

ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDCAC0J0G0

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Echinomastus intertextus*  
**COMMON NAME:** White Fishhook Cactus  
**SYNONYMS:** *Neolloydia intertexta*, *Pediocactus intertextus*, *Sclerocactus intertextus*  
**FAMILY:** Cactaceae

**AUTHOR, PLACE OF PUBLICATION:** Britton, Nathaniel Lord and Joseph Nelson  
Lord. The Cactaceae, descriptions and illustrations of plants of the cactus family 3: 149. 1922.

**TYPE LOCALITY:** United States.

**TYPE SPECIMEN:** GH 61996 (Isolectotype). Collector name, date, locality not on sheet.

**TAXONOMIC UNIQUENESS:** Although there are differing opinions on the classification of *Echinomastus* and *Sclerocactus*, the USFWS and Arizona Natural Heritage Program use the genus *Echinomastus*. According to Kearney and Peebles (1960) there are three species of *Echinomastus* in Arizona: *johnsonni*, *intertextus* and *erectocentrus*. *Echinomastus* is one of 10 genera of the Cactaceae family in Arizona.

**DESCRIPTION:** Stems 5-17(-20) × 3-10 cm; ribs ca. 13; areoles (5-)9-11 mm apart along ribs; areolar glands absent. Spines 20-29 per areole, dull tan to pale gray, pinkish, or reddish brown (rarely dull white or straw colored), usually tipped reddish brown; radial spines 13-25 per areole; abaxial (shortest) radial spine 5-13 × 0.2-0.4 mm; adaxial and lateral (longest) radial spines 9-20 mm; central spines (3-)4 per areole, abaxial central spine porrect, straight or nearly so, (0-)0.5-14(-20) mm; others 10-18(-20) × 0.2-0.5 mm. Flowers 2.5-3(-3.8) × 2.5-3(-3.8) cm; inner tepals silvery white to pale lavender pink (rarely white with pale pink midstripes), 1.3-2.5 cm × (1-)3-5.5 mm; stigma lobes bright red or pink (rarely white). Fruits immediately dehiscent through wide basal pore (= circumscissile abscission scar), ± spheric, 6-15 × (6-)8-15 mm. 2n = 22. (eFlores 2015).

**AIDS TO IDENTIFICATION:** The following criteria from Kearney and Peebles (1960) can be used to identify the genus *Echinomastus* from the other Cactaceae genera:

Areoles not furnished with glochids; spines not barbed or scabrous,  
Flowers borne at apex of the tubercles, contiguous with or actually on the spiniferous areole,  
Flowers diurnal; stems not greatly elongate; plants cespitose or the stems unbranched,  
Hypanthium devoid of spines, commonly scaly, flowers terminal,

Fruit thin-walled, dehiscent by vertical fissure or rarely basal orifice, persisting only a few weeks; spines not annulate. Plants small, rarely 50cm high,  
 Stems ribbed,  
 None of the spines hooked or flattened.....*Echinomastus*

*E. intertextus* can be distinguished from the other two species based on the following characteristics:

Central spines 1-4, straight, flowers pink,  
 Central spines about 4, one very short and porrect, the upper ones appressed and otherwise like the radials.....*E. intertextus*

### ILLUSTRATIONS:

Photos, Herbarium Mounts:

[http://swbiodiversity.org/seinet/taxa/index.php?taxon=Echinomastus intertextus](http://swbiodiversity.org/seinet/taxa/index.php?taxon=Echinomastus+intertextus).

Photos: <http://eol.org/pages/485041/media>.

**TOTAL RANGE:** SE Arizona, SW New Mexico, western-most extension of Texas, N Mexico (very near to US border), both Sonora and Chihuahua.

**RANGE WITHIN ARIZONA:** Eastern Santa Cruz County from near the Mexico border to Elgin SW of the Mustang Mountains, eastern edge of the Huachuca Mountains and northwestern end of the Chiricahua Mountains north to the Dos Cabezas Mountains in Cochise County.

### SPECIES BIOLOGY AND POPULATION TRENDS

**GROWTH FORM:** Perennial succulent.

**PHENOLOGY:** Flowers have been noted in March and April collections in Arizona.

**BIOLOGY:**

**HABITAT:** Grasslands and oak-juniper grasslands.

**ELEVATION:** 2950 – 3930 feet (900-1200m) per EOL 2015. In Arizona, collections have been made from 4200 – 5700 feet (1280-1738m), effectively extending the published range.

**EXPOSURE:** Not specified.

**SUBSTRATE:** Limestone hills, rocky outcrops have been reported.

**PLANT COMMUNITY:** Grasslands and xerophyllous scrub, Chihuahuan desert scrub. Associated species: *Acacia neovernicosa*, *A. greggii*, *A. constricta*, *Flourensia cernua*, *Larrea tridentata*, *Prosopis velutina*, *Parthenium incanum*, *Aristolochia watsonii*, *Talinum paniculatum*, *T. auruntiacum*, *Apodanthera undulata*, *Nulenbergia porter*, *Yucca schottii*, *Agave palmeri*, *Platyopuntia*, *Manzanita*, *Dasyilirion*, *Coryphantha vivipara* var. *bribeeana*, *Echinocereus rigidissimus*. *Eriogonum wrightii*. *Baccharis pteronioides*

**POPULATION HISTORY AND TRENDS:** Overall, *E. intertextus* has a very large range, is abundant and there are no major threats. It is listed as “least Concern” on the IUCN Red List (EOL 2015). Although *E. intertextus* has been collected in Arizona since the 1940s, there are no records that define populations and population trends. Along the San Pedro Riparian NCA the species was reported as rare, but was common on an eastern bajada of the Fort Huachuca Mountains. The collections in south-eastern Arizona represent the northern most extension of this species.

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None.  
**STATE STATUS:** Salvage Restricted (ARS, ANPL 1999)  
**OTHER STATUS:** This species is legally protected in Mexico by the national list of species at risk of extinction, NOM-059-SEMARNAT-2010, where it is listed under category “threatened” (A) under the name *Echinomastus intertextus* (SEMARNAT 2010).

**MANAGEMENT FACTORS:** None specified.

**PROTECTIVE MEASURES TAKEN:** *E. intertextus* is “salvage restricted” per Arizona Native Plant Law and requires a permit for collecting. It is also listed as “threatened” in Mexico. Additional protection is afforded to some populations that occur with national monuments and natural resource conservation areas.

**SUGGESTED PROJECTS:** None specified.

**LAND MANAGEMENT/OWNERSHIP:** BLM-San Pedro River NCA, USNPS- Coronado and Chiricahua National Monuments, Arizona State Land – San Rafael Ranch NA, USFWS Las Cienegas NA, DOD Army – Fort Huachuca, USFS – Coronado NF, and private land holdings.

## **SOURCES OF FURTHER INFORMATION**

### **REFERENCES:**

Britton, N.L. and J.N. Rose. 1963. The Cactaceae: Descriptions and Illustrations of the Cactus Family. Dover Publications, New York. Volume 3: 148.

Encyclopedia of Life (EOL), accessed 3/30/2015, <http://eol.org/pages/485041/details>.

Flora of North America, eFlores, accessed 03-26-2015,

[http://www.efloras.org/florataxon.aspx?flora\\_id=1&taxon\\_id=242415280](http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242415280).

Kearney, Thomas H. and Robert H. Peebles. 1960. Arizona Flora (with supplement). University of California Press, Berkeley. P. 574.

JStor| Global Plants, accessed 3/26/2015,

<http://plants.jstor.org/stable/10.5555/al.ap.specimen.gh00061996>.

Tropicos, accessed 3/26/2015, <http://www.tropicos.org/Name/5105537>.

### **MAJOR KNOWLEDGEABLE INDIVIDUALS:**

**ADDITIONAL INFORMATION:** The mature part of the stem of *Echinomastus intertextus* is sometimes positioned above ground level on a stalk-like proximal part of the stem, which often remains narrowly cylindrical while the distal part broadens to the normal diameter of the adult stem. This contrasts with the other species of *Echinomastus*, which lack a stalk-like stem portion between the roots and mature part of the stem. Many populations of *E. intertextus* are intermediate between the two varieties, i.e., they contain a wide range of central spine lengths. Consequently, sampling error (usually only one specimen from each population) created the illusion of extensive sympatry between long-spined and short-spined varieties. (eFlores 2015.)

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