A new species of Ponthieva (Orchidaceae, Cranichidinae) from Veracruz, Mexico

GERARDO A. SALAZAR

Salazar, G. A. (Departamento de Botánica, Instituto de Biología, Universidad Nacional Autónoma de México, Apartado Postal 70–367, 04510 México, D.F. México; e-mail: gasc@servidor.unam.mx). A new species of *Ponthieva* (Orchidaceae, Cranichidinae) from Veracruz, Mexico. Brittonia 57: 252–254. 2005.—**Ponthieva rinconii**, a new orchid species from the foothills of the Sierra Madre Oriental in Veracruz, Mexico, is described and illustrated. It is similar in overall appearance to the wide-ranging upland species *P. schaffneri*, but differs from it in habitat preferences (tropical semi-evergreen forest at 650 m elevation), presence of a loose raceme, and three-lobed labellum with a basal cavity.

Key words: Cranichidinae, Orchidaceae, Mexico, Ponthieva rinconii, Veracruz.

Ponthieva R. Br. is a neotropical genus comprising about 30 species of primarily terrestrial orchids, and can be distinguished from other members of subtribe Cranichidinae Lindl. by the combination of petals adnate to the column in their basal parts and lack of a spurred or saccate nectary (Pridgeon et al., 2003). Ten species of Ponthieva were recorded for Mexico by Soto (1988), but during cursory determination of orchid specimens from central Veracruz, an additional distinctive species was discovered.

Ponthieva rinconii Salazar, sp. nov. (Fig. 1)

TYPE: MEXICO. Veracruz: Municipio Coetzala, mountain slope E of Coetzala, 18°46′50″N, 96°54′52″W, 650 m, 2 Oct., 2001, *A. Rincón & C. Durán 2801* (HOLOTYPE: MEXU; ISOTYPE: XAL).

Ponthievae schaffneri (Rchb.f.) E. W. Greenw. similis, sed racemo laxo et labello trilobato basi excavato differt.

Lithophytic, acaulescent *herb*, 30–35 cm tall including the inflorescence. *Roots* few (3–5), simple, terete, lanuginose, 1–2 mm in diameter. *Leaves* 4, grouped into a loose basal rosette, distinctly petiolate, to 14 cm total length, the uppermost one funnel-shaped and enclosing the base of the scape;

petiole linear, channeled, 2-6 cm long; leaf blade elliptic-oblanceolate, acute, 2-9 cm long, 1-2.8 cm wide. Inflorescence a laxly flowered raceme with 12-15 flowers; scape glabrous below, gradually becoming pubescent above (trichomes sparse, simple, septate, with swollen apical cell), partially covered by 4 tubular, glabrous, acute sheaths. Floral bracts lanceolate, acute, rather sparsely pubescent as the peduncle, covering the basal one-third of the ovary, 2.5-6.5 mm long. Ovary slender, ascending, cylindrical-fusiform, pedicellate, sparsely pubescent as the scape, 6-9 mm long including the pedicel, ca. 0.75 mm in diameter. Flowers small for the genus (ca. 6 mm maximum spread), nonresupinate, greenish white, opening sequentially with most of them eventually open at the same time; perianth segments bearing sparse raphidecontaining idioblasts. Sepals sparsely pubescent outside (trichomes as in the scape), otherwise glabrous. Dorsal sepal lanceolate-elliptic, obtuse-rounded, slightly concave at apex, 3.5 mm long, 1.6 mm wide. Lateral sepals obliquely elliptic, obtuserounded and obscurely galeate at apex, three-veined, 3.8 mm long, 2.5 mm wide. Petals fused to the column at base for ca. 0.2 mm, obliquely oblanceolate-spatulate, asymmetrically rounded to truncate, apical-

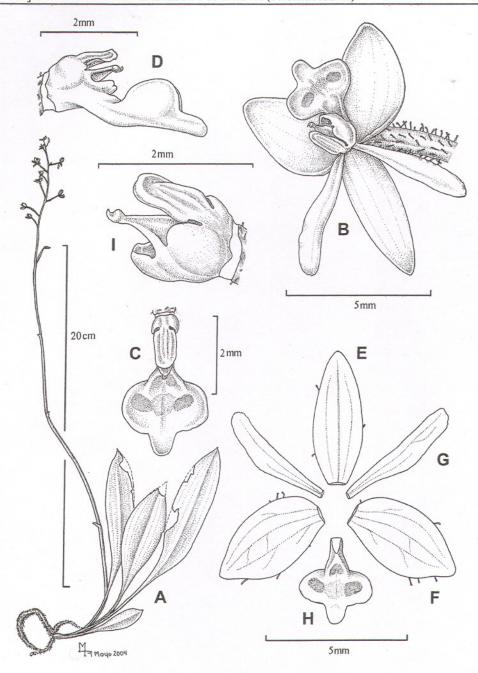


Fig. 1. Ponthieva rinconii. A. Habit. B. Flower. C. Labellum and column, from above. D. Labellum and column, from side. E. Dorsal sepal. F. Lateral sepal. G. Petal. H. Labellum. I. Column, from side. (From the holotype, Rincón & Durán 2801.)

ly papillose (especially on margin), the outer lateral margin repand, one- or twoveined, 4 mm long, 0.7-0.8 mm wide. Labellum joined basally to the ventral surface of the column, shortly clawed, three-lobed, 2.2 mm total length, 2.5 mm wide across the lateral lobes when spread out; claw rounded, with thickened margins that limit a shallow basal cavity, distinctly brownish, ca 0.5 mm long, 0.7 mm wide; lateral lobes semiorbicular, each with an elliptic darker area, ca. 1 mm in diameter; midlobe subtriangular, rounded, slightly concave, papillose on the apical margin and the inner surface, ca. 0.8 mm long, 0.6 mm wide. Column very short, more or less globose, ca. 1.5 mm long; clinandrium slightly concave, with a fleshy, rounded lobe at each side; anther oblong-ovate, rounded, two-celled, with fleshy connective; rostellum narrowly oblong-triangular, blunt after removal of the viscidium; viscidium hamular, with a retrorse dorsal point; stigma a terminal, transversely slit, reminiscent of an open mouth. Pollinia not seen. Capsule fusiform, distinctly pedicellate (not seen mature).

Distribution and habitat.—This species is known from a single collection, consisting of two individual plants that were found growing on rocks on a steep slope with limestone substrate, under the canopy of a semi-evergreen tropical forest ("selva mediana subperennifolia") and an understory of abandoned coffee trees. The site is located in the foothills of the Sierra Madre Oriental, south of the city of Córdoba, Veracruz. Flowering occurs at least from late

September to early October.

Etymology.—The specific epithet honors biologist Armando Rincón (1968–), from the Facultad de Ciencias, Universidad Nacional Autónoma de México, who collected this species.

Ponthieva rinconii is similar in overall apppearance and in the oblanceolate-spatulate petals to the widespread P. schaffneri (Rchb.f.) E. W. Greenw., a dweller of Pinus-Quercus forest, tropical deciduous forest, and xerophytic scrub from 1500 to 2700 m elevation throughout the major mountain ranges of Mexico and Guatemala. In all other Mexican and Mesoamerican species of Ponthieva the petals are either obliquely triangular or have a prominent outer margin ("dolabriform") or a pointed lobe. However, P. rinconii is distinguished from P. schaffneri by its lowland tropical habitat, loose raceme and three-lobed labellum with a cavity at the base. The two other lowland species of Ponthieva that have been recorded in Mexico, namely P. brittoniae Ames (syn. P. parviflora Ames & C. Schweinf.) and P. racemosa (Walter) C. Mohr, both have broad, obliquely triangular petals and sessile, boat-shaped labellum lacking a basal cavity.

Acknowledgments

I thank Claudia Gallardo (XAL) for bringing to my attention the specimens of *P. rinconii*, Fernando Chiang (MEXU) for help with the Latin diagnosis, Miguel Soto, Ken Cameron, Wesley Higgins, and an anonymous reviewer for comments that improved the manuscript, and Marco A. López Rosas for preparing the accompanying illustration.

Literature Cited

Pridgeon, A. M., P. J. Cribb, M. W. Chase & F. N. Rasmussen, editors. 2003. Genera Orchidacearum. Vol. 3. Orchidoideae. Part 2, Vanilloideae. Oxford University Press, Oxford.

Soto, M. A. 1988. Listado actualizado de las orquídeas de México. Orquídea (Mexico City) 11: 233–276.