

TETRANEMA BICOLOR L.O. WMS. (SCROPHULARACEAE) TRANSFERRED TO
NAPEANTHUS (GESNERIACEAE)

Kerry Barringer
Department of Botany
Field Museum of Natural History
Chicago, IL 60605-2496

ABSTRACT: The combination Napeanthus bicolor is made based on Tetranema bicolor L.O. Wms.

Species of Napeanthus G. Gardn. (Gesneriaceae) and Tetranema Turcz. (Scrophulariaceae) can be difficult to distinguish. All are low, understory herbs with opposite leaves and short-lived flowers. Traditional characters which usually distinguish the two families, such as placentation, staminal fusion, and ovary position do not always distinguish the genera, but seed morphology does. Beaufort-Murphy (1983) has shown that the seeds of Napeanthus species are always elliptic and have spirally reticulate coats with linate-polygonate cells, elevated edges, and composite crests. She found this pattern to be widespread in the Gesneriaceae. No seeds of this type have been found in the Scrophulariaceae. Napeanthus bicolor has elliptic seeds with the spirally reticulate coat while all Tetranema species have subquadrate to subconical seeds with straight to irregular cells.

Williams (1972) noted the vegetative similarity between Tetranema bicolor L.O. Wms. and the other species of Tetranema, but pointed out that its inflorescence was shorter than other species, the calyx is larger and more foliaceous, and the flowers lack a staminode.

Napeanthus bicolor (L.O. Wms.) Barringer, comb. nov.

basionym: Tetranema bicolor L.O. Wms., Fieldiana, Bot. 34: 127. 1972. TYPE: NICARAGUA. near Rio San Juan at "el Relos" about midway between El Castillo and Delta de San Juan, 0-50 meters, 23 Mar 1961, Bunting & Licht 748 F!

Napeanthus bicolor can be distinguished from Napeanthus apodemus Donn. Sm., the only other Central American species (Skog 1978; Wiehler 1977), by its erect leafy stem and its lowland habitat. The exclusion of Napeanthus bicolor makes Tetranema a more natural genus whose center is the Guatemalan uplands.

Since the species was described, additional material has been collected on the Osa peninsula in Costa Rica. The disjunct

distribution suggests that the species will be found throughout much of the lowland, wet forest of the Caribbean plain in Costa Rica and in Panama.

Additional material studied: COSTA RICA. Prov. Puntarenas: Osa peninsula, 4 miles W of Rincon de Osa, 30 m, 4-7 June 1968, Burger & Stolze 5576 (F); Osa Peninsula, 8 km s. of Rincon, 28 Feb. 1965, A. Jimenez 3020 (F); Osa Peninsula, 4 miles W of Rincon de Osa, 100 ft, 8 August 1967, Raven 21639 (F).

LITERATURE CITED

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