



Maxillaria tenebrifolia* Arévalo & Christenson, *sp. nov.

TYPE Colombia. Risaralda: Municipio Pueblo Rico, Vereda Monte Bello, road to Montezuma hill, 1,926–2,451 m de alt, 05°14'38''N 76°05'54''W – 05°14'59''N 76°06'35''W; bosque húmedo de montaña, creciendo en barranco del camino; 10 de Enero 2006; R. Arévalo 454 & A. Tapasco (holotype, COL).

Plant terrestrial, erect, 50–60 cm tall. Rhizomes ascending, enclosed by conduplicate triangular sheaths without blades. Pseudobulbs spaced ca. 15 cm apart, purplish-green, slightly compressed, ovate, 5 × 2 cm, rugose, unifoliate apically, enveloped by sheaths 6–7.5 × 3.6–3.8 cm, and 1–2 leaves, with blades 10.1–17.4 × 4.4–6.4 cm. Leaves dark green adaxially but completely purple abaxially, elliptic-ovate, 20–22 × 7–8.4 cm, rounded-retuse and asymmetrical, conduplicate, coriaceous. Inflorescences numerous, mostly produced from the base of the pseudobulb, a few from the rhizome, fasciculate (with 1–3 simultaneously-open flowers each), erect, 12 cm long; peduncle, somewhat fractiflex, 9 cm long, enclosed by 5–7 bracts, these green-

[7] *Maxillaria tenebrifolia*, detail of the flower from the plant specimen that serves as the holotype.

[8] *Maxillaria tenebrifolia*, a detail of the habit, as seen growing in its natural habitat.

[9] *Maxillaria tenebrifolia* Arévalo & Christenson (R. Arévalo 454). A. Habit. B. Flower, front view. C. Perianth, flattened. D. Ovary, column and lip, lateral view. E. Anther cap. F. Pollinarium.

ish, tinged with purple toward the apex, lanceolate, 2.1–2.3 × 0.6–0.7 cm. Floral bract lanceolate, longer than the ovary and enclosing it completely, 1 × 2 cm. Flowers resupinate, the sepals and petals whitish to cream-colored, with tips shaded purple, the lip cream-colored and stained with purple toward the apex abaxially. Sepals obovate, the margins revolute; dorsal sepal 2.7–3.3 × 1.1–1.2 cm, slightly apiculate; lateral sepals adnate to the column foot, oblique, curved downward, 3–3.6 × 1–1.1 cm, acute. Petals obliquely oblong, 2.1–2.7 × 0.5–0.6 cm, slightly falcate basally, acute, the margins a little revolute. Lip hinged to the column foot, 1.0–1.2 cm long × 0.9–1.1 cm wide when flattened, three-lobed, the lateral lobes erect, perpendicular to disk in natural position, 0.1 cm long × 0.3 cm wide at base, apically rounded, subequal to the apex of the mid-lobe; mid-lobe 0.1 cm long, rounded-truncate, thick, the margin undulate to crispate, the upper surface verrucose; disk bearing a white spatulate callus blotched with purplish toward the base, thicker toward the triangular apex. Column white, 0.5–0.6 cm long, curved towards the distal end, ventrally flattened, with the clinandrium minutely erose, the foot yellowish, 0.6–0.7 cm long, the anther apical, the stigma ventral. Pollinarium with four narrowly oblong-ellipsoid pollinia in pairs, the two pairs different in size and attached to a horseshoe-shaped viscidium. Anther cap white, cucullate, with some apical pleats. Ovary green, 2 cm long, terete, rigid. Fruit not seen. (Figs. 7, 8 and 9)

DISTRIBUTION The species is known only from the Cordillera Occidental of the Colombian Andes, on Cerro Montezuma, municipality of Pueblo Rico, Risaralda. As botanical exploration increases in the montane forests of the Colombian Chocó region, we expect this species will likely be found at other sites along the western slope of the Cordillera as well.

HABITAT Although plants of this species have been collected only from roadside slopes, they presumably grow inside the forests as high canopy epiphytes at ca. 1,900–2,500 m elevation.

ETYMOLOGY From the Latin “tenebri,” meaning “dark,” in allusion to the dark purplish leaves that characterize this species.

PHENOLOGY Plants have been collected in flower in January, August and September.

OTHER SPECIMENS EXAMINED Colombia. Risaralda, Municipio de Pueblo Rico, Vereda Monte Bello, Cerro Montezuma, ca. 2,500 m de alt., 05°14'59"N – 76°06'35"W; planta terrestre, creciendo en

talud del carretera; 30 de Septiembre 2006; R. Arévalo 650, A. Tapasco, H. Tapasco, J. Betancur & O. Laverde (COL). Cerro Montezuma, carretera a las antenas, entre los sitios “Cajones” y “El Chorro”, 2,249–2,340 m de alt., 05°14'54"N 76°06'14"W – 05°15'28"N 76°06'39"W; creciendo en talud de carretera; 7 de Agosto 2007; R. Arévalo 769 & H. Tapasco (COL).

The most distinctive feature of *Maxillaria tenebrifolia* is the combination of cream-colored flowers (with the sepals and petals shaded purple at their tips), and wide, dark purplish leaves (which stand out as unique and dissimilar from any other *Maxillaria* from the region). *Maxillaria tenebrifolia* resembles *M. caveroi* D.E. Benn. & Christenson, *M. floribunda* Lindl. and *M. platyloba* Schltr. in its growth habit, but differs from them by the size, shape and texture of the floral segments. In *M. tenebrifolia*, the obliquely oblong petals are smaller in contrast to the linear petals of *M. floribunda* and the linear-lanceolate petals of *M. platyloba*. The thick mid-lobe of the lip, with the verrucose surface and truncate-rounded apex provides an additional distinctive character, particularly from *M. caveroi*, which has a distinctly 3-lobed labellum sparsely covered with trichomes. Sequence data from multiple DNA regions (Arévalo, in prep.) have confirmed the placement of this species in the genus *Maxillaria* sensu Blanco et al. (2007).