

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

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CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Astragalus preussii* var. *cutleri*

COMMON NAME: Copper Canyon milk-vetch, Cutler's milk-vetch, Cutler's milkvetch

SYNONYMS: *Astragalus cutleri*

FAMILY: Fabaceae

AUTHOR, PLACE OF PUBLICATION: *Astragalus preussii* var. *cutleri* Barneby, Great Basin Naturalist 46(2): 256-257. 1986. *Astragalus cutleri* (Barneby) S.L. Welsh, Great Basin Naturalist 58: 51. 1998.

TYPE LOCALITY: United States of America, Utah, San Juan County, Copper Canyon, 1 mile from mouth.

TYPE SPECIMEN: HT: NY-5665. H.C. Cutler 2283, 18 June 1938. IT: CAS, WIS.

TAXONOMIC UNIQUENESS: There are over 2000 species of *Astragalus* worldwide, and 350 in North America. It is the most abundant genus of flowering plants found in Arizona with about 105 species/varieties documented. The var. *cutleri* is 1 of 3 in *A. preussii*.

DESCRIPTION: The species *Astragalus preussii* is rather coarse and robust, and glabrous or nearly so below the inflorescence. Stems are 10 – 35 cm (4-14 in) tall, erect to spreading, forming clumps from a branched root crown. Leaves alternate, 4-18 cm (1.6-7 in) long, with 5 to 25 rather distant leaflets, usually narrowly elliptical. Racemes are 4- to 16-flowered; calyx 8-12 mm long; purple corolla 14-22 mm long. Glabrous, thin-walled, and inflated pods are 20-30 mm long, and 7-13 mm wide. Leaflets of the variety *cutleri* number 5-11, 7-12 mm wide. Flowers white when fresh, acquiring a bluish keel-tip when dried. Pods are thin-textured, often drying straw-colored. (Welsh et al. 1993).

AIDS TO IDENTIFICATION: Flowers of *Astragalus preussii* var. *cutleri* are white when fresh, acquiring a bluish keel-tip when dried. In southeastern Utah, the flowers of *A. p.* var. *preussii* are consistently vivid purple except for pallid wingtips. In var. *preussii*, the leaflets of the longer leaves are more numerous and smaller than those of var. *cutleri*. The leaves of the allopatric var. *laxiflorus* Gray may be similar to those of var. *cutleri* in size and number, but its pod is sessile, its stems taller, and its range of dispersal different. (Welsh, 1986).

ILLUSTRATIONS: Color photo of species (Taylor, 1998: p. 129).

Color photo of holotype (Cutler NY-5665, in
http://scisun.nybg.org:8890/searchdb/owa/wwwcatalog.detail_list?this_id=1951217)

TOTAL RANGE: Copper Canyon, San Juan County, Utah, primarily within Navajo Nation lands. Potentially occurs in Arizona.

RANGE WITHIN ARIZONA: Potentially occurs in northern Arizona.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Short-lived perennial forb/herb.

PHENOLOGY: Late March to May for the species.

BIOLOGY: The species accumulates selenium and is ill smelling.

HABITAT: Unknown.

ELEVATION: Approximately 1160 m (3,803 ft) in Utah.

EXPOSURE: Unknown

SUBSTRATE: The species grows in selenium-rich clays and alkaline soils of the Mohave and Painted Deserts.

PLANT COMMUNITY: Warm desert shrub community.

POPULATION HISTORY AND TRENDS: Unknown

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None (USDI, FWS 1996)
[C2 USDI, FWS 1993]
[C2 USDI, FWS 1990]

STATE STATUS: None

OTHER STATUS: Group 2 (NNDFW, NESL 2005)
[Group 3 (NNDFW, NESL 2001)]
Endangered (E), 1997 IUCN Red List of
Threatened Plants.

MANAGEMENT FACTORS:

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Surveys are needed of suitable habitat in Arizona to determine presence.

LAND MANAGEMENT/OWNERSHIP: BIA – Navajo Nation.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

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Welsh, S.L., N.D. Atwood, S. Goodrich, and L.C. Higgins, editors. 1993. A Utah Flora. Second Edition, revised. Print Services, Brigham Young University. Provo, Utah. P. 419.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

Revised: 2002-08-01 (SMS)
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