

PSILOTACEAE WHISK-FERN FAMILY

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Plants perennial, terrestrial, epipetric, or epiphytic. ROOTS lacking. STEMS green, simple or dichotomously branching. LEAVES absent or ligulate, less than 1.5 cm long, alternate to subopposite, veinless or with one vein. SYNANGIA, a structure composed of three fused homosporous sporangia, solitary and sessile. SPORES numerous and reniform. GAMETOPHYTES subterranean, elongate, and branched. —2 genera, 12 spp. Tropical and subtropical areas worldwide, though absent from dry areas.

Psilotum Swartz Whisk-fern

Plants perennial, epiphytic, or rarely terrestrial. RHIZOMES short and creeping in habit, lacking roots but with short hair-like rhizoids. STEMS green, unbranched basally and dichotomously branching distally; branches angular in cross-section. LEAVES absent or reduced and lacking veins, 1-2 mm long, alternate, and widely spaced. SYNANGIA sessile with three valvate lobes dehiscing loculicidally. —2 species and 1 natural hybrid; pantropical. (Name from Greek, *psilos*, naked, referring to the plant's leafless aerial shoots.)

Psilotum nudum (L.) P. Beauv. (nude, devoid of leaves or usual covering). Whisk-fern. —Plants terrestrial in AZ. STEMS dichotomously branched to 20 cm, 3-angled, 4 mm in diameter. LEAVES absent or scalelike, less than 1 mm long. SYNANGIA yellowish to greenish yellow, 2-3 mm wide. [*Lycopodium nudum* L.]. —Rocky slopes: Santa Cruz Co.; ca. 1100 m; Jan-Dec; AL, FL, GA, LA, MS, SC, TX; Mex., C. and S. Amer., W. Ind., and Old World Tropics.

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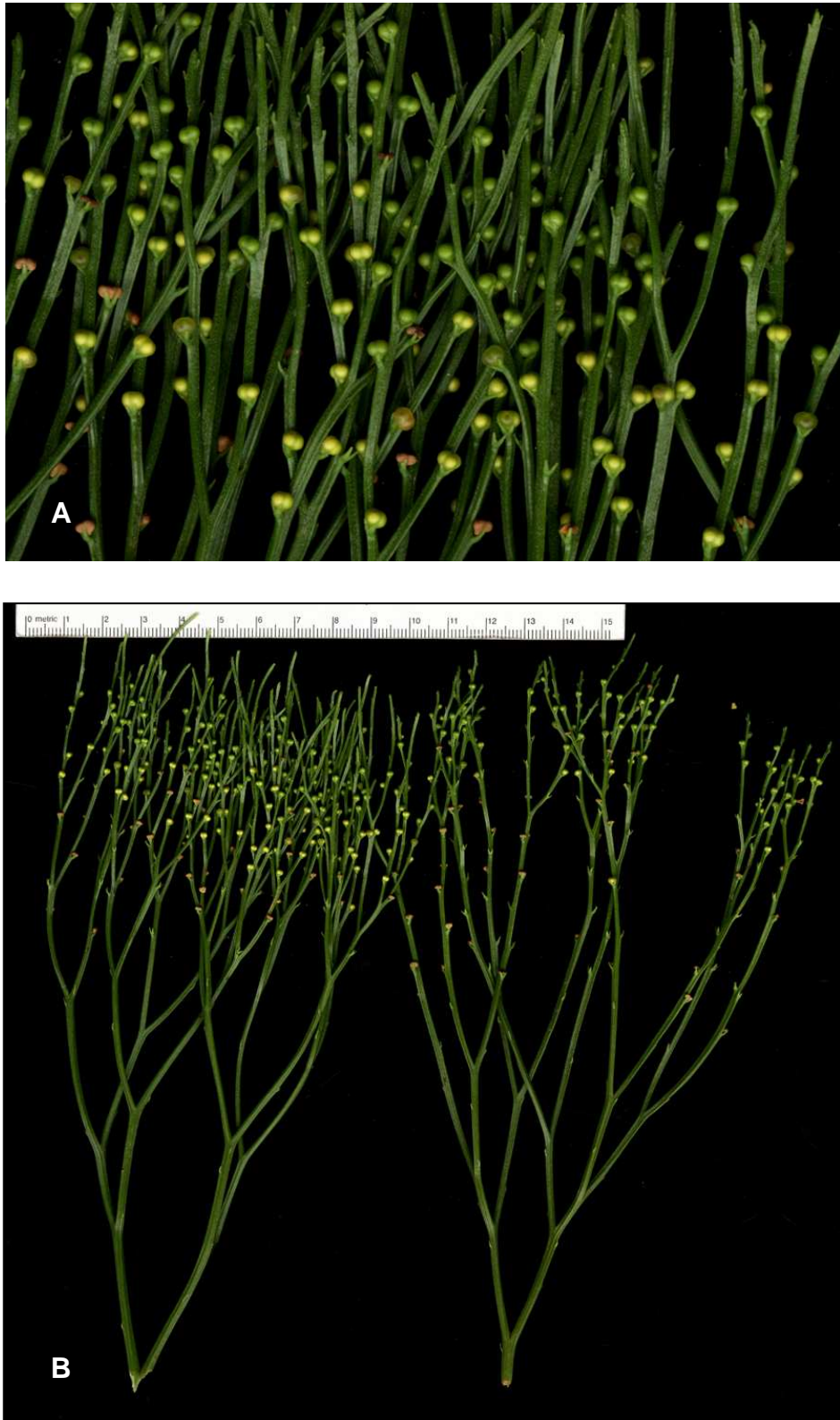
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Psilotaceae Figure 1. Distribution of: *Psilotum nudum*.



Psilotaceae Figure 2. *Psilotum nudum*: (A) detail of synangia morphology; (B) entire plant.