## Masdevallia zumbuehlerae Luer, sp. nov.

Ety.: Named for Paula Keeler nee Zumbühler of Bellingham, WA, who discovered this species.

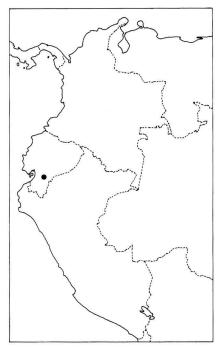
Inter species sect. *Polyanthae* planta haec mediocris, pedunculo tereti folio majore dimidio, flore successivi illis *M. bicolori* Rchb.f. similis.

Plant medium in size, presumably epiphytic, caespitose; roots fleshy. Ramicauls stout, erect, 1.5-2 cm long, enclosed by a loose, tubular sheath, and 1-2 others at the base. Leaf erect, thickly coriaceous, 7-12.5 cm long including the petiole 1-1.5 cm long, the blade elliptical, obtuse, 1.5-2.2 cm wide, narrowed below into the petiolate base. Inflorescence a lax, successively few-flowered raceme borne by an erect, terete peduncle 6 cm long, with a close bract near the base, from low on the ramicaul; floral bracts 10 mm long; pedicels 10-20 mm long; ovary 5 mm long; sepals glabrous, the dorsal sepal light green, the blade obovate, 10 mm long, 6 mm wide, connate to the lateral sepals for 5 mm to form a cylindrical tube, the free portion triangular, acute, contracted into an erect, slender, green tail ca. 25 mm long, the lateral sepals rose-purple, light green toward the base, connate 15 mm into an ovate, bifid lamina, with a shallow mentum, expanded beyond the tube, 17 mm long, 14 mm wide, the apices obtuse, close, contracted into similar tails 17 mm long; petals white with pink dots on the callus, oblong, 6 mm long, 1.8 mm wide, the apex subtruncate-retuse, the labellar margin with a longitudinal callus ending near the base; lip rose, diffusely dotted with purple, confluent at the base, oblong-subpandurate, 6 mm long, 2.5 mm wide, shallowly channeled medially, with marginal folds above the middle, the epichile ovate, acute, entire, the hypochile oblong, subcordate at the base, hinged beneath; column white with purple margin, semiterete, 5 mm long, the foot stout, 2 mm long, spotted with purple, with a short, incurved extension.

ECUADOR: Morona-Santiago: Capsules collected by Paula Keeler from cut trees along the new road below Chigüinda toward Gualaquiza, alt. 1273 m, Oct. 1997, seedling cultivated in Wilmington, NJ, Sept. 2001, by Malli Rao 56 (Holotype: MO), C. Luer illustr. 20041; sibling seedling cultivated Dec. 2001 by Malli Rao 56A (MO).

Mature capsules were collected by Paula Keeler from plants in felled trees along the road being constructed to Gualaquiza from Sigsig in 1997. The capsules were flasked by Kelsey Creek Laboratory, and seedlings were distributed for cultivation. Two seedlings have been found to be identical.

The plants are characterized by relatively large, fleshy, shortly petiolate leaves similar to many in subgenus *Polyantha*. The flowers, produced in a successively flowered raceme, and with lips divided by marginal folds, are borne by a slender, terete peduncle. This immediately places it in section *Polyanthae*, where 16 species



are known, and none of which can be confused with this species. The flower with a yellow dorsal sepal and connate, dark purple lateral sepals is most similar to that of *M. bicolor*, which is borne in a simultaneously two- or three-flowered raceme by a stout, triquetrous peduncle.

The possibility of a naturally occurring hybrid immediately arose, but identifying a parent with a terete peduncle came to naught. The nearest, most similar species is *M. mayaycu* from the Cordillera del Condor, with a much smaller habit and a much longer peduncle.

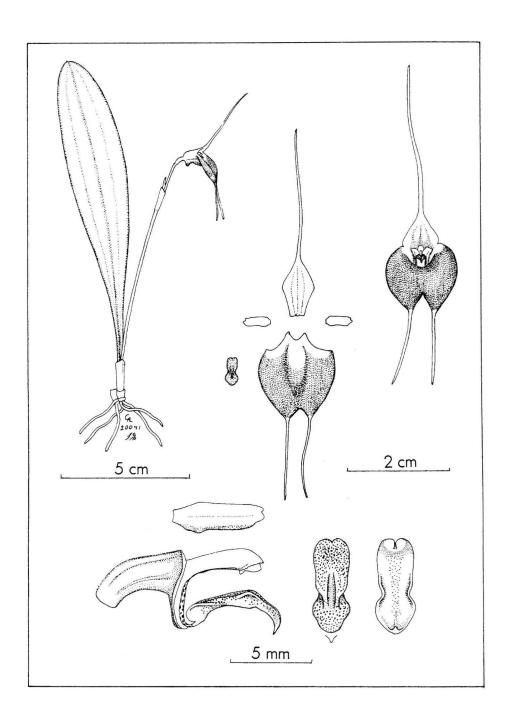


Plate 533. Masdevallia zumbuehleriae