

Masdevallia attenuata Rchb.f., Gard. Chron. 1871: 834. 1871. SYNTYPES: COSTA RICA [?]. *Z[ahn?]* 178, cultivated by *Veitch 192*; Panama [?], *Zahn s.n.* Lectotype, **hic designatus**: Panamá [?]. Without collecting data, drawing of a syntype, based on *Zahn s.n.* (W 28837, Rchb-Orch 50775, upper part of the drawing).

Homotypic synonym: *Acinopetala attenuata* (Rchb.f.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 3. 2006.

Heterotypic synonyms: *Masdevallia scabrilinguis* Luer, Phytologia 44(3): 168. 1979, **syn. nov.** TYPE: PANAMA. Chiriquí: Cerro Gordo, collected by R.L. Dressler s.n., 1977, cultivated at SEL-77-1707, flowered in cult. 6 Mar. 1978, *C. Luer 2788* (holotype, SEL!).

Acinopetala scabrilinguis (Luer) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 3. 2006.

Epiphytic, caespitose, erect *herb*, up to 10 cm tall. *Roots* flexuous, to 1.5 mm in diameter. *Ramicauls* erect, up to 14 mm long, 2 mm wide, enclosed by 2–3 ribbed, tubular sheaths to 8 mm long. *Leaves* bright green, erect to suberect, coriaceous, linear-ligulate, acute to obtuse at the apex, with a short apiculus, 5–9 cm long including the petiole, 1 cm wide, the base gradually narrowed below into the petiole ca. 1 cm long. *Inflorescence* single flowered. *Peduncle* erect to suberect, 3–5 cm long, with a tubular bract below the middle. *Floral bract* tubular, 5–6 mm long. *Pedicel* 9–14 mm long. *Ovary* light green, 5 mm long, with 6 stria ribs. *Flowers* with faint sweet fragrance, sepals white, lightly suffused with green, tails orange-yellow, suffused with green on the outside, petals white, with a green middle nerve, lip light yellow, with the apex darker yellow-orange, column white to greenish, suffused with green. *Sepals* microscopically pubescent within. *Dorsal sepal* obovate-oblong, 24–27 mm long including the tail 16.5 mm long, 4–5 mm wide, connate to the lateral sepals for about 8 mm forming a cylindrical, sepaline tube, the free portion about 16–20 mm long, triangular, acute, gradually contracted into a slender, upwardly directed tail. *Lateral sepals* obovate, oblique, 24–27 mm long including the tails 15 mm long, 9–10 mm wide expanded, connate for about

8 mm to form a lamina, the free portion about 16–20 mm long, triangular, apices acute, gradually contracted into slender, downwardly directed tails. *Petals* elliptic-oblong, acute or obtusely apiculate, 5 mm long, 2 mm wide, the labellar margin thickened, ending in a low callus at the angle between the middle third and the claw. *Lip* oblong, 5 mm long, 2.5 mm wide, the apex obtuse to rounded, papillose-verrucose, with crenulate margins, the disc shallowly sulcate between two keels from the base, extending in front in two subparallel, verrucose calli, the base subcordate, hinged beneath. *Column* semiterete, 4 mm long, 1.5 mm wide. *Foot* 2 mm long with a short incurved extension. *Pollinia* two, ovoid. *Anther cap* cucullate. Fig. 6, 8A, 9A.

Distribution: Costa Rica and Panama.

Additional specimens examined: COSTA RICA. Puntarenas: Coto Brus, Las Alturas de Cotón, Fila Cedro, unpaved road to Río Cedro, 8°58'20"N 82°52'40"W–8°59'03"N 82°54'20"W, 1670–1240 m, lower montane moist forest, primary vegetation, with H. León-Páez & A.C. Rodríguez, 20 March 2003, *F. Pupulin 4416* (JBL). Puntarenas: Coto Brus, Las Alturas de Cotón, Fila Cedro, unpaved road to Río Cedro, 8°58'20"N 82°52'40"W–8°59'03"N 82°54'20"W, 1670–1240 m, lower montane moist forest, primary vegetation, with H. León-Páez & A.C. Rodríguez, 20 March 2003, *F. Pupulin 4444* (CR). Puntarenas: Coto Brus, Zona Protectora Las Tablas, Las Alturas de Cotón, trail from Las Alturas Biological Station to Cerro Ehandi, 8°56'59"N 82°50'01"W–8°50'30"N 82°59'50"W, 1620–1850 m, lower montane moist forest, in the upper part mostly with *Quercus* sp., primary vegetation, with A.C. Rodríguez, 21 March 2003, *F. Pupulin 4463* (USJ). Without locality data, *A.R. Endrés s.n.* (illustration, W). PANAMA [?]. Without specific locality, cultivated by *Veitch 71* (W). Without locality data, presented to Kew by Mr. William Saunders (K).

Masdevallia attenuata is distinguished by the white to greenish-white sepaline cup, ending in orange tails, the petals white with the central vein and the apex green, provided with a short and low callus on the labellar half, the lip obtuse to rounded at the papillose-verrucose apex, with crenulate margins, the disc shallowly sulcate between two keels running from the base and

extending in front in two subparallel, verrucose calli, and the white column. We select the upper sketch of the type-drawing by Reichenbach as the species' lectotype, as it clearly illustrates the critical features that distinguish *M. attenuata*. Apparently, all the flowers mounted on the type sheet are referable to the plant received through Veitch and grown at the Hamburg Botanical Garden, where they were prepared at different times from the cultivated specimen. Kränzlin annotated specimens of *M. attenuata* and *M. fONSECAE* in Reichenbach's herbarium in Vienna as conspecific with *M. guayanensis* Lindl., based on a collection by R. Schomburgk from Roraima, in British Guiana (the holotype, K) (Lindley, 1843b). The latter, however, is endemic from the Guiana shield, ranging from Venezuela (where it has been also described as *M. manarana* Carnevali & I. Ramírez, 1987) to northern Brazil, which only superficially resembles *M. attenuata*.

The characters indicated by Reichenbach f. in the protologue of *M. attenuata*, as well as those illustrated in the upper part of the type drawing, selected here as the lectotype, cannot be distinguished from those of the later *M. scabrilinguis*. The latter was compared with *M. attenuata* and mainly distinguished on the basis of the slightly scabrous *indumentum* of the sepals and the presence of subparallel, verrucose calli in the distal portion of the lip (Luer, 1979), two features which are also typical of *M. attenuata*. In Luer's concept, *M. attenuata* corresponds to the plants of the other syntype, but the flowers of the latter are striped with purple, have a distinct purple blotch at the base of the lateral sepals (visible from outside also in dried materials), a white column stained with purple band on the adaxial side, and a white lip provided with a brownish orange to purple-brown, raised, verrucose, terminal callus.

These characters, which are not even mentioned in the original description of *M. attenuata* (Reichenbach, 1871), were used by Königer to distinguish his *M. fONSECAE* (Königer, 1994), described on the basis of a Costa Rican plant native from the southern portion of the Puntarenas province and flowered in cultivation in Munich, Germany. We accept it as a distinct species.