

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

**Plant Abstract**

**Element Code:** PPADI090M0

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Cheilanthes pringlei*  
**COMMON NAME:** Pringle Lip Fern  
**SYNONYMS:** *Cheilanthes sonorensis* Goodding 1912  
**FAMILY:** Polypodiaceae

**AUTHOR, PLACE OF PUBLICATION:** Davenport. 1883. Bulletin of the Torrey Botanical Club 10:61.

**TYPE LOCALITY:** Southeastern Arizona, probably Tucson Mountains (coll. Pringle 1883).

**TYPE SPECIMEN:** C.G. Pringle. May 2, 1883.

**TAXONOMIC UNIQUENESS:** Lehr (1978) recognizes 14 species of *Cheilanthes* occurring in Arizona.

**DESCRIPTION:** Rhizomes slender, creeping with slender, lance to linear shaped, **red-brown scales**; fronds 5.0-15.0 cm (2.0-6.0 in.) tall, stipe (stalk of the frond) red-brown, slightly lustrous, with a few crinkled hairs and 2.0-3.0 mm ((0.08-0.12 in.) long scales, scattered to crowded. Blades triangular-ovate, divided into 5-9 pairs of pinnae (leaf branching), these with both surfaces bright green.

**AIDS TO IDENTIFICATION:** Leaves smooth surfaced; terminal leaf lobes bent and turned over. Often confused with *C. wrightii*, a hand lens is needed to differentiate species. Edges of leaf lobes of *C. wrightii* folded over on sides of lobes and there are no scales on pinnae. *C. pringlei* has scales on pinnae.

**ILLUSTRATIONS:** USFWS line drawing.  
Line drawing (Knobloch and Correll 1962:84).

**TOTAL RANGE:** Desert mountains of southern Arizona south to central Sonora and Chihuahua, Mexico.

**RANGE WITHIN ARIZONA:** Pima and Santa Cruz counties: Tucson, Santa Catalina, Waterman, Atascosa, and Baboquivari mountains. The Sawtooth Mountains is the most northern occurrence of this species.

**SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Perennial Fern

**PHENOLOGY:**

**BIOLOGY:** Becomes dormant in dry season; leaf segments curl and roll in tightly. Leaves open shortly after rains.

**HABITAT:** Bottom of rocky ledges and slopes; crevices and under shrubs.

**ELEVATION:** 2,275 - 5,000 ft. (694 - 1525 m) in Arizona.

**EXPOSURE:** Usually north exposure or in deep shaded canyons.

**SUBSTRATE:** Rhyolite and others.

**PLANT COMMUNITY:** Paloverde-saguaro desertscrub to desert grassland; also subtropical thornscrub in Sonora. Often found with *Notholaena sinuata*, *N. standleyi* and *Selaginella*.

**POPULATION TRENDS:**

### **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None (USDI, FWS 1996)  
[3C USDI, FWS 1993]  
[C2 USDI, FWS 1990]  
[C2 USDI, FWS 1985]  
[C2 USDI, FWS 1980]  
PTN-T (USDI, FWS 1975)

**STATE STATUS:** None

**OTHER STATUS:** Not Forest Service Sensitive (USDA, FS Region 3 1999)  
[Forest Service Sensitive USDA, FS Region 3 1990]

**MANAGEMENT FACTORS:** Occurs in rugged terrain. Any impacts to populations would likely require major construction activities (e.g. blasting). Possible trampling by people (hikers) at only a few sites.

**CONSERVATION MEASURES TAKEN:** Several populations are within established preserves (e.g. Saguaro National Monument; Tucson Mountain Park).

**SUGGESTED PROJECTS:**

**LAND MANAGEMENT/OWNERSHIP:** BIA - Tohono O'Odham Nation; NPS - Saguaro National Park; Pima County - Tucson Mountain County Park; City of Tucson; Private.

### **SOURCES OF FURTHER INFORMATION**

**LITERATURE CITATIONS:**

- Davenport. 1883. Bulletin of the Torrey Botanical Club 10:61.
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- Mickel, J.T. 1979. How to know the ferns and fern allies. W.C. Brown and Co., Dubuque, Iowa. p. 74-75.
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- Wiggins, I.L. 1939. Distributional notes on and a key to the species of *Cheilanthes* in the Sonoran Desert and certain adjacent regions. American Fern Journal 29(2):66.
- Yatskievych, G. and M. Widham. 1986. Notes on Arizona Pteridophyta. Journal of the Arizona-Nevada Academy of Science 21:19-21.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

- Phil Jenkins - Southwest Field Biologists, Tucson.
- J.T. Mickel - New York Botanical Garden, Bronx.
- Barb Phillips - USFS Zone Botanist, Coconino, Prescott and Kaibab national forests. Flagstaff, Arizona.
- Tim Reeves - University of Minnesota, Minneapolis.
- M. Widham - Northern Arizona University, Flagstaff.
- G. Yatskievych - Missouri Botanical Garden.

**ADDITIONAL INFORMATION:**

Yatskievych: the Kearney and Peebles (1960) citation of the Chiricahua Mountains, Cochise County, as part of its range is probably in error--there are no specimens. *Cheilanthes pringlei* Cav. and *Notholaena pringlei* Dav. are not the same fern. The latter is a calcareous substrate plant of the Chihuahuan Desert.

Yatskievych and Windon (1986): questions identification of non-Pima County and non-Santa Cruz County records.

*Cheilanthes pringlei* is the most common fern in the Tucson Mountains, Pima County, Arizona.

In Mexico, fairly common in several areas. Many collections from Sonora down to the Rio Mayo and to Alamos.

The 1991 USFWS Arizona Plant Recovery Team has recommended moving *Cheilanthes pringlei* to category 3C. It is widespread and common in Mexico, and in Arizona it is also fairly common within its range. Many populations are in established preserves and are not threatened. Recommended for removal from Forest Service Sensitive Species List.

**Revised:** 1990-10-12 (SR)  
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