Maxillaria muscoides J. T. Atwood, *sp. nov.* TYPE. COSTA RICA: "From Cerros el Humo de Pejivalle in the zone of Turrialba," *Dodson 2526* (Holotype: SEL). Figs. 4-9.

Species affinis *M. flavae* Ames et al. et *M. microphyto* Schltr. similis sed plantis parvioribus, foliis angustioribus teretibusque, et labello differente distinguitur.

Plant small, somewhat moss- or brush-like, to about 10 cm tall, often a tuft of small, few-branched canes appearing somewhat cespitose. Rhizome elongate, to 2 cm between pseudobulbs, rooted only at the base, concealed by scale bracts; roots less than 0.5 mm in diameter. **Pseudobulbs** conic, somewhat grooved, to about 1.2 cm long and 5 mm wide, subtended by 3-4 foliaceous bracts; the apex 1-foliate. **Leaves** acicular, terete, articulate, 1-3.5 cm long, about 1.5 mm in diameter, the apex obtuse and apiculate. **Inflorescence** single per foliaceous or non-foliaceous rhizome bract appearing on the nearly mature shoot; scapes to about 1 cm long; ovary with pedicel 2-2.5 mm long, exceeded

by the subulate floral bract. Flowers pale yellow, apparently not opening broadly. Sepals dissimilar; the dorsal ligulate, somewhat concave, 5-5.5 mm long, 1.2-1.8 mm wide, acute, dorsally keeled at the apex; the lateral sepals triangular-falcate, attached to the column foot, acute, 5 mm long, less than 2 mm wide. Petals elliptic-lanceolate, slightly falcate, acute, 4-4.5 mm long, about 1.2 mm wide. Lip hinged to the column foot, recurved in natural position when spread (difficult) 3-3.5 mm long and 2-2.2 mm wide, shallowly 3-lobate at about the middle, the lateral lobes rounded and somewhat embracing the column, the midlobe ovate, acute, dorsally keeled; callus lamellate connecting the lateral lobes, ending at or below the sinuses. Column short, less than 2 mm long excluding the operculum; foot about 1.8 mm long; operculum 1.5 mm in diameter; pollinia 4, supported on a short, squarrose stipe with dark viscidium (dried material).

PARATYPES: COSTA RICA. Prov. Cartago: Tapantí, Vicinity of Quebrada Casa Blanca, *Grayum 3967* (MO); pasture and forested slope N of Quebrada Casa Blanca, epiphytic on stem of old coffee tree in pasture, ca. 1,350 m, *Grayum* 4575 (MO).

ETYMOLOGY: Named in allusion to the mosslike habit of the plant.

Maxillaria muscoides is an epiphyte of premontane rainforests at 1,350 m elev. In habit *Maxillaria muscoides* is unlike any other species known from Central America particularly in the needle-like leaves reminiscent of certain Brazilian taxa that have two leaves at the pseudobulb apex. However, flower morphology indicates a distinct relationship with *M. microphyton*. Flowering season is August to November.



Figs. 4-9. *Maxillaria muscoides* Atwood. 4. Plant habit. Scale=1 cm. 5,6. Analysis of sepals and petals; lateral view of ovary, lip, and column. Scale = 5 mm. 7. Flower in natural position. Scale = 5 mm. 8. operculum. Scale = 1 mm. 9. Pollinarium with viscidium, stipe, and 4 pollinia. Scale = 0.5 mm. Figures by G. Barboza.