

FREMONT'S LEATHER FLOWER

Clematis fremontii S. Wats.

Plant Symbol = CLFR

Contributed by: USDA NRCS Plant Materials Center,
Manhattan, Kansas



Mitchell County, Kansas (Haddock, 2007)
Mike Haddock, Kansas State University

Alternate Names

Fremont's clematis, Fremont's crowsfoot, Fremont's leather-plant, leatherplant, rattleweed

Uses

Ornamental: Fremont's leather flower has potential as a garden plant with its unique, showy, bell or urn-shaped flowers, ornamental fruit clusters, interesting texture and long period of attractiveness (Locklear 1991). It may be planted in large groups and is an attractive addition to rock gardens, border fronts, native plant gardens, prairies or meadows (Easyliving Wildflowers, 2008). Fremont's leather flower combines well with other native herbaceous spring bloomers, such as pasque flower and prairie smoke (Hendrickson and Browning 2008).

Status

Described as one of our rarest plants, Fremont's leather flower is protected in Missouri (FGCM, 2009). Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description

General: An herbaceous perennial, non-climbing, shrubby-type clematis, with broad ovate leathery green leaves to 5 inches long with parallel veins, appearing alternate, simple, and sessile, on erect stems 12 to 24 inches tall, arising from a stout caudex bearing many fibrous roots. Thick, non-spreading, often recurved sepals form an inch-long solitary bell-shaped purple to white flower nodding on a slender stalk atop the foliage. Blooming occurs late April into June, giving rise to large clusters of achenes each tipped with a long, curled style. The achenes and foliage turn brown in the fall and persist into the winter (Locklear, 1991; Missouri Botanical Garden, 2008).

Distribution: Fremont's leather flower has been found in 15 counties in north central Kansas and 3 adjoining counties in south central Nebraska according to herbarium records (McGregor and Barkley, 1977) and 7 counties in Missouri, 6 clustered in east central Missouri, and 1 located in Ozark County (Steyermark, 1963). The Missouri populations have been described as the distinct *C. f.* var. *riehlii*, though there is presently little support for this (Barkley, 1986). A recent discovery from Tennessee near Chattanooga in 2006 and a nearby Georgia population has been reported (TNPS, 2007). For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Habitat: Fremont's leather flower is native to limestone prairies and dolomite glades.

Adaptation

Fremont's leather flower thrives in full sun on a lean alkaline soil (Barr 1983). Although this species naturally occurs on rocky prairie sites such as Fort Hays Limestone and Smoky Hill Chalk (Bare 1979), and on limestone glades in the eastern Ozark region (Easyliving Wildflowers, 2008), it has been found to be a hardy, very easy to grow, long lived garden plant given full sun to part shade and rich, well drained soil (Hendrickson and Browning 2008). This species is adapted to the 20 to 24 inch precipitation zone (Locklear, 1991).

Establishment

Seed may be sown following a three month cold-moist stratification period. The seeds are slow to germinate and may lay in the soil medium a month before germinating. Planting on well-drained soils is required for successful establishment (Locklear, 1991).

Pests and Potential Problems

None known

Environmental Concerns

None

Seeds and Plant Production

There are approximately 35,290 seeds per pound (USDA NRCS, 2009). Plants grown from seed take two to three years to reach maturity and begin flowering (Locklear, 1991).

Cultivars, Improved, and Selected Materials (and area of origin) none known

Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government." The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

References

- Bare, J. E. 1979. Wildflowers and Weeds of Kansas. The Regents Press of Kansas. Lawrence. 509p.
- Barkley, T. ed. 1986. *Flora of the Great Plains*. 1986. Univ. Press of Kansas. Lawrence. 1392p.
- Barr, C. A. 1983. *Jewels of the Plains*. Univ. of Minnesota Press. Minneapolis. 236p.
- Easyliving Wildflowers. 2008. Easyliving Native Perennial wildflowers. *Clematis fremontii* Fremont's Leather Flower plants & seed.
<http://www.easywildflowers.com/quality/cle/fre.htm> [online:cited 20 November 2008].
- FGCM. 2009. Federated Garden Clubs of Missouri.
<http://gardencentral.org/fgcmmissouri/part2activities/> [online:cited 31 March 2009].
- Haddock, M. J. 2007. Kansas Wildflowers & Grasses. **FREMONT'S CLEMATIS**
<http://www.kswildflower.org/details.php?flowerID=204> [online:cited 12 March 2009].
- Hendrickson, B. and S. Browning. 2008. *In Bush Type Clematis: A Garden Treasure*.
<http://www.dodge.unl.edu/newsitems/2008%20Hort%20News/08%20Bush%20Type%20Clematis> [online:cited 20 November 2008].
- Locklear, J. H. 1991. Plant Profiles. *Clematis fremontii*. The Public Garden. J. Am. Assoc. Bot. Gard. Arbor. Vol. 6 (3) pg 39-40.
- McGregor R. L., Coord. and T. M. Barkley, Ed. 1977. *Atlas of the Flora of the Great Plains*. The Iowa State Univ. Press, Ames.
- Missouri Botanical Garden. 2008. *Clematis fremontii*. Kemper Center for Home Gardening. Missouri Botanical Garden.
<http://www.mobot.org/GARDENINGHELP/PLANTFINDER/Plant.asp?Code=M160> [online:cited 20 November 2008].
- Steyermark, J. 1963. *Flora of Missouri*. Iowa State Univ. Press, Ames, Iowa. 1728p.
- TNPS. 2007. Native Plant of the Month. Fremont's Leatherflower. Tennessee Native Plant Society.
http://www.tnps.org/March_2007.html [online:cited 20 November 2008].
- USDA NRCS. 2009. Manhattan Plant Materials Center Annual Technical Report. Salina, Kansas.

Prepared By and Species Coordinator

John M. Row, USDA NRCS Plant Materials Center, Manhattan, Kansas

Citation

Row, J. 2009. Plant Guide for Fremont's leather flower (*Clematis fremontii* S. Watson). USDA-Natural Resources Conservation Service, Kansas Plant Materials Center, Manhattan, KS 66502

Published July, 2009

Edited: 090611 jsp

For more information about this and other plants, please contact your local NRCS field office or Conservation District at <http://www.nrcs.usda.gov/> and visit the PLANTS Web site at <http://plants.usda.gov/> or the Plant Materials Program Web site <http://plant-materials.nrcs.usda.gov>.

PLANTS is not responsible for the content or availability of other Web sites.