



Figs. 5-6. *Maxillaria tubercularis*. 5. Plant habit. Scale = 10 cm. G. Barboza. 6. Floral analysis. Scale = 1 cm. G. Barboza.

Maxillaria tubercularis J. T. Atwood, *sp. nov.*
 TYPE: PANAMA. Prov. Chiriquí: Fortuna Dam region, along trail to Cerro Hornito (Pate de Macho) on southern ridge of watershed; short, dense forest. 1,800-1,950 m, G. McPherson 13567 (Holotype: MO). Fig. 2.

Planta similis *Maxillariae elatiore*, sed foliis parvioribus, petiolatis, vaginis tuberculatis differt.

Plant a conspicuously rhizomatous epiphyte to about 50 cm tall. Stems erect when young, pendent when large, rooted at the base, concealed by tuberculate, non-foliaceous bracts; roots to about 1 mm in diameter. **Pseudobulbs** ovoid, laterally compressed, 2.5-5 cm long, 1-2.25 cm wide, 3-10 cm apart, concealed when young by 2-3 tuberculate, foliaceous sheaths, the apex 1-foliolate. **Leaves** with petiole 1/6-1/3 the blade length, the lateral width

3-4 mm; blade coriaceous, narrowly elliptic, 6-15 cm long, 1-3 cm wide; the apex acute. **Inflorescences** apparently restricted to non-foliaceous bract axils of the mature or immature rhizome; scapes less than 2 cm long; ovary with pedicel 1.3-1.6 cm long, subtended by a subequal, inflated, acuminate floral bract. **Flowers** well expanded, yellow with many red to maroon spots; lip red or maroon. **Sepals** dissimilar, ovate, acute; the dorsal somewhat concave, 1.9-2.2 cm long, 8.5-10 mm wide; the lateral sepals attached to the column foot, 1.8-2.2 cm long, 1.2 cm wide. **Petals** elliptic-ovate, somewhat oblique, 1.5-1.7 cm long, 6-7 mm wide, acute to obtuse. **Lip** not-firmly attached to the column foot, ovate in general outline when spread, 1.2-1.3 cm long, 9-10 mm wide, 3-lobate at about the middle; lateral lobes variable, acute to rounded, somewhat exceeded in front by the fleshy, subquadrate, emarginate callus; midlobe ovate, rounded, with crenulate margin. **Column** arcuate, about 9 mm long excluding foot and operculum, foot 5-6 mm long; operculum and pollinia unknown, probably as per the genus.

PARATYPES: COSTA RICA. Prov. Puntarenas: Cordillera de Talamanca, forested slopes of Cerro Echandi, 3(2?),000-2,700 m. *G. Davidse et al.* 23979 (SEL); Cordillera de Talamanca, forested upper slopes of Cerro Burú, *G. Davidse et al.* 23819 (MO). PANAMA. Prov. Chiriquí: Near Fortuna Dam, on slopes of Cerro Hornito above Los Planes, 1,300 m, *G. McPherson 11850* (MO); path from Linares farm c. 1,400 m to top of Cerro Hornito at 1,750 m, *J. P. Folsom et al.* 7254 (MO, SEL); Near Fortuna Dam, on slopes of Cerro Hornito above Los Planes, forested slopes, 1,300 m, *G. McPherson 11850* (MO); Cerro Hornito, NNE of Gualaca, 1,750-2,000 m, *R. L. Dressler 5756* (FLAS).

ETYMOLOGY: Named in allusion to the tuberculate leaf sheaths.

Maxillaria tubercularis is endemic to evergreen (often oak) forests of southern Costa Rica and Chiriquí, Panama at 1,300-2,700 m elev. It most closely resembles *Maxillaria elatior* Rchb.f. found to the north, but it is generally smaller in all vegetative parts and occurs at much higher elevations. Flowering season: August, December and January.