

Thelypteris Schmidel MAIDEN FERN, MARSH FERN

Thelypteris puberula (Baker) C. V. Morton var. *sonorensis* A. R. Smith, SONORAN MAIDEN FERN. Perennial herb, evergreen, rhizomatous, fibrous-rooted, to 120 cm tall; shoots with ascending leaves spaced along shallow, creeping rhizome; young fiddlehead to 15 mm across; rhizomes \pm long-creeping, 4–8 mm diameter, scaly, the scales awl-shaped, 2–3 mm long, dark brownish with paler margins. **Leaves (fronds):** alternate, 1-odd-pinnately compound with 10–28 lobed leaflets (pinnae) per side and terminal portion abruptly tapering and pinnately lobed with 28 or more lobes, leaflets \pm opposite at base to alternate above, lobes of terminal portion mostly like lobes of lateral leaflets except the basal ones leafletlike or deeply serrate, long-petiolate; petiole (stipe) cylindric (drying grooved), (150–)200–680(–800) mm long, to 7 mm diameter, straw-colored, glabrous but sparsely scaly at base, the scales lanceolate, brownish, hairy; blade ovate in outline, 200–670(–850) \times 100–550 mm; rachis deeply grooved between 2 prominent veins on upper surface, tannish, pubescent with hairs 0.2–0.5 mm long; lateral leaflets sessile, oblong-linear to linear-lanceolate, 30–300 \times 7–25(–30) mm, narrowly attached at base of rachis to broadly attached approaching terminal pinnae, leaflet 13–60-lobed, the lobes mostly alternate, obliquely oblong, 3.5–16 \times 1.7–5.5 mm, sinuses to within 1.5–5 mm of axis (costule), \pm uniform in length below midpoint but the lowest pair of lobes much longer and often having 1 lobe pointed toward the frond tip (acroscopic) and the lobe pointed toward petiole (basisopic) shorter or sometimes longer, lobes decreasing in length and serrate to dentate upward, above midpoint ascending or slightly arched, entire or toothed on margins, rounded to acute with minute point at tip (mucronate), pinnately veined with basal veins of adjacent lobes reaching margin just above sinus or 1 vein never reaching sinus margin and other vein reaching margin just above sinus, or 1 vein reaching base of sinus and other vein slightly above sinus, upper surface of leaflet or lobes glabrous to sparsely hairy, lower surface pubescent along veins with irregularly crimped and straight hairs 0.2–0.3 mm long. **Sori:** on lower surface of lobes along veins between midrib and margin, round, commonly contiguous when mature; indusium tan to brownish and densely hairy, hairs straight to irregularly crimped, 0.2–0.25 mm long. **Sporangia:** 0.15–0.2 mm across, light brown to tan or dark brown with a lighter orange-brown ringlike dehiscence mechanism (annulus), glabrous, on stalk 0.1–0.2 mm long. **Spores:** 0.02–0.03 mm diameter, dark brown.

Native. Perennial herb in range only known along stream banks in canyon bottom of Encinal Canyon (SMM). *Thelypteris puberula* is curiously pubescent on the lower surface of the leaf, including on the indusium covering the sporangia.

B. A. Prigge & A. C. Gibson