

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

**Plant Abstract**

**Element Code:** PMORC1C050

**Data Sensitivity:** YES

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Hexalectris warnockii*

**COMMON NAME:** Texas Purple Spike

**SYNONYMS:**

**FAMILY:** Orchidaceae

**AUTHOR, PLACE OF PUBLICATION:** Ames and Correll, Botanical Museum Leaflets  
11(1): 8. 1943.

**TYPE LOCALITY:** Blue Creek Canyon, Chisos Mountains, Brewster County, Texas.

**TYPE SPECIMEN:** Warnock, B. H. (#2597).

**TAXONOMIC UNIQUENESS:** There are 2 species of *Hexalectris* in Arizona. In all of North America, there are only 5 species in this genus.

**DESCRIPTION:** Perennial saprophyte from slender rhizome, with erect, leafless dark-reddish stem up to 30.0 cm (1.0 ft.) tall. Inflorescence of up to 7 **rich reddish purple (distinctive characteristic)**, no green, flowers. Sepals and petals deep purple or maroon, 1.5-2.0 cm (0.6-0.8 in.) long). Dorsal sepal 17.0 mm (0.68 in.) long and 3.0 mm (0.12 in.) wide. Petals oblanceolate to linear-spatulate; lip (lowest) white with 3 lobes, broadly oval, 14.0 mm (0.56 in.) long and wide, lateral lobes pale pink (Correll and Johnston 1970 state "veined with purple"). Capsules 1.5 cm (0.6 in.) long and 0.5 cm (0.2 in.) wide. Coleman (1999), reports "sepals and petals purple; lip, three lobed, lateral lobes curl upwards, mostly purple from heavy veining, central lobe white with five ridges down the center crested with yellow, apex with purple spot and wavy margins."

**AIDS TO IDENTIFICATION:** *Hexalectris warnockii* differs from *H. spicata* in having fewer flowers per spike (less than 8) and with the lip crests scalloped and more or less divided. *Corallorhiza wisteriana* is about the same height, but flowers are much smaller, lip is entire and without ridges; and blooms earlier in late spring and early summer (Coleman 1999).

**ILLUSTRATIONS:**

B&W photos of plant in habitat (Luer, 1975: figs.1-3, p.274).

B&W photos of flower (Luer, 1975: figs.4-5, p.274).

Color photos from Texas (<http://66.39.69.144/r0100425.jpg>)

**TOTAL RANGE:** Western Texas (Chisos and Davis mountains; Fern Canyon near Alpine; and 75 miles west of Austin), New Mexico, southeastern Arizona, and Baja California, Mexico.

**RANGE WITHIN ARIZONA:** Cochise County: Chiricahua Mountains, Rhyolite Canyon, Chiricahua National Monument (for a long time, this was sole site); Mule Mountains; and two sites in the Huachuca Mountains (Oversight and McClure Canyons).

## **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Herbaceous Perennial

**PHENOLOGY:** Spikes emerge in late July to early August; flowers open in early to mid-August. Individual plants usually do not bloom in successive years. (Coleman 1999).

**BIOLOGY:** Purely parasitic, host plant unknown. Can remain underground without emergence for a long time making plant difficult to monitor.

**HABITAT:** In humus beneath rocks and fallen oaks along streambeds.

**ELEVATION:** 5,000 - 7,000 feet (1525 - 2135 m).

**EXPOSURE:** Shady canyon bottoms up to slope in oak-mixed conifer leaf litter.

**SUBSTRATE:** Rich humus soil. Quartzite in Oversight Canyon, McClure Canyon probably quartzite also. (Warren 1994).

**PLANT COMMUNITY:** Mixed oak woodland. Forest cover is mostly silverleaf oak with some pines, madrones, and manzanita. (Coleman 1999).

**POPULATION TRENDS:** Unknown. The plants that were observed in 1992 on the Coronado National Forest, have not been seen during subsequent searches from 1995 through 1998 (Coleman 1999).

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None (USDI, FWS 1996)

[Category 2 (USDI, FWS 1993)]

**STATE STATUS:**

Highly Safeguarded (ARS, ANPL accessed 2011)

[Highly Safeguarded (ARS, ANPL 1993)]

**OTHER STATUS:**

Forest Service Sensitive (USDA, FS Region 3 2007)  
 [Forest Service Sensitive (USDA, FS Region 3 1999)]  
 Bureau of Land Management Sensitive (USDI, BLM AZ 2005, 2008, 2010)

**MANAGEMENT FACTORS:** Protect from collection. Protect from maintenance activities at Chiricahua National Monument (one site next to management headquarters). Probably not of concern to BLM. This plant found at higher elevations in leaf litter.

**PROTECTIVE MEASURES:**

**SUGGESTED PROJECTS:** Survey and monitor known populations to determine status. Get information about Texas populations.

**LAND MANAGEMENT/OWNERSHIP:** BLM - Tucson Field Office; DOD Fort Huachuca Military Reservation; NPS - Chiricahua National Monument; USFS - Coronado National Forest.

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

- Arizona Revised Statutes, Chapter 7. 1993. Arizona Native Plant Law. Appendix A:2.  
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- Kearney, T.H., R.H. Peebles with collaborators. 1960. Arizona flora. Second edition with supplement by J.T. Howell, E. McClintock and collaborators. University of California Press. Berkeley, California. p. 203.
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- Luer, C.A. 1975. The native orchids of the United States and Canada excluding Florida. New York Botanical Garden. Bronx, New York.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.
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Warren, P.L. 1994. Bureau of Land Management, Safford District, Rare Plant Workshop. November 14-16. Tucson, Arizona.

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**ADDITIONAL INFORMATION:**

<b>Revised:</b>	1991-10-30 (PLW)
	1991-11-13 (SR)
	1994-12-14 (DBI)
	1998-01-08 (SSS)
	1998-12-04(DJG)
	2001-12-21 (SMS)

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