
Macrocarpaea angustifolia (Gentianaceae), a New Species from Peru

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ABSTRACT. *Macrocarpaea angustifolia*, known only from the Departamento de Pasco, Peru, differs from the sympatric *M. revoluta* in having glabrous, narrower, acuminate leaves with obscure secondary venation. It further differs in its verrucose (*Rusbyanthus*-type) pollen, which suggests a closer relationship to such species as *M. corymbosa* and *M. viscosa*.

Key words: Gentianaceae, *Macrocarpaea*, Peru.

Macrocarpaea angustifolia J. S. Pringle, sp. nov.

TYPE: Peru. Pasco: Prov. Oxapampa, headwaters of Río Tunqui, trail to Chuchurras-Palcazu, 75°28'W, 10°14'S, shrubby vegetation on ridge, 1900 m, 2 Jan. 1984, R. Foster, M. Chanco, J. Alban & D. N. Smith 7747 (holotype, MO; isotype, USM photocopy seen). Figure 1.

Frutex glabra. Folia subcoriacea, laminis elliptico-lanceolatis, 10–14 × 1.5–3 cm, marginibus incrassatis revolutisque, apicem versus peracuminatis, et petiolo angusto circa 1 cm longo. Calyx 6–10 mm, lobis semiorbicularibus tubo duplo brevioribus, margine scarioso. Corolla 35–45 mm, lobis ovato-oblongis, 7–10 mm longis. Exinium pollinis verrucosum.

Shrub to ca. 3 m, glabrous throughout. Stems nearly terete, striate. Leaves firm, blades dark green above, paler beneath, elliptic-lanceolate, 10–14 × 1.5–3 cm, only midrib conspicuous, secondary and lesser veins obscure; margins thickened, revolute; base tapering to a slender petiole up to ca. 1 cm long; apex strongly acuminate. Inflorescence a terminal, open, paniculate cyme of ca. 15–25 flowers. Flowers ± nodding, on pedicels 15–25 mm long. Calyx campanulate, 6–10 mm long, lobed ca. 1/3 of its length; lobes equal or nearly so, semi-circular, slightly overlapping, scarioso-margined. Corolla pale yellowish green, 35–45 mm long; tube expanding rather abruptly 2–4 mm above summit of calyx; lobes oblong-ovate, 7–10 mm long. Anthers seen after dehiscence, estimated ca. 5.0 mm long when straight. Exine of pollen verrucose. Mature fruit not seen.

Known only from the type collection.

Superficially, *M. angustifolia* somewhat resem-

bles the Venezuelan species formerly known as *M. salicifolia* Ewan. The latter, however, has pollen in tetrads, and is now placed in *Chelonanthus* or, by those more narrowly defining the genera in this complex, in *Rogersonanthus*, whereas *M. angustifolia* has separate pollen grains, like all other species of *Macrocarpaea* as the genus is now circumscribed. Also, in *M. angustifolia* as in *Macrocarpaea* species generally, the bracts in the inflorescence are gradually reduced, the proximal bracts being distinctly leaflike, whereas in those species transferred to *Chelonanthus* or *Rogersonanthus* all of the inflorescence bracts are greatly reduced and scalelike. Among species retained in *Macrocarpaea*, *M. angustifolia* exhibits some similarity to *M. revoluta* (Ruiz & Pavón) Gilg, which is native to the same part of Peru. The leaves of *M. angustifolia* differ in being glabrous, much narrower, and strongly acuminate, with obscure secondary venation and with more slender petioles, and, at least as seen through comparison of the respective type specimens, its inflorescence is fewer-flowered and more open. It also resembles *M. subcaudata* Ewan, of Costa Rica and Panama, especially in its narrow, acuminate leaves but differs in its terrestrial rather than epiphytic habit, its much longer pedicels, and its glabrous calyx.

Another somewhat similar species is *M. bangiana* Gilg of Bolivia, from which *M. angustifolia* differs in its narrower, glabrous, strongly acuminate leaves of thicker texture, without the conspicuous secondary venation of the Bolivian species, and in its smaller flowers. The pollen of *M. angustifolia* is conspicuously verrucose, thus being of the *M. corymbosa*-type or *Rusbyanthus*-type of Nilsson (1968, 1972), whereas that of *M. revoluta*, *M. subcaudata*, and *M. bangiana* is of Nilsson's *M. glabra*-type (Nilsson, 1968, 1972; Weaver, 1972). Palynology suggests that the closest relationships of *M. angustifolia* are with *M. cinchonifolia* (Gilg) Weaver (Ecuador to Bolivia), *M. corymbosa* (Ruiz & Pavón) Ewan (S Peru), *M. pachystyla* Gilg (S Peru), and *M. viscosa* (Ruiz & Pavón) Gilg (Peru), which also have the *M. corymbosa* pollen type.

Acknowledgments. I am very grateful to Jason



Figure 1. *Macrocarpaea angustifolia* J. S. Pringle, Foster et al. 7747 (holotype, MO).

R. Grant of l'Université de Neuchâtel, Switzerland, for discussions about *Macrocarpaea*, comments on the manuscript, and photocopies of the isotype. The type specimen of the name *M. angustifolia* was collected under the auspices of the Flora of Peru project, a collaborative effort of the Missouri Botanical Garden, the Universidad Nacional Mayor de San Marcos, and the Universidad Nacional de Amazonia Peruana. Fieldwork by Robin Foster et al. was supported by USAID. This is Contribution no. 88

from the Royal Botanical Gardens, Hamilton, Ontario.

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