

**Masdevallia echinata** Luer & Andreetta, sp. nov.

*Masdevallia rosea* Veitch, Man. Orchid. Pl. 5:60. 1889; not Lindl.

*Masdevallia rosea* Woolward, Monograph Genus *Masdevallia*, 1896; not Lindl.

Species haec *M. roseae* Lindl. persimilis sed labello minore apice nonlobulato crasso echinato differt.

Plant medium in size, epiphytic, caespitose; roots slender, flexuous. Secondary stems semiterete, blackish, unifoliate, 1-3 cm long, enclosed by 2-3 loose, tubular sheaths. Leaf erect, coriaceous, elliptical, long-petiolate, 10-15 cm long including the petiole 3-6 cm long, 2-3.5 cm wide, the obtuse apex tridenticulate, the base cuneate into the channeled petiole. Inflorescence a solitary, more or less horizontal to nutant, showy flower borne at the apex of a slender, suberect peduncle 10-15 cm long, with a bract below the middle, from a node low on the secondary stem; floral bract tubular, 9-13 mm long; pedicel 10-19 mm long; ovary 8 mm long, purple-brown, pitted; sepals bright rose, commonly orange toward the bases, the dorsal sepal narrowly linear, connate to the lateral sepals for 18-28 mm to form a narrow, laterally compressed tube, the free portion narrowly triangular, acuminate to the attenuated apex, more or less decurved over the lateral sepals, the total length 52-72 mm, the maximum width 2-5 mm, the lateral sepals connate 30-35 mm, dilated above the sepaline tube into ovate, oblique blades, the acute apices produced into 10 mm long tails, the total lengths 48-67 mm, 12-23 mm across both lateral sepals spread out; petals yellow-white, oblong, 4.5 mm long, 1-2.25 mm wide, the apex obtuse, with a broad, retrorse, uncinatate lobe on the lower margin near the base and a broad, rounded lobe on the upper margin near the base; lip light yellow with a purple-brown apex, ob-

long, 5-5.5 mm long, 2 mm wide, the thickened, rounded apex densely beset with long and short, dark purple spicules or hairs, the disc thickened with a pair of low, longitudinal calli, shortly pubescent, the base subcordate, hinged beneath; column white, semiterete, 5 mm long, the 2 mm foot terminated with a slender, incurved extension.

ETYMOLOGY: From the Latin *echinatus*, "bristly," in reference to the apex of the lip.

TYPE: *ECUADOR*: *CARCHI*: epiphytic in cloud forest east of Tulcan toward El Carmelo, alt. ca. 3000 m, April 1978, A. Andreetta & A. Hirtz 75, cultivated in Cuenca, flowered in cult. 18 Aug. 1978, *C. Luer 3315* (HOLOTYPE: SEL).

DISTRIBUTION: Southern Colombia and northeastern Ecuador.

ADDITIONAL MATERIAL EXAMINED: *COLOMBIA*: INTEND. OF PUTUMAYO: epiphytic in cloud forest between La Cocha and Sibundoy, alt. ca. 3000 m, 4 August 1978, *C. Luer, J. Luer, R. Escobar & J. Kuhn 3164* (SEL, JAUM).

John Lindley described *Masdevallia rosea* in 1845 from dried specimens collected near Loja, Ecuador, by Theodore Hartweg in 1842 or 1843. Apparently because the showy sepaline tube was so distinctive, Lindley made no mention of the petals and lip. In Bonplandia in 1854, however, Reichenbach described the apex of the lip of Warscewicz' specimen from near Loja as being trilobed, asperulous and with a denticulate margin. Examination of living material also from near Loja (Zamora-Chinche), reveals the apex of the lip to be indistinctly trilobed, the middle lobe reflexed, and microscopically cellular-glandular with a cellular-erose margin. Otherwise, the lip is glabrous. The same description applies to the lips of living plants of *M. rosea* from the Andes east of Quito (Napo), from near Baños (Tungurahua), and from east of Cuenca (Morona-Santiago). *Masdevallia rosea* varies somewhat in size and color through its range, but the morphology of the petals and lips is relatively constant.

According to Woolward in her monograph of the genus *Masdevallia*, Consul F. C. Lehmann succeeded in sending to Europe in 1880 a living collection of very similar plants identified as *M. rosea* from the Andes east of Pasto, Colombia. These plants first flowered in 1882 and became the basis for Miss Woolward's illustration and subsequent descriptions of *M. rosea*, including those by Veitch and Kraenzlin. The lip is portrayed with a thick, bristly apex which does not apply to *M. rosea*.

Examination of living material also from east of Pasto (Intend. of Putumayo) and from east of Tulcan (Prov. of Carchi, Ecuador) reveals the non-lobed, echinate lip as illustrated by Miss Woolward, very different from the larger, glabrous lip of the *M. rosea* from farther south. The average size of the flowers of the northern plants is somewhat smaller and the petals are more distinctly lobed, especially on the upper margin near the base. Because of the well-defined, separate geographical distributions and very dissimilar lips, I believe that the northern plants, recognized here as *M. echinata*, are specifically distinct from the southern *M. rosea*. Drs. Dodson and Dressler concur and suggest that the difference is probably due to longstanding isolation, and that both species are probably pollinated by hummingbirds.