

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDFAB0F8Z1

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Astragalus toanus* var. *scidulus*

COMMON NAME: Toano milkvetch; Diamond Butte milkvetch

SYNONYMS:

FAMILY: Fabaceae (Pea Family)

AUTHOR, PLACE OF PUBLICATION: *Astragalus toanus* Jones var. *scidulus* Welsh & Atwood, Rhodora 95(883/884): 403, f. 11. 1993. *A. toanus* M.E. Jones, Zoë 3(4): 296. 1893.

TYPE LOCALITY: East flank Diamond Butte, Mohave Strip, Mohave County, Arizona, USA.

TYPE SPECIMEN: HT: BRY. N.D. Atwood and S.L. Welsh 13526, 16 April 1989. IT: GH, MO, NY, POM, US.

TAXONOMIC UNIQUENESS: Over 2000 species of *Astragalus* worldwide, 380 in North America (Hickman 1993). This is the largest genus of flowering plant in Arizona with over 100 species/subspecies being recorded. Variety *scidulus* is 1 of 2 varieties of *Astragalus toanus* and the only variety in Arizona.

DESCRIPTION: Multi stemmed, herbaceous perennial, 20-40 cm (8-16 in) tall, with rush-like form and much reduced foliage. The leaves are 3-8 cm (1.2-3 in) long, the terminal leaflet is confluent with the rachis, the lower stipules connate-sheathing; pubescence basifixed. Flowers are small, less than 15 mm long, pale lavender to dull white in color, ascending at anthesis. Seedpods are erect, sessile, and broad, 6-9 mm wide. The stiff leathery pods may stay on the plant through the summer.

AIDS TO IDENTIFICATION: Distinguished from other rush-like *Astragalus* in Arizona by its connate-sheathing lower stipules, and from *A. convalvarius* by its plumper pods and selenium-scented herbage.

“The flowers average smaller than for the species as a whole, are pale through-out, a greenish yellow or dull whitish, but with pure white wing-tips as in the species. The pods are broader than for the bulk of *A. toanus* specimens examined, being approached in width by only a few specimens.” (Welsh 1993).

ILLUSTRATIONS:

Line drawing of species (Cronquist et al., 1989: p. 93)

Line Drawing (Welsh 1993)

Color photo of species isotype (M.E. Jones, US 47148 in

<http://ravenel.si.edu/botany/types/fullRecords.cfm?myFamily=>)

Line Drawing (in Falk, Jenkins et al., 2001)

Color photos of plant and habitat (John Anderson/BLM, in Falk, Jenkins et al., 2001)

TOTAL RANGE: Known only from bases of Diamond Butte and Twin Buttes, upper Hurricane Valley, Mohave County, Arizona.

RANGE WITHIN ARIZONA: See “Total Range.”

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Multi-stemmed herbaceous perennial.

PHENOLOGY: Flowers and fruits from May to June.

BIOLOGY:

HABITAT: Found around the base of buttes with mixed desertscrub and scattered juniper and pinyon.

ELEVATION: 4,900 - 5,400 ft (1495-1647 m). Falk, Jenkins et al. (2001) report elevation range as 4,900-5,000 ft (1490-1525m).

EXPOSURE:

SUBSTRATE: Seleniferous, red Moenkopi soils.

PLANT COMMUNITY: Mixed juniper-eriogonum-hilaria community.

POPULATION TRENDS: Unknown

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None

STATE STATUS: None

OTHER STATUS: Bureau of Land Management Sensitive
(USDI, BLM 2000, 2005, 2008, 2010)

MANAGEMENT FACTORS:

PROTECTIVE MEASURES TAKEN:**SUGGESTED PROJECTS:**

LAND MANAGEMENT/OWNERSHIP: BLM - Arizona Strip Field Office; State Land Department.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

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Vol. 95, No. 883/884, pp. 392-421.
Welsh, S.L., N.D. Atwood, S. Goodrich, and L.C. Higgins, Eds. 1993. *A Utah Flora*. Second
Edition, revised. Print Services, Brigham Young University. Provo, Utah. P. 424.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

John L. Anderson - Arizona BLM State Office, Phoenix, Arizona.

ADDITIONAL INFORMATION:

"This phase of *A. toanus* is disjunct from the main distribution of the species by more than 150 km, and while it differs only in degree from the species, it is most certainly isolated, reducing the possibility of genetic exchange to essentially zero." (Welsh 1993).

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