A NEW SPECIES OF TREPADONIA
(ASTERACEAE: VERNONIEAE) FROM PERU

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ABSTRACT

Trepadonia oppositifolia (Asteraceae: Vernonieae) is described from Peru and a key is presented for the two species of the genus.

RESUMEN

Se describe Trepadonia oppositifolia (Asteraceae: Vernonieae) de Perú y se presenta una clave para las dos especies del género.

Trepadonia was established as a genus separate from the broad concept of Vernonia (Jones 1980) by Robinson (1994) based on the one Peruvian species, Vernonia mexiae (Robinson 1981). The genus is based on the totally scantent habit and the 90°-angle branching of the primary branches of the inflorescence. The species also has distinctive racemose branchlets in the inflorescence. A second species, Trepadonia oppositifolia is described herein, also from Peru, differing by having opposite leaves, cymiform inflorescence branchlets, and more florets in the heads. The new species occurs in southern Peru, and if distributions of cohabitants such as the bamboo Guadua are indicative, the new species may be found eventually in nearby western Brazil.

Trepadonia oppositifolia H. Rob. & H. Beltrán, sp. nov. (Fig. 1). TYPE: PERU: DRP, Cuzco: Provincia La Convención, Echarati, Casähriri-3 Well Site, 5 km S of Carnesia River, 11°52'57"S, 72°39'6"W, 700 m, upland forest mixed with "paca" Guadua zarracarpa, vine, petals pale purple, clearing, 2 Sep 1998; P. Nuñez, H. Beltran, W. Naurey R. de la Colina, J. Tenteyo et al. 23967 (HOLOTYPE USM; ISOTYPE USM, CUZ).

A. mexiae in foliis oppositis ramulis inflorescentii cymiformis et floribus 18–23 in capitulo differt. Scandent, to 8–9 m high; branches striate, glabrous. Leaves opposite; petioles mostly 1.0–1.5 cm long, base dilated and reddish; lamina ovate, 11–13 cm long, 5–7 cm wide, base rounded, margins entire to slightly undulate, apex acuminate, adaxial surface bright green, glabrous, abaxial surface paler green, puberulous with minute hairs, venation pinnate, ca. 9–10 pairs of widely spreading secondary veins. Inflorescence rather thyrsoid-paniculate, with primary and secondary branching mostly spreading at 90°-angles, branchlets cymose. Heads separate, mostly sessile, homogamous; involucre campanulate, 3–4 mm high, 4–5 mm wide; involucral bracts ca. 28, gradate in 3–4 series; outer bracts ovate, 2 mm long, 1 mm wide, puberulous outside, brown at apex, inner bracts...
Fig. 1. *Trepadonia oppositifolia* H. Rob. & H. Beltrán, Live plant.

Oblong-lanceolate, 4 mm long, 1 mm wide, glabrous. Florets 18–23; corollas purple, glabrous, ca. 5 mm long, tube 2 mm long, throat ca. 1 mm long, 1 mm wide, lobes erect, lanceolate, ca. 2 mm long. Cyposelas 2 mm long, 0.5 mm wide, 10-costate, with many short appressed setulae; pappus bristles white, ca. 38, 4 mm long, scabrid, squamae of outer series ca. 0.9–1.2 mm long, scabrid. Pollen ca. 37 mm in diameter in fluid, tricolporate, non-lobalate.


**KEY TO THE SPECIES OF TREPADONIA**

1a. Leaves alternate, blade oblong-ovate; branchlets of inflorescence racemiform; heads with 8–10 florets .......................................................... *T. mexiae*

1b. Leaves opposite, blades ovate; branchlets of inflorescence cymiform; heads with 18–23 florets .................................................................. *T. oppositifolia*

Leaves of the Vernonieae are usually alternate. Opposite and verticillate leaves are comparatively rare in the tribe, being most common in the Neotropical subtribe Piptocarphinae and the African genus *Bothriocline* Oliv. ex Benth. In the subtribe Vernoniiinae, to which *Trepadonia* belongs, opposite or verticillate leaves have previously been known only in one Jamaican species of *Lepidaploa* and one Colombian variety of another species of *Lepidaploa* (Robinson 1999). The character is almost always variable within the genera in which it occurs. Only in the Andean genus *Joseanthus* H. Rob., of the Piptocarphinae, with five species, are all the species opposite-leaved.
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