

ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDFAB0F370

Data Sensitivity: No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Astragalus endopterus* (Barneby) Barneby

**COMMON NAME:** Sandbar milk-vetch, Sandbar milkvetch

**SYNONYMS:** *Astragalus wootonii* (*wootoni*) Sheldon var. *endopterus* Barneby

**FAMILY:** Fabaceae

**AUTHOR, PLACE OF PUBLICATION:** *Astragalus endopterus* (Barneby) Barneby, Mem. New York Bot. Gard. 13: 879. 1964. *Astragalus wootonii* var. *endopterus* Barneby, Amer. Midl. Naturalist 41: 498. 1949.

**TYPE LOCALITY:** Sandy bed of the Little Colorado River, at Cameron, Coconino County, Arizona, alt. 3700 ft.

**TYPE SPECIMEN:** HT: CAS-337308. Ripley & Barneby 8491, 5 June 1947.

**TAXONOMIC UNIQUENESS:** *Astragalus* is a species-rich genus, with more than 2000 species in the genus currently known worldwide. *Astragalus endopterus* is 1 of 350 species in the genus *Astragalus* in North America.

**DESCRIPTION:** Herbaceous annual with 4 or 5 pairs of leaflets. Peduncles up to 2 cm long, very slender, borne on nearly the whole length of the stem. Pods membranaceous, mottled, the ventral suture introverted as a wing 2.5 to 3.5 mm wide. (Kearney and Peebles, 1951). For the species *A. wootoni*, which *A. endopterus* used to be a variety of, flowers are whitish, often tinged with pink, lavender or lilac (McDougall, 1973).

**AIDS TO IDENTIFICATION:** Differs from *A. wootoni* var. *typicus*, in that var. *typicus* has leaflet pairs of 6 to 9; peduncles up to 5 cm long, stout, borne in the median and upper axils; and pods that are chartaceous, seldom mottled, the ventral suture filiform or the wing less than 1 mm wide. *A. endopterus* is smaller in all its parts than *A. allochrous*, but otherwise very similar. (Kearney and Peebles, 1951).

**ILLUSTRATIONS:**

**TOTAL RANGE:** In the valley of the Little Colorado River at Cameron, and below Tanners Crossing, Coconino County, Arizona. NatureServe (2004) reports "Known only from the lower Little Colorado River Moenkopi Wash in Coconino County, Arizona."

**RANGE WITHIN ARIZONA:** See "Total Range."

**SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Annual forb/herb.

**PHENOLOGY:** Flowers from March to May.

**BIOLOGY:**

**HABITAT:** Gravelly washes and sandbars of summer-dry streams.

**ELEVATION:** 3,642 – 3,937 ft (1110–1200 m).

**EXPOSURE:**

**SUBSTRATE:** Gravelly washes and sandbars.

**PLANT COMMUNITY:** Unknown

**POPULATION HISTORY AND TRENDS:** Unknown

**SPECIES PROTECTION AND CONSERVATION**

<b>ENDANGERED SPECIES ACT STATUS:</b>	None
<b>STATE STATUS:</b>	None
<b>OTHER STATUS:</b>	Forest Service Sensitive (USDA, FS Region 3 1999)

**MANAGEMENT FACTORS:** Known to produce loco disease in horses, cattle and sheep (Kearney and Peebles, 1951). Animals do not like it, and usually avoid it except when hungry for green feed.

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:**

**LAND MANAGEMENT/OWNERSHIP:** BIA – Navajo Nation.

**SOURCES OF FURTHER INFORMATION****REFERENCES:**

- Integrated Taxonomic Information System (ITIS). Retrieved 9/27/2004 from ITIS, <http://www.itis.usda.gov>.
- Kearney, T.H., R.H. Peebles with collaborators. 1951. Arizona flora. Second edition with supplement by J.T. Howell, E. McClintock and collaborators. 1960. University of California Press. Berkeley, California. pp. 463.
- McDougall, W.B. 1973. Seed Plants of Northern Arizona. The Museum of Northern Arizona. Flagstaff, Arizona. P. 258.
- Missouri Botanical Garden, Nomenclatural Data Base. *Astragalus wootonii* var. *endopterus* Barneby, and *Astragalus endopterus* (Barneby) Barneby. [http://mobot.mobot.org/cgi-bin/search\\_vast](http://mobot.mobot.org/cgi-bin/search_vast). Accessed: 31 Jul 2002.
- NatureServe Explorer: An online encyclopedia of life [web application]. 2001. Version 1.6. Arlington, Virginia, USA: NatureServe. Available: <http://www.natureserve.org/explorer>. (Accessed: July 31, 2002).
- NatureServe. 2004. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.0. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: July 21, 2004).
- Parker, K.F. 1972. An illustrated guide to Arizona Weeds. The University of Arizona Press. Tucson, Arizona. Pp. 164-165.
- Rickett, H.W. 1970. Wild Flowers of the United States, the southwestern states. Volume Four, Parts Two of Three Parts. W.C. Steere, General Editor. The New York Botanical Garden. McGraw-Hill Book Company, New York. Pp. 396, 402.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.
- USDA, NRCS. 2004. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

Rupert Barneby - New York Botanical Garden, Bronx, New York.

**ADDITIONAL INFORMATION:**

This species was originally identified as a variety of *A. wootoni*, which is known to cause loco disease in sheep, horses, and cattle.

**Revised:** 2002-07-30 (MEP)  
2002-08-02 (SMS)  
2004-08-12 (SMS)

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Arizona Game and Fish Department. 20XX (= **year of last revision as indicated at end of abstract**). X...X (= **taxon of animal or plant**). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.