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# A New Species of *Solenidiopsis* (Orchidaceae: Oncidiinae) from Peru

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Abstract. A third species of the little known Andean orchid genus *Solenidiopsis* is described and illustrated. A key to the species is provided.

## Introduction

Until the present description of *Solenidiopsis galianoi* (Figure 1), only two other species previously have been recognized in this genus, *S. peruviana* (Schltr.) D.E. Benn. & Christenson and *S. tigroides* (C. Schweinf.) Senghas (Dalström 1999). During a recent visit at the herbarium in Cuzco, Peru (CUZ), photographs and a dried specimen of a third species were located. The plant had been collected during a botanical survey in the Manu Biosphere Reserve. This third species differs from *S. peruviana* and *S. tigroides,* primarily by the rounded bilobed lip lamina and the fleshy ridge that attaches the column to the lip.

## New Species

**Solenidiopsis galianoi** Dalström & P. Nuñez, sp. nov. TYPE: Peru. Cuzco: Province of Paucartambo, District of Challabamba, the Biosphere Reserve of Manu, between Pillahuata and Nueva Esperanza, at 2800–3200 m elev., *P. Nuñez, W. Galiano, E. Suclli, A. Rodriguez & F. Carazas 28694,* 18 Feb. 2001 (Holotype: CUZ). Figure 1.

Species haec sepalis petalisque rotundis, labelli lamina rotunda biloba apiculata, et columna labelloque profunde connatis a congeneribus diversa.

***Plant*** epiphytic. ***Pseudobulbs*** caespitose, ovate, ancipitous, 2–2.5 × 0.8–1 cm, trifoliate, subtended basally by 6–8 distichous sheaths, the uppermost foliaceous. ***Leaves*** conduplicate, shortly petiolate, oblong elliptic to narrowly obovate, 7–9 × 0.8–1 cm. ***Inflorescences*** 1 or 2, axillary, from the uppermost sheaths, erect to suberect, 14–16 cm long, 8–10 flowered, slightly fractiflex racemes; bracts conspicuous ca. 5–8 mm long. ***Pedicel*** with ovary ca. 5 mm long, covered by the floral bract of equal length. ***Flower*** nonresupinate; sepals and petals brown turning yellow basally; lip pale yellow with brown spots and markings between the callus and near the apex; column pale yellow with a large brown spot on each side at the base of the apical wings; dorsal sepal broadly elliptic, entire, 7 × 3.5 mm; lateral sepals similar but slightly obovate, 7 × 4 mm; petals rounded elliptic, 7 × 4.5 mm; lip rigidly fused to the base of the column through a longitudinal, central, fleshy keel, up to ca. ⅔ the length of the column, canaliculate basally then rounded laminate, bilobed-apiculate, ca. 6 × 5.5 mm; callus of two fleshy, pubescent, spreading keels emerging from above the column attachment; column shortly clavate, straight, with two slightly falcate apical wings and a stigmatic surface divided by an inbent rostellum forming two orbicular lobes, ca. 3 mm long; anther cap orbicular, rectangular rostrate with a verrucose apical knob, ca. 1.5 mm broad; pollinarium of two globose pollinia on a narrowly elongate ca. 0.8 mm long stipe.

*Solenidiopsis galianoi* appears closely related to the other two members of the genus, *S. peruviana* and *S. tigroides,* but differs by the characters presented in the accompanying key. When Senghas (1986) described the genus *Solenidiopsis,* he used the fusion between the column and the lip as a distinguishing feature of this genus and *Cochlioda* Lindl.; a free lip for *Solenidiopsis* versus a lip fused to the column for *Cochlioda.* Adnation, however, varies (Dalström 1999), and the discovery of *S. galianoi,* with an extended fusion between the column and the lip supports uniting the two genera. On the other hand, a different range of colors, distinct floral scents, and non-resupinate flowers readily separate the species in *Solenidiopsis* from the bright-colored, scentless, and regularly resupinate flowers of *Cochlioda.* These differences indicate a different pollination strategy that makes it easy to taxonomically separate the two groups of plants,

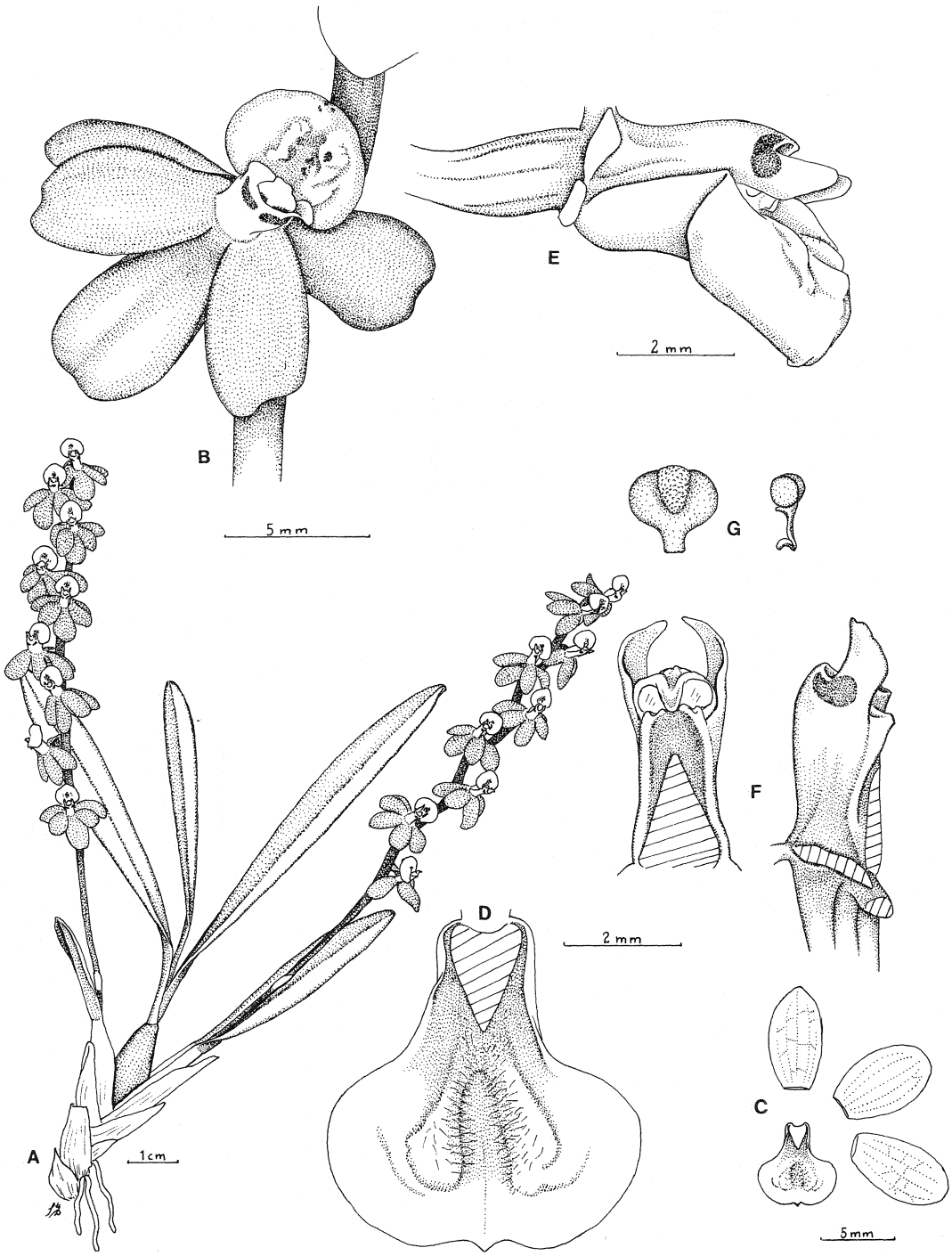


FIGURE 1. *Solenidiopsis galianoi* Dalström & P. Nuñez. **A** Plant habit. **B.** Flower front view. **C.** Dissected flower. **D.** Lip flattened, dorsal view. **E.** Column and lip, lateral view. **F.** Column, ventral and lateral view. **G.** Anther cap dorsal view and pollinarium ventral view. (Drawn from *P. Nuñez et al. 28694,* CUZ).

which in turn may justify keeping them in separate genera.

**Habitat.** Epiphyte in higher elevation wet cloud forest in southern Peru.

**Etymology.** Named in honor of Professor Washington Galiano of Cuzco, Peru, co-discoverer of this species.

## KEY TO THE SPECIES OF *SOLENIDIOPSIS*

1a. Pseudobulbs unifoliate; flowering on immature growth . . . . . *S. peruviana*
1b. Pseudobulbs bifoliate or trifoliate; flowering on mature growth . . . . . 2
2a. Sepals and petals yellow with dark brown spots and bars; lip lamina trilobed . . . . . *S. tigroides*
2b. Sepals and petals uniformly brown; lip lamina rounded, bilobed-apiculate . . . . . *S. galianoi*

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