

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

Plant Abstract

Element Code: PDASC050M0

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Cynanchum utahense*
COMMON NAME: Swallowwort, Utah Swallowwort
SYNONYMS: *Astephanus utahensis* , *Funastrum utahense*
FAMILY: Apocynaceae

AUTHOR, PLACE OF PUBLICATION: Woodson, Robert Everard. Annals of Missouri Botanical Garden 28(2) 1-210. 1941.

TYPE LOCALITY: Utah (southern): near St. George, drifting sandhills.

TYPE SPECIMEN: MO 078143. C.C. Parry #209 (Isotype for *Funastrum utahense*). 1874/5. Peabody Museum of Natural History, Yale University: YU 1840. C.C. Parry #209. (Isotype for *Astephanus utahensis*). 1874.

TAXONOMIC UNIQUENESS: There are 16 species of *Cynanchum* found in the United States and Canada, and four of these species occur in Arizona: *C. arizonicum*, *C. ligulatum*, *C. utahense* and *C. wigginsii*. *C. ligulatum* and *C. wigginsii* occur only in Arizona.

DESCRIPTION: **Plant:** herbaceous vine; Stems pilose at base, glabrous upwards or sparsely pubescent at the nodes; milky sap **Leaves:** linear, 1-6 cm long, ca. 0.2 cm broad, more or less revolute, glabrous above, sparsely pubescent to glabrate below, the margins sparsely ciliate; petioles absent or indistinct **Inflorescence:** umbelliform, ca. 1 cm across, the peduncles mostly 1-2 cm long **Flowers:** ca. 3-4 mm long; calyx lobes 1-2 mm long; corolla yellowish, cylindric-campanulate, the tube 2-3 mm long, pubescent inside, the lobes incurved and hooded, their tips more or less closing the corolla tube; crown absent; anther wings 0.5-0.6 mm long; corpusculum 0.3-0.4 mm long, the pollinia oblong-obovate, ca. 0.4 mm long; stigma head apically rounded **Fruit:** Follicles ca. 6-7 cm long (Sundell 1994).

AIDS TO IDENTIFICATION: *C. utahense* can be distinguished from the other three species occurring in Arizona by leaves that are oblong to linear (not cordate) to 5 cm long and with flowers 3-4 mm long. Peduncles are 10-20 mm long, the crown is absent, and seeds are 10-12 mm long (Sundell 1994).

ILLUSTRATIONS:

Photo, Herbarium Mounts: [http://swbiodiversity.org/seinet/taxa/index.php?taxon=Cynanchum utahense](http://swbiodiversity.org/seinet/taxa/index.php?taxon=Cynanchum%20utahense).

TOTAL RANGE: Utah from SW corner around St. George (type locality); Nevada, SE borderline with Arizona; California, from S Nevada to east of Big Bear Lake and N of Salton Sea to Arizona; and Arizona, along western boundary from Utah-Nevada corner in the NW, south to Quartzsite.

RANGE WITHIN ARIZONA: Along the western boundary of Arizona from the Utah-Nevada-Arizona border in the NW, and south to Quartzsite, north of Yuma. La Paz and Mohave Counties.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial herbaceous vine, rarely exceeding one meter in length.

PHENOLOGY: April through June (Sundell 1994), extended to September in California. Two Arizona collections noted flowers during the latter half of April, and fruits were noted in mid-May.

BIOLOGY:

HABITAT: Mohave Desert, sand dunes.

ELEVATION: Range-wide 500 – 3000 feet (150-900m), as reported in Sundell 1994. Arizona collections have been made from 800 – 5320 feet (244-1622m), extending the higher elevation limit.

EXPOSURE: Not specified, but probably open.

SUBSTRATE: Prefers a variety of sandy settings, including dunes, deep sand pockets and sandy flats. One collection was made from badlands and a gypsum-soil.

PLANT COMMUNITY: Desert scrub community, usually dominated by *Ambrosia dumosa* and *Larrea tridentata*. This short perennial twinning vine was noted at several collections growing on grasses; specifically noted were *Hilaria rigida* and *Bromus rubens*. Other species associated included: *Yucca brevifolia* and *Y. schidigera*, *Gutierrezia*, *Oryzopsis*, *Coleogyne*, *Androstephium brevifolium*, *Psilostrophe cooperi*, *Cylindropuntia* sp., *Plantago* sp., *Krameria erecta*, *Chaenactis fremontii*, *Antheropeas wallacei*, *Ferocactus cylindraceus*, *Psoralea fremontii*, *Ephedra* sp., and *Layia glandulosa*.

POPULATION HISTORY AND TRENDS: Unknown for Arizona. There are only 10 collections from the State, plus one additional 1884 record that only indicated “near Kingman.” None of these represent multi-year collections from the same site, so any trend cannot be inferred. Most of the collection sites that recorded any data on frequency indicated

scattered, uncommon or few plants. Only a single record noted the species was frequent. NatureServe considers the species to be imperiled in Arizona.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.
STATE STATUS: None.
OTHER STATUS: None.

MANAGEMENT FACTORS: None specified.

PROTECTIVE MEASURES TAKEN: None specified.

SUGGESTED PROJECTS: Verify if the species is still extant at the known collection sites.

LAND MANAGEMENT/OWNERSHIP: The majority of the collections in Arizona are from USDI BLM lands. Some collections were also made on State Land and private holdings.

SOURCES OF FURTHER INFORMATION

REFERENCES:

- Jepson e-Flora, accessed 9/26/2014, http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=81803.
JStor| Global Plants, accessed 9/22/2014,
<http://plants.jstor.org/search?plantName=%22Cynanchum+utahense%22&syn=1>.
Sundell, Eric. 1993. Asclepiadaceae: Milkweed Family. Jour. AZ-NV Acad. Sci. 27(2): 169-187.
Tropicos, accessed 9/22/2014, <http://www.tropicos.org/Name/2601074>.

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ADDITIONAL INFORMATION:

Revised: 2014-09-24 BDT

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