

Fig. 4. *Maxillaria amabile*. Floral analysis. Note operculum at column apex. Scale = 10 mm. J. T. Atwood. Figs. 5-6. *Maxillaria monteverdensis*. 5. Plant habit. Scale = 10 cm. G. Barboza. 6. Floral analysis. Scale = 10 mm. J. T. Atwood.

H499 (F); loc. cit., Austin Smith H107 (AMES, F); loc. cit., 1250 m, Brenes 1159 (NY).

EYMOLOGY: Named in allusion to the pretty flowers.

Maxillaria amabilis is a poorly known epiphyte apparently of premontane and montane rainforests at 1,200-1,900 m elev. Flowering occurs at least in October and January.

Maxillaria monteverdensis J. T. Atwood & G.

Barboza, *sp. nov.* TYPE: COSTA RICA: Intersection of Provinces Alajuela, Guanacaste, and Puntarenas, Monteverde Reserve, at 1,600-1,700 m elev., *J. T. Atwood 89-33* (Holotype: SEL, Isotype: CR). Fig. 5, 6.

Species affinis *M. falcata* Ames & Correll sed flore grandiore, lobo mediano longiore, et callo papilla basi non carinato distinguitur.

Plant a large, erect, cane-forming epiphyte to at least 35 cm tall, and probably much taller. Canes

of mature shoots lacking pseudobulbs, concealed by rugose leaf sheaths, mostly leafless on the lower canes; roots mostly restricted to the base, to about 2 mm in diameter. Pseudobulbs present only at the base of the plant (as cespitose juveniles), about 4.5 cm tall and 2.5 cm wide, laterally compressed, sessile, apically 1-foliate with shortly petiolate leaf. Leaves thin, articulate; the blade keeled below, 4-11 cm long, 1.5-2 cm wide; the apex obtuse to rounded and unequally 2-lobate. Inflorescences several per leaf axil, long for the genus and sometimes exceeding the subtending leaf; scapes to about 8 cm long; ovary with pedicel 1.3-1.5 mm long, subtended by a somewhat longer subulate, acute floral bract. Flower large for the genus, campanulate, to about 3.2 cm long, white to pinkish with lip yellow to orange, fragrant. Sepals similar, oblong, 2.5-3.1 cm long, about 5-7 mm wide, the apex acute. Petals falcate-oblanceolate, about 2.5-2.7 cm long, 6.5-9 mm wide, acute to acuminate. Lip loosely rigid with the column foot, canaliculate on the lower 2/3, 3-lobate on the upper 1/3, about 1.5-1.8 cm long and 3.5-4 mm wide in natural position, to 2 cm long when spread; the lateral lobes embracing the column; midlobe ovate, obtuse and with crenulate margin; callus a truncate to rounded lamina terminating at about the lobe sinuses, with a single papilla at the base. Column nearly straight, cylindric, 1.2-1.5 cm long excluding foot and operculum; foot short, about 3 mm long; pollinia unknown, undoubtedly 4.

PARATYPES: COSTA RICA: Intersection of Provinces Alajuela, Guanacaste, and Puntarenas on Continental Divide, 1,580-1,700 m, *W. C. Burger & J. L. Gentry, Jr. 8746* (F); Atlantic drainage, elev. 1,700-1,800 m, *V. J. Dryer 1144* (F).

EYMOLOGY: Named for the type locality, Monteverde, Costa Rica.

Maxillaria monteverdensis is apparently endemic to Monteverde at 1,500-1,800 m elev. in lower montane rain forests. It is most closely related to M. amabilis but has longer ovaries, larger flowers, and the lip has a single papilla at the base instead of a distinct keel. It is represented by only three collections. Flowering time is at least January to March.