**Diodonopsis ramiromedinae** (Orchidaceae: Pleurothallidinae), a New Species from Colombia

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**ABSTRACT.** A new species, *Diodonopsis ramiromedinae*, is described, illustrated, and compared with similar species. A brief history of *Masdevallia* sect. *Pygmaeae* and the genus *Diodonopsis* is provided. *Diodonopsis ramiromedinae* is most similar to *D. anachaeta*, but differs by sepals with apices acute or acuminate-triangular vs. narrowly caudate; longer petals with a descending, narrowly linear, rounded basal process vs. with an acute, retrorse basal process; and the larger lip, obovate with the apex very broadly rounded vs. oblong-subpandurate with the apex acute.

**Key words:** Colombia, *Diodonopsis*, *Masdevallia*, new species, Pleurothallidinae, section *Pygmaeae*

**Introduction.** When Carlyle Luer first turned his attentions to subdividing the large and untidy genus *Masdevallia* Ruiz & Pav., he segregated five species into section *Pygmaeae* Luer (Luer 1986). At that time, he speculated that these species might not form a coherent group. In 2000, Luer established the subgenus *Pygmaeia* to accommodate several sections, including section *Pygmaeae* (Luer 2000a). When he treated the section in greater detail, Luer included only three species: *M. erinacea* Rchb.f., *M. anachaeta* Rchb.f., and *M. pygmaea* Kraenzl. (Luer 2000b).

Pridgeon and Chase (2001) transferred Luer’s original five species of section *Pygmaeae* into a new genus, *Diodonopsis* Pridgeon & M.W.Chase, but only molecular data of *Masdevallia erinacea* were included into the analysis. The placement of the species in *Diodonopsis* may change with more exhaustive molecular analysis (Oses & Karremans, pers. comm. 2017).

The lip of *Diodonopsis ramiromedinae* Thoerle, the proposed species, is partitioned by oblique marginal folds and resembles that found in some members of *Masdevallia* section *Alicataeces* Kraenzl. However, the combination of the general habit, characteristics of the inflorescence, and the ornamented ovary support its placement in *Diodonopsis*.

**Taxonomic Treatment**

*Diodonopsis ramiromedinae* Thoerle, sp. nov.

**TYPE:** Colombia. Putumayo. Km 5 en nueva carretera o Variante San Francisco-Mocoa, margen derecha río Putumayo, alt. 2600 m, collected by R. Medina & M. Suárez, 2 May 2012, and flowered in cultivation by R. Medina, 12 June 2017, R. Medina 98 (holotype: JAUM!). Fig. 1–2.

**Diagnosis:** *Diodonopsis ramiromedinae* is most similar to *D. anachaeta*, but differs by sepals with apices acute or acuminate-triangular vs. narrowly caudate; longer petals with a descending, narrowly linear basal process vs. with an acute, retrorse basal process; and the larger lip, obovate and divided into two parts by marginal folds, the hypochile verrucose, the epichile subcircular with radiating lamellae, vs. oblong-subpandurate with the apex acute, and lacking lamellae.

**Epiphytic, small, caespitose herb; roots 0.5 mm diam. Ramicaul erect to suberect, 3–5 mm long, enclosed by 2 membranous, loose basal sheaths. Leaf erect to suberect, coriaceous, petiolate, elliptic-obovate, apex subobtuse, minutely tri-apiculate, base narrowly cuneate into the petiole, 15–20 × 3–5 mm, including the petiole 5–7 mm long. Inflorescence erect, from low on the ramicaul, bearing a single flower and a filament.**
Figure 1. Diodonopsis ramiromedinae Thoerle. A. Plant habit. B. Flower. C. Dissected flower. D. Petal. E. Lip. F. Ovary, column, and lip. Drawn by L. Thoerle from the plant that provided the holotype.
representing a vestigial flower, 2–3 cm long including the terete peduncle 1.8–2.7 cm long; peduncular bract 1, very small, low on the peduncle; floral bract cucullate, ovate-acuminate, 3–4 mm long; pedicel enveloped by floral bract, 2–3 mm long; ovary ca. 2 mm long, cristate with margins irregularly and coarsely dentate. Flower with sepaline tube ca. 4–5 mm long, free parts above gaping; sepals glabrous, entire, dull maroon at base, yellow toward apex, veins thickly carinate on the exterior; dorsal sepal ovate-elliptic, acute, with apex thickened, narrowly rounded, 10–12 × 4–5 mm, 3-veined, connate to the lateral sepals for ca. 2.5 mm to form a sepaline tube, the free portion beyond the tube recurved, erect; lateral sepals ovate with apices short, thickened, acuminate-triangular; the lateral sepals are 5 mm wide, with narrow, caudate apices. The petals of D. ramiromedinae are 5 mm long with a descending, narrowly linear, rounded basal process appressed to the column-foot for most of its ca. 1-mm length; those of D. anachaeta are 2 mm long, with an acute, retrorse tooth that is less than 0.5 mm long and free of the column-foot. The lip of the new species is obovate with the apex very broadly rounded, 4.0 × 2.5 mm, neither completely divided nor heavily textured.

This species is most similar to the more common and widespread Diodonopsis anachaeta (Rchb.f.) Pridgeon & M.W.Chase [= Masdevallia anachaeta] (Fig. 3), but is readily distinguished by floral characteristics. The dorsal sepal of D. ramiromedinae is elliptic-ovate, with the apex acute, and the lateral sepals are 5 mm wide, with the short apices bluntly acuminate-triangular; the dorsal sepal of D. anachaeta is elliptic with a distinct cauda, and the lateral sepals are 3 mm wide, with narrow, caudate apices. The petals of D. ramiromedinae are 5 mm long with a descending, narrowly linear, rounded basal process appressed to the column-foot for most of its ca. 1-mm length; those of D. anachaeta are 2 mm long, with an acute, retrorse tooth that is less than 0.5 mm long and free of the column-foot. The lip of the new species is obovate with the apex very broadly rounded, 4.0 × 2.5 mm, divided in two parts by marginal folds that extend to about the middle of the lip, with the hypochile verrucose and the epichile with radiating lamellae. The lip of D. anachaeta is oblong-subpandurate with the apex acute, 2.5 × 1 mm, neither completely divided nor heavily textured.

The new species also superficially resembles Diodonopsis pygmaea (Rchb.f.) Pridgeon & M.W.Chase [= Masdevallia pygmaea] (Fig. 4), from which it is distinguished by vegetative and floral characteristics. The leaves of D. ramiromedinae are elliptic-obovate, 3–5 mm wide; those of D. pygmaea are narrowly linear, 1–2 mm wide. Floral differences include the ovary, irregularly cristate vs. densely muricate; lateral sepals with acuminate-triangular
apices shorter than the blades vs. with well-developed caudae longer than the blades; petals 5 mm rather than 1.5 mm long; and the lip obovate and divided, 4 mm long vs. elliptic-oblong and undivided, 2–2.5 mm long.

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Literature Cited


