

A NEW *MASDEVALLIA* (ORCHIDACEAE: PLEUROTHALLIDINAE) FROM A DEFORESTED AREA IN THE HUANUCO REGION OF PERU

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ABSTRACT. A new and showy species of *Masdevallia* from the Huanuco region in Peru is described and illustrated with a line drawing and color photographs. It belongs to the subgenus *Masdevallia*, section *Masdevallia*. The new species is compared to several more or less morphologically similar species, such as *M. burianii*, *M. cranion* and *M. popowiana* that appear to be closely related. The new species differs from them by a combination of features, including the rather fleshy leaves and the bell-shaped flowers covered internally with magenta to white pubescence.

KEY WORDS: Huanuco, *Masdevallia*, new species, Peru, Pleurothallidinae

Introduction. The genus *Masdevallia* Ruiz & Pav. is one of the more well-known and popular orchid genera in cultivation. It has therefore also been of interest to many taxonomists over the years. Several groups of species that were originally described as *Masdevallia* have been separated since the genus was established and generally been accepted as genera of their own, such as *Dracula* Luer, *Porroglossum* Schltr., *Scaphosepalum* Pfitzer and *Trisetella* Luer. Despite these and other transfers from *Masdevallia*, the genus is still large today with over 600 species, classified into numerous subdivisions (Luer 1986, 2000a,b, 2001, 2002, 2003). This vast number of species, in combination with molecular investigations (Pridgeon & Chase 2001, Abele *et al.* 2005), eventually encouraged Luer to split the genus into 16 new genera, in addition to the remaining *Masdevallia* (Luer 2006). This latter treatment has not been generally accepted (Dalström & Ruiz Pérez 2014) so the genus is more generally accepted in a broader sense, basically as it was earlier circumscribed by Luer.

and flowered in cultivation by Perúflora, Nov. 2015 (*Masdevallia* sp. 401020) S. Dalström 3785 (holotype: USM). Figs. 1–4.

Masdevallia tataniae belongs to the subgenus *Masdevallia*, section *Masdevallia*, and appears most similar to *M. burianii* Luer & Dalström, *M. cranion* Luer and *M. popowiana* Königer, but differs from *M. burianii* in having much sturdier and thicker leaves, petals with a truncate apex versus a rather narrow and oblique acute apex for the petals of *M. burianii*, a lip with a distinctly narrowed apical part versus an almost truncate apex for the lip of *M. burianii*, and *M. tataniae* differs from *M. cranion* in the erect inflorescence versus a subhorizontal and *ca.* half as long inflorescence, by a lip with a distinctly narrowed apical part versus an evenly ovate lip lamina for *M. cranion*, and densely pubescent inner surfaces of the sepals versus cellular-papillose inner surfaces of the sepals for *M. cranion*, and *M. tataniae* differs from *M. popowiana* by the pubescent inner surfaces of the sepals versus basically glabrous inner surfaces of the sepals, and by the rounded cupulate flowers versus flowers with a distinct ventral mentum formed by the lateral sepals in *M. popowiana*.

TAXONOMIC TREATMENT

Masdevallia tataniae Dalström & Ruiz-Pérez, *sp. nov.*

TYPE: Peru. Huanuco. Along and above the road between Uchiza and Huacrachuco, in a patch of dense and scrubby cloud forest west of San Pedro de Chonta, alt. *ca.* 2500 m, collected by S. Ruiz on 1 Dec. 2013,

Epiphytic herb. Plant medium sized for the subgenus, caespitose. *Ramicauls* erect, rather thick, *ca.* 2.8–3.2 cm long, enclosed basally by 3 tubular sheaths. *Leaf* erect, coriaceous, petiolate, blade basally

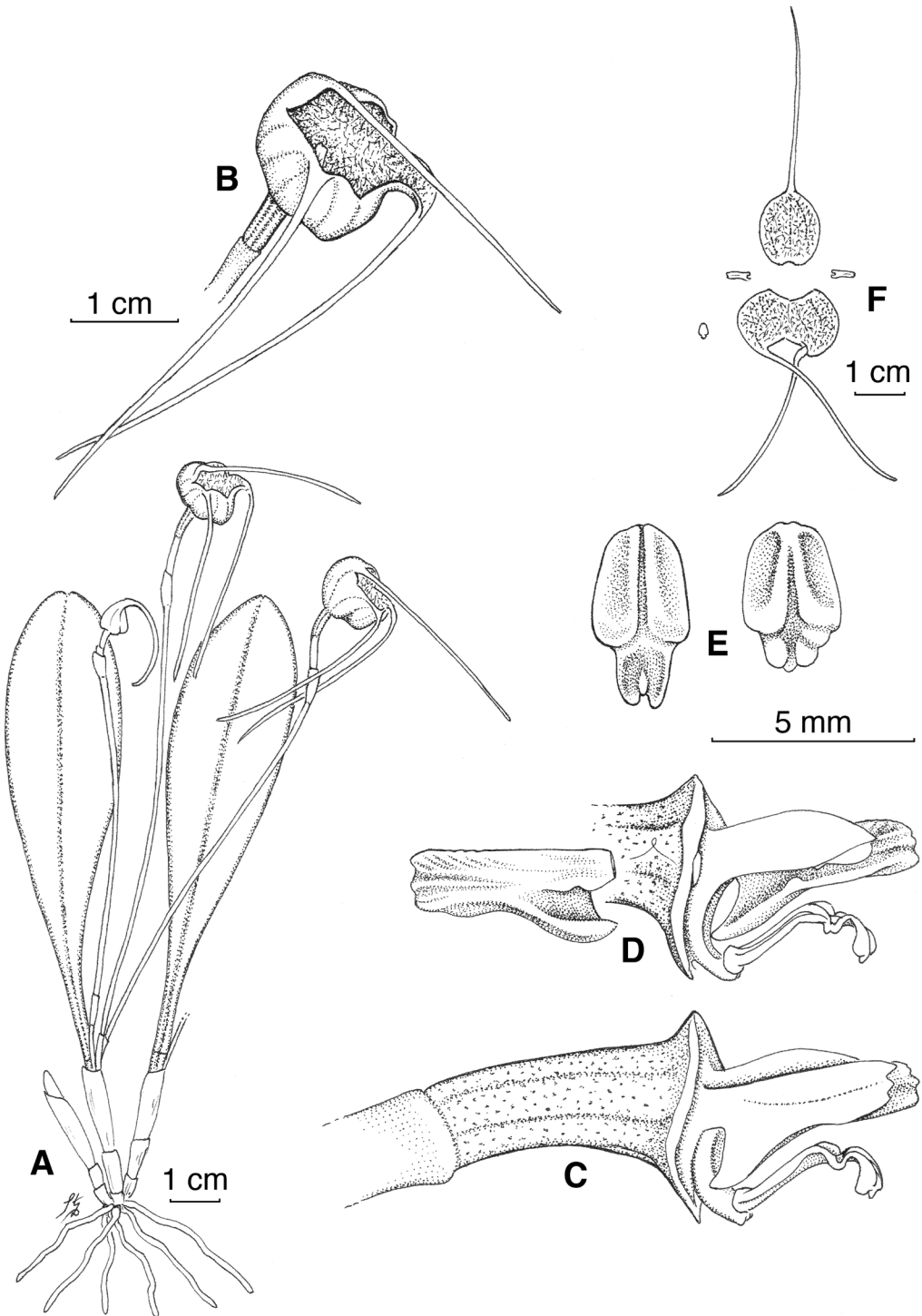


FIGURE 1. *Masdevallia tataniae* Dalström & Ruiz-Pérez. A. Plant habit. B. Flower. C. Ovary, lip and column, including the petal, lateral view. D. Ovary, lip and column, with removed and flipped petal, lateral view. E. lip normal and flattened dorsal views. F. Dissected flower. Drawn from holotype by Stig Dalström.

conduplicate and cuneate, ovate to elliptic, obtuse, to ca. 10.0 × 2.5 cm, including the ca. 2 cm long petiole. *Inflorescence* erect, terete, single flowered, with an up to ca. 10 cm long peduncle; *peduncular bract* 1, tubular, near the base of the peduncle, ca. 6 mm long; *floral bract* appressed, tubular, ca. 7 mm long; *pedicel* excluding the ovary to ca. 15 mm long; *ovary* shallowly sulcate, smooth, with scattered tiny “fungal pits” (tiny pits where it is speculated here, but not proven, that some fungi establish, based on visual observation only), ca. 4–5 mm long. *Flower* deeply cupulate, forming a ca. 10 mm long sepaline cup; *dorsal sepal* pale yellow with basal magenta spots and the apical tail gradually turning purplish, connate to the lateral sepals for ca. 5–6 mm, then obtuse, internally covered by magenta to whitish hairs, ca. 15 × 12 mm, with a slender apical, more or less forward to downward pointing, basally yellowish turning gradually purplish ca. 38–40 mm long tail; *lateral sepals* similar in texture and coloration, connate for ca. 8 mm, then obliquely ovate and obtuse, ca. 12–13 × 10–11 mm, with apical, slender, yellowish and purplish ca. 38–40 mm long tails; *petals* translucent, glass-like and colorless, cartilaginous, unguiculate with a distinct lateral, triangular and involute fleshy lobe, extending from the base to the middle of the length, then rather linear with a truncate and indistinctly tridentate apex, ca. 5.0 × 1.5 mm; *lip* basally pale yellow, then with pale purple hue and specks, the apical part brownish to purplish with a dark purple apicule, hinged on the hook-shaped column foot by a minute strap-like tissue, basally broadly ovate with a minor longitudinal furrow, then distinctly angled into a narrower epichile that is linear when flattened and apically bilobed with a small fleshy rounded knob in between. ca. 4.5 × 2.5 mm when flattened; *column* pale yellow with magenta lower edges, straight, ca. 4 mm long, with an equally long, curved and apically hook-shaped foot; *anther cap* pale yellow and campanulate; *pollinia* not seen.

PARATYPE: Peru. A small population of plants without flowers was observed in the same location as the holotype. No other collections known.

DISTRIBUTION: *Masdevallia tatianae* is only known from the type locality.

EPONYMY: This species is named in honor of Tatiana



FIGURE 2. *Masdevallia tatianae*. Front view of the flower. Flowered in cultivation and photographed by Perúflora.



FIGURE 3. *Masdevallia tatianae*. Three quarters view of the flower. Flowered in cultivation and photographed by Perúflora.



FIGURE 4. *Masdevallia tatiana*. Lateral view of the flower. Flowered in cultivation and photographed by Perúflora.

Leyla Ruíz Sanchez, the daughter of the discoverer and second author, on his request.

Masdevallia tatiana was originally discovered by Saúl Ruíz and his brother Moises during a field trip in October 2013. A few plants were growing epiphytically in a small patch of remaining scrubby cloud forest in an otherwise heavily deforested area (Fig. 5). Very little remains of the original forest in that entire region and many plant species are without a doubt doomed to disappear in a near future. *Masdevallia tatiana* appears to be most closely related to species such as *M. burianii*, *M. cranion* and *M. popowiana*, due to the rounded and bell-shaped flower. But the rich internal pubescence also reminds of features displayed by members of the subsection *Saltatrices*.

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FIGURE 5. The deforested habitat of *Masdevallia tatiana* Dalström & Ruíz-Pérez, in Huanuco, Peru. Photograph by S. Dalström.

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