

Ionopsis papillosa Pupulin *sp. nov.* TYPE: ECUADOR. Pichincha: Santo Domingo de Los Colorados, 500 m, September 1995, collected by A. Olmi, flowered in cultivation 28 April 1997, *F. Pupulin* 402 (Holotype: SEL; Isotype: Herb. Pupulin). Fig. 2.

Species I. minutiflorae (Dodson & N. Williams) *Pupulin similis*, sed planta et inflorescentia minoribus, labello albo lamina papillosa, petalis purpureo maculatis differt.

Plant epiphytic, cespitose, erect, with short rhizome. Roots flexuous, filiform. Pseudobulbs ovate, slightly complanate, 1.2 cm long, 0.9 cm wide, monophyllous, concealed at the base by 3–5 conduplicate, imbricating, foliaceous sheaths, articulate near the base; foliate blade elliptic-ovate, acute, minutely apiculate, very fleshy, green, 2–4.2 cm long, 1.1–2.0 cm wide. Terminal leaf aborted, about 3 mm long. Inflorescence paniculate, erect, produced from the axil of the uppermost leaf, to 24 cm long, provided with many tubular to slightly spreading bracts, each branch densely few flowered, bearing 5–7 flowers at apex. Floral bracts triangular-ovate, acute, to 1.2 mm long, 1.5 mm wide. Pedicellate ovary linear clavate, to 5 mm long including the pedicel. Flowers very small, white with petals blotched of purple at apex, the lip white with yellow callus. Dorsal sepal elliptic-obovate, obtuse, apiculate, erect surrounding the column, 2.8 mm long, 1.2 mm wide. Lateral sepals connate for about 2/3 of their length, elliptic, deeply saccate at the base to form a gibbous nectary, the synsepalum 2.5 mm long, 2.2 mm wide, the apexes obtuse, apiculate. Petals obliquely elliptic-oblong, obtuse, alongside labellum and column, 3.2 mm long, 1.5 mm wide. Labellum cuneate-spatulate, with a short claw, obtuse to retuse, abaxially densely papillose, 2.5–3.2 mm long, 1.5–2.0 mm wide, provided at the base with 2 rounded, short, laterally flattened nectar horns protruding into the nectary; callus formed by 2 fleshy carines, subquadrate to subfalcate at the base, slightly narrowing at apex. Column clavate, with 2 vestigial, rounded, stigmatic arms, the stigma triangular-obcordate, 1.3 mm long. Anther cap operculate, strongly carinate, glabre. Pollinia 2, obovate, laterally complanate, on a triangular-ligulate stipe, basally attenuate; viscidium ligulate, white.

Etymology: from the Latin *papillosus*, papillose, in reference to the indumentum of the lip.

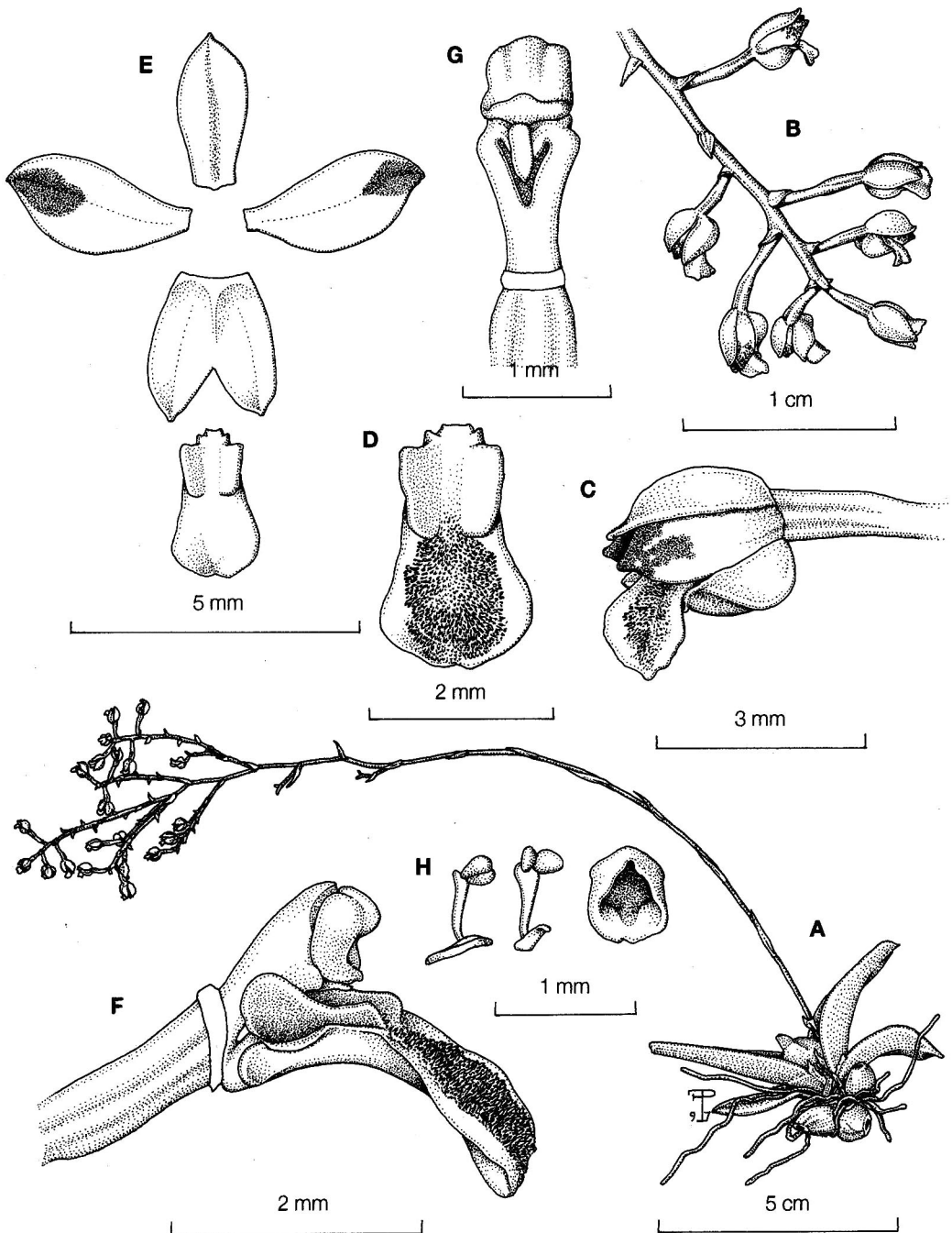


FIGURE 2. *Ionopsis papillosa* Pupulin. A, habit; B, apex of the inflorescence; C, flower; D, lip; E, perianth, flattened; F, column and lip, lateral view; G, column, abaxial view; H, pollinarium and operculum. (F. Pupulin 402).

Distribution: endemic to Ecuador.

Ecology: epiphytic in rain forests. Rains on the western flanks of the Cordillera Occidental are heavy, and they may exceed 3000 mm a year at Santo Domingo de Los Colorados, where climate is generally temperate with an average temperature of about 22.5 C (Terán, 1990). The plant flowers in cultivation in April.

Ionopsis papillosa differs from *I. minutiflora* mainly in the shape and indumentum of the labellum (densely papillose in *I. papillosa* vs. nonpapillose in *I. minutiflora*). Furthermore, the plant and the inflorescence are smaller in the former, whereas in *I. minutiflora* the labellum is spotted with purple and white petals; in *I. papillosa* the labellum is white with a yellow callus, and the petals have two large blotches of purple at the apex.