

A New Species of *Mutisia* (Compositae–Mutisieae) from Ecuador

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ABSTRACT. *Mutisia magnifica* C. Ulloa & P. M. Jørgensen is described and illustrated. This species is distinguished by its large inflorescence heads, essentially glabrous phyllaries, ray florets with broadly elliptic, revolute ligulas, long inner lip segments, and long style. It is only known from the Cerro Uritusinga in the province of Loja, Ecuador.

RESUMEN. Se describe e ilustra *Mutisia magnifica* C. Ulloa & P. M. Jørgensen. Las características más notables son los grandes capítulos, las filarias prácticamente glabras, las lígulas elípticas, anchas y revolutas y, los segmentos del labio interior de las flores radiadas y el estilo largos. Esta especie sólo se conoce del Cerro Uritusinga en la provincia de Loja, Ecuador.

The South American genus *Mutisia* L. f. comprises some 60 species distributed in two well-defined areas: along the Andes from northern Colombia to southern Chile and Patagonia, and in southern Brazil and adjacent regions of Paraguay, Uruguay, and northern Argentina. The genus was revised by Cabrera (1965[1966]), and more recently Harling (1991) treated it for the Flora of Ecuador, Díaz-Piedrahita and Vélez-Nauer (1993) for Colombia, and Ferreyra (1995) for Peru. Harling recognized 11 species in Ecuador and expected one Colombian species to occur in the country.

During a recent collecting trip to the province of Loja, Ecuador, we collected a beautiful vine of the genus *Mutisia* that was climbing on the vegetation in the upper montane forest, southwest of the town of Loja. The specimens turned out to be a new species belonging to section *Mutisia* as treated by Cabrera (1965[1966]); it is here described, illustrated, and compared with other species.

Mutisia magnifica C. Ulloa & P. M. Jørgensen, sp. nov. TYPE: Ecuador. Loja: Cerro Uritusinga, Loja-La Palma Km 18.4, 4°5'24"S, 79°13'39"W, 3000 m, 28 Nov. 1994, P. M. Jørgensen, C. Ulloa, S. León, H. Vargas & P. Lozano 1010 (holotype, MO; isotypes, LOJA, QCA, QCNE). Figure 1.

A *Mutisia grandiflora* Humboldt & Bonpland phyllariis glabriusculis, laciniis labii interioris florum radii longis,

ligula ample elliptica, lobis florum disci glabriusculis difert.

Suffruticose vine climbing to ca. 10 m; branches striate, with a caducous ochraceous arachnoid indumentum. Leaves alternate, pinnate, 3–5-paired, rachis densely arachnoid to glabrescent, ending in a long trifid tendril; basal folioles stipuliform, sessile, ovate, mucronate at apex, cordate at base, 0.6–1.5 cm long, 0.4–1.3 cm wide; the others alternate or subopposite, petiolulate, petiolule to 2 mm long, densely arachnoid, folioles elliptic to ovate, acute-obtuse and mucronate at apex, rounded and commonly unequal at base, (1.5–)2.4–5.6 cm long, (0.8–)1.2–2.5 cm wide, finely reticulate, loosely arachnoid particularly on the main nerve to glabrescent above, paler and densely ochraceous arachnoid below. Inflorescence heads solitary, pendulous; peduncle striate, 5.8–13.5 cm long, glabrous or slightly arachnoid. Involucre narrowly cylindrical, 8.5–9.6 cm long, 2.2–3 cm wide, phyllaries 25–30, in 6–7 series, entire, glabrous but minutely puberulous at tip, coriaceous, green turning black with age; outer ones broadly ovate, obtuse, mucronate, 0.5–1.5 cm long, 0.4–1.8 cm wide; median ones broadly oblong to oblong-obovate, obtuse to subacute, mucronate, 4.1–5 cm long, 1.8–2.2 cm wide; inner ones narrowly oblong, acute, 8.4–9 cm long, 0.6–1.4 cm wide. Ray florets pistillate, 8–9, ligulate; tube yellow, 7.5–8.8 cm long; ligula broadly elliptic, tridentate, recurved to revolute, bright orange-red, 5–6.4 cm long, 1.8–3 cm wide; interior lip of 2 laciniate segments, yellow, 2.5–4.3 cm long; rudimentary stamens exerted 4–6 mm; style 11.5–16.7 cm long. Disc florets perfect, 35–40, yellow; corolla 9.6–12.5 cm long, glabrous, but with scattered hairs with age; tube conspicuously wrinkled below the middle, not conspicuously bilabiated at apex, lobes ca. 0.5 mm long; anthers exerted 3–4.5 cm; style 12.1–16.5 cm long. Achenes 1.1–1.9 cm long; pappus off-white, plumose, 2.2–2.4 cm long.

Distribution, habitat, and phenology. Ecuador, Loja Province, Cerro Uritusinga toward hacienda La Palma, in upper montane forest, 3000 m, flowering and fruiting in November. This species was found in a relatively undisturbed forest patch,

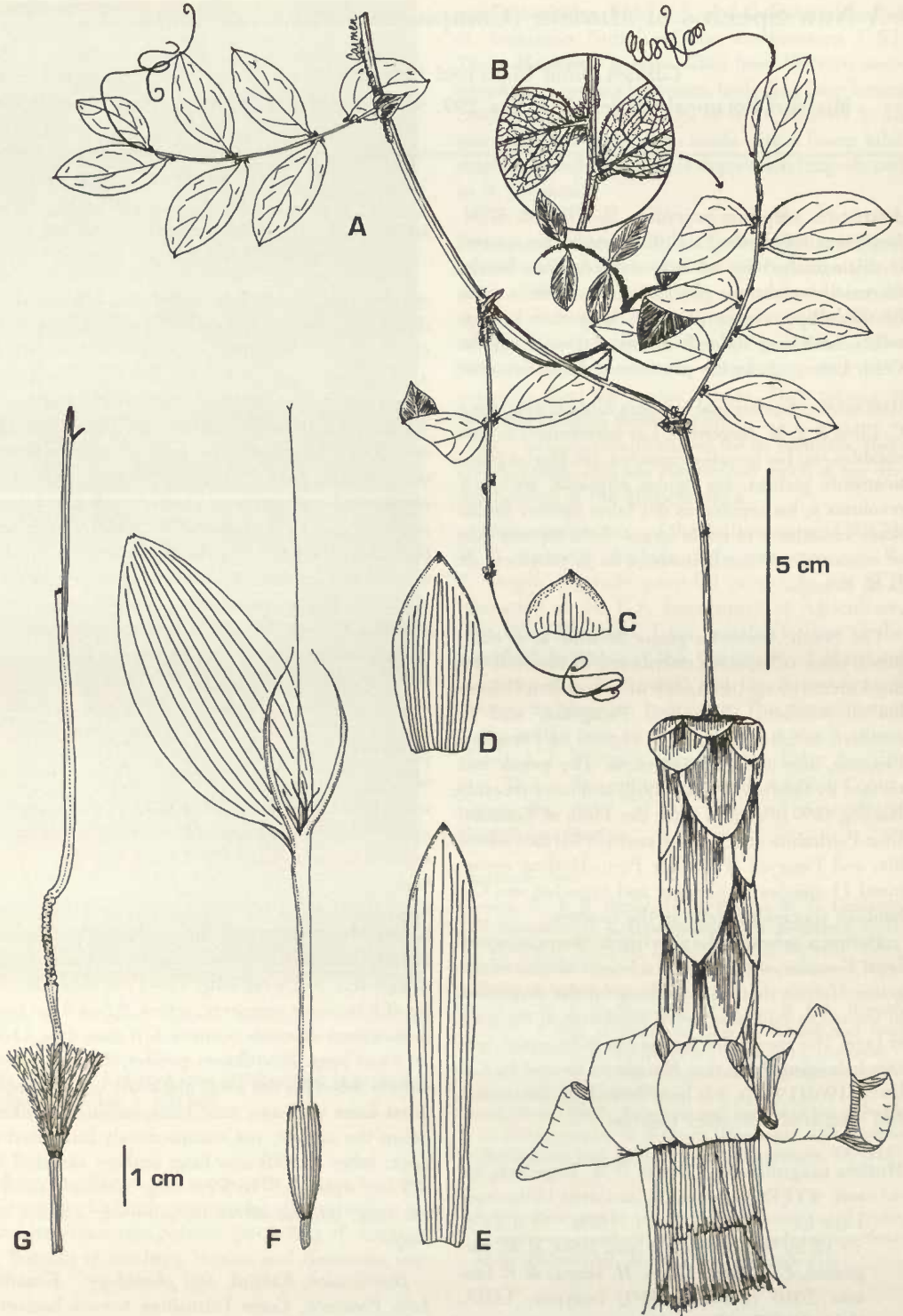


Figure 1. *Mutisia magnifica* C. Ulloa & P. M. Jørgensen, illustrated by C. Ulloa from herbarium specimens and photos of the type collection. —A. Branch with inflorescence. —B. Detail of leaflet venation above. —C, D, E. Outer, median, and inner phyllaries. —F. Ray floret. —G. Disc floret fully developed. The following parts share the same scale: B, C, D, E, F, and G.

which is severely threatened by the extraction of wood for charcoal production.

Mutisia magnifica is recognizable by its large inflorescence heads with narrowly cylindrical involucre to 9.6 cm long, coriaceous, mostly glabrous phyllaries, and ray florets with reflexed to revolute, broadly elliptic ligulas, interior lip divided into two long segments, and extremely long style exceeding the ligula. In Harling's (1991) key to the species of *Mutisia* of Ecuador, *M. magnifica* would key out close to *M. grandiflora* Humboldt & Bonpland. Harling treated *M. intermedia* Hieronymus as a synonym of *M. grandiflora*. However, Díaz-Piedrahita and Vélez-Nauer (1993) considered *M. grandiflora* an endemic of Colombia's Cordillera Central and *M. intermedia* a species distributed from southern Colombia to central Ecuador. Furthermore, they suggested that all the Ecuadorian material cited by Harling might belong to *M. intermedia*. With only a few specimens in hand we cannot conclude whether these two names should be maintained as separate species, nor which is the correct name for all the Ecuadorian collections seen by Harling. It seems, however, that these species, together with *M. microcephala* Sodiro ex Cabrera, an endemic from Ecuador, constitute a complex that needs further study. This species complex has the branches covered with loosely arachnoid hairs and the lower surface of the leaflets with a dense indumentum very similar to *M. magnifica*; it differs, however, by the smaller involucre to 7.4 cm long, outer phyllaries with scattered to dense arachnoid indumentum, inner lip of the ray florets absent, lobes of disc corollas pubescent to villous apically, and disc florets fewer in number (25 to 30).

The long and well-developed inner lip of the ray florets in *M. magnifica* is a feature only found in

M. lanata Ruiz & Pavón and *M. wurdackii* Cabrera within section *Mutisia*. These two species differ from *M. magnifica* by the broadly campanulate involucre, the tomentose recurved involucral bracts, and the pappus of the ray florets about as long as the tube.

This magnificent new species is only known from the type collection. The other species of the genus known from the province of Loja is *M. alata* Hieronymus of section *Guariruma*.

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