst. Nat. ed. 12, 2:132; Mantissa Pl. 132.1767. Neotype and generitype..

Aspicilia contorta (Hoffmann) Krempelhuber

SANTE84; WEBER90.

Aspicilia desertorum (Krempelhuber) Mereschkowsky

Agrestia cyphellata J. W. Thomson. SHUSH69.

Aspicilia hispida Mereschkowsky. SHUSH69.

Aspicilia fruticulosa (Eversman) Flagey

Grand Co.: 6 km NW Kremmling, DeBolt et al 9334.

Aspicilia laevata (Acharius) Arnold

WEBER90.

Aspicilia mazarina (Wahlenberg) R. Santesson

WEBER90. Possibly a submerged modification of *A. caesiocinerea*, but recognized by all treatments..

Aspicilia aquatica Koerber.

Aspicilia moenium (Vainio) Thor & Tindal

THOR92. Graphis Scripta 4: 66. 1992..

Acarospora moenium (Vainio) Rasanen.

Aspicilia excavata Thor & Tindal. THOR86; WEBER90. Boulder Co.: U. of Colorado campus, Sept., 88, Tindal & Weber L-83547; new to North America..

Endocarpon moenium Vainio. WEBER94. Lichenographia Fenn. 1. Acta Soc. Fauna Fl. Fenn. 49:85.1921. *Moenium* refers to fortifications (walls), the habitat of choice..

Aspicilia quartzitica W. A. Weber

WEBER71B. Bryologist 74:183-185.1971. Type: BL: First Flatiron, 24 Jan. 1971, Weber, Lich. Exsicc. COLO 364 (COLO). Type specimen from Colorado.

Aspicilia reptans (Looman) Wetmore

Summit Co.: Green Mt. Reservoir, Rosentreter 9324. Possibly intermediate to *A. desertorum* fma *hispida*.

Aspicilia sublapponica Zahlbruckner

WEBER90. LR: Mt. Chiquita, Anderson L-35363..

Aspicilia terrestris Tomin

Summit Co.: Green Mt. Reservoir, Rosentreter 9324. Possibly intermediate to *A. desertorum* fma *hispida*.

Bacidia De Notaris, 1846 EKMAN96**Bacidia bacillifera (Nylander) Arnold**

Boulder Co.: Rocky Mt. Nat. Park, Ouzel Falls, [Weber L-2891A]. =*B. circumspecta* (Nylander ex Vainio) Malme pro parte, fide SANTE84.

Bacidia beckhausii Koerber

EKMAN96. Coppins annotation: Boulder Co.: Four Mile Creek, Science Lodge, Anderson L-35216). Coppins says "*Bacidia*" *beckhausii*.

EKMAN96 considers this intermediate between *Bacidid/Bacidina* and *Scoliciosporum*..

Bacidia hemipolia (Nyl.) Malme

Coppins annotation: Larimer Co.: W of Endovalley Campground, on Abies, Anderson L-30376). Coppins says "*Bacidia*" *hemipolia*..

Bacidia peltigericola Vainio

Boulder Co.: trail to Royal Arch, [Weber L-4843], !Thomson].

Bacidia subincompta (Nylander) Arnold

EKMAN96. Larimer Co.: Rocky Mt. Nat. Park, Calypso Cascades, [Anderson 1513 (L-30013), 1600 (L-30060), Gunnison Co.:1955, Weber, cited..

Bacidia vermifera (Nylander) Th. Fries

CARME75; EKMAN96.

Bacidia hegetschweileri auct. non (Hepp) Vain.. SANTE84; EKMAN96.

Bacidina Vezda 1990 VEZDA90*Bacidia inundata* (E. Fries) Koerber

ANDER74A; EKMAN96. A name used for a number of saxicolous species, fide EKMAN96.

Baeomyces Persoon, 1794**Baeomyces rufus (Hudson) Rebentisch**

THOMS67, WEBER90.

Bellemeria Clauzade & Roux, 1984**Bellemeria alpina (Sommerfelt) Clauzade & Roux**

CLAUZ84.

Aspicilia alpina (Sommerfelt) Arnold. SHUSH69.

Lecanora alpina Sommerfelt. SHUSH69.

Bellemeria cinereorufescens (Acharius) Clauzade & Roux

CLAUZ84.

Aspicilia cinereorufescens (Acharius) Massalongo. ANDER74A.

Bellemeria subsorediza (Lynge in Dahl et al.) Santesson in Moberg

Aspicilia subsorediza (Lynge in Daghl et al.) Santesson. WEBER90.

Biatora E. Fries, 1817**Biatora rufofusca Anzi**

HAFEL84.

Lecidea rufofusca (Anzi) Th. Fries. SHUSH69.

Biatora sanguineoatra (Wulfen) Tuckerman

HAFEL84.

Lecidea sanguineoatra (Wulfen) Acharius. SHUSH69.

Biatora sphaeroides (Dickson) Hornemann**Biatora turgidula (E. Fries) Nylander**

HINTE94.

Lecidea turgidula E. Fries. SHUSH69.

Biatora vernalis (L.) E. Fries

HAFEL84.

Lecidea vernalis (L.) Acharius. SHUSH69.

Lichen vernalis L.. JOERG94. Proposed for conservation with a conserved type..

Biatorella De Notaris, 1846**Biatorella fossarum (Dufour ex E. Fries) Th. Fries**

SHUSH69. Question as to whether American material should be called *B. hemisphaerica* Anzi. Egan says "See Thomson," but no reference given.

Lecidea fossarum Dufour ex E. Fries.

Brodoa Goward, 1986 GOWAR86*Brodoa intestiniformis* (Villars) Goward

GOWAR86.

Hypogymnia intestiniformis (Villars) Räsänen. SHUSH69, KROG74. Colorado specimens are *Brodoa oroarctica*.

Parmelia encausta (J. E. Smith) Nylander.

Parmelia intestiniformis (Villars) Acharius.

Brodoa oroarctica (Krog) Goward

GOWAR87; SHUSH69, as *Parmelia intestiniformis*.

Hypogymnia atrofusca (Schaerer) Räsänen.

Hypogymnia oroarctica Krog. KROG74.

Bryonora Poelt, 1983**Bryonora castanea (Hepp) Poelt**

POELT83.

Biatora castanea Hepp.

Lecanora castanea (Hepp) Th. Fries. SHUSH69.

Bryoria Brodo & Hawksworth, 1977

Bryoria capillaris (Acharius) Brodo & Hawksworth

BRODO77. Cited: CF: Buena Vista, Imshaug 1212679 (MSC).

Bryoria chalybeiformis (L.) Brodo & Hawksworth

BRODO77, WEBER90.

Alectoria chalybeiformis (L.) S. Gray.

Lichen chalybeiformis L.. JOERG94. Sp. Pl. 1155.1753. Name proposed for conservation with a new type..

Bryoria fremontii (Tuckerman) Brodo & Hawksworth

BRODO77. Cited: RT: Seedhouse G.S., Weber 6835.

Alectoria fremontii Tuckerman. SHUSH69.

Bryoria furcellata (E. Fries) Brodo & Hawksworth

BRODO77. Cited: CS: Purgatory, 6 April 1882 Faxon s.n. (FH).

Bryoria fuscescens (Gyelnik) Brodo & Hawksworth

BRODO77. Cited: LR: Bierstadt Lake, Anderson 2507.

Alectoria fuscescens Gyelnik.

Bryoria lanestris (Acharius) Brodo & Hawksworth

BRODO77. Cited: HN: 28 July 1964, Weber s.n., LR: Kiener 1695.

Alectoria lanestris (Acharius) Gyelnik.

Bryoria simplicior (Vainio) Brodo & Hawksworth

BRODO77. The specimen cited is from the Canadian Rockies!.

Buellia De Notaris, 1846

Buellia aethalea (Acharius) Th. Fries

ANDER74A.

Buellia badia (E. Fries) Massalongo

SHUSH69.

Buellia elegans Poelt

POELT74A, WEBER90. EA: Gypsum, Weber & Timdal L-83555.

Buellia epigaea (Persoon) Tuckerman

WEBER90; NOBLE87, POELT74B. On gypsum, MN, SM. NOBLE87 says "North American records under this name are probably *B. elegans*".

Buellia erubescens Arnold

SANTE84.

Buellia zahlbruckneri J. Steiner. SHUSH69.

Buellia geophila (Floerke ex Sommerfelt) Lyngby

WEBER90. BL, LR, alpine..

Buellia insignis (Naegeli ex Hepp) Th. Fries

SHUSH69.

Buellia jugorum (Arnold) Arnold

ANDER74B.

Buellia lacteoides Lesdain

ANDER74A.

Buellia lauricassiae (Fée) Müller-Argoviensis

SHUSH69. Misidentification; a tropical species.

Buellia leptocline (Flotow) Massalongo

Larimer Co.: Rocky Mt. Nat. Park, [Anderson 4543 (L-35917), 4547 (L-35921)].

Buellia myriocarpa De Notaris

SHUSH69. misidentification of *B. erubescens*.

Buellia novomexicana Lesdain

BA: SW of Utleyville, 4,500 ft., Shushan L-8185.

Buellia papillata (Sommerfelt) Tuckerman

SHUSH69.

Buellia parasema (Acharius) De Notaris

SHUSH69; SHEAR64. probably misidentifications of *B. erubescens*; the name *B. parasema* is illegitimate.

Buellia retrovertens Tuckerman

SHUSH69.

Buellia semitensis Tuckerman

ANDER74A.

Buellia spuria (Schaerer) Anzi

SHUSH69.

Buellia terricola Nordin

NORDI99. Cited: Boulder Co.: summit Rollins Pass, Anderson & Shushan in 1969 (COLO). Other collections are from Canada!.

Buellia triphragmioides Anzi

ANDER74A.

Buellia uberior Anzi

SCHEI87.

Buellia contermina Arnold. ANDER76.

Buellia vilis Th. Fries

SHUSH69.

Caloplaca Th. Fries, 1860 WETMO94,98**Caloplaca adnexa Vezda**

WEBER90.

Caloplaca albovariegata (B. de Lesdain) Wetmore

WETMO94.

Pyrenodesmia albovariegata B. de Lesdain. Rev. Bryol. Lich. n.s. 12:62.1942..

Caloplaca ammiospila (Acharius) Olivier

HANSE87.

Caloplaca cinnamomea (Th. Fries) Olivier. SHUSH69.

Caloplaca arenaria (Persoon) Müller-Argoviensis

SHUSH69.

Caloplaca lamprocheila (De Candolle) Flagey.

Caloplaca atroalba (Tuckerman) Zahlbruckner

WEBER90; WETMO94.

Placodium atroalbum Tuckerman. WETMO94. Proc. Amer. Acad. 12:172.1877. Type from "North Platte, Rocky Mts., cretaceous sandstones", Hayden (FH lectotype).

Caloplaca atroflava (Turner) Monguillon

WETMO96. Cited: Rio Grande Reservoir, Ryan 11961A) (herb. RYAN). Assignment tentative, fide Wetmore.

Caloplaca callopisma (Acharius) Th. Fries

A wastebasket name, synonymous with *C. aurantia* and others not present in this area.

Placodium callopismum Acharius. SHUSH69.

Caloplaca cerina (Ehrhart ex Hedwig) Th. Fries

SHUSH69.

Placodium cerinum (Hedwig) Naegeli & Hepp.

Caloplaca cinnabarina (Acharius) Zahlbruckner

SHUSH69. Specimens annotated by Rudolph were incorrect. The species occurs in northern New Mexico.

Caloplaca cirrochroa (Acharius) Th. Fries

ANDER74A; WETMO98. WETMO98 cites Lyons, Anderson 9340, and Clear Creek Canyon, Weber L55654..

Caloplaca citrina (Hoffmann) Th. Fries

SHUSH69.

Placodium citrinum (Taylor) Müller-Argoviensis.

Caloplaca cladodes (Tuckerman) Zahlbruckner

SHUSH69. Wetmore annotations, 1999.

Caloplaca congregiens (Nylander) Zahlbruckner

WETMO96. Mistaken for *C. grimmiae*, fide WETMO96.

Caloplaca decipiens (Arnold) Blomberg & Forssell

SHUSH69; WETMO98.

Caloplaca diphyodes (Nylander) JattaANDER67; WETMO94. Wetmore calls our material *C. atroalba* but I disagree; substrate and ecology quite wrong for the species..**Caloplaca epiphyta Lyngé**

Skr. Svalb. Ishavet 81:119.1940. Type from Greenland.

Caloplaca bryochryson Poelt. ANDER74B; POELT55; SANTE93. ST: North Star Mt., Blue Lake Reservoir, Anderson.

Caloplaca epithallina Lyngé

SHUSH69.

Caloplaca eugyra (Tuckerman) Zahlbruckner

SHUSH69; WETMO98. Record based on FINK35, not a citation. The species is found in Texas and Mexico.

Caloplaca exsecuta (Nylander) Dalla Torre & Sarnthein

WEBER90; WETMO96. Gilpin Co.: S of Rollinsville, Anderson, Poelt, Weber L-65353; Grand Co.: NeverSummer Range, Anderson 3342 (COLO); Huerfano Co.: Trinchera Peak, Egan 3788 (MIN)..

Caloplaca feracissima MagnussonVery common on sandstone rocks at lower altitudes. Spore shape and septum width separate from *C. arenaria*.*Caloplaca ferruginea (Hudson) Th. Fries*Colorado herbarium records (Gough collections) belong to *C. wrightii*.**Caloplaca flavorubescens (Hudson) Laundon**

LAUND76.

Caloplaca aurantiaca auctt.. SHUSH69; LAUND76. non (Lightfoot) Th. Fries.

Placodium aurantiacum (Lightfoot) Anzi.

Caloplaca flavovirescens (Wulfen) Dalla Torre & Sarnthein

SHUSH69.

*Caloplaca fraudans (Th. Fries) Olivier*SHUSH69. probably misidentifications of *C. arenaria*.**Caloplaca grimmiae (Nylander) Olivier**

WETMO96. Gilpin Co: S of Rollinsville, Anderson, Poelt, Weber L-65343, cited..

Lecanora grimmiae Nylander. Type from Caucasus, Lojka.

Caloplaca holocarpa (Hoffmann) Wade

SHUSH69.

Caloplaca pyracea (Acharius) Th. Fries.

Caloplaca jungermanniae (M. Vahl) Th. Fries

SHUSH69.

Placodium jungermanniae (M. Vahl) Tuckerman.

*Caloplaca lobulata (Floerke) Hellbom*SHUSH69. Not an American taxon; misidentifications of *C. modesta*.**Caloplaca luteominia (Tuckerman) Zahlbruckner**

WEBER90; ARUP93. MF: Round Top Mt., Alexander L-228. ARUP93 considers this a coastal species; he never saw our material..

Caloplaca microphyllina (Tuckerman) Hasse

WEBER90.

Caloplaca modesta (Zahlbruckner) Fink

WEBER90.

Caloplaca sipeana H. Magnusson.

Xanthoria modesta Zahlbruckner.

*Caloplaca murorum (Hoffmann) Th. Fries*Our plants are *C. saxicola*.**Caloplaca oblongula (Magnusson) Wetmore**

WETMO94.

Apatoplaca oblongula (H. Magnusson) Poelt & Hafellner. Poelt & Hafellner (1980), WEBER90.

Lecidea oblongula H. Magnusson. Wetmore, annotations.

Caloplaca obscurella (J. Lahm ex Körber) Th. Fries

WETMO94. Boulder Co.: Lyons, St. Vrain Creek, Wetmore 16198 (MIN). Corticolous conifers, and on Selaginella..

Caloplaca pelloidella (Nylander) Hasse

WEBER90; WETMO96. MN: Gypsum Gap, Timdal & Weber L-83563. Larimer Co.: Sylvan Dale, Big Thompson Canyon, Ryan 12112 (RYAN)..

Caloplaca rubelliana (Acharius) Lojka

WEBER90. BA: Utleyville, Shushan L-8178.

Caloplaca saxicola (Hoffmann) Nordin

NORDI72, WEBER90.

Psora saxicola Hoffmann.

Caloplaca saxifragarum Poelt

WEBER90. Fedde, Rep. 58:176.1955; Mitt. Bot. Staatss. München 2:49.1955.

Caloplaca sideritis (Tuckerman) Zahlbruckner

WETMO96.

Caloplaca sinapisperma (Lamarck & De Candolle) Maheu & Gillet

SANTE84.

Blastenia sinapisperma (Lamarck & De Candolle) Massalongo. SHUSH69.

Caloplaca leucoraea (Acharius ex Floerke) Branth. SANTE84.

Placodium sinapispermum (Lamarck & De Candolle) Hepp.

Caloplaca sorocarpa (Vainio) Zahlbruckner

CARME75.

Caloplaca stillicidiorum (M. Vahl) Lyngé

SHUSH69.

Placodium cerinum (Hedwig) Naegeli & Hepp var *stillicidiorum* Acharius.

Caloplaca tetraspora (Nylander) Olivier**Caloplaca tirolensis Zahlbruckner**

SHUSH69.

Caloplaca trachyphylla (Tuckerman) Zahlbruckner

SHUSH69; WETMO98.

Caloplaca variabilis (Persoon) Mueller-Argoviensis

WETMO94. LARIMER CO.: on limestone, Owl Canyon, 6 April 1955, Weber & Shushan. !Wetmore, 1993.

Caloplaca vitellinula (Nylander) Olivier

WEBER90. LR: RMNP, Deer Ridge, Anderson L-34353.

Caloplaca wetmorei Nimis, Poelt, & Tretiach

NIMIS94. Bryologist 97:182-185.1994. Larimer Co.: [Weber et al. L-2257]; Hinsdale Co.: [Weber L-38380]. Saxicolous, reduced to isidia. [C. bacillaris ined.].

Caloplaca wrightii (Tuckerman) Fink

WEBER90.

Caloplaca caesiorufa fma *herbidella* Hue.

Caloplaca ferruginea (Hudson) Th. Fries var *wrightii* (Tuckerman) Zahlbruckner.

Caloplaca herbidella (Hue) H. Magnusson. ANDER74B.

Placodium ferrugineum (Hudson) Th. Fries var *wrightii* Tuckerman. Syn. N. A. Lich. 1:178.1882. The epithet *wrightii* antedates that of Hue (1911).

Placodium cladodes Tuckerman

Type: Colorado: on soil, alpine, E. Hall.. Type specimen from Colorado.

Candelaria Massalongo, 1852**Candelaria concolor (Dickson) B. Stein ex Cohn**

SHUSH69.

Candelariella Müller-Argoviensis, 1894*Candelariella antennaria* Räsänen

HAKUL58. The specimen is *C. deflexa*.

Candelariella arctica (Koerber) R. Santesson

SHUSH69. Doubtfully correct identification from Fink, Nearing.

Candelariella crenulata (Wahlenberg) Zahlbruckner.

***Candelariella aurella* (Hoffmann) Zahlbruckner**

SHUSH69; HAKUL58.

Candelariella aurella (Hoffmann) Zahlbruckner fma *effusa* Hakulinen. HAKUL58. Cited by Hakulinen from WL, LP. A trivial form.

***Candelariella coralliza* (Nylander) H. Magnusson**

Summit Co.: Monte Cristo Creek, N base of Hoosier Pass, 10,800 ft. alt., on rock, 4 July 1954, Shushan & Weber 2641, determined by Hakulinen, incorrectly, as *C. kuusamoensis*.

***Candelariella deflexa* (Nylander) Zahlbruckner**

WEBER81C.

***Candelariella efflorescens* Harris & Buck**

HARRI78. Colorado listed on dot map but no citation given. Harris (corresp.) advised us to ignore the dot!.

Candelariella kuusamoensis Räsänen var *areolata* Hakulinen

HAKUL58. The specimen identified by Hakulinen is *C. coralliza*.

***Candelariella minuta* Reichert & Galum**

Bull. Res. Council Inrael 9D:135.1960. New to North America. Boulder Co.: 6 mile Fold, on shale, 10 Sept. 1994, Weber & Corbridge L-89673.

Candelariella oleaginescens Rondon in Vezda, Lich. Sel. Exsicc. No. 341. 1966.. Lich. Sel. Exsicc. No. 3412. 1966. Type: France: Marseille, near Puits de Lierre, on calcareous rocks, 17 Nov. 1964, Clauzade & Rondon.

***Candelariella placodizans* (Nylander) H. Magnusson**

On moss in alpine tundra.

Candelariella canadensis H. Magnusson.

Candelariella hudsonica Hakulinen.

Candelariella septentrionalis Hakulinen.

***Candelariella plumbea* Poelt & Vezda**

POELT76B; WEBER90. New to North America. L-65336: BL. Boulder Canyon 2.6 mi W Sugarloaf turnoff, Anderson, Poelt & Weber.

***Candelariella rosulans* (Müller-Argoviensis) Zahlbruckner**

SHUSH69.

Candelaria vitellina (Hoffmann) Müller-Argoviensis var *rosulans* Müller-Argoviensis in Britton & Vail. Bull. Herb. Boiss. 3:197.1895. Type: BL: Flagstaff Mt., Penard (G). Type specimen from Colorado.

Candelariella terrigena Räsänen. An. Soc. Cient. Argent. 128:137.1939. Type: BL: Gregory Canyon. Specimen is *C. rosulans* with a small accumulation of soil around it. Weber ms. Cited by HAKUL58 from OT. Type specimen from Colorado.

***Candelariella spraguei* (Tuckerman) Zahlbruckner**

See BREDK82 for report from Tian-Shan. This is not an American endemic!.

Lecanora spraguei (Tuckerman) Tuckerman ex Nylander.

Placodium spraguei Tuckerman. Syn. Lich. N. Amer. 1:179.1882. Type: Colorado, on earth among rocks, Brandegee. Type specimen from Colorado.

***Candelariella subdeflexa* (Nylander) Lettau**

HAKUL58; WEBER90. !Hakulinen.

***Candelariella vitellina* (Hoffmann) Müller-Argoviensis**

HAKUL58; SHUSH69.

Candelaria vitellina (Ehrhart) Massalongo.

Placodium vitellinum (Ehrhart) Naegeli & Hepp.

***Candelariella xanthostigma* (Persoon ex Acharius) Lettau**

ANDER74A.

Carbonea (Hertel) Hertel, 1983

***Carbonea assimilis* (Koerber) T. Fries**

Gilpin Co.: on schist, S of Rollinsville, T2S R72W S6, 7 Sept. 1977, Anderson, Poelt, & Weber L-65351..

Lecidea assimilis (Koerber) Th. Fries.

***Carbonea latypizodes* (Nylander) Knoph & Rambold**

Boulder Co., L-20218, !Knoph..

***Carbonea vitellinaria* (Nylander) Hertel**

HERTE83C, WEBER90.

Lecidea vitellinaria Nylander. THOMS73.

Nesolechia vitellinaria (Nylander) Rehm ex Rabenhorst. THOMS73.

Carbonea vorticosa (Floerke) Hertel

HERTE83B.

Lecidea vorticosa (Floerke) Koerber. SHUSH69.

Catapyrenium (Stizenberger) Flotow, 1850 THOMS87; BREUS96B**Catapyrenium cinereum (Persoon) Koerber**

THOMS87; BREUS96B.

Dermatocarpon cinereum (Persoon) Th. Fries. SHUSH69.

Catapyrenium daedaleum (Krempelhuber) Stein in Cohn

THOMS89; BREUS94,96B. Jefferson Co.: Bull Gulch, Weber & Anderson 36343 (COLO); Larimer Co.: Lumpy Ridge, Anderson 3630 (COLO).

Catapyrenium psoromoides (Borrer) R. Santesson

BREUS98(annotations). Rio Blanco Co.: Piceance Creek, base of juniper, over Pseudoleskeella, 16 May 1959, Weber & Shushan L-25966, !Breuss 1998. One of the only bark-inhabiting species..

Catinaria Vainio, 1922**Catinaria atropurpurea (Schaerer) Poelt & Vezda**

POELT81, WEBER90.

Catolechia Flotow, 1850**Catolechia wahlenbergii (Acharius) Koerber**

Buellia wahlenbergii (Acharius) Sheard. ANDER74A.

Cecidonia Triebel & Rambold, 1988**Cecidonia umbonella (Nylander) Triebel & Rambold**

TRIEB88.

Lecidea umbonella Nylander.

Cetraria Acharius, 1803 RANDL97; RANDL98**Cetraria ericetorum Opiz var reticulata (Räsänen) Kärnefelt**

Cetraria crispa (Acharius) Nylander. SHUSH69.

Cetraria ericetorum Opiz var. ericetorum

SHUSH69; KARNE79.

Cetraria islandica (L.) Acharius ssp crispa (Acharius) Crombie. SHUSH69.

Cetraria tenuifolia (Retzius) R. Howe. SHUSH69.

Cetraria islandica (L.) Acharius

SHUSH69; KARNE79.

Cetraria islandica (L.) Acharius var platyna (Acharius) Acharius. SHUSH69.

Lichen islandicus L.. JOERG94A. Sp. Pl. 2:1145.1753..

Chaenotheca Th. Fries, 1860**Chaenotheca ferruginea (D. Turner ex J. E. Smith) Migula**

ANDER74A.

Chaenotheca melanophaea (Acharius) Zwackh-Holzhausen.

Chaenotheca furfuracea (L.) Tibell

Coniocybe furfuracea (L.) Acharius. ANDER74A.

Mucor furfuraceus L.. JOERG94A. Sp. Pl. 2:1185.1753..

Chromatochlamys Trevisan, 1860**Chromatochlamys muscorum (E. Fries) Mayrhofer & Poelt**

MAYRH87. Cited: numerous colls from Colorado, one from Wyoming, all at COLO..

Microglaena muscorum (E. Fries) Th. Fries. SHUSH69.

Chromatochlamys muscorum (E. Fries) Mayrhofer & Poelt var octospora (Nylander) Mayrhofer & Poelt

MAYRH87. Cited: Rocky Mountain Nat. Park, Anderson 3218.

Cladina Nylander, 1866**Cladina arbuscula (Wallroth) Hale & Culberson**

SHUSH69; ANDER76; AHTI61. see ssp. beringiana.

Cladina arbuscula (Wallroth) Hale & Culberson ssp beringiana (Ahti) Golubkova*Cladina mitis (Sandstede) Hale & Culberson*

Cladonia mitis Sandstede. SHUSH69.

Cladina stellaris (Opiz) Brodo

WEBER90. PA: East Lost Park, Cooper 1632 (COLO).

Cladonia alpestris (L.) Rabenhorst.

Cladonia J. Hill ex G. H. Weber in Wiggers, 1780*Cladonia apodocarpa Robbins*

SHUSH69. A misidentification.

Cladonia bacillaris (Acharius) Nylander

LR: Lawn Lake Trail, Anderson L-30408, !S. Hammer, 1989.

Cladonia bacilliformis (Nylander) Glück

SHUSH69. GA: Mt. Enentah, Anderson 3424, !S. Hammer, 1989.

Cladonia borealis Stenroos

STENR89. BL: raised areas in Carex scopulorum solifluction lobe, Niwot Ridge, 11,300 ft., Weber L-45037.

Cladonia botrytes (Hagen) Willdenow

SHUSH69.

Cladonia cariosa (Acharius) Sprengel

SHUSH69.

Cladonia cariosa (Acharius) Sprengel fma squamulosa (Müller-Argoviensis) Vainio. SHUSH69.

Cladonia carneola (E. Fries) E. Fries

SHUSH69.

Cladonia cenotea (Acharius) Schaerer

SHUSH69.

Cladonia cervicornis (Acharius) Flotow ssp verticillata (Hoffmann) Ahti

AHTI80, WEBER90.

Cladonia verticillata (Hoffmann) Schaerer.

Cladonia chlorophaea (Floerke ex Sommerfelt) Sprengel

SHUSH69.

Cladonia pyxidata (L.) Hoffmann var chlorophaea (Floerke ex Sommerfelt) Floerke.

Cladonia coccifera (L.) Willdenow

SHUSH69.

Lichen cocciferus L.. JOERG94A. Sp. Pl. 2:1151.1753..

Cladonia coniocraea (Floerke) Sprengel

SHUSH69.

Cladonia cornucopioides F. Wilson

SHUSH69. C. pleurota?.

Cladonia cornuta (L.) Hoffmann

SHUSH69.

Lichen cornutus L.. JOERG94A. Sp. Pl. 2:1152.1753..

Cladonia cornuta (L.) Hoffmann ssp groenlandica (Dahl) Ahti

LR: Fall River Canyon, 8,700-9,000 ft., Anderson L-30239, !Hammer 1989.

Cladonia crispata (Acharius) Flotow

SHUSH69.

Cladonia furcata (Hudson) Schrader var crispata (Acharius) Floerke.

Cladonia cyanipes (Sommerfelt) Nylander

SHUSH69. GN: Gothic, Fullford 1067, !Evans (US).

Cladonia decorticata (Floerke) Sprengel

SHUSH69.

Cladonia deformis (L.) Hoffmann

SHUSH69.

Lichen deformis L.. JOERG94A. Sp. Pl. 2:1152.1753..

Cladonia didyma (Fée) Vainio

SHUSH69. BL: Sandbeach Lake, Kiener 5601, !Evans (US).

Cladonia ecmocyna Leighton

SHUSH69.

Cladonia ecmocyna Leighton var macroceras (Floerke) Acharius. SHUSH69.

Cladonia ecmocyna Leighton var nigripes (Nylander) Evans.

Cladonia fimbriata (L.) E. Fries

SHUSH69.

Cladonia fimbriata (L.) E. Fries fma cornutoradiata Coemans.

Cladonia fimbriata (L.) E. Fries var chlorophaeoides Vainio. SHUSH69.

Cladonia fimbriata (L.) E. Fries var coniocraea (Floerke) Vainio.

Cladonia fimbriata (L.) E. Fries var radiata (Schreber) Coemans.

Cladonia fimbriata (L.) E. Fries var simplex (Weiss) Vainio. SHUSH69.

Cladonia major (Hagen) Sandstede. SHUSH69. possibly synonymous with *C. fimbriata*, acc. to Ahti.

Lichen fimbriatus L.. JOERG94A. Sp. Pl. 2:1152.1753..

Cladonia furcata (Hudson) Schrader

SHUSH69.

Cladonia furcata (Hudson) Schrader var racemosa (Hoffmann) Floerke. SHUSH69.

Cladonia gracilis (L.) Willdenow

SHUSH69.

Cladonia gracilis (L.) Willdenow var chordalis (Floerke) Schaerer. SHUSH69.

Cladonia gracilis (L.) Willdenow var dilatata (Hoffmann) Vainio. SHUSH69.

Cladonia gracilis (L.) Willdenow var elongata (Jacquin) E. Fries. SHUSH69.

Cladonia gracilis (L.) Willdenow var hybrida Schaerer.

Lichen gracilis L.. JOERG94A. Sp. Pl. 2:1152.1753..

Cladonia humilis (Nylander) Nylander

LAUND64. report doubtful.

Cladonia conista (Acharius) Robbins. SHUSH69.

Cladonia macroceras (Delise) Ahti

AHTI78. LR/GA: Bighorn Flats, 11,680-12,240 ft., Anderson L-35039, !S. Hammer, 1989.

Cladonia macrophyllodes Nylander

SHUSH69*. LR: Mummy Range, Lawn Lake trail, 9,900 ft., Anderson L-30405, !S. Hammer 1989.

Cladonia mateocyatha Robbins

SHUSH69. Misidentifications of *C. macrophyllodes*.

Cladonia multiformis Merrill

SHUSH69.

Cladonia norrlinii Vainio

SHUSH69. BL: Long's Peak, Kiener 1683a, !Evans (US)..

Cladonia ochrochlora Floerke

SHUSH69.

Cladonia phyllophora Hoffmann

SHUSH69.

Cladonia degenerans (Floerke) Sprengel.

Cladonia pleurota (Floerke) Schaerer

SHUSH69.

Cladonia pocillum (Acharius) Grognot

SHUSH69.

Cladonia pyxidata (L.) Hoffmann var pocillum (Acharius) Flotow. SHUSH69.

Cladonia polycarpoides Nylander

CULBE69. Fig. 6, dot in Colorado (RT); no citation given; an eastern N.A. sp. with western limits in E Nebraska, Kansas, Mo..

Cladonia pyxidata (L.) Hoffmann

SHUSH69.

Lichen pyxidatus L.. JOERG94A. Sp. Pl. 2:1151.1753..

Cladonia rei Schaerer

Cladonia nemoxyna (Acharius) Nylander. FLOWE65. Hearsay report.

Cladonia squamosa (Scopoli) Hoffmann

SHUSH69.

Cladonia strepsilis (Acharius) Vainio

BACA CO.: Big Hole Canyon, 24 May 19934, [Weber & Wittmann L-89189].

Cladonia gracilescens (Floerke) Vainio.

Cladonia lepidota Nylander. SHUSH69.

Cladonia stricta (Nylander) Nylander

COLO specimens verified by Evans.

Cladonia gracilescens (Floerke) Vainio.

Cladonia lepidota Nylander. SHUSH69.

Cladonia subcariosa Nylander

SHUSH69. excluded from Colo by CULBE69.

Cladonia subulata (L.) G. H. Weber ex Wiggers

SHUSH69.

Lichen subulatus L.. JOERG94A. Sp. Pl. 2:1153.1753..

Cladonia sulphurina (Michaux) E. Fries

Cladonia gonecha (Acharius) Asahina. SHUSH69.

Cladonia symphicarpa (Acharius) E. Fries

CULBE69. Cited: EP: Clements 273 (US); LR: Long's Peak, Kiener 14243 (US).

Cladonia turgida (Ehrhart) Hoffmann

CC: Summit Lake, Mt. Evans, Anderson L-35253, !S. Hammer 1989.

Collema G. H. Weber in Wiggers, 1780

Collema bachmanianum (Fink) Degelius

DEGEL74.

Collema coccophorum Tuckerman

DEGEL74.

Collema conglomeratum Hoffmann

DEGEL74.

Collema crispum (Hudson) G. H. Weber ex Wiggers

SHUSH69; DEGEL74.

Collema crispum (Hudson) G. H. Weber ex Wiggers var metzleri (Arnold) Degelius

DEGEL74.

Collema cristatum (L.) G. H. Weber ex Wiggers

SHUSH69; DEGEL74.

Lichen cristatum L.. JOERG94. Proposed for conservation..

Collema furfuraceum (Arnold) DuRietz

SHUSH69; DEGEL74.

Collema fuscovirens (Withering) Laundon

LAUND84.

Collema tuniforme (Acharius) Acharius. SHUSH69.

Collema glebulentum (Nylander ex Crombie) Degelius

DEGEL74.

Collema nigrescens (Hudson) DeCandolle

MCCUNE98A. Archuleta Co..

Collema polycarpon Hoffmann

DEGEL74.

Synechoblastus wyomingensis Fink ex Hedrick. DEGEL74.

Collema tenax (Swartz) Acharius

DEGEL74.

- Collema pulposum* (Bernhardi) Acharius.
Collema tenax (Swartz) Acharius var *bachmannianum* (Fink) Degelius.
Collema tenax (Swartz) Acharius var *substellatum* (H. Magnusson) Degelius.

Cyphelium Acharius, 1815

Cyphelium inquinans (J. E. Smith) Trevisan

SHUSH69; WEBER67B.

Cyphelium lucidum (Th. Fries) Th. Fries

ANDER74A.

Cyphelium notarisii (Tulasne) Blomberg & Forssell

SHUSH69.

Cyphelium tigillare (Acharius) Acharius ssp *notarisii* (Tulasne) W. A. Weber.

Cyphelium tigillare (Acharius) Acharius

SHUSH69.

Cystocoleus Thwaites, 1849

Cystocoleus ebeneus (Dillwyn) Thwaites

ANDER67.

Dermatocarpon Eschweiler, 1824

Dermatocarpon fluviatile (G. H. Weber) Th. Fries

SHUSH69.

Dermatocarpon aquaticum (Weiss) Zahlbruckner.

Dermatocarpon intestiniforme (Koerber) Hasse

WEBER90; ORANG98. BL: Steamboat Mt., Weber L-55145.

Endocarpon intestiniforme Koerber.

Dermatocarpon luridum (Withering) Laundon

SHUSH69; LAUND84, WEBER90. LR: Owl Canyon, Weber 4796 det. Thompson as *D. weberi*.

Dermatocarpon weberi (Acharius) Mann.

Dermatocarpon miniatum (L.) Mann

SHUSH69; ROSEN92.

Dermatocarpon miniatum (L.) Mann var *complicatum* (Lightfoot) Th. Fries.

Dermatocarpon miniatum (L.) Mann var *fulvofuscum* (Tuckerman) Zahlbruckner.

Dermatocarpon miniatum (L.) Mann var *papillosum* (Anzi) Müller-Argoviensis.

Lichen miniatus L.. JOERG94A.

Dermatocarpon moulinsii (Montagne) Zahlbruckner

SHUSH69.

Dermatocarpon reticulatum H. Magnusson

SHUSH69; ROSEN92.

Dermatocarpon vagans Inshaug.

Dermatocarpon rivulorum (Arnold) Dalla Torre & Sarnthein

WEBER81C.

Dermatocarpon vellereum Zschacke

SHUSH69; WEBER90. Anderson regarded as misidentifications of *D. moulinsii*, but COLO specimens numerous.

Dimelaena Norman, 1853

Dimelaena oreina (Acharius) Norman

SHEAR74.

Rinodina novomexicana Lesdain. SHEAR74.

Rinodina oreina (Acharius) Massalongo. SHUSH69.

Rinodina suboreina Lesdain. SHEAR74. This is recognized in the new Checklist (1995) as a species..

Dimerella Trevisan, 1880

Dimerella pineti (Acharius) Vezda

Dimerella diluta (Persoon) Trevisan. SHUSH69; ANDER74A.

Diploschistes Norman, 1853 LUMBS89

Diploschistes actinostomus (Persoon) Zahlbruckner

WEBER90.

*Diploschistes canadensis Räsänen*SHUSH69. Lumbsch annotations. Misidentification of *D. diacapsis*.**Diploschistes diacapsis (Acharius) Lumbsch**SHUSH69, as *D. canadensis*; LUMBS88.*Diploschistes steppicus* Reichert. LUMBS88.**Diploschistes gypsaceus (Acharius) Zahlbruckner**

LUMBS88.

Diploschistes muscorum (Scopoli) R. Santesson in D. Hawksworth

WEBER90.

Diploschistes bryophilus (Ehrhart) Zahlbruckner.*Diploschistes bryophilus* (Ehrhart) Zahlbruckner var *parasiticus* Zahlbruckner.*Diploschistes lichenicolus* (Montagne & E. Fries) Vainio.*Urceolaria scruposa* (Schreber) Acharius var *bryophila* (Ehrhart) Acharius.**Diploschistes scruposus (Schreber) Norman**

SHUSH69.

Urceolaria scruposa (Schreber) Acharius.**Diplotomma Flotow, 1849****Diplotomma alboatrum (Hoffmann) Flotow***Buellia alboatra* (Hoffmann) Th. Fries. SHUSH69; IMSHA51.**Endocarpon Hedwig, 1789****Endocarpon pulvinatum Th. Fries**

WEBER81C.

Endocarpon pusillum Hedwig

SHUSH69.

Ephebe E. Fries, 1825**Ephebe hispidula (Acharius) Horwood**

HENSS63.

Ephebe lanata (L.) Vainio

SHUSH69.

Lichen lanatus L.. JOERG94A. Sp. Pl. 2:1155.1753..**Ephebe ocellata Henssen**

SHUSH69.

Ephebe perspinulosa Nylander ex Norrlin

WEBER90. LR: RMNP, Anderson L-35416, !Henssen..

Ephebe trachytera (Nylander ex Vainio) Henssen.*Ephebe solida* Bornet

SHUSH69.

Epilichen Clements ex Hafellner**Buellia scabrosa (Acharius) Massalongo****Epilichen scabrosus (Acharius) Clements ex Hafellner**

Summit Co.: Green Mt. Reservoir, Rosentreter 9326.

Euopsis Nylander. 1875**Euopsis granatina (Sommerfelt) Nylander**

HAFEL84.

Lecanora granatina Sommerfelt. ANDER74A.**Evernia Acharius in Luyken, 1809****Evernia divaricata (L.) Acharius**

SHUSH69.

Lichen divaricatus L.. JOERG94A. Syst. Nat., Ed. 12,2:713.1767..

Evernia mesomorpha Nylander

WEBER90.

Evernia perfragilis Llano

SHUSH69. Misidentification of *E. divaricata*.

Farnoldia Hertel, 1983

Farnoldia micropsis (Massalongo) Hertel

EGAN87.

Lecidea rhaetica Hepp ex Th. Fries. ANDER74A.

Melanolecia micropsis (Massalongo) Hertel. EGAN87.

Flavocetraria Kärnefelt & Thell KARNE94A

Flavocetraria cucullata (Bellardi) Kärnefelt & Thell

KARNE94A; RANDL97.

Allocetraria cucullata (Bellardi) Randl & Saag. RANDL92.

Cetraria cucullata (Bellardi) Acharius. SHUSH69.

Flavocetraria cucullata (Bellardi) Kärnefelt & Thell

KARNE94.

Allocetraria cucullata (Bellardi) Randl & Saag. RANDL92.

Cetraria cucullata (Bellardi) Acharius. SHUSH69.

Flavocetraria nivalis (L.) Kärnefelt & Thell

KARNE94A; RANDL97.

Allocetraria nivalis (L.) Randl. & Saag. RANDL92.

Cetraria nivalis (L.) Acharius. SHUSH69.

Cetraria nivalis (L.) Acharius var *sorediifera* Hasselrot. SHUSH69.

Lichen nivalis L.. JOERG94A.

Flavoparmelia Hale, 1986

Flavoparmelia baltimorensis (Gyelnik & Foriss) Hale

HALE86B, WEBER90.

Parmelia baltimorensis Gyelnik & Foriss.

Pseudoparmelia baltimorensis (Gyelnik & Foriss) Hale.

Flavoparmelia caperata (L.) Hale

HALE86B.

Lichen caperatus L.. JOERG94A. Sp. Pl. 2:1147.1753..

Parmelia caperata (L.) Acharius. SHUSH69.

Pseudoparmelia caperata (L.) Hale.

Flavoparmelia rutidota (Hooker & Taylor) Hale

Boulder Co.: Wild Basin, SW of campground, 8,600-8,800 ft. alt., on bark, 26 April 1963, Anderson 3835.

Flavopunctelia (Krog) Hale, 1984

Flavopunctelia flaventior (Stirton) Hale

HALE84.

Parmelia andreana Müller-Argoviensis.

Parmelia flaventior Stirton. SHUSH69.

Flavopunctelia soredica (Duby) Hale

HALE84.

Parmelia ulophyllodes (Vainio) Savicz. SHUSH69.

Fulgensia Massalongo & De Notaris, 1853 WESTB98

Fulgensia bracteata (Hoffmann) Räsänen

POELT71. The Colorado lichen is *F. desertorum*.

Caloplaca bracteata (Hoffmann) Jatta. SHUSH69.

Fulgensia desertorum (Tomin) Poelt

POELT71.

Fuscopannaria Joergensen JOERG94**Fuscopannaria leucophaea (Vahl) P. Joergensen**

JOERG94.

Pannaria leucophaea (M. Vahl) Joergensen. JOERG78, 94.

Pannaria microphylla (Swartz) Massalongo. SHUSH69.

Fuscopannaria praetermissa (Nylander) Joergensen

JOERG94.

Lecidea caeruleonigricans (Lightfoot) Schaerer. TIMDA1; JOERG94.

Pannaria lepidiota (Sommerfelt) Th. Fries. SHUSH69; JOERG94.

Pannaria paleacea (E. Fries) Clements ined.. SHUSH69. Clements, Crypt. Format. Colorado. No. 100. Misidentification of Pannaria praetermissa. !P. M. Jørgensen.

Pannaria praetermissa Nylander in Chydonius & Furuhjelm. JOERG78,94.

Parmeliella lepidiota (Sommerfelt) Vainio.

Parmeliella praetermissa (Nylander) P. James. SHUSH69.

Toninia caeruleonigricans (Lightfoot) Th. Fries. SHUSH69; TIMDA91. The lectotype was examined by Timdal..

Glaucomaria Choisy, 1929**Glaucomaria rupicola (L.) Choisy**

HAFEL84.

Lecanora rupicola (L.) Zahlbruckner. SHUSH69.

Lecanora sordida (Persoon) Th. Fries.

Lichen rupicola L.. JOERG94A. Syst. Nat. ed. 122,2:709; Mant. Pl. 132.1767..

Glypholecia Nylander, 1853**Glypholecia scabra (Persoon) Müller-Argoviensis**

SHUSH69.

Acarospora saxicola Fink ex Hedrick.

Gongylia Koerber, 1855**Gongylia muscorum Zschacke in Rabenhorst**

WEBER90.

Gonohymenia J. Steiner, 1902**Gonohymenia nigritella (Lettau) Henssen**

HENSS86, WEBER90.

Thyrea nigritella Lettau.

Gyalecta Acharius, 1808**Gyalecta erythrozona Lettau**

ANDER74B.

Gyalecta foveolaris (Acharius) Schaerer

SHUSH69.

Gyalecta peziza (Montagne) Anzi

WEBER90.

Gypsoplaca Timdal, 1990 TIMDA90**Gypsoplaca macrophylla (Zahlbruckner) Timdal**

TIMDA90. A gypsophile, EA, SM, MN. Previously known only from China.

Lecidea macrophylla Zahlbruckner.

Haematomma Massalongo, 1852**Haematomma coccineum (Dickson) Koerber**

SHUSH69; CULBE63. Misidentifications.

Haematomma elatinum (Acharius) Massalongo

SANTE84.

Lecanora chloroplia (Erichsen) Almborn. ANDER74A; EGAN87.

Haematomma ochroleucum (Necker) Laundon var porphyrium (Persoon) Laundon

HAWKS80.

Haematomma porphyrium (Persoon) Zopf. CULBE63. Cited: no locality, Brandegee (MICH).

Heppia Naegeli in Massalongo, 1854

Heppia lutosa (Acharius) Nylander

SHUSH69; WETMO70.

Heppia despreauxii (Montagne) Tuckerman.

Heterodermia Trevisan, 1868

Heterodermia casarettiana (Massalongo) Trevisan

Esslinger determinations from LR (L-2231, 46435).

Heterodermia japonica (Sato) Swinscow & Krog

HARRIS1990. Esslinger determinations from BL, CR, HF, LR.

Heterodermia japonica (Sato) Swinscow & Krog

Esslinger determinations, BL, CS, HR, LR but we doubt that these are not [H. casarettiana].

Heterodermia pseudospeciosa (Kurokawa) Culberson

SHUSH69. Identity incorrect.

Anaptychia pseudospeciosa Kurokawa.

Heteroplacidium Breuss BREUSS96B

Heteroplacidium acarosporoides (Zahlbruckner) Breuss

BREUS96B.

Heteroplacidium acarosporoides (Zahlbruckner) Breuss

Heteroplacidium congestum (Breuss & McCune) Breuss

BREUSS96B.

Catapyrenium congestum Breuss & McCune. BREUS94; BREUS96B. Delta Co.: Dominguez canyon., Rosentreter 10278.

Heteroplacidium podolepis Breuss

BREUS96B.

Heteroplacidium Breuss BREUS96B

Heteroplacidium acarosporoides (Zahlbruckner) Breuss

BREUS96B. Breuss annotations, LR, ME.

Catapyrenium acarosporoides (Zahlbruckner) J. W. Thomson. THOMS87; BREUS94; BREUS96B.

Heteroplacidium congestum (McCune & Breuss) Breuss

BREUS96B.

Catapyrenium congestum Breuss & McCune. BREUS98(annotations). Moffat Co.: Blue Mt., 6,580 ft., 17 July 1960, MacLeod L-33136 !Breuss 98.

Heteroplacidium podolepis (McCune & Breuss) Breuss

BREUS96B.

Catapyrenium podolepis Breuss. BREUS94,96B. Grand Co.: (on rock), Grand Co.: N of Grand Lake, 10 Aug.1962, Anderson L-34635, !Brusse. Breuss says much of American C. compactum is this, and other material might be a (Verrucaria..

Hymenelia Krempelhuber, 1852

Hymenelia lacustris (Withering) Poelt & Vezda

WEBER90. One record, Grand Co.: Neversummer Mts., Red Mountain, 10-111,000 ft., Anderson L-34585. Vid. Lutzoni but not annotated..

Lecanora lacustris (Withering) Th. Fries.

Hyperphyscia Müller-Argoviensis, 1894

Hyperphyscia syncolla (Tuckerman ex Nylander) Kalb

CARME75; KALB83a.

Physciopsis syncolla (Tuckerman ex Nylander) Poelt. CARME75.

Hypocnomyce Choisy, 1951

Hypocnomyce friesii (Acharius ex Liljebblad) P. James & G. Schneider in G. Schneider

SCHNE79.

Lecidea friesii Acharius ex Liljebblad. SHUSH69.

Psora friesii Acharius ex Liljebblad.

Hypocnomyce scalaris (Acharius ex Liljebblad) Choisy

SCHNE79; DIRIG90.

Lecidea scalaris (Acharius ex Liljeblad) Acharius. SHUSH69.

Psora ostreata Hoffmann.

Psora scalaris (Acharius) Hooker.

Hypocenomyce sorophora (Vainio) James & Poelt

WEBER90. BL:L-35506, PA: L-5527, !Tindal 1988. Minute discrete yellowish areolae with laminal soredia, usually with *Lecidea elabens*.

Hypogymnia (Nylander) Nylander, 1896 GOWAR88

Hypogymnia austerodes (Nylander) Räsänen

SHUSH69.

Parmelia austerodes Nylander.

Hypogymnia bitteri (Lyngé) Ahti

ANDER76.

Parmelia bitteri Lyngé.

Hypogymnia farinacea Zopf

EGAN87. But SANTE84 still uses *H. bitteriana*.

Hypogymnia bitteriana (Zahlbruckner) Räsänen. ANDER74A; EGAN87.

Hypogymnia physodes (L.) Nylander

SHUSH69.

Lichen physodes L.. JOERG94A. Sp. Pl. 2:1144.1753..

Parmelia physodes (L.) Acharius.

Hypogymnia subobscura (Vainio) Trass

SHUSH69. Acad. Sci. R.S.S. Estonia, Tallin, 1963, antedates combination made by Poelt & Filson.

Parmelia subobscura Vainio.

Hypogymnia tubulosa (Schaerer) Havaas

ANDER74A.

Hypotrachyna (Vainio) Hale 1974 HALE75

Hypotrachyna laevigata (J. E. Smith) Hale

SHUSH69.

Parmelia laevigata (J. E. Smith) Acharius.

Hypotrachyna revoluta (Koerber) Hale

HALE75. Boulder Co.: N facing slope Boulder Canyon above Boulder Falls, Weber & Shushan L-2174). Also Larimer Co..

Parmelia revoluta Floerke. HALE75.

Hypotrachyna (Vainio) Hale, 1974

Hypotrachyna laevigata (J. E. Smith) Hale

SHUSH69.

Parmelia laevigata (J. E. Smith) Acharius.

Hypotrachyna revoluta (Koerber) Hale

HALE75. Boulder Co.: N facing slope Boulder Canyon above Boulder Falls, Weber & Shushan L-2174). Also Larimer Co..

Parmelia revoluta Floerke. HALE75.

Icmadophila Trevisan, 1852-1853

Icmadophila ericetorum (L.) Zahlbruckner

SHUSH69.

Baeomyces aeruginosus (Scopoli) De Candolle.

Lichen ericetorum L.. JOERG94A. Sp. Pl. 2:1141.1753..

Imshaugia S. F. Meyer, 1985

Imshaugia aleurites (Acharius) S. F. Meyer

MEYER85.

Parmeliopsis aleurites (Acharius) Nylander. SHUSH69.

Imshaugia placorodia (Acharius) S. F. Meyer

MEYER85.

Parmeliopsis placorodia (Acharius) Nylander. SHUSH69.

Involucropyrenium Breuss BREUS96B**Involucropyrenium waltheri (Krempelhuber) Breuss**

BREUS96B.

Catapyrenium waltheri (Krempelhuber) Koerber. THOMS89; BREUS94; BREUS96B. Thomson considers this to be an epruinose modification of *C. cinereum*, but Breuss considers it a good species (p. 367). Summit Co.: Anderson].

Dermatocarpon waltheri (Krempelhuber) Blomberg & Forssell. SHUSH69; ANDER74B.

Verrucaria waltheri Krempelhuber. BREUS96B.

Japewia Tonsberg, 1990 TONSB90

Generic name commemorates James [JA], Peter [PE]. Wilfred [WI]

Japewia tomoënsis Tonsberg

TONSB90.

Lecidea tomoënsis Nylander. ANDER74A; EGAN87.

Mycoblastus tomoënsis (Nylander) R. Anderson. ANDER74A; EGAN87. Bryologist 77:220.1974.

Kirschsteiniothelia D. Hawksworth, 1985 HAWKS85**Kirschsteiniothelia aethiops (Berkeley & Curtis) D. Hawksworth**

WEBER90.

Microthelia micula Koerber. HAWKS85, WEBER90. JF: Bull Gulch, Weber & Anderson L-36359.

Koerberia Massalongo, 1854**Koerberia sonomensis (Tuckerman) Henssen**

ANDER74A.

Lasallia Mérat, 1821**Lasallia pensylvanica (Hoffmann) Llano**

Umbilicaria pensylvanica Hoffmann. SHUSH69.

Lasallia pustulata (L.) Mérat subsp. papulosa (Acharius) W. A. Weber

Umbilicaria papulosa (Acharius) Nylander. SHUSH69.

Umbilicaria pustulata (L.) Hoffmann ssp papulosa (Acharius) W. A. Weber.

Lecania Massalongo, 1853*Lecania brunonis* Tuckerman

SHUSH69. Based on a Tuckerman report of "*Lecanora*" brunonis; a California taxon.

Lecania constricta W. A. Weber

WEBER84A. Lich. Exsicc. Colo. 614.1984. Type: on *Populus angustifolia*, base of Flatirons, Weber et al (COLO). Type specimen from Colorado.

Lecania cyrtella (Acharius) Th. Fries

SHUSH69.

Lecania cyrtellina (Nylander) Sandstede

CARNE75.

Lecania erysibe (Acharius) Mudd

SHUSH69.

Lecania turicensis (Hepp) Mueller-Argoviensis

Lecania albariella (Nylander) Müller-Argoviensis. SHUSH69.

Lecanora Acharius in Luyken, 1809**Lecanora argentea Oxner & Volkova**

LUMBS92.

Lecanora fuliginosa Brodo. BRODO84, WEBER90.

Lecanora argentea Oxner & Volkova

LUMBS92.

Lecanora oregana Tuckerman.

Schistoplaca argopholis (Acharius) Brusse. BRUSS87.

Lecanora argopholis (Acharius) Acharius

BRUSS87; VANSK84.

Lecanora oregana Tuckerman.

Schistoplaca argopholis (Acharius) Brusse. BRUSS87.

Lecanora bipruinosa Fink

WEBER90. SM: Paradox Pass, Timdal & Weber L-83568. Ryan (ined.) uses a manuscript name *L. nashii* for the Colorado collection, but in his thesis he does not adopt the name.

Lecanora cadubriae (Massalongo) Hedlund

ANDER74A.

Lecanora caesiorubella Acharius ssp saximontana Imshaug & Brodo

IMSHA66. Type from South Dakota.

Lecanora carpinea (L.) Vainio

SHUSH69; IMSHA66.

Lichen carpineus L.. JOERG94A. Sp. Pl. 2:1141,1753..

Lecanora cavicola Creveld

RYAN97. Ryan notes that this appears in Lich. Exsicc. COLO pr.p. No. 135 with "*Lecanora pringlei*" from Colorado.

Lecanora cenisea Acharius

SHUSH69.

Lecanora chlarotera Nylander

SHUSH69; BRODO84.

Lecanora circumborealis Brodo & Vitikainen

BRODO84.

Lecanora dispersa (Persoon) Sommerfelt

SHUSH69.

Lecanora epibryon (Acharius) Acharius

ANDER76; BRODO84; ELIX89.

Lecanora expallens Acharius

GOUGH75.

Lecanora flowersiana H. Magnusson

WEBER90.

Lecanora frustulosa (Dickson) Acharius

SHUSH69; VANSK84. Colorado collections represent *L. argopholis*. See VANSK84..

Lecanora garovaglii (Koerber) Zahlbruckner

SHUSH69.

Lecanora nevadensis H. Magnusson. WEBER90; RYAN93.

Lecanora hagenii (Acharius) Acharius

SHUSH69.

Lecanora hypoptoides (Nylander) Nylander

GOUGH75.

Lecanora impudens Degelius

BRODO84. Cited: BL: Nederland, Sierk 2470 (UAC).

Lecanora intricata (Acharius) Acharius

SHUSH69.

Lecanora mutabilis Sommerfelt. SANTE84.

Lecanora marginata (Schaerer) Hertel

HERTE85.

Lecidea elata Schaerer. SHUSH69.

Lecanora meridionalis H. Magnusson

BRODO84, WEBER90.

Lecanora muralis (Schreber) Rabenhorst

SHUSH69; HAFEL84.

Lecanora nigromarginata H. Magnusson

WEBER75; RYAN91. Ryan ined., feels that Rocky Mountain specimens are *L. novomexicana*.

Lecanora novomexicana H. Magnusson

SHUSH69; RYAN91.

Lecanora thomsonii H. Magnusson. RYAN91.

Lecanora opiniconensis Brodo

BRODO86.

Lecanora pacifica Tuckerman

SHUSH69. Misidentification.

Lecanora pallida (Schreber) Rabenhorst

IMSH66. Dotted on map in error.

Lecanora phaedrophthalma Poelt

POELT58. Known previously from the type collection in Nepal!.

Lecanora christoi W. A. Weber. WEBER75. Bryologist 78:206.1975. Type: GF:8 km N of Rifle, Weber et al, Lich. Exsicc. COLO 458 (COLO). B. Ryan (ined.) makes this synonymous with *L. phaedrophthalma*, known previously from Nepal. Type specimen from Colorado.

Lecanora pinastri (Schaerer) H. Magnusson

SHUSH69. Misidentification.

Lecanora piniperda Koerber

GOUGH75.

Lecanora polytropa (Hoffmann) Rabenhorst

SHUSH69.

Lecanora varia (Ehrhart) Acharius var *polytropa* Nylander.

Lecanora pringlei (Tuckerman) Lamb

SHUSH69.

Lecanora pseudomellea Ryan

RYAN93. Bryologist 96:295.1993. Cited: Gunnison Co.: Crested Butte, 10,000 ft., N.L.T.Nelson 2254 (MIN) Cited by Ryan; xerox in herb. COLO.

Lecanora reagens Norman

ANDER76.

Lecanora rugosella Zahlbruckner

BRODO84.

Lecanora saligna (Schrader) Zahlbruckner

HAFEL48.

Lecanora effusa (Persoon) Acharius. ZAHLB22. 5:536..

Lecanoropsis saligna (Schrader) Choisy. HAFEL84; WEBER81A.

Lecanora straminea (Wahlenberg ex Acharius) Acharius

SHUSH69. Misidentification.

Lecanora subaurea Zahlbruckner

SANTE84, WEBER90. OR: Timdal 6951b.

Lecanora subintricata (Nylander) Th. Fries

CARME75. No specimens cited, all in herb. Anderson. On *Quercus*; apoth. 0.2-0.5 mm., spores 5(7-8) x 3(-4) microns.

Lecanora symmicta Acharius

SHUSH69. Colorado specimens are usually *Lecanoropsis saligna*.

Lecidea symmicta (Acharius) Acharius. SHUSH69. Misidentification.

Lecanora thallophila H. Magnusson

WEBER90.

Lecanora umbrosa Degelius

ANDER74B; BRODO84.

Lecanora utahensis H. Magnusson

WEBER90.

Lecanora valesiaca (Müller-Argoviensis) Stizenberger

WEBER90. BL, !B. Ryan.

Lecanora varia (Ehrhart) Acharius

SHUSH69. Misidentifications.

Lecanora viriduloflava Lesdain

BRODO84, WEBER90.

Lecanora weberi B. Ryan

RYAN89. Type specimen from Colorado.

Protoparmeliopsis muralis (Schreber) Choisy

HAFEL84.

Lecanoropsis Choisy, 1949 HAFEL84

The genus was not validly published, according to Hafellner. See *Lecanora saligna*].

Lecidea Acharius, 1803**Lecidea alpestris Sommerfelt**

ANDER74B.

Lecidea atrobrunnea (Rameau ex Lamarck & De Candolle) Schaerer

SHUSH69.

Lecidea auriculata Th. Fries

SHUSH69.

Lecidea caesioalbescens (H. Magnusson) Vainio

SHUSH69. Misidentification. Evidently the species is not American, not in ESSL195.

Lecidea caesioatra Schaerer

ESSLI95.

Lecidea arctica Sommerfelt. SHUSH69; ESSL195. Misidentifications.

Lecidea cinerata Zahlbruckner

SHUSH69*;MAGNU36. cited from BL: Sugar Loaf, Morgan in Cummings Exs. 227. Collection mixed, also includes the type of *Sarcogyne athrocarpa*.

Lecidea confluens (G. H. Weber) Acharius

SHUSH69. Misidentification.

Lecidea cumulata Sommerfelt

TIMDA91.

Lecidea extenuata Vainio

ANDER76.

Lecidea fuscoatra (L.) Acharius

SHUSH69. Misidentification.

Lecidea laboriosa Muell.-Arg.

HERTE95; HERTE97. HEERTE97 maps for Colorado (and California and Arctic America, Europe and Chile)..

Lecidea lapicida (Acharius) Acharius

SHUSH69.

Lecidea lactea Floerke ex Schaerer. SHUSH69.

Lecidea pantherina (Hoffmann) Th. Fries.

Lecidea polycarpa E. Fries.

Lecidea leucothallina Arnold

ANDER65.

Lecidea limosa Acharius

SHUSH69. misidentification of *L. berengeriana*.

Lecidea lithophila (Acharius) Acharius

SHUSH69. Misidentification.

Lecidea lurida (Dillwyn) Acharius

TIMDA84, WEBER90. ESSL1 gives authorities as (*Acharius*) DeCandolle, citing Santesson 1993.

Biatora lurida (Dillwyn) E. Fries.

Psora lurida (Dillwyn) De Candolle. TIMDA84.

Lecidea lyngei Degelius

SHUSH69.

Lecidea nylanderi (Anzi) Th. Fries

WEBER90.

Lecidea plebeja Nylander

GOUGH75.

Lecidea myriocarpoides Nylander.

***Lecidea praenubila* Nylander**

ESSLI95.

Lecidea paupercula Th. Fries. WEBER90; ESSLI95.

***Lecidea promiscens* Nylander**

Larimer Co.: Rocky Mt. Nat. Park, Mummy Mt., [Anderson 2998 (L-34345)].

***Lecidea promixta* R. Anderson, sp. n. ined.**

Park Co.: Hoosier Ridge, [Shushan & Anderson L-25956]; Grand Co.: Never Summer Mts., [Anderson 3357 (L-25956)]. Type specimen from Colorado.

Lecidea recessa H. Magnusson

SHUSH69. Misidentification.

***Lecidea silacea* (Acharius) Acharius**

ANDER74A.

***Lecidea syncarpa* Zahlbruckner**

HERTE95; MCCUN98. *Lecidea saxosa* Anderson ined..

***Lecidea tessellata* (Acharius) Floerke**

SHUSH69.

Lecidea columbiana H. Magnusson.

Lecidea cyanea (Acharius) Röhlings.

Lecidea pavimentans H. Magnusson.

Lecidea spilota E. Fries.

Lecidea tuberculata Sommerfelt

Micarea tuberculosa Anderson, non *Lecidea* Sommerfelt.

***Lecidea umbonata* (Hepp) Mudd**

WEBER90.

Toninia cumulata (Sommerfelt) Th. Fries

SHUSH69; TIMDA91. Misidentifications of *Leproloma angardianum*.

***Lecidella* Koerber, 1859 HERTE77A, key to the species; KNOPH90**

***Lecidella bullata* Koerber**

ANDER74B.

***Lecidella carpathica* Koerber**

Lecidea carpathica (Koerber) Szatala. SHUSH69.

Lecidea latypaea auctt.. SANTE84.

Lecidea latypiza Nylander.

***Lecidella chodatii* (G. Sampaio) Knoph & Leuckert**

Washington and Boulder counties. !Knoph.

***Lecidella dimelaenophila* Hertel**

HERTE77B. Cited, p. 327. GN.: 25.5 km N Lake City, Anderson 8651 (Hb. Anderson). Specimen figured in photo, Plate 46..

***Lecidella effugiens* (B. Nils.) Knoph & Leuckert**

KNOPH90.

Lecidella incongruella (Vainio) Hertel & Leuckert. ANDER74B; KNOPH.

Lecidella elaeochroma (Acharius) Haszlinsky

ESSLI95.

Lecidea elaeochroma (Acharius) Acharius. SHUSH69. Misidentification..

***Lecidella euphorea* (Floerke) Hertel**

EGAN87.

Lecidea enteroleuca E. Fries. SHUSH69.

Lecidea glomerulosa (De Candolle in Lamarck & De Candolle) Steudel. SHUSH69.

Lecidella glomerulosa De Candolle in Lamarck & De Candolle.

***Lecidella patavina* (Massalongo) Knoph & Leuckert**

KNOPH90.

Lecidella alaiensis (Vainio) Hertel. HERTE73; KNOPH90.

Lecidella inamoena (Müller-Argoviensis) Hertel. WEBER90; KNOPH90.

***Lecidella scabra* (Taylor) Hertel & Leuckert**

Larimer Co.: Rocky Mt. Nat. Park, [Anderson 4488 (L-35831)].

***Lecidella stigmatea* (Acharius) Hertel & Leuckert**

Lecidea goniophila Floerke var *egenea* Krempelhuber.

Lecidea stigmatea Acharius. SHUSH69.

Lecidea vulgata Zahlbruckner.

Lecidella viridans (Flotow) Koerber

SHUSH69. Misidentifications of *L. chodatii*.

Lecidea viridans (Flotow) Lamy.

***Lecidella wulfenii* (Hepp) Koerber**

SANTE84.

Lecidea heppii Anderson & Weber. SHUSH69; SANTE84.

Lecidea wulfenii (Hepp) Arnold. SANTE84.

Lecidoma Schneider & Hertel, 1981

***Lecanora pseudomellea* Ryan**

RYAN93. One collection known: Gunnison Co.:Crested Butte, 10,000 ft., N.L.T. Nelson 2254 (MIN).!Ryan (xerox in COLO).

***Lecidoma demissum* (Rutström) Schneider & Hertel in Hertel**

HERTE81.

Biatora atrorufa (Dickson) E. Fries. SHUSH69. Schneider does not include this name in synonymy.

Lecidea demissa (Rutström) Acharius. SHUSH69.

Lepidoma demissum (Rutström) G. Schneider.

Psora demissa (Rutström) Almqvist.

Leciographa Massalongo, 1854

***Leciographa glaucomaria* (Nylander) A. L. Smith**

WEBER90.

***Leciographa lamyi* (J. Richard) Saccardo & Saccardo**

WEBER90. CC: Summit Lake, det. Santesson..

Leciophysma Th. Fries, 1865

***Leciophysma furfurascens* (Nylander) Gyelnik**

WEBER90. LR: RMNP, Anderson L-35313, !Henssen.

Lempholemma Koerber, 1855

***Lempholemma polyanthes* (Bernhardt in Schrader) Malme**

Lempholemma myriococcum (Acharius) Th. Fries. WEBER90.

***Lempholemma vesiculiferum* Henssen**

WEBER90. LR, !Henssen.

Lepraria Acharius, 1803

Lepraria neglecta (Nylander) Lettau

SHUSH69. Misidentification of *Leproloma angardiana*.

Crocynia neglecta (Nylander) Hue.

Leprocaulon Nylander ex Lamy, 1878 LAMB74A

Leprocaulon albicans (Th. Fries) Nylander ex Hue

SHUSH, LAMB74A. Misidentification of *L. gracilescens*.

Stereocaulon albicans Th. Fries.

***Leprocaulon gracilescens* Lamb & Ward**

LAMB74A.

***Leprocaulon microscopicum* (Villars) Gams**

LAMB74A.

Leprocaulon nanum (Acharius) Nylander ex Lamy.

Leprocaulon quisquiliare (Leers) Choisy. SHUSH69.

Stereocaulon microscopicum (Villars) Frey. LAMB74A.

Leprocaulon subalbicans (Lamb) Lamb & Ward

LAMB74A.

Stereocaulon subalbicans Lamb ex Imshaug.

Lepruloma Nylander ex Crombie, 1894 LAUND89**Lepruloma cacuminum (Massalongo) Laundon**

LAUNDON92.

Lepruloma angardianum (Ovstedal) Laundon. LAUND89; LAUND92.

Lepruloma membranaceum (Dickson) Vainio

LAUND89. Laundon does not cite western North American specimens.

Amphiloma lanuginosum Nylander. LAUND89. Lichen lanuginosum sensu Acharius, non Hoffmann is synonymous with Lepruloma membranaceum.

Crocynia lanuginosa (Acharius) Hue. LAUND89.

Crocynia membranacea (Dickson) Zahlbruckner. LAUND89. OZEND70 and POELT74 give (Dickson) Lettau.

Lepraria membranacea (Dickson) Vainio. SHUSH69.

Lepruloma vouauxii (Hue) Laundon

LAUND89. Colorado collections are L. angardianum.

Crocynia arctica Lynge. LAUND89.

Lepraria arctica (Lynge) Wetmore. ANDER76; LAUND89. Laundon cites two Colorado collections so distributed, as Lepruloma angardianum (Ovstedal) Laundon.

Leproplaca (Nylander) Nylander ex Hue, 1887-1888*Leproplaca chrysodeta (Vainio ex Räsänen) Laundon*

Wetmore (1.2000, in litt.) places our material in Caloplaca citrina..

Caloplaca chrysodeta (Vainio ex Räsänen) Dombrowski. ANDER76.

Leptochidium Choisy, 1952**Leptochidium albociliatum (Desmarais) Choisy**

ANDER74A.

Polychidium albociliatum (Desmarais) Zahlbruckner.

Leptogium (Acharius) S. Gray, 1821 SIERK64**Leptogium arsenei Sierk**

SIERK64. Bryol. 67:297-298.1964. Type: BL: 4 mi N Boulder, Anderson 20070 (COLO). Type specimen from Colorado.

Leptogium burnetiae Dodge var hirsutum (Sierk) Joergensen

JOERG75.

Leptogium hirsutum Sierk. SIERK64.

Leptogium byssinum (Hoffmann) Zwackh-Holzhausen ex Nylander

SIERK64.

Leptogium amphineum Acharius ex Nylander.

Leptogium contortum Sierk

SIERK64. Bryol. 67:272-273.1964. Type: ME: Colo. Nat. Monument, Shushan & Weber L-4987 (COLO). Type specimen from Colorado.

Leptogium corniculatum (Hoffmann) Minks

Leptogium palmatum (Hudson) Montagne. SHUSH69.

Leptogium cyanescens (Rabenhorst) Koerber

SHUSH69; SIERK64; JORGE83.. This is the basis of Colorado reports of L. tremelloides..

Leptogium denticulatum Nylander

SHUSH69; SIERK64.

Leptogium erectum Sierk

SIERK64. Bryol. 67:261.1964. Type: ME: Colo. Nat. Monument, Shushan & Weber L-5235 (COLO).. Type specimen from Colorado.

Leptogium furfuraceum Harmand

SIERK64; SHUSH69. Colorado reports refer to L. papillosum.

Leptogium gelatinosum (Withering) Laundon

LAUND84.

Leptogium sinuatum (Hudson) Massalongo. SHUSH69.

Leptogium hildenbrandii (Garovagli) Nylander

SIERK64. Not in North America.

Leptogium juniperinum Tuckerman

SIERK64. Locality unknown, Brandegee (FH)..

Leptogium lichenoides (L.) Zahlbruckner

SIERK64.

Tremella lichenoides L.. JOERG94A. Sp. Pl. 2:1157.1753..

Leptogium papillosum (Lesdain) Dodge

SHUSH69; JOERG97. Misidentification of L. pseudofurfuraceum. Colorado reports of L. furfuraceum also belong here..

Leptogium plicatile (Acharius) Leighton

SIERK64; SHUSH69.

Leptogium pseudofurfuraceum Joergensen & Wallace

Joerg97. Boulder Co.: S St. Vrain canyon, W of Lyons, Santesson 18516b) cited..

Leptogium rivale Tuckerman

SIERK64; SHUSH69.

Leptogium saturninum (Dickson) Nylander

SIERK64; SHUSH69.

Leptogium subtile (Schrader) Torssander

JOERG94C.

Leptogium minutissimum (Floerke) E. Fries. SIERK64, SHUSH69.

Leptogium tenuissimum (Dickson) Koerber

SIERK64; SHUSH69.

Leptogium tremelloides (L.) S. Gray

SHUSH69. Not in Nprth America.

Letharia (Th. Fries) Zahlbruckner, 1892

Letharia vulpina (L.) Hue

SHUSH69.

Evermia vulpina (L.) Acharius.

Lichen vulpinus L.. JOERG94A. Sp. Pl. 2:1155.1753..

Lichenothelia D. Hawksworth, 1981

Lichenothelia scopularia (Nylander) D. Hawksworth

HAWKS81.

Microthelia aterrma (Anzi) Zahlbruckner. SHUSH69. Colorado reports apply to L. tenuissima.

Lichenothelia tenuissima Henssen

HENSS87. Bibl. Lichenol. 25:262.1987. Type: Boulder Co.: Sunshine Canyon, 1,800 m, on shady sandstone, 1962, Henssen 14486g (Hsn)..
Type specimen from Colorado.

Lichinella Nylander, 1873

Lichinella stipatula Nylander

SHUSH69.

Lobaria (Schreber) Hoffmann, 1795

Lobaria pulmonaria (L.) Hoffmann

JORDA73. "Jefferson Co.," Eastwood (COLO). Never found again. Jordan regarded the record as doubtful, but there is no chance that Eastwood collected it anywhere else.

Lichen pulmonaria L.. JOERG94A. Sp. Pl. 2:1145.1753..

Lobaria scrobiculata (Scopoli) De Candolle

JORDA73. See note in SHUSH69, re Sticta hallii.

Lobothallia Hafellner 1991 HAFEL91

Lobothallia alphoplaca (Wahlenberg ex Acharius) Hafellner

HAFEL91.

Aspicilia alphoplaca (Wahlenberg ex Acharius) Poelt & Leuckert.

Lecanora alphoplaca (Wahlenberg ex Acharius) Acharius. SHUSH69.

Lobothallia melanaspis (Acharius) Hafellner

HAFEL91.

Aspicilia melanaspis (Acharius) Poelt & Leuckert. HERMA73.

Lecanora melanaspis Acharius. SHUSH69.

***Lobothallia praeradiosa* (Nylander) Hafellner**

HAFEL91.

Aspicilia praeradiosa (Nylander) Poelt & Leuckert. HERMA73.

Lecanora praeradiosa Nylander. SHUSH69.

***Lobothallia radiosa* (Hoffmann) Hafellner**

HAFEL91.

Aspicilia radiosa (Hoffmann) Poelt & Leuckert. HERMA73, WEBER90.

Massalongia Koerber, 1855

***Massalongia carnosa* (Dickson) Koerber**

SHUSH69.

Megaspora (Clauzade & Roux) Hafellner & Wirth WIRTH87

***Megaspora mutabilis* (Acharius)**

Santesson synonymizes this with *M. verrucosa*. I do not agree..

Pachyospora mutabilis (Acharius) Massalongo. WEBER90, VEZDA75. Santesson synonymizes with *P. verrucosa*..

***Megaspora verrucosa* (Acharius) Hafellner & Wirth**

WIRTH87.

Lecanora verrucosa Acharius. SHUSH69.

Pachyospora verrucosa (Acharius) Massalongo. HERTE71.

Melanelia Esslinger, 1978

***Melanelia albertana* (Ahti) Esslinger**

ESSLI77. Rio Grande Co.: Beaver Creek Campground near South Fork, on mosses over rock, 8,500 ft. alt., Wetmore 17238, Herb. Wetmore (cited by Esslinger).

***Melanelia commixta* (Nylander) Thell**

THELL95; RANDL97.

Cetraria commixta (Nylander) Th. Fries. SHUSH69; THELL95.

Platyna commixta Nylander. RANDL97.

Platyna commixta Nylander.

Platysma fahlunensis Vainio. THELL95. Not *Cetraria fahlunensis* L. which = *Melanelia stygia*.

***Melanelia disjuncta* (Erichsen) Esslinger**

ESSLI77,78A,80,90; EGAN87. ESSLI80 proposed conservation of *Melanelia* over *Pleurosticta*..

Melanelia granulosa (Lynge) Esslinger in Egan. EGAN87, p. 163; ESSLI90.

Parmelia disjuncta Erichsen. SHUSH69.

***Melanelia elegantula* (Zahlbruckner) Esslinger**

ESSLI78A,90; EGAN87, p. 163.

Melanelia incolorata (Parrique) Esslinger in Egan. EGAN87, p. 163; ESSLI90.

Parmelia elegantula (Zahlbruckner) Szatala. SHUSH69.

***Melanelia exasperata* (De Notaris) Esslinger**

ESSLI78A.

Parmelia olivacea (L.) Nylander var *aspidota* Acharius. SHUSH69; ESSLI77. Misidentification of *Melanelia subolivacea*.

Parmelia olivacea (L.) Nylander var *exasperata* De Notaris. SHUSH69.

***Melanelia exasperatula* (Nylander) Esslinger**

ESSLI78A.

Parmelia exasperatula Nylander. SHUSH69.

***Melanelia fuliginosa* (E. Fries ex Duby) Esslinger in Egan**

WEBER90; EGAN87; ESSLI90.

Melanelia glabratula (Lamy) Esslinger. ESSLI78A.

Parmelia glabratula (Lamy) Nylander.

***Melanelia glabra* (Schaerer) Esslinger**

ESSLI77.

Parmelia glabra (Schaerer) Nylander. SHUSH69.

Melanelia glabroides (Esslinger) Esslinger

ESSLI78A.

Parmelia glabroides Esslinger. ESSLI77,78A. J. Hatt. Bot. Lab. 42:72-74.1977. Type: LR: Rocky Mt. Nat. Park, McGregor Mt. near Bighorn Cr., Anderson 4062 (COLO).. Type specimen from Colorado.

Melanelia infumata (Nylander) Esslinger

ESSLI77,78A.

Parmelia infumata Nylander. SHUSH69.

Melanelia olivacea (Nylander) Esslinger

ESSLI77. Does not occur in western U. S..

Parmelia olivacea (L.) Nylander. SHUSH69.

Melanelia panniformis (Nylander) Esslinger

WEBER90, ESSLI77,78A.

Parmelia panniformis Nylander.

Melanelia septentrionalis (Lyngé) Ahti

WEBER84A, ESSLI77,78A.

Parmelia olivacea (L.) Nylander var *septentrionalis* Lyngé.

Melanelia sorediata (Acharius) Goward & Ahti in Ahti et al.

AHTI87, WEBER90. Mycotaxon 28:94.1987. Replaces *Parmelia sorediosa* Almb. (the epithet *sorediata* could not be used in *Parmelia* but is O.K. in *Melanelia*..)

Melanelia sorediosa (Almborn) Esslinger.

Parmelia sorediosa Almborn. ANDER74A.

Melanelia stygia (L.) Esslinger

SHUSH69. Misidentification..

Parmelia stygia (L.) Acharius.

Melanelia subargentifera (Nylander) Esslinger

ESSLI77,78A.

Parmelia subargentifera Nylander. SHUSH69.

*Melanelia subaurifera (Nylander) Esslinger*WEBER90. The few specimens belong to *P. subargentifera*.

Parmelia subaurifera Nylander.

Melanelia subolivacea (Nylander) Esslinger

ESSLI77,78A.

Parmelia subolivacea Nylander. SHUSH69.

Melanelia tominii (Oxner) Esslinger

ESSLI92. Lichenologist 24:13-20.1992..

Melanelia substygia (Räsänen) Esslinger. ESSLI77,78A,92.

Parmelia saximontana Anderson & Weber. ESSLI2. Bryol. 65:236.1962. Type: Boulder Co.: W of Boulder, Anderson & Weber, Lich. Exsicc. COLO 41 (COLO).. Type specimen from Colorado.

Parmelia substygia Räsänen. ESSLI92. Lich. Fenn. Exsicc. 51.1933..

Parmelia tominii Oxner. ESSLI92. Zh. Bio-Bot. Tsiklu, Kiev 7-8:171.1933..

Melanolecia Hertel in Poelt & Vezda, 1981**Melanolecia transitoria (Arnold) Hertel ex Poelt**

PA/ST: Hoosier Ridge, Shushen & Imshaug L-85483.

Lecidea transitoria Arnold.

Tremolecia transitoria (Arnold) Hertel.

Micarea E. Fries, 1825 COPPI83*Lecidea populina Müller-Argoviensis ex Nylander*

Anderson's new combination, based on a misidentification of *M. incrassata* was unjustified.

Micarea assimilata (Nylander) Coppins

COPPI83. Coppins (in litt, 1995) says that Colorado material reported as this belongs to *M. incrassata*.

Lecidea assimilata Nylander var *infusata* Th. Fries. SHUSH69.

Micarea denigrata (E. Fries) Hedlund

SHUSH69. Coppins annotations: Boulder Co.: L-4841, 30056, 35080, 35110, 35159, 35218, 35599. Larimer Co.: L-30287, 35435. San Juan Co.: L-266..

Catillaria denigrata E. Fries. SANTE84.

Micarea elachista (Koerber) Coppins & Santesson

COPPI83, WEBER90.

Micarea glomerella (Nylander) Hedlund. SANTE84.

Micarea incrassata Hedlund

COPPI85. Coppins annotations: Larimer Co.: L-49775. According to Coppins (in litt., 1995), specimens reported as *M. assimilata* in Colorado belong here, as well as specimens called *Micarea populina*.

Micarea misella (Nylander) Hedlund

COPPI83; WEBER90. Coppins annotations: Boulder Co., L-35113, 34768.

Micarea globularis (Acharius ex Nylander) Hedlund. SANTE84.

Micarea populina Anderson & Carmer

ANDER74C; COPPI83. Bryologist 77:83.1974. Coppins (annotations)..

Micarea prasina (Nyl.) Hedlund

Coppins annotations say "*Micaria* aff. *prasina*". He says these agree with *M. prasina* but have much larger granular areolae..

Micarea sylvicola (Flotow) Vezda & Wirth

Coppins annotations.

Micarea tuberculata R. Anderson. ANDER74B; COPPI85. Bryologist 77:46.1974. Coppins annotations 1995. Not *Lecidea tuberculata* Sommerfelt.

Miriquidica Hertel & Rambold, 1987

Miriquidica garovaglii (Schaerer) Hertel & Rambold

HERTE87.

Lecidea aenea (Dufour ex E. Fries) Nylander. SHUSH69. Anderson's subsequent colls. from RMNP are correct..

Lecidea garovaglii Schaerer. HERTE87. cf. Vezda, Lich. Sel. Exs. 1458.

Miriquidica instrata (Nylander) Hertel & Rambold

HERTE87.

Lecidea instrata Nylander. ANDER65.

Miriquidica intrudens (H. Magnusson) Hertel & Rambold

Boulder Co.: Rocky Mt. Nat. Park, [Anderson 4220 (L-35567)]. Parasitic on [Rhizocarpon].

Lecanora intrudens H. Magnusson. ANDER76.

Lecidea intrudens H. Magnusson.

Miriquidica lulensis (Hellbom) Hertel & Rambold

ESSLI95.

Lecidea circumnigrata H. Magnusson in Degelius var *reagens* H. Magnusson in Degelius. ANDER74A.

Lecidea demonum H. Magnusson. ANDER74A.

Muellerella Hepp ex Müller-Argoviensis, 1862 HAWKS85

Muellerella melanostigma (Th. Fries)

HAWKS1985. author citation incomplete.

Microthelia melanostigma Th. Fries. HAWKS85, WEBER90.

Muellerella pygmaea (Koerber) D. Hawksworth

HAWKSW85.

Tichothecium pygmaeum Koerber.

Mycobilimbia Rehm, 1890

Mycobilimbia berengeriana (Massalongo) Hafellner & V. Wirth in V. Wirth

?

Lecidea berengeriana (Massalongo) Th. Fries. SHUSH69.

Mycobilimbia dermaticarporum R. Santesson

Santesson ined?. Type: Larimer Co.: OPwl Canmyon, 6,000 ft., Weber & Shushan L-4766. Type specimen from Colorado.

Mycobilimbia fissuriseda (Poelt) Poelt & Hafellner

Lecidea fissuriseda Poelt. POELT69, WEBER90. PA: Horseshoe Cirque, on limestone, 10 Nov. 1988, Timdal, L-83661. New to North America.

Mycobilimbia hypnorum (Libert) Kalb & Hafellner in Wirth

WIRTH87.

Lecidea hypnorum Libert. SANTE84.

Lecidea sanguineoatra Nylander. SANTE84.

Lecidea templetonii Taylor ex Mackay. SHUSH69; SANTE84.

***Mycobilimbia lobulata* (Sommerfelt) Hafellner in Wirth**

Biatora artyta (Acharius) Tuckerman.

Bilimbia artyta (Acharius) Fink.

Toninia lobulata (Sommerfelt) Lyng. ANDER76.

***Mycobilimbia sabuletorum* (Schreber) Hafellner**

HAFEL84.

Bacidia sabuletorum (Schreber) Lettau. SHUSH69.

***Mycocalicium Vainio* in Reinke, 1890**

***Mycocalicium subtile* (Persoon) Szatala**

Calicium parietinum Acharius.

Calicium subtile Persoon. SHUSH69.

***Mycoglaena Höhnel*, 1909**

***Mycoglaena myrica* (Nylander) R. Harris**

WEBER81C; HARRI73. Lich. Exsicc. COLO 519.

***Neofuscelia Esslinger*, 1978**

***Neofuscelia loxodes* (Nylander) Esslinger**

ESSLI77,78A.

Parmelia isidiotyla Nylander. SHUSH69.

Parmelia loxodes Nylander.

***Neofuscelia pulla* (Acharius) Esslinger**

ESSLI77,78A.

Parmelia prolixa (Acharius) Carroll. SHUSH69. Misidentification..

***Neofuscelia pustulosa* (Rsslinger) Esslinger**

ESSL87A. Boulder Co.: Steamboat Mt., NW of Lyons, Wetmore 16156 (herb. Wetmore).

***Neofuscelia subhosseana* (Esslinger) Esslinger**

WEBER90; ESSLI77,78A.

Parmelia subhosseana Esslinger. ESSL77.

***Neonorrlinia Sydow*, 1923**

***Neonorrlinia trypetheliza* (Nylander) Sydow**

POELT76. Anderson ined. Specimens in Hb. Anderson..

***Nephroma Acharius*, 1809**

***Nephroma bellum* (Sprengel) Tuckerman**

SHUSH69; WETMO60.

***Nephroma helveticum* Acharius**

SHUSH69; WETMO60.

***Nephroma laevigatum* Acharius**

WETMO60.

***Nephroma parile* (Acharius) Acharius**

SHUSH69; WETMO60.

***Normandina Nylander*, 1855**

***Normandina pulchella* (Borrer) Nylander**

SHUSH69; CULBE66.

***Ochrolechia Massalongo*, 1852 BRODO91**

***Ochrolechia frigida* (Swartz) Lyng**

WEBER90.

***Ochrolechia pallescens* (L.) Massalongo**

Lecanora pallescens (L.) Schaerer. SHUSH69. Misidentifications of *O. upsaliensis*.

***Ochrolechia upsaliensis* (L.) Massalongo**

SHUSH69.

Lichen upsaliensis L.. JOERG94A. Sp. Pl. 2:1142.1753..

Omphalora Nash & Hafellner, 1990

Omphalora arizonica (Tuckerman ex Willey) T. Nash & Hafellner

NASH90.

Lecanora arizonica (Tuckerman ex Willey) W. A. Weber.

Omphalodium arizonicum (Tuckerman ex Willey) Tuckerman. SHUSH69.

Pannaria Delise, 1828 JOERG94B

Pannaria conoplea (Acharius) Bory

JOERG78.

Pannaria pityrea Degelius. JOERG78. Colorado reports are misidentifications of *P. tavaresii*.

Pannaria pezizoides (G. H. Weber) Trevisan

SHUSH69; JOERG78.

Pannaria brunnea (Swartz) Massalongo.

Pannaria tavaresii Joergensen

JOERG78. Opera Bot. 45:69-70.1978. Type: Larimer Co.: Loveland Heights, Dahl (O, holotype; COLO isotype).. Type specimen from Colorado.

Parmelia Acharius, 1803 HALE88A; ADLER90

ADLER90 is a key to the genera.

Parmelia adpressa Krempelhuber

SHUSH69. misidentification of a *Xanthoparmelia*.

Parmelia fraudans (Nylander) Nylander

HALE88.

Parmelia saxatilis (L.) Acharius

SHUSH69; HALE88.

Lichen saxatilis L.. JOERG94A. Sp. Pl. 2:1142.1753..

Parmelia sulcata Taylor

SHUSH69; HALE88.

Parmelia tiliacea (Ehrhart) Floerke

P. tiliacea is a mishmash of many species in several genera!.

Parmelina Hale, 1974

Parmelina minarum (Vainio) Skorepa

SKORE83.

Parmelia dissecta Nylander. ANDER74A*.

Parmelina dissecta (Nylander) Hale.

Parmelinopsis Elix & Hale, 1987

Parmelinopsis swinscowii (Hale) Elix & Hale

WEBER90.

Hypotrachyna swinscowii (Hale) Krog & Swinscow. Lichenologist 19:420.1987 (n. comb)..

Parmelina swinscowii (Hale) Hale.

Parmeliopsis (Stizenberger) Nylander, 1869

Parmeliopsis ambigua (Wulfen in Jacquin) Nylander

SHUSH69.

Foraminella ambigua (Wulfen in Jacquin) S. F. Meyer. MEYER82. According to Almborn, Nord. J. Bot. 4:512.1984, Meyer is wrong..

Parmeliopsis hyperopta (Acharius) Arnold

SHUSH69.

Foraminella hyperopta (Acharius) S. F. Meyer. MEYER82. According to Almborn, Nord. J. Bot. 4:512.1984, Meyer is wrong..

Parmotrema Massalongo, 1860

Parmotrema crinitum (Acharius) Choisy

WEBER90.

Parmelia crinita Acharius. SHUSH69, citing Makarevitch without explanation.

Peccania Massalongo, 1858**Peccania kansana (Tuckerman) Forssell**

SHUSH69.

Omphalaria kansana Tuckerman.

Peltigera Willdenow, 1787 VITIK94**Peltigera aphthosa (L.) Willdenow**

SHUSH69; THOMS50.

Lichen aphthosus L.. JOERG94A. Sp. Pl. 2:1148.1753..

Peltophora aphthosa (L.) Hoffmann.

Peltigera canina (L.) Willdenow

SHUSH69; THOMS50.

Peltigera canina (L.) Willdenow fma rimosa Gyelnik ex Kiener.

Peltigera canina (L.) Willdenow var albescens (Wahlenberg) J. W. Thomson.

Peltigera canina (L.) Willdenow var spongiosa Tuckerman. SHUSH69.

Peltigera canina (L.) Willdenow var ulorrhiza (Floerke) Schaerer.

Peltigera plittii Gyelnik fma sandwichensis Gyelnik.

Peltigera collina (Acharius) Schrader

SHUSH69; THOMS50.

Peltigera scutata (Dickson) Duby.

Peltigera scutata (Dickson) Duby fma collina (Acharius) Gyelnik.

Peltigera didactyla (Withering) Laundon

LAUND84.

Peltigera erumpens (Taylor in Hooker) Vainio. WEBER90; STOCK90. A sorediate developmental phase..

Peltigera spuria (Acharius) De Candolle. SHUSH69, as P. canina var..

Peltigera didactyla (Withering) Laundon var. extenuata (Nylander ex Vainio) Goffinet & Hastings

GOFFI95.

Peltigera elizabethae Gyelnik

ANDER74.

Peltigera horizontalis (Hudson) Baumgartner

SHUSH69; THOMS50.

Peltigera kristinssonii Vitikainen

VITIK85. Lich. Exs. COLO 484.

Peltigera lepidophora (Nylander ex Vainio) Bitter

SHUSH69; THOMS50.

Peltigera leucophlebia (Nylander) Gyelnik

POELT69. Underside with differentiated veins..

Peltigera aphthosa (L.) Willdenow var variolosa (Massalongo) J. W. Thomson. SHUSH69; THOMS50.

Peltigera variolosa Massalongo var leucophlebia (Nylander) Gyelnik.

Peltigera malacea (Acharius) Funck

SHUSH69; THOMS50.

Peltigera malacea (Acharius) Funck var polyphylla Flotow ex Sturm. SHUSH69; THOMS50.

Peltigera membranacea (Acharius) Nylander

SHUSH69. Misidentifications. A northwest coast species..

Peltigera polydactylon (Necker) Hoffmann

SHUSH69; THOMS50; VITIK94.

Peltigera polydactyla (Necker) Hoffmann var crassoides Gyelnik.

Peltigera polydactylon (Necker) Hoffmann fma lophyra (Acharius) Nylander.

Peltigera praetextata (Floerke ex Sommerfelt) Zopf

WEBER90, POELT69.

Peltigera rufescens (Weiss) Humboldt

SHUSH69; POELT69.

Peltigera coloradoensis Gyelnik.

Peltigera plittii Gyelnik.

Peltigera plittii Gyelnik fma ornata Gyelnik.

Peltigera scabrosa Th. Fries

SHUSH69. misidentification of *P. kristinssonii*.

***Peltigera venosa* (L.) Hoffmann**

SHUSH69; THOMS50.

Lichen venosus L.. JOERG94A. Sp. Pl. 2:1148.1753..

Peltophora venosa (L.) Hoffmann.

***Peltula* Nylander, 1853 WETMO70**

***Peltula euploca* (Acharius) Poelt in Ozenda & Clauzade**

WETMO70.

Heppia euploca (Acharius) Vainio. SHUSH69.

***Peltula obscurans* (Nylander) Gyelnik var *deserticola* (Zahlbruckner) Wetmore**

WETMO70.

***Peltula polyspora* (Tuckerman) Wetmore**

WETMO70.

Endocarpiscum polysporum (Tuckerman) Fink. WETMO70.

Heppia arenivaga Nylander. WETMO70. Lich. Jap. 104. 1890. Type: Colorado, Brandegee, 1879 (FH-Tuckerman).. Type specimen from Colorado.

Heppia polyspora Tuckerman. SHUSH69.

***Pertusaria* De Candolle, 1805 DIBBE80**

***Pertusaria amara* (Acharius) Nylander**

Larimer Co.: St. Vrain Creek, Weber & Catcheside L-24390, !Dibben.

***Pertusaria azulensis* B. Be Lesdain**

Many annotations by Lumbsch. Common on dead wood of conifers..

Pertusaria communis De Candolle

SHUSH69. Misidentification..

Pertusaria leioplaca (Acharius) De Candolle

SHUSH69. Misidentification..

Pertusaria multipuncta (D. Turner) Nylander

SHUSH69. Misidentification..

***Pertusaria octomela* (Norman) Erichsen**

ANDER74A.

***Pertusaria saximontana* Wetmore**

ANDER74A.

***Pertusaria sommerfeltii* (Sommerfelt) E. Fries**

ANDER74A.

***Phaeophyscia* Moberg, 1977**

***Phaeophyscia cernohorskyi* (Nadvornik) Esslinger**

ESSLI78B.

Physcia orbicularis (Necker) Poetsch fma albociliata (Lesdain) J. W. Thomson. SHUSH69.

***Phaeophyscia ciliata* (Hoffmann) Moberg**

MOBER77.

Physcia ciliata (Hoffmann) DuRietz. SHUSH69.

Physcia lithotodes Nylander. SHUSH69; MOBER77.

***Phaeophyscia constipata* (Norrlin & Nylander) Moberg**

MOBER77.

Physcia constipata (Nylander) Norrlin & Nylander. SHUSH69.

***Phaeophyscia decolor* (Kashiwadani) Esslinger**

ESSLI78B. Montrose Co.: L-31312, cited by Esslinger.

Phaeophyscia endococcina (Koerber) Moberg

MOBER77. Colorado material assigned to *P. ciliata*..

Physcia endococcina (Koerber) Th. Fries fma lithotodes (Vainio) J. W. Thomson. SHUSH69.

Phaeophyscia hirsuta (Mereschkowsky) Esslinger

WEBER90; ESSL178B,89.

Physcia hirsuta Mereschkowsky.**Phaeophyscia hispidula (Acharius) Esslinger**

WEBER90; ESSL178B,89.

Physcia hispidula (Acharius) Frey.*Physcia setosa* (Acharius) Nylander.*Physcia setosa* (Acharius) Nylander fma *virella* Lesdain. SHUSH69.**Phaeophyscia kairamoi (Vainio) Moberg**

WEBER90; MOBER77; ESSL178B.

Phaeophyscia nigricans (Floerke) Moberg

ANDER76, MOBER77; ESSL78A.

Phaeophyscia orbicularis (Necker) Moberg

MOBER77.

Physcia orbicularis (Necker) Poetsch. SHUSH69.**Phaeophyscia sciastra (Acharius) Moberg**

MOBER77; ESSL178B.

Physcia sciastra (Acharius) DuRietz. SHUSH69.**Phaeorrhiza Mayrhofer & Poelt, 1979****Phaeorrhiza nimbose (E. Fries) Mayrhofer & Poelt**

MAYRH78.

Rinodina nimbose (E. Fries) Th. Fries. SHUSH69.*Rinodina phaeocarpa* (Sommerfelt) Vainio.**Pharcidia Koerber, 1865****Porocyphus coccodes (Flotow) Koerber**

SHUSH69, WEBER90.

Porocyphus furfurellus (Nylander) Forssell.**Porocyphus dispersus Dahl**

SHUSH69; HENSS66. LR: Rocky Mt. Nat. Park, Anderson L-35641, !Henssen..

Phylliscum Nylander, 1853**Phylliscum demangeonii (Mougeot & Montagne) Nylander**

SHUSH69.

Physcia (Schreber) Michaux, 1803**Physcia adscendens (E. Fries) Olivier**

SHUSH69; THOMS63.

Physcia aipolia (Ehrhart ex Humboldt) Fürnröhr

SHUSH69; THOMS63.

Physcia aipolia (Ehrhart) Hampe fma *anthelina* (Acharius) Vainio. SHUSH69.*Physcia stellaris* (L.) Nylander fma *anthelina* (Acharius) Nylander.*Physcia albinea (Acharius) Nylander*SHUSH69; THOMS63. Mistaken identification of *P. dubia*.**Physcia biziana (Massalongo) Zahlbruckner**

SHUSH69; THOMS63.

Physcia caesia (Hoffmann) Fürnröhr

SHUSH69; THOMS63.

Physcia wainioi Räsänen. SHUSH69.**Physcia callosa Nylander**

SHUSH69; THOMS63.

Physcia dimidiata (Arnold) Nylander

WEBER90.

Physcia dubia (Hoffmann) Lettau

SHUSH69; THOMS63.

Physcia intermedia Vainio. SHUSH69.

Physcia intermedia Vainio fma *stellata* (Lyng) J. W. Thomson. SHUSH69.

Physcia teretiuscula (Acharius) Lyng. SHUSH69; THOMS63; MOBER77.

Physcia lacinulata Müller-Argoviensis

SHUSH69. Misidentification..

***Physcia magnussonii* Frey**

WEBER90.

***Physcia phaea* (Tuckerman) J. W. Thomson**

SHUSH69; THOMS63.

Physcia cascadenis H. Magnusson. SHUSH69; THOMS63. Reported as a distinct species..

***Physcia stellaris* (L.) Nylander**

SHUSH69; THOMS63.

Lichen stellaris L.. JOERG94A. Sp. Pl. 2:1144.1753..

Physcia stellaris (L.) Nylander fma *radiata* (Acharius) Nylander. SHUSH69; THOMS63.

Physcia stellaris (L.) Nylander fma *rosulata* (Acharius) Nylander.

Physcia stellaris (L.) Nylander fma *tuberculata* (Kernstock) Dalla Torre & Sarnthein.

Physcia subtilis Degelius

SHUSH69.

***Physcia tenella* (Scopoli) De Candolle**

SHUSH69; THOMS63.

***Physcia tribacia* (Acharius) Nylander**

CARME75.

Physciella Esslinger

Physciella Esslinger, 1986 ESSL186

***Physciella chloantha* (Acharius) Esslinger**

ESSL86. ME: Esslinger 9473 in herb. Esslinger.

Physcia luganensis Mereschkowsky.

***Physciella melanchra* (Hue) Esslinger**

ESSL186.

Phaeophyscia melanchra (Hue) Kashiwadani. ESSL178B.

Physcia melanchra (Hue) Esslinger.

***Physciella nepalensis* (Poelt) Esslinger**

MCCUN98. Boulder, Garfield, Pitkin, Routt counties. Specimens at OSU..

Physconia Poelt, 1965 ESSL194

***Pharcidia dispersa* (Lahm) Winter**

WEBER90. LR: 19 mi N LaPorte, Shushan & Weber L-2347, !Santesson..

Physconia detersa (Nylander) Poelt

WEBER90; POELT66; ESSL194.

Physconia distorta (Withering) Laundon

ESSL194.

Physcia pulverulenta (Schreber) Hampe.

Physcia pulverulenta (Schreber) Hampe fma *angustata* (Hoffmann) Leighton.

Physcia pulverulenta (Schreber) Hampe fma *coralloidea* Suza.

Physconia pulverulenta (Schreber) Poelt. POELT66.

***Physconia elegantula* Esslinger**

ESSL194. Mycotaxon 51:92-94.1994. Type from Arizona. MN, GF..

***Physconia enteroxantha* (Nylander) Poelt**

ANDER74A; POELT66; ESSL194.

Physconia grisea (Lamarck) Poelt

POELT66; ESSL194.

Physcia grisea (Lamarck) Zahlbruckner. SHUSH69.

Physcia grisea (Lamarck) Zahlbruckner fma *hillmannii* Lynge. SHUSH69.

***Physconia isidiigera* (Zahlbruckner in Herre) Esslinger**

ESSLI94. Mycotaxon 51:94.1994. Type from California..

***Physconia muscigena* (Acharius) Poelt**

POELT66.

Physcia muscigena (Acharius) Nylander. SHUSH69.

Physcia muscigena (Acharius) Nylander fma *alpina* Nadvornik. SHUSH69.

Physcia muscigena (Acharius) Nylander fma *lenta* (Acharius) Vainio. SHUSH69.

Physcia muscigena (Acharius) Nylander fma *squarrosa* (Acharius) Lynge. SHUSH69.

***Physconia perisidiosa* (Erichsen) Moberg**

WEBER90; MOBER77; ESSLI94.

Physconia farrea (Acharius) Poelt. POELT66.

***Physconia thomsonii* Esslinger**

ESSLI94. Mycotaxon 51:97-99.1994. Type: Mesa Co.: 10-12 mi NNE of Fruita, on shaded rock, 9 Aug. 1984, [Esslinger 9447], DUKE. Hybrid.

***Placidiopsis Beltramino* BREUSS96A**

***Placidiopsis pseudocinerea* Breuss**

BREUSS96A. Park Co.: E end Hoosier Ridge, ca.11 mi N of Fairplay, 13,000 ft. alt., 8.7.56, Shushan & Imshaug s.n.] (WIS), cited..

***Placidium Massalongo* BREUSS96B**

***Placidium andicola* (Breuss) Breuss**

BREUSS96B. Breuss cited: Montezuma Co.: 10 June 1958, Weber & Shushan (LD)..

***Placidium chilense* (Breuss) Breuss**

BREUSS96.

***Placidium lachneum* (Acharius) Breuss**

BREUSS96. Breuss cited Larimer Co.: Bighorn Flats, RMNP, Anderson (COLO L-35047. Exclusively alpine..

Catapyrenium lachneum (Acharius) Santesson.

***Placidium lacinulatum* (Acharius) Breuss**

BREUSS96.

Catapyrenium lacinulatum (Ach.) Breuss. BREUSS96B.

***Placidium pilosellum* (Breuss) Breuss**

BREUSS96. Breuss annotated (1998), Montezuma Co.: Mesa Verde, 10 June 1958, Weber & Shushan (LD). Baca Co.: Dodge Ranch, 4 Sept. 1955, Shushan (COLO L-8198)..

Catapyrenium pilosellum Breuss.

***Placidium rufescens* (Acharius) Breuss**

BREUSS96. Breuss annotated (1998): Boulder Co.: Boulder Falls, 7,000 ft., granite ledges, Weber & Persson L-2152)..

Catapyrenium rufescens (Ach.) Breuss.

***Placidium squamulosum* (Acharius) Breuss**

BREUSS96.

Catapyrenium squamulosum (Ach.) Breuss.

Placocarpus [author?] BREUSS

***Placocarpus schaeferi* (E. Fries) Breuss**

Catapyrenium schaeferi (E. Fries) R. Santesson. THOMS89. Summit Co.: Weber L-50596. Breuss (letter 1997) says *Catapyrenium schaeferi* is *Placocarpus schaeferi* (Fr.) Breuss, but thinks American records are *Placopyrenium* species..

Placopyrenium Breuss 1987 BREUSS87

***Placopyrenium noxium* Breuss**

BREUSS98. Cited: Larimer Co.: Lytle Formation, Dakota Ridge, 2 mi SETable Mt., 26.6.1960, Anderson (COLO). Type from Alberta..

Placynthiella Elenkin, 1909 COPPI87

***Placynthiella oligotropha* (Laundon) Coppins & James**

COPPI84.

Lecidea oligotropha Laundon. SHUSH69.

***Placynthiella uliginosa* (Schrader) Coppins & James**

SHUSH69; LAUND84.

Lecidea uliginosa (Schrader) Acharius. SHUSH69.
Saccomorpha uliginosa (Schrader) Hafellner. HAFEL84, p. 334.

Placynthium (Acharius) S. Gray, 1821

Placynthium asperellum (Acharius) Trevisan

EGAN87; HENSS63,84.
Placynthium aspratile (Acharius) Henssen. SHUSH69; HENSS63B,84.

Placynthium flabellum (Tuckerman) Zahlbruckner

HENSS63.

Placynthium nigrum (Hudson) S. Gray

HENSS63.

Placynthium stenophyllum (Tuckerman) Fink var *isidiatum* Henssen
 SHUSH69. Erroneous report by Wetmore; Henssen did not report this for Colorado.

Platismatia Culberson & Culberson, 1958

Platismatia glauca (L.) Culberson & Culberson

SHUSH69, CULBE68; RANDL97.
Cetraria glauca (L.) Acharius.
Lichen glaucus L..
Lichen glaucus L.. JOERG94A. Sp. Pl. 2:1148.1753..

Pleopsidium Koerber 1855 emend. Hafellner 1993 HAFEL93A

Pleopsidium chlorophanum (Wahlenberg ex Acharius) Zopf

HAFEL93A. An arctic-alpine species, doubtfully present in Colorado..
Acarospora chlorophana (Wahlenberg ex Acharius) Massalongo. SHUSH69; HAFEL93A.
Lecanora chlorophana (Wahlenberg ex Acharius) Acharius.
Placodium chlorophanum (Acharius) Flotow.

Pleopsidium flavum (Kellardi) Koerber

HAFEL93A considers this distinct from *P. chlorophanum*. Colorado material is all *P. flavum*.
Acarospora flava (Bellardi) Trevisan. SHUSH69.
Lichen flavus Bellardi.

Polyblastia Massalongo, 1852

Polyblastia bryophila Lönnroth

ANDER74A.

Polyblastia cucurbitula Thomson & Murray

CC: NW of Mt. Bierstadt, Anderson & Carmer 8848 !WAW 1990.

Polyblastia theleodes (Sommerfelt) Th. Fries

ANDER74A. The specimen is *P. cucurbitula*.

***Polycauliona* Hue, 1908**

Polycauliona coralloides (Tuckerman) Hue

SHUSH69. Misidentification; a California coastal lichen..
Placodium coralloides Tuckerman.

Polychidium (Acharius) S. Gray, 1821

Polychidium muscicola (Swartz) S. Gray

SHUSH69.

Polysporina Vezda, 1978

Polysporina simplex (Davies) Vezda

WEBER90; VEZDA78.
Sarcogyne simplex (Davies) Nylander.

Porina Müller-Argoviensis, 1883

Porina mammillosa (Th. Fries) Vainio

ANDER67. Boulder Co.: summit of Rollins Pass, 11,800 ft., 22 July 1960, Shushan & Anderson, L-25770 pr.p..

Porocyphus Koerber, 1855

Porocyphus coccodes (Flotow) Koerber

SHUSH69, WEBER90.

Porocyphus furfurellus (Nylander) Forssell.**Porocyphus dispersus Dahl**

SHUSH69; HENSS66. LR: Rocky Mt. Nat. Park, Anderson L-35641, !Henssen..

Porpidia Koerber, 1855**Porpidia crustulata (Acharius) Hertel & Knoph**GOWAN89. Fig. 30, p. 40 (map). Most Colorado specimens previously assigned to *P. macrocarpa* belong here..*Huilia crustulata* (Acharius) Hertel.***Porpidia flavocaerulescens* (Hornemann) Hertel & Schwab**for Colorado specimens, see *P. pseudomelinodes*..*Huilia flavocaerulescens* (Hornemann) Hertel. HERTE75.*Lecidea flavocaerulescens* Hornemann. SHUSH69.**Porpidia macrocarpa (De Candolle) Hertel & Schwab**

GOWAN89. RMNP: Anderson 4400, cited by Gowan (specimen not located in herb)..

Huilia macrocarpa (E. Fries) Hertel.*Lecidea contigua* auctt..*Lecidea macrocarpa* (De Candolle) Steudel. SHUSH69.**Porpidia pseudomelinodes Schwab**

GOWAN89. RMNP: Anderson 4349, 4429, 4224 !Gowan..

Porpidia speirea (Acharius) Krempelhuber*Lecidea speirea* (Acharius) Acharius. ANDER74A.*Lecidea superba* Koerber.**Porpidia superba (Koerber) Hertel & Knoph**

HERTE77A. Larimer Co.: Rocky Mt. Nat. Park, [Anderson 4335 L-35682], 4478 (L-35821).

Lecidea speirea (Acharius) Acharius. ANDER74A.*Lecidea superba* Koerber.**Porpidia thomsonii Gowan**

GOWAN89. RMNP: Anderson 2351, 3238, 3341, 4298, 4318, 4393 !Gowan..

Protoblastenia (Zahlbruckner) J. Steiner, 1911**Protoblastenia incrustans (De Candolle) J. Steiner**

WEBER90.

Protoblastenia rupestris (Scopoli) J. Steiner

WEBER90.

Protoblastenia russula* (Acharius) RäsänenBiatora russula* (Acharius) Montagne. SHUSH69. misidentification?.*Lecidea russula* Acharius.**Protoparmelia Choisy, 1929****Protoparmelia atriseda (E. Fries) R. Santesson & V. Wirth**

Grand Co.: Never Summer Mts., [Anderson 3236 (L-34583)].

Lecanora atriseda E. Fries.**Protoparmelia badia (Hoffmann) Hafellner**

HAFEL84.

Lecanora badia (Hoffmann) Acharius. SHUSH69.**Pseudephebe Choisy, 1930****Pseudephebe minuscula (Nylander ex Arnold) Brodo & Hawksworth**

BRODO77.

Alectoria minuscula Nylander ex Arnold. SHUSH69.**Pseudephebe pubescens (L.) Choisy**

BRODO77.

Alectoria pubescens (L.) R. Howe. SHUSH69.*Lichen pubescens* L.. JOERG94A. Sp. Pl. 2:1155.1753..

Parmelia lanata Nylander.
Parmelia pubescens (L.) Vainio.

Pseudevernia Zopf, 1903

***Pseudevernia furfuracea* (Mann) Hale & Culberson**

HALE68.
Parmelia furfuracea (L.) Acharius.
Pseudevernia furfuracea (Mann) Hale & Culberson var *ceratea* (Acharius) Nylander.

***Pseudevernia intensa* (Nylander) Hale & Culberson**

WEBER90, HALE68.

Psora Hoffmann, 1784, non J. Hill, 1762

Conserved name

***Psora cerebriformis* W. A. Weber**

WEBER81C; TIMDA87. Mycotaxon 13:104.1981. Type: MN: Paradox Valley, Weber, Lich. Exsicc. COLO 24 (COLO).. Type specimen from Colorado.

***Psora crenata* (Taylor) Reinke**

TIMDA87.
Biatora crenata (Taylor) Tuckerman fma *dealbata* Tuckerman.
Lecidea crenata (Taylor) Stizenberger. SHUSH69.

***Psora decipiens* (Hedwig) Hoffmann**

TIMDA87.
Biatora decipiens (Hedwig) E. Fries.
Lecidea decipiens (Hedwig) E. Fries. SHUSH69.

***Psora globifera* (Acharius) Massalongo**

TIMDA87.
Biatora globifera (Acharius) E. Fries.
Lecidea globifera Acharius. SHUSH69.

***Psora himalayana* (Babington) Tindal**

TIMDA87. No specimens cited.
Psora elenkini Rassadina. TIMDA87.

***Psora icterica* (Montagne) Müller-Argoviensis**

TIMDA87.
Biatora icterica Montagne.
Lecidea icterica (Montagne) Taylor. SHUSH69.

***Psora luridella* (Tuckerman) Fink**

TIMDA87.
Biatora luridella (Tuckerman) Tuckerman.
Lecidea luridella Tuckerman. SHUSH69.

***Psora montana* Tindal**

TIMDA87. Type: GA: Tonahutu Cr. Trail, Rocky Mt. Nat. Park, Anderson 2386 (COLO).. Type specimen from Colorado.

***Psora nipponica* (Zahlbruckner) G. Schneider**

TIMDA87.
Lecidea novomexicana (Lesdain) W. A. Weber ex R. Anderson. SHUSH69.
Psora novomexicana Lesdain.

***Psora rubiformis* (Acharius) Hooker**

TIMDA87.
Lecidea rubiformis (Acharius) Wahlenberg. SHUSH69.

***Psora russellii* (Tuckerman) A. Schneider**

TIMDA87. no specimens cited.

***Psora tuckermanii* R. Anderson ex Tindal**

TIMDA87. Bryol. 89:273-274.1986. Type: BL: Steamboat Mt., Shushan & Weber, Lich. Exsicc. COLO 23 (O).. Type specimen from Colorado.

Psorinia G. Schneider SCHNE79

Psorinia conglomerata (Acharius) G. Schneider

SCHNE70.

Lecidea conglomerata Acharius. SCHNE79.

Toninia conglomerata (Acharius) Boistel. SCHNE79.

Psoroma Acharius ex Michaux, 1803**Psoroma hypnorum (M. Vahl) S. Gray**

SHUSH69; JOERG78.

Psorotichia Massalongo, 1855**Psorotichia minuta H. Magnusson**

ANDER67.

Psorula G. Schneider, 1979**Psorula rufonigra (Tuckerman) G. Schneider**

SCHNE79.

Lecidea rufonigra (Tuckerman) Nylander. SHUSH69.

Psora rufonigra (Tuckerman) A. Schneider.

Pterygiopsis Vainio, 1890**Pterygiopsis americana Henssen**

!Henssen, sp. nov. ined..

Pterygiopsis atra Vainio

SHUSH69.

Punctelia Krog, 1982**Punctelia bolliana (Müller-Argoviensis) Krog**

KROG82.

Parmelia bolliana Müller-Argoviensis. SHUSH69. Krog does not equate this with *P. hypoleucites*!***Punctelia borrieri* (D. Turner ex J. E. Smith in Smith & Sowerby) Krog**KROG82. Colorado specimens so named belong to *P. stictica* and *P. subrudecta*.

Parmelia borrieri (D. Turner ex J. E. Smith in Smith & Sowerby) D. Turner. SHUSH69; KROG82.

Punctelia hypoleucites (Nylander) Krog

KROG82.

Parmelia hypoleucites Nylander. SHUSH69.

Punctelia perreticulata (Raesaenen) Wilhelm & LaddADLER96. Cited: Larimer Co.: Rocky Mt. Nat.Park, (Anderson 3775). Indistinguishable from *P. subrudecta* except for pycnoconidial shape..**Punctelia rudecta (Acharius) Krog**

WEBER90.

Parmelia rudecta Nylander.

Punctelia stictica (Duby) Krog

KROG82.

Parmelia stictica (Duby) Nylander. SHUSH69.

Punctelia subrudecta (Nylander) Krog

WEBER90, KROG82.

Parmelia subrudecta Nylander.

Pyrenocollema Reinke, 1895 HARRI80**Pyrenocollema tichothecioides (Arnold) R. Harris**

HARRI80. Boulder Co.: Limestone-shale, eber L-85382.

Xanthopyrenia tichothecioides (Arnold) Bachmann.

Pyrrhospora Koerber, 1855 HAFEL93B**Pyrrhospora elabens (E. Fries) Hafellner**

HAFEL93B.

Lecidea elabens E. Fries. VAINI34:332-334..

Lecidea melancheima Tuckerman. SHUSH69.

Ramalina Acharius in Luyken, 1809**Ramalina obtusata (Arnold) Bitter**

Not previously reported. Hinsdale Co.: Ceboolla Creek campground, 9,400 ft., Weber L-38417. Numerous counties..

Ramalina pollinaria (Westring) Acharius

SHUSH69.

Ramalina sinensis Jatta

WEBER90.

Rhizocarpon Ramond ex De Candolle, 1805**Rhizocarpon anaperum (Vainio) Vainio**

ANDER65; SHUSH69.

Rhizocarpon badioatrum (Floerke ex Sprengel) Th. Fries

SHUSH69.

Rhizocarpon disporum (Naegeli ex Hepp) Müller-Argoviensis

SHUSH69; FEUER91.

Buellia petraea (Wulfen) Branth & Rostrup var montagnei (Koerber) Tuckerman.

Rhizocarpon montagnei Koerber.

Rhizocarpon disporum (Naegeli ex Hepp) Müller-Argoviensis var irriguum (Flotow ex Koerber) Zahlbruckner

probably not the above, but an undescribed species!.

Rhizocarpon effiguratum (Anzi) auctt.

ANDER65; SHUSH69; SANTE84. Acc. to SANTE84, R. effiguratum sensu Th. Fries = R. superficiale..

Rhizocarpon eupetraeum (Nylander) Arnold

FEUER91.

Rhizocarpon grande (Floerke ex Flotow) Arnold. SHUSH69; FEUER91.

Rhizocarpon geminatum Koerber

Systema Lichenum Germaniae 259. 1855. COLO collections a mixture of this and R. disporum.

Rhizocarpon geographicum (L.) De Candolle

SHUSH69.

Buellia geographica (L.) Th. Fries.

Lichen geographicus L. JOERG94A. Sp. Pl. 2:1140.1753..

Rhizocarpon geographicum (L.) De Candolle var contiguum (Schaerer) Massalongo.

Rhizocarpon tinei (Tornabene) Runemark ssp diabolicum (Räsänen) Runemark.

Rhizocarpon intermediellum Räsänen

ANDER65; SHUSH69.

Rhizocarpon intersitum Arnold

ANDER65; SHUSH69.

Rhizocarpon macrosporum Räsänen

ANDER65; SHUSH69.

Rhizocarpon sublucidum Räsänen. SHUSH69. Synonymy fide Thomson..

***Rhizocarpon norvegicum* Räsänen**

ANDER65; SHUSH69. Misidentification of R. santessonii..

Rhizocarpon obscuratum (Acharius) Massalongo

ANDER74A.

Rhizocarpon permodestum Arnold

ANDER74B.

Rhizocarpon polycarpum (Hepp) Th. Fries

ANDER65; SHUSH69.

Rhizocarpon renneri Poelt

ANDER76.

Rhizocarpon riparium Räsänen

SHUSH69; SANTE84. Santesson returns this to a subspecies of R. geographicum..

Rhizocarpon santessonii Timdal

WEBER90, TIMDA86. LR: Anderson L-35481, L-35865 !Timdal..

Rhizocarpon sphaerosporum Räsänen

ANDER65; SHUSH69. Not located in herb. Re-named?.

Rhizocarpon superficiale (Schaerer) Vainio

SHUSH69.

Rhizocarpon superficiale (Schaerer) Vainio ssp boreale Runemark. SHUSH69.

Rhizocarpon tetramerum (Vainio) Vainio

ANDER74A.

Rhizoplaca Zopf, 1905**Rhizoplaca chrysoleuca (J. E. Smith) Zopf**

MCCUN87. McCune gives key to N. Amer. species..

Lecanora chrysoleuca (J. E. Smith) Acharius. SHUSH69.

Lecanora rubina (Villars) Acharius.

Placodium chrysoleucum Koerber.

Rhizoplaca melanophthalma (De Candolle in Lamarck & De Candolle) Leuckert & Poelt

Lecanora melanophthalma (De Candolle in Lamarck & De Candolle) Ramond. SHUSH69.

Lecanora rubina (Villars) Acharius var melanophthalma (Ramond ex Lamarck & De Candolle) Zahlbruckner.

Lecanora rubina (Villars) Acharius var opaca Acharius.

Lecidea brandegei Tuckerman. type specimen examined!.

Placodium melanophthalmum (Ramond ex Lamarck & De Candolle) Szatala var opacum (Acharius) Müller-Argoviensis.

Rhizoplaca peltata (Ramond) Leuckert & Poelt

Lecanora peltata (Ramond) Steudel. SHUSH69.

Rhizoplaca subdiscrepans (Nylander) R. Santesson

WEBER90.

Rimelia Hale & Fletcher, 1990 HALE90A**Rimelia reticulata (Taylor) Hale & Fletcher**

HALE90A.

Parmelia reticulata Taylor. ANDERS74A.

Parmotrema reticulatum (Taylor) Choisy.

Rimularia Nylander, 1868**Rimularia furvella (Nylander ex Mudd) Hertel & Rambold**

HERTE87.

Lecidea furvella Nylander ex Mudd.

Rimularia gibbosa (Acharius) Coppins, Hertel, & Rambold in Hertel & Rambold

HERTE90.

Lecanora bockii Rodig ex E. Fries. POELT77.

Mosigia gibbosa (Acharius) E. Fries ex Massalongo. POELT77, WEBER90.

Rimularia impavida (Th. Fries) Hertel & Rambold

HERTE87.

Lecidea impavida Th. Fries. ANDER76.

Rimularia insularis (Nylander) Rambold & Hertel

HERTE85.

Lecidea insularis Nylander. SHUSH69.

Rimularia paradoxa Timdal & Weber

TIMDA unpublished. Type: Montrose Co.: Summit of Paradox Pass between La Sal, Utah, and Bedrock, Colorado, 16 Oct. 1988, Timdal, Weber, & Bratt 7105 (O) (COLO L-83567).

Rinodina (Acharius) S. Gray, 1821**Rinodina archaea (Acharius) Arnold**

CARME75. !Sheard.

Rinodina bischoffii (Hepp) Massalongo

SHUSH69.

Rinodina penardiana Müller-Argoviensis. Bull. Herb. Boiss. 3:201.1895. Type: El Paso Co.: Colorado Springs, Penard 23 (G). Type specimen from Colorado.

Rinodina boulderensis Sheard, ined.

Type specimen from Colorado.

Rinodina brouardii Bouly de Lesdain

WEBER90.

*Rinodina calcarea (Hepp) Arnold*Misidentifications of *R. castanomela*..**Rinodina castanomela (Nylander) Arnold**

WEBER90.

Rinodina coloradiana H. Magnusson

MAGNU52*. Acta Horti Goteb. 19:48-49.1952. Type: 40 mi W Denver, Oct. 1946, Lacy (UPS).. Type specimen from Colorado.

Rinodina confragosa (Acharius) Koerber

WEBER90.

Rinodina conradii Koerber

SHUSH69.

Rinodina constrictula Magnusson

Boulder Co.: Hall Ranch, Weber L-92799, !Sheard.

Rinodina exigua (Acharius) S. Gray

SHUSH69. Misidentification..

Rinodina fuscoramulans Anderson & Sheard, ined.**Rinodina juniperina Sheard, ined.****Rinodina lignicola Sheard, ined.****Rinodina luridata (Koerber) Mayrhofer**

MAYRH90. Cited: Rio Blanco Co.: Piceance Creek Weber L-24163.

Rinodina euryspora Zahlbruckner. WEBER90; MAYRH90.**Rinodina metaboliza Vainio**

WEBER90.

Rinodina milvina (Wahlenberg ex Acharius) Th. Fries

SHUSH69.

Rinodina mniaraea (Acharius) Koerber

SHUSH69.

Rinodina mniaraea (Acharius) Koerber var *cinnamomea* Th. Fries. SHUSH69.**Rinodina mucronatula H. Magnusson**

WEBER90.

Rinodina pachysperma H. Magnusson

CARME75.

Rinodina pyrina (Acharius) Arnold

CARME75. !Sheard.

Rinodina riparia SheardSHEAR98A. Type: Jefferson Co.: Deer Creek, 4.7 km W of jct Colo.470 and Deer Creek Road; base of *Populus angustifolia*, 1650 m, 5 May 1974, Carmer 2525 (COLO).. Type specimen from Colorado.**Rinodina septentrionalis Malme**

WEBER90.

Rinodina turfacea (Wahlenberg) Koerber

SHUSH69.

Rinodina orbata (Acharius) Vainio.**Rinodina zwackhiana (Krempelhuber) Koerber**

SHEAR82.

Rinodina violascens H. Magnusson. SHUSH69.**Rinodinella Mayrhofer & Poelt, 1978**

Rinodinella lignans Sheard, ined.

Rinodinella lobulata Sheard, ined.

Rinodinella oleacea Sheard, ined.

Sarcogyne Flotow, 1851 POELT74A

Sarcogyne athrocarpa H. Magnusson

SHUSH69; MAGNU34. Ann. Crypt. Exot. 7:137-138.1934. Type: BL: Sugar Loaf, 1898, Morgan in Cummings Exs. 227 (F). COLO has two specimens, one with this plus Lecidea cinerata and other lichens.. Type specimen from Colorado.

Sarcogyne clavus (De Candolle in Lamarck & De Candolle) Krempelhuber

SHUSH69.

Biatorella clavus (Ramond ex Lamarck & De Candolle) Th. Fries.

Sarcogyne privigna (Acharius) Massalongo

SHUSH69. Reported with questionmark..

Acarospora privigna (Acharius) Massalongo.

Lecanora privigna (Acharius) Nylander.

Sarcogyne privigna (Acharius) Massalongo var revertens Tuckerman. what is Biatorella revertens?.

Sarcogyne revertens Tuckerman.

Sarcogyne regularis Koerber

SHUSH69.

Sarcogyne pruinosa (J. E. Smith ex Smith & Sowerby) Koerber.

Schadonia Koerber, 1859

Schadonia fecunda (Th. Fries) Vezda & Poelt

HAFEL84, p. 337-339..

Lopadium fecundum Th. Fries. ANDER67.

Schaereria Th. Fries, 1874, non Koerber, 1855

Proposed for nomenclatural conservation

Schaereria cinereorufa (Schaerer) Th. Fries

SCHNEI79.

Lecidea cinereorufa Schaerer. SHUSH69.

Lecidea lugubris (Sommerfelt) Nylander.

Schaereria tenebrosa (Flotow) Hertel & Poelt

HAWKS80.

Lecidea tenebrosa Flotow. SHUSH69.

Scoliciosporum Massalongo, 1852

Scoliciosporum umbrinum (Acharius) Arnold

SANTE84.

Bacidia umbrina (Acharius) Bausch. SHUSH69.

Solorina Acharius, 1808

Solorina bispora Nylander

SHUSH69.

Solorina crocea (L.) Acharius

SHUSH69.

Lichen croceus L.. JOERG94A. Sp. Pl. 2:1149.1753..

Solorina octospora Arnold

SHUSH69.

Solorina saccata (L.) Acharius

SHUSH69.

Lichen saccatus L.. JOERG94A. Fl. Suecica, ed. 2:419.1755..

Solorina spongiosa (J. E. Smith) Anzi

SHUSH69.

Spilonema Bornet, 1856**Spilonema revertens Nylander**

SHUSH69.

Sporastatia Massalongo, 1854**Sporastatia polyspora (Nylander) Grumann**

GRUMM63.

Sporastatia cinerea (Schaerer) Koerber. SHUSH69.

Sporastatia testudinea (Acharius) Massalongo

SHUSH69.

Lecidea morio (De Candolle) Schaerer.

Squamarina Poelt, 1958**Squamarina americana Ryan, ined.**

SM: Paradox Pass, Timdal & Weber. Uniquely has thallus K+ yellow..

Squamarina degelii Poelt

WEBER90.

Squamarina lentigera (G. H. Weber) Poelt

POELT58.

Lecanora lentigera (G. H. Weber) Acharius. SHUSH69.

Staurothele Norman, 1853 THOMS92**Staurothele areolata (Acharius) Lettau**

THOMS92.

Staurothele clopima Th. FriesSHUSH69; SANTE84. COLO specimens misidentifications. *S. clopima* sensu (Wahlenberg) Th. Fries = *S. fuscocuprea* fide SANTE84..**Staurothele clopimoides (Arnold) J. Steiner**

THOMS92. Larimer Co.: Rocky Mt. Nat. Park, Kiener 1775; Park Co.: Wheeler Lake, Weber & Shushan 2757.

Staurothele drummondii (Tuckerman) Tuckerman

THOMS92.

Endocarpon wilmsoides Zahlbruckner.

Staurothele elenkinii Oxner

THOMS92.

Staurothele sessilis H. Magnusson. THOMS92.

Staurothele fissa (Taylor) Zwackh-Holzhausen

SHUSH69; THOMS92.

Staurothele umbrina (Acharius) Tuckerman. THOMS92.

Staurothele monicae (Zahlbruckner) Wetmore

THOMS92. Boulder Co.: Steamboat Mt., Weber 4256.

Staurothele rugosa J. W. Thomson, ined.

THOMS92. LR: Lytle Formation, Dakota Ridge, 4.5 mi SW Ft. Collins, above Horsetooth Res., T7N R69W S32, 5,450-5,900 ft., Anderson L-20280 (COLO). Type specimen from Colorado.

Steinia Koerber in B. Stein, 1873 HAWKS80**Steinia geophana (Nylander) B. Stein**

WEBER90. DA: Anderson & Carmer.

Lecidea geophana Nylander. HAWKS80.

Stenocybe Nylander ex Koerber, 1855**Stenocybe byssacea (E. Fries) Koerber**

TIBEL81; HAWKS82.

Stenocybe pullulata (Acharius) B. Stein in Cohn. SHUSH69, as pullulata.

Stereocaulon Hoffmann, 1796 LAMB74B,77**Stereocaulon alpinum Laurer**

SHUSH69.

Stereocaulon condensatum Laurer

SHUSH69. Misidentification..

Stereocaulon glareosum (Savicz) H. Magnusson

SHUSH69.

Stereocaulon glareosum (Savicz) H. Magnusson var *brachyphylloides* Lamb ex Llano.

Stereocaulon incrustatum Floerke

WEBER90. Long's Peak, Kiener, fide Lamb. However, this may be a misidentification of *S. glareosum* var. *brachyphylloides*.

Stereocaulon paschale (L.) Hoffmann

SHUSH69; LAMB77. Misidentifications..

Stereocaulon rivulorum H. Magnusson

SHUSH69.

Stereocaulon tomentosum E. Fries

SHUSH69.

Stereocaulon myriocarpum Th. Fries. SHUSH69, LAMB77. "perhaps too closely related to *S. tomentosum* to qualify as a good distinct sp." LAMB77 p 225..

Stereocaulon myriocarpum Th. Fries var *orizabae* Th. Fries.

Sticta (Schreber) Acharius, 1803

Sticta beauvoisii Delise

WEBER90; HARRI84A.

Sticta sylvatica (Hudson) Acharius

SHUSH69. The specimen in question is fragmentary pieces of *S. beauvoisii*..

Sticta sylvatica (Hudson) Acharius var. fuliginosa (Dickson) Hepp

SHUSH69; LAUND84; OZEND70.

Sticta fuliginosa (Dickson) Acharius.

Sticta weigeli (Insert ex Acharius) Vainio

SHUSH69; ANDER76; HARRI84A. Colorado specimens are *S. beauvoisii*.

Strangospora Koerber 1860

Biatorrella microhaema Norman in Th. Fries

SANTE84.

Strangospora microhaema (Norman in Th. Fries) R. Anderson in Carmer

CARME75; SANTE84.

Strangospora ochrophora (Nylander) R. Anderson in Carmer

CARME75.

Biatorrella ochrophora (Nylander) Arnold. SANTE84.

Synalissa E. Fries, 1825

Synalissa symphorea (E. Fries) Coppins & James

WEBER90. BL: Anderson L-35794 !Henssen.

Synalissa ramulosa (Hoffmann) E. Fries.

Teloschistes Norman, 1853

Teloschistes chrysophthalmus (L.) Norman

SHUSH69. Misidentification..

Teloschistes contortuplicatus (Acharius) Clauzade & Rondon ex Vezda

ANDER76; ROSEN96.

Tephromela Choisy, 1929

Tephromela aglaea (Sommerfelt) Hertel & Rambold

WEBER90; HERTE85B.

Tephromela armeniaca (De Candolle) Hertel & Rambold

HERTE85B.

Lecidea armeniaca (De Candolle) E. Fries. SHUSH69.

Tephromela atra (Hudson) Hafellner in Kalb

KALB83.

Lecanora atra (Hudson) Acharius. ANDER74A.

Thamnotia Acharius ex Schaerer, 1850**Thamnotia vermicularis (Swartz) Schaerer**

Cladonia vermicularis Swartz.

Thamnotia subuliformis (Ehrhart) Culberson. SHUSH69. Chemical strain.

Thamnotia subvermicularis Asahina.

Thamnotia vermicularis (Swartz) Acharius ex Schaerer var coloradoensis Gyelnik. Magyar Botan. Lapok 29:26. 1930.. Type specimen from Colorado.

Thelidium Massalongo, 1855***Thelidium pyrenophorum (Acharius) Mudd***

SHUSH69. Record based on an old Willey record. Misidentification?.

Verrucaria pyrenophora Nylander. SHUSH69. No such name found..

Thelidium saximontanum R. Anderson, sp. n. ined.

Larimer Co.: Rocky Mt. Nat. Park, [Anderson 4334 (L-35681), 4371 (L-35716), 4372 (L-35717). Type specimen from Colorado.

Thelotrema Acharius, 1803***Thelotrema lepadinum Acharius***

SHUSH69. Reported on basis of an erroneous dot map report by Makarevich..

Thrombium Wallroth. 1831**Thrombium epigaeum (Persoon) Wallroth**

SHUSH69.

Thrombium mongolicum H. Magnusson

SHUSH69.

Thyrea Massalongo, 1856**Thyrea pulvinata (Schaerer) Massalongo**

SHUSH69.

Omphalaria pulvinata (Schaerer) Nylander.

Toninia Massalongo, 1852 TIMDA91***Lecidea aromatica (Smith) Massalongo var. verrucarioides Nylander***

TIMDA91. Europe, Rocky Mts., Calif., W Canada, Alaska..

Toninia cervina Lönnroth. TIMDA91.

Toninia alutacea (Anzi) Jatta

TIMDA91. Western N.A., Europe, Central Asia..

Toninia athallina (Hepp) Timdal

TIMDA91. LR: NW Fort Collins, Anderson L-20,231, the only North American collection (Europe, China, E Greenland)..

Catillaria athallina Hepp.

Toninia bullata (Meyen & Flotow) Zahlbruckner

ANDER76; TIMDA91. Colorado the only North American locality (S and Centr. Amer. S Africa, Australia, N.Z..

Toninia candida (G. H. Weber) Th. Fries

SHUSH69; TIMDA91. Western N.A., Europe, Middle Asia..

Toninia lutosa (Acharius) Timdal

TIMDA91. Rocky Mts. to Mexico; Europe, China, S Africa..

Catillaria crystallifera Kilius. TIMDA91.

Toninia verrucosa (Massalongo) Flagey. TIMDA91.

Toninia massata (Tuckerman) Herre

SHUSH69. Rocky Mts., Calif., S Europe, Middle Asia, Atlantic islands..

Lecidea massata Tuckerman. TIMDA91. Type from San Francisco.

Toninia philippea (Montagne) Timdal

TIMDA91. Rocky Mts., Yukon, Europe, China..

Catillaria kansuensis H. Magnusson. ANDER67; TIMDA91.

Lecidea philippea Montagne. TIMDA91.

Toninia ruginosa (Tuckerman) Herre

SHUSH69; TIMDA91. W U.S., Sprin, Norway, Tenerife..

Toninia sculpturata (H. Magnusson) Tindal

TIMDA91. Colo., Utah, China, Uzbekistan..

Catillaria sculpturata H. Magnusson. ANDER67; TIMDA91. See Kiliias (1985), but Tindal finds it does occur here!.

Toninia sedifolia (Scopoli) Tindal

TIMDA91. Usually was called *T. coeruleonigricans*, which is *Pannaria praetermissa*. Widely distrib. in N Hemisphere, few localities in Australia and S America.,

Lichen sedifolius Scopoli. TIMDA91.

Toninia squalida (Acharius) Massalongo

TIMDA91. Widely distrib. in N Hemisphere..

Lecidea squalida Acharius. TIMDA91.

Toninia subdiffracta Tindal

TIMDA91. Endemic of Colorado Plateaus..

Toninia tristis (Th. Fries) Th. Fries subsp. asiae-centralis Tindal

TIMDA91. Widely distrib. over N Hemisphere, one locality in Peru..

Toninia tristis (Th. Fries) Th. Fries subsp. scholanderi (Lynge) Tindal

SHUSH69; TIMDA91. Middle Asia, Rocky Mts., SE Greenland..

Lecidea scholanderi Lynge. SCHNE79; TIMDA84A,91.

Psora scholanderi (Lynge) R. Anderson. ANDER76; TIMDA91.

Toninia tristis (Th. Fries) Th. Fries subsp. tristis

TIMDA91.

Toninia verrucarioides (Nylander) Tindal

TIMDA91. Tindal annotations. Mesa Co. Unaweap Canyon, Weber et al L-57129.

Toninia cervina Lönnroth. TIMDA91.

Toninia weberi Tindal

TIMDA91. Iran, China, W U.S. (type from Iran)..

Toninia weberi Tindal, ined.**Trapeliopsis Hertel & Schneider, 1979****Trapeliopsis flexuosa (E. Fries) Coppins & James**

WEBER90, COPPI84.

Lecidea aeruginosa Borrer. ANDER74A; EGAN87.

Trapeliopsis granulosa (Hoffmann) Lumbsch ex Hertel

COPPI84.

Lecidea granulosa (Hoffmann) Acharius. SHUSH69.

Lecidea quadricolor (Dickson) Borrer ex Hooker.

Trapeliopsis viridescens (Schrader) Acharius

ESSL95.

Tremolecia Choisy, 1953**Tremolecia atrata (Acharius) Hertel**

HERTE71.

Lecidea atrata (Acharius) Wahlenberg.

Lecidea dicksonii (J. F. Gmelin) Acharius. SHUSH69.

Tuckermannopsis Gyelnik, 1933 EGAN87; THELL98B

Still remains a highly polyphyletic genus, likely to be broken up in the near future

Tuckermannopsis chlorophylla (Willdenow in Humboldt) Hale in Egan

EGAN87; RANDL97.

Cetraria chlorophylla (Willdenow) Vainio.

Cetraria scutata auctt., non (Wulf.) Poetsch. SHUSH69.

Lichen chlorophyllus Willdenow.

Tuckermannopsis ciliaris (Acharius) Gyelnik

Cetraria ciliaris Acharius. MUELL95. Misidentification of *Melanelia exasperatula*!

Tuckermannopsis coralligera (W. A. Weber) W. A. Weber

EGAN92.

Cetraria coralligera (W. A. Weber) Hale. SHUSH69.

Cetraria fendleri (Nylander) Tuckerman fma *coralligera* W. A. Weber.

Tuckermannopsis fendleri (Nylander) Hale in Egan

EGAN87; RANDL97. Generic disposition not clear (RANDL97).

Cetraria fendleri (Nylander) Tuckerman. SHUSH69.

Platysma fendleri Nylanderr. RANDL97.

Umbilicaria Hoffmann, 1789 LLANO50; WEI93; JOERG1994A

Umbilicaria anthracina (Wulfen) Schaerer

SHUSH69. Misidentification..

Umbilicaria cinereorufescens (Schaerer) Frey

WEBER90, LLANO50. Misidentification of *U. trabeculata*.

Umbilicaria cylindrica (L.) Delise

SHUSH69. misidentifications of *U. virginis*.

Umbilicaria decussata (Villars) Zahlbruckner

SHUSH69.

Gyrophora decussata (Villars) Zahlbruckner.

Omphalodiscus decussatus (Villars) Scholander.

Umbilicaria deusta (L.) Baumgartner

SHUSH69; WEI93; JOERG94. Proposed for conservation..

Lichen deustus L. JOERG94. Sp. Pl. 1150.1753. Proposed for conservation with a new type..

Umbilicaria flocculosa (Wulfen) Hoffmann. WEI93; JOERG94.

Umbilicaria exasperata Hoffmann

WEI93. *U. hyperborea* of Colorado literature.

Gyrophora hyperborea Hoffmann.

Umbilicaria hyperborea (Acharius) Hoffmann. SHUSH69; WEI93.

Umbilicaria hirsuta (Swartz ex Westring) Hoffmann

SHUSH69.

Umbilicaria krascheninnikovii (Savicz) Zahlbruckner

SHUSH69.

Omphalodiscus krascheninnikovii (Savicz) Scholander.

Umbilicaria murina (Acharius) De Candolle

SHUSH69. Misidentification..

Umbilicaria phaea Tuckerman

SHUSH6.

Umbilicaria phaea Tuckerman var *coccinea* Llano.

Umbilicaria polyphylla (L.) Baumgartner

SHUSH69. A polyphyllous plant of *U. hyperborea* fide Imshaug 1957.

Gyrophora polyphylla (L.) Fink.

Umbilicaria proboscidea (L.) Schrader

SHUSH69. misidentification of *U. virginis* fide Imshaug 1957.

Umbilicaria torrefacta (Lightfoot) Schrader

SHUSH69.

Gyrophora erosa (G. H. Weber) Acharius.

Umbilicaria trabeculata H. Mayrhofer

H. Mayrhofer ined.. Hybrid.

Umbilicaria vellea (L.) Acharius

SHUSH69. Misidentification of *U. americana*.

Gyrophora vellea (L.) Acharius.

Umbilicaria virginis Schaerer

SHUSH69.

Gyrophora rugifera (Nylander) Th. Fries.

Gyrophora virginis (Schaerer) Frey var *coloradoënsis* Räsänen. An. Soc. Cient. Argent. 128:134. 1939. Type from Colorado? or Argentina?.

Omphalodiscus virginis (Schaerer) Scholander. LLANO50.

Umbilicaria rugifera Nylander.

***Umbilicaria americana* H. Mayrhofer**

Type: Boulder Co., Steamboat Mt., Weber & Shushan, Lich. Exs. COLO 38. H. Mayrhofer ined. Colorado reports of *U. vellea* pertain to this. Hybrid.

Usnea Dillenius ex Adanson, 1763

Usnea barbata (L.) Wiggers

A waste-basket name.

***Usnea cavernosa* Tuckerman**

SHUSH69.

Usnea dasypoga (Acharius) Röhling

SHUSH69. Misidentification..

Usnea barbata (L.) Wiggers var *dasypoga* (Acharius) E. Fries.

Usnea diplotypus Vainio

SHUSH69. American reports are misidents, fide Hale & Culberson.

***Usnea fulvorea*gens (Räsänen) Räsänen**

CARME75.

***Usnea glabrata* (Acharius) Vainio**

SHUSH69.

***Usnea hirta* (L.) G. H. Weber ex Wiggers**

SHUSH69; JOERG94. Proposed for conservation with a conserved type..

Lichen hirtus L.. JOERG94A. Sp. Pl. 2:1155.1753..

Usnea barbata (L.) Wiggers var *hirta* (L.) E. Fries.

***Usnea lapponica* Vainio**

SANTE84. *U. soreidiifera* sensu Motyka, non (Arnold) Lyngé..

Usnea soreidiifera Motyka. SHUSH69; SANTE84. sensu Motyka, non (Arnold) Lyngé.

Usnea stuppea (Räsänen) Motyka

SHUSH69. misident. of *U. soreidiifera*.

***Usnea subfloridana* Stirton**

SANTE84. *U. comosa* Vainio, non Persoon.

Usnea comosa (Acharius) Vainio. SHUSH69. Report by Flowers; to be checked..

Usnea trichodea Acharius

SHUSH69; WILLE74. probably misidentification of *U. cavernosa*.

Usnea variolosa Motyka

SHUSH69. Cited specimens not seen. Doubtful report..

Verrucaria Schrader, 1794

***Verrucaria cetera* Breuss**

BREUS98. Type: Colorado. Archuleta Co.: 2 mi N of Chromo, 14 June 1955, Shushen (COLO, holotype)..

***Verrucaria compacta* (Massalongo) Jatta**

BREUS94. Breuss: Probably belongs in another genus; studies needed..

Catapyrenium compactum (Massalongo) R. Santesson. SANTE84; THOMS87. annotations by Breuss, 1998.

Dermatocarpon compactum (Massalongo) Lettau. SHUSH69.

Placidium compactum Massalongo.

Verrucaria fuscella (D. Turner) Acharius

SHUSH69. Report not substantiated by citation..

***Verrucaria inficiens* Breuss**

BREUS98.

Catapyrenium plumbeum (Lesdain) J. W. Thomson. THOMS87; BREUS98.

Dermatocarpon plumbeum (Lesdain) Zahlbruckner. SHUSH69.

Endopyrenium plumbeum (B. de Lesdain) Thomson. BREUS98. Non *Verrucaria plumbea* Acharius.

Verrucaria lecideoides (Massalongo) Trevisan

Montezuma Co.: head of Navajo Canyon, Mesa Verde Nat. Park, on sandstone, 9 June 1954, [Weber L-2388].

Dermatocarpon lecideoides Zahlbr.. Oesterr. Bot. Zeits. 51:279.2902; Hasse, Bryologist 18:92.1915..

Thrombium lecideoides Massalongo. Recherche Auton. Lich. p. 157. fig. 305. 1852..

Verrucaria levata Acharius

WEBER90. *V. pachyderma* Arnold is probably only a dark form..

Verrucaria macrostoma Dufour ex De Candolle

ANDER62; SHUSH69. A calciphile, according to Migula (1931). The specimen was sterile, and probably not a *Verrucaria*..

Verrucaria margacea (Wahlenberg ex Acharius) Wahlenberg

CARME75. Specimens in herb. Anderson. None in COLO. Probably misidentification of *V. levata*..

Verrucaria sphaerospora Anzi

Breuss (letter, 1997) puts *Catapyrenium globosum* in synonymy and annotated the holotype..

Catapyrenium globosum J. W. Thomson. THOMS89. Bryologist 92:190-191.1989. Type: Boulder Co.: head of Gregory Gulch, 7,000 ft., 1962, Weber L-32326 (COLO). Not mentioned by BREUS96BBreuss (letter, 1997) says that this is *Verrucaria sphaerospora* Anzi s.l., possibly a monotypic genus.

Verrucaria viridula (Schrader) Acharius

SHUSH69.

Verrucaria zamenhofiana Clauzade & Roux

BREUS94. Cited: Larimer Co.: sandstone and conglomerate, Lytle Formation, Dakota Ridge, 22 mi N of Fort Collins, 2 mi SE of Table Mt., 6300-6500 ft., 13 Sept. 1960, Anderson s.n. (WIS)..

Vulpicida Mattsson, J.-E., & M.-J. Lai. MATTS93a, 93b***Vulpicida juniperinus* (L.) Mattsson & Lai**

MATTS93.

Cetraria juniperina (L.) Acharius. SHUSH69; MATTS93.

Cetraria juniperina (L.) Acharius var *terrestris* Schaerer. SHUSH69; MATTS93.

Lichen juniperinus L..

Tuckermannopsis juniperina (L.) Hale in Egan. EGAN87; MATTS93.

***Vulpicida pinastri* (Scopoli) Mattsson & Lai**

MATTS93.

Cetraria juniperina (L.) Acharius var *pinastri* (Scopoli) Acharius. SHUSH69; MATTS93.

Cetraria pinastri (Scopoli) S. Gray. SHUSH69; MATTS93.

Lichen pinastri Scopoli.

Tuckermannopsis pinastri (Scopoli) Hale in Egan. EGAN87; MATTS93.

***Vulpicida tilesii* (Acharius) Mattsson & Lai**

MATTS93.

Cetraria tilesii Acharius. SHUSH69; MATTS93.

Xanthoparmelia (Vainio) Hale, 1974***Parmelia subramigera* Gyelnik**

SHUSH69; HALE90B.

***Xanthoparmelia ajoensis* (Nash) Egan**

HALE90B. Attributed to Colorado, without citation of specimens.

***Xanthoparmelia angustiphylla* (Gyelnik) Hale**

HALE88, 90B; EGAN90; WEBER90. Hale claims that North American records of *X. hypopsila* belong here..

***Xanthoparmelia camtschadalis* (Ach.) Hale**

HALE90B. Attributed to Colorado, without citation of specimens.

***Xanthoparmelia chlorochroa* (Tuckerman) Hale**

HALE74,90B.

Parmelia chlorochroa Tuckerman. SHUSH69.

***Xanthoparmelia coloradensis* (Gyelnik) Hale**

HALE88B,90B.

Parmelia conspersa (Acharius) Acharius var *coloradensis* Gyelnik. Fedde Repert. Sp. Nov. 29287.1931. Type: BL: Caribou, 18 Feb. 1916, Clokey 14 (US, lectotype).. Type specimen from Colorado.

Parmelia imitans (Müller-Argoviensis) Gyelnik var *coloradensis* (Gyelnik) Gyelnik. HALE88B.

Parmelia ioannis-simae Gyelnik var *coloradoensis* Gyelnik. HALE90B. Fedde Rep. Sp. Nov. 29:287.1931. Type: BL: Caribou, 18 Feb. 1916, Clokey 14 (US).

Parmelia phaeophana Gyelnik fma *coloradensis* (Gyelnik) Gyelnik. HALE88B,90B.

Xanthoparmelia somloënsis (Gyelnik) Hale. AHTI87; HALE88B.

***Xanthoparmelia conspersa* (Acharius) Hale**

SHUSH69, HALE74,90B.

Parmelia conspersa (Ehrhart ex Acharius) Acharius.

Parmelia isidiata (Anzi) Gyelnik. HALE90B.

***Xanthoparmelia cumberlandia* (Gyelnik) Hale**

HALE74,90B. "The non-isidiate morph of *X. plittii*."

Parmelia cumberlandia Gyelnik. SHUSH69.

***Xanthoparmelia hypopsila* (Müller-Argoviensis) Hale**

HALE88,90B. See *X. angustiphylla*.

***Xanthoparmelia lavicola* (Gyelnik) Hale**

HALE90B. Possibly the isidiate morphotype of *X. psoromifera*, has psoromic acid.

Parmelia kurokawae Hale. ANDER74A.

Xanthoparmelia kurokawae (Hale) Hale. HALE90B.

***Xanthoparmelia lineola* (Berry) Hale**

HALE90B.

Parmelia conspersa (Ehrhart ex Ach.) Ach. var *diffracta* Mereschkowsky. HALE90B. Ann. Mag. Nat. Hist., ser. 9, 6:482-489. 1920. Type: "southern Colorado" (G lectotype). Type specimen from Colorado.

Parmelia lineola Berry. SHUSH69.

***Xanthoparmelia mexicana* (Gyelnik) Hale**

HALE74,90B.

Parmelia mexicana Gyelnik. SHUSH69.

***Xanthoparmelia molliuscula* (Acharius) Hale**

HALE90B. An African species.

Parmelia molliuscula Acharius. SHUSH69. Misidentifications of *X. chlorochroa*.

***Xanthoparmelia mougeotii* (Schaerer) Hale**

HALE90B. Our specimens represent a saxicolous occurrence of *Parmeliopsis ambigua*.

Parmelia mougeotii Schaerer. ANDER67; SHUSH69.

***Xanthoparmelia neochlorochroa* Hale**

HALE90B. "the norstictic acid-containing chemotype of *X. chlorochroa*".

***Xanthoparmelia neowyomingica* Hale**

HALE89,90B. Mycotaxon 34:552.1989. Type: BL: Glacier Lake, 1 June 1962, Wirth s.n. (US). "Closely related to *X. wyomingica* but produces terete laciniae.. Type specimen from Colorado.

***Xanthoparmelia novomexicana* (Gyelnik) Hale**

HALE74,90B.

Parmelia novomexicana Gyelnik. SHUSH69.

***Xanthoparmelia plittii* (Gyelnik) Hale**

WEBER90, HALE74,90B.

Parmelia plittii Gyelnik.

***Xanthoparmelia subdeciapiens* (Vainio) Hale**

ANDER74A; HALE90B.

Parmelia subdeciapiens Vainio.

***Xanthoparmelia taractica* (Krempelhuber) Hale**

AHTI87; HALE90B. Ahti et al. claim that most of American records belong to *X. somloensis* (Gyelnik) Hale, but Hale proposes *X. coloradensis*, which see..

Parmelia ioannis-simae Gyelnik.

Parmelia stenophylla (Acharius) DuRietz.

Parmelia taractica Krempelhuber. SHUSH69; AHTI87.

Xanthoparmelia ioannis-simae (Gyelnik) Hale. WEBER90, HALE90B.

***Xanthoparmelia vagans* (Nyl.) Hale**

HALE90B. Differs from *X. chlorochroa* and *X. camtschadalis* in production of norstictic acid..

Xanthoparmelia wyomingica (Gyelnik) Hale

HALE74; ANDER76.

Xanthoria (E. Fries) Th. Fries, 1860 LINDB97*Xanthoria borealis Santesson & Poelt*POELT92; LINDB97. Cited from Colorado. Boulder Co.: Weber & Imshaug. LINDB97 claims Colorado material is *X. mendozae*".**Xanthoria elegans (Link) Th. Fries**

SHUSH69.

Amphiloma elegans (Link) Koerber.

Amphiloma elegans (Link) Koerber var discretum (Schaerer) Koerber.

Caloplaca elegans (Link) Th. Fries.

Caloplaca elegans (Link) Th. Fries var muscicola (Müller-Argoviensis) Jatta.

Lecanora elegans var. soreidiata Vainio. LINDB97. Colorado citations from Boulder, Chaffee, Summit counties..

Placodium elegans (Link) De Candolle.

Placodium miniatum (Hoffmann) Frege.

Xanthoria soreidiata (Vainio) Poelt. LINDB97. Lindblom tentatively gives it species status..

Xanthoria splendens (Darbishire) Christensen ex Poelt. LINDB97.

Xanthoria fallax (Hepp ex Arnold) Arnold

SHUSH69; POELT69, p.698.

Physcia fallax Hepp ex Arnold. LINDB97.

Teloschistes lychneus (Nylander) Tuckerman.

Xanthoria fallax (Hepp) Arnold var lychneoides (Mereschkowsky) Erichsen

POELT69, p.699.. The common coarse form on trees..

Xanthoria fulva (Hoffmann) Poelt & Petutschnig

LINDB97. Larimer Co.: Anderson 2523 cited..

Lobaria fulva Hoffmann. LINDB97.

Xanthoria mendozae Räsänen

LINDB97. Specimens cited from Boulder, Grand, Hinsdale, and Larimer Counties..

Xanthoria montana Lindblom

LINDB97. Holotype: Colorado. Montrose Co.: on Quercus gambelii, Cerro Summit, 7,600 ft. alt., 1965, Weber Lich. Exs. COLO 151.

Xanthoria oregana Gyelnik

LINDBL97. Cited from Costilla, Garfield, Larimer, Mesa, Moffat counties..

Xanthoria parietina (L.) Beltramini

SHUSH69. Misidentification..

Teloschistes parietinus (L.) Norman.

Teloschistes parietinus (L.) Norman var aureolus (Acharius) Müller-Argoviensis.

Teloschistes parietinus (L.) Norman var lobulatus Müller-Argoviensis.

*Xanthoria polycarpa (Hoffmann) Rieber*SHUSH69; LINDB97. Colorado reports are based on *X. montana*. The species is suboceanic distribution in eastern and western U.S..

Lobaria polycarpa Hoffmann. LINDB97.

Teloschistes polycarpus (Ehrhart) Tuckerman.

Xanthoria ramulosa (Tuckerman) Herre. LINDBL97.

Xanthoria soreidiata (Vainio) Poelt

POELT54. I believe this is a shade-induced soreidiate form ov caving overhangs..

Caloplaca soreidiata (Vainio) DuRietz.

Gasparrinia soreidiata (Vainio) Dombrowski. ANDER76.

Xanthoria ulophyllodes Räsänen

LIND97. Not yet reported from Colorado, but to be expected; occurring in adjacent New Mexico and in the Black Hills of South Dakota (Colfax and San Miguel Counties)..

Xylographa (E. Fries) E. Fries, 1836**Xylographa abietina (Persoon) Zahlbruckner**

WEBER90.

Xylographa vitiligo (Acharius) Laundon

ANDER67.