Distribution. U.S.A., southeastern Arizona and Trans-Pecos Texas, and northern Mexico, Chihuahua and Sonora; cliffs and rocky slopes on a variety of acidic substrates including quartzite and granite; 1700–2400 m.


Pellaea ternifolia (Cav.) Link subsp. villosa Windham, subsp. nov.—Type: Mexico.


Subsp. ternifoliae et subsp. arizonicae Windham similis, a quibus differt pinnis pilis dispersis secus venas principales abaxialiter, rhachidibus villosis apprime axillis pinnarum; insuper differt a subsp. ternifolia numero majore pinnarum indivisarum ad apicum, pinnulis plus quam 18 mm longis, stipitibus abaxialiter convexus vel leviter complanatis distaliter, sporis plus quam (x) = 46 μm longis metentibus, chromosomatum numero n = 58.

Plants epipetric (rarely terrestrial). Rhizomes compact, 5–10 mm in diameter; rhizome scales linear-subulate, 0.1–0.3 mm wide, strongly bicolorous, with a black central stripe and brown, erose-dentate margins. Leaves 10–50 × 3–7 cm, monomorphic; croziers densely villous. Petioles black or dark purple, rounded or slightly flattened adaxially in distal portion, without prominent articulation lines. Blades linear-lanceolate, deeply pinnate-pinnatifid proximally; rachis straight, often flattened or slightly grooved adaxially, villous throughout or with hairs concentrated in axils of pinnae. Pinnae ascending or rarely perpendicular to rachis, not decurrent on rachis, ternately divided in proximal portion of blade; costae usually absent. Ultimate segments linear-oblong, 18–40 mm, with a mucronate apex, sparsely villous abaxially along midribs; segment margins usually recurved on fertile segments, often covering more than 1/2 the abaxial surface. Sporangia long-stalked, not intermixed with glandular paraphyses, containing 64 spores. Spores averaging 46–53 μm long. Chromosome number: n = 58 (from paratypes indicated by *).

Distribution. Central and northern Mexico from Puebla north to Durango, Chihuahua and Coahuila, one disjunct locality in the Davis Mountains of west Texas, U.S.A.; rocky slopes and ledges on various (mostly calcareous) substrates; 1800–2700 m.


Pleopeltis

A recent paper by Mickel and Beitel (1987) detailing the extent of hybridization between Pleopeltis and Polypodiurn raises questions concerning the circumscription of these genera. The authors recognize five different hybrid taxa, which they assign to the intermediate genus Pleopodium. In each case, the Polypodium