

*Cheilanthes newberryi* (D. C. Eaton) Domin, NEWBERRY'S LIP FERN. Perennial herb, rhizomatous, fibrous-rooted, rosetted, in range 6–16 cm tall; shoots with spreading to ascending basal leaves; fiddleheads not obvious, with emerging leaf blade appearing hooklike, densely cobwebby-tomentose, the hairs long, soft, pale brown; rhizomes horizontal, branched and typically contorted, compact or short-creeping, 3–5 mm diameter, densely covered with scales, the scales strongly appressed, 1.5–2 mm long, persistent, of 2 forms, the common form uniformly brown or with tannish base and long-tapered with a hairlike tip, the other form tannish or golden brown, linear awl-shaped and narrower than the brown form, rhizome axis vertically elliptic in  $\times$ -section with grayish white, U-shaped vascular core (stele). **Leaves (fronds):** helically alternate, typically odd-2-pinnately compound (occasionally 3-pinnate at base) with 6–14 primary leaflets per side, opposite below and alternate above midblade, petiolate; petiole (stipe) cylindrical, never straight, brittle,  $\pm$  glossy, with crooked, pale brown hairs becoming glabrescent, occasionally with pale brown linear scales along lower axis as well as typical rhizome scales near the base; blade lanceolate in outline, in range  $< 100 \times 25$ –45 mm; rachis cylindrical,  $1/4$ – $1 \times$  petiole,  $< 0.5$  mm diameter, dark brown, tomentose but shedding hairs in patches; primary leaflets lanceolate to oblong, to 20 mm long below midpoint and decreasing upward, with tomentose, green veins; secondary leaflets subopposite to alternate, sessile, narrowly ovate to oblong, to 6 mm long, lobed, lateral lobes obovate or 3-lobed (basal), ultimate lobes fan-shaped, crenate on margins, lobes down-curved but not forming false indusia, upper surface dull green and cobwebby-tomentose with tomentose, green minor veins, lower surface densely tomentose. **Sori:** submarginal on lower surface, appearing discontinuous and concentrated opposite small, down-curved, crenate lobes of margin. **Sporangia:**  $< 0.3$  mm wide, the sides finely netlike, brownish, and translucent, the ringlike dehiscence mechanism (annulus) darker, each sporangium with 64 or 32 spores. Sporulation early March–mid-April.

Native. Perennial herb, a highly restricted fern of southern California, in range occurring occasionally in shady soil nooks of volcanic, west-facing outcrops on Conejo Mountain, and probably elsewhere, in the westernmost SMM. *Cheilanthes newberryi* has densely tomentose leaves, unlike *C. cooperae*, which instead has glandular hairs.

B. A. Prigge & A. C. Gibson