

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

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CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE



ME: *Thelypteris puberula* (Baker) Morton var. *sonorensis* A. Reid Smith
COMMON NAME: Aravaipa wood fern, Sonoran maiden fern, Sonoran maidenfern
SYNONYMS: *Cyclosorus puberula*, *Dryopteris feei* C. Chr., *Lastrea augescens* (Link) J. Smith misapplied, *Thelypteris augescens* var. *puberula*
FAMILY: Thelypteridaceae

AUTHOR, PLACE OF PUBLICATION: A.R. Smith, University of California Publication in Botany. 59: 91-92. 1971.

TYPE LOCALITY: Aravaipa Canyon, Galiuro Mountains, Pinal County, Arizona.

TYPE SPECIMEN: HT: US-1915953. W.S. Phillips 2877 and H.G. Reynolds, 10 April 1946.
IT: MO, NY, UC, and US.

TAXONOMIC UNIQUENESS: Formerly in the family Polypodiaceae. Variety *sonorensis* is 1 of 2 varieties in the species *puberula*, and the only one in North America; variety *puberula* is found from Mexico to Costa Rica. The species *puberula* is 1 of 62 in the genus *Thelypteris*.

DESCRIPTION: Large perennial rhizomatous fern, with leaves finely dissected, generally 50-130 cm (20-51 in) long and 15-30 (51) cm (6-12 (20) in.) wide, and regularly spaced. Rhizomes are thick (3-8 mm in diameter), long-creeping, scaly prostrate or underground roots, which produce shoots. Petiole scales are lanceolate, 2-4 mm long, mostly dark reddish-brown, not persistent, and sparsely pilosulous along the margin. Fronds are light green, papery to leathery. The pinnae are pinnatifid, ascending or sometimes largest ones spreading, straight, lobes ascending, sparsely and evenly pilosulous throughout, especially on abaxial side. Sori are circular, within conspicuous, small, pilose, kidney-shaped indusia; indusia are tan to brownish. Stipes 20-30 cm (8-12 in.) long, glabrous, straw colored above with pale brown base.

AIDS TO IDENTIFICATION: Variety *sonorensis* can usually be recognized by the presence of hairs on the lamina above.

ILLUSTRATIONS: Line drawing (Mickel 1979: p. 205)
Line drawing of abaxial surface of pinna (Smith 1971: Fig. 125e)
Line drawing (Hickman 1993: p. 113)

Color photos of Isotype collections (Phillips 2877, in MO at http://mobot.mobot.org/cgi-bin/search_vast)

Color photo of Isotype collection (Phillips 2877, in NY at http://scisun.nybg.org:8890/searchdb/owa/wwwcatalogrenz.detail_list)

TOTAL RANGE: Arizona, southwestern California to western Mexico.

RANGE WITHIN ARIZONA: Coconino, Maricopa, Pima, Pinal and Yavapai counties.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Pteridophyte. Perennial fern.

PHENOLOGY: Emergent after summer rains, growing into winter.

BIOLOGY:

HABITAT: In moist soil in the shade of boulders in mesic canyons. On riverbanks, seepage areas, and meadow habitats.

ELEVATION: 2,220 - 4,500 feet (677 - 1373 m); 164-1800 feet (50-550 m) in California.

EXPOSURE: Various, but always in shade of boulders.

SUBSTRATE: Granite.

PLANT COMMUNITY: Primarily riparian.

POPULATION TRENDS: Unknown. Known to cultivate in moist garden soil or potting mix in partial sun (Lellinger 1985).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None

STATE STATUS: None

OTHER STATUS: Bureau of Land Management Sensitive
(USDI, BLM AZ 2000)

MANAGEMENT FACTORS: Easily disturbed. May be affected by grazing animals and collection.

CONSERVATION MEASURES TAKEN: BLM proposed areas of critical environmental concern in 1982.

SUGGESTED PROJECTS: Surveys and research are needed on population range and habitat requirements.

LAND MANAGEMENT/OWNERSHIP: BLM - Safford Field Office; NPS - Grand Canyon National Park; USFS - Coronado and Tonto National Forests; Arizona State Land Department; Private.

SOURCES OF FURTHER INFORMATION

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ADDITIONAL INFORMATION:

Thelypteris means female fern, from *thely* meaning female or maiden and *pteris* meaning fern, *puberula* means minutely pubescent with scarcely elongate hairs, and *sonorensis* means of or from Sonora (Brian, 2000).

Revised: 1992-12-09 (JSP)
 1994-12-27 (DBI)
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