

***Physothallis cylindrica* Luer, sp. nov.**

Planta mediocris vel grandis terrestris caespitosa, caulibus secundariis crassis teretibus unifoliatis vaginatis, folio crasso carnosio obovato apice rotundato base cuneato, racemo suberecto gracillimo longissimo multifloro, floribus purpureis erectis, sepalis in cylindrum connatis apicibus libris revolutis, petalis nanis spatulatis, labello crasso obovato culcato apice rotundato.

Plant medium to large in size, terrestrial, caespitose; roots slender, flexuous. Secondary stems terete, stout, 5-18 cm long, mostly concealed by a tubular sheath and 1-2 smaller sheaths at the base, unifoliate. Leaf erect, thick, fleshy, obovate, the apex obtuse to rounded, retuse, the base cuneate, sessile, 5-14 cm long, 2-3.5 cm wide. Inflorescence a very long (to 80 cm), suberect, flexible, slender, laxly many-flowered (to 35) raceme, 3-5 erect, cylindrical, purple flowers maturing simultaneously, the peduncle from a spathe about 5 mm long in the axil of the leaf; floral bract 2-3 mm long; pedicel 5 mm long; ovary 4-5 mm long; sepals connate to near their apices into a very slightly sigmoid tube, 10-12 mm long, 15 mm long, 10 mm wide opened and spread, 9-veined, the apices free from each other for 3-4 mm, thickened, subacute, recurved, the lateral sepals united for 8-9 mm; petals translucent white, oblong-spatulate, the apex rounded, suffused with red, 2.5 mm long, 1 mm wide, 1-veined; lip pale green, suffused with red-purple, obovate, sulcate between the thickened, upturned sides, the apex rounded, the base truncate, shortly hinged to the column-foot, 3 mm long, 1 mm wide; column terete, 2.5 mm long, green, spotted with purple, the foot short.

ETYMOLOGY: From the Latin *cylindricus*, "cylindrical," in reference to the tubular flower.

TYPE: *ECUADOR*: LOJA: terrestrial on the road embankment about 25 km north of Loja, alt. ca. 2000 m, 5 March 1977, *C. Luer, J. Luer & K. Cordoba 1538* (HOLOTYPE: SEL).

DISTRIBUTION: Southern Ecuador.

This robust species forms clumps of numerous stout stems bearing thick obovate leaves. An exceedingly long, flexible raceme produces a row of several erect flowers in a slow procession. The apices of the sepals curve out from the small aperture on the labellar (adaxial) side of the apex of the tubular flower. Except for the fact that the lateral sepals are united to each other for much of their length, the plant and flower are very similar to *Physothallis harlingii* Garay (SELBYANA 1:218. 1975).

Although a tubular flower created by connate sepals has been the feature relied upon to diagnose a species of *Physosiphon*, other characteristics of *Physothallis cylindrica* indicate a very close alliance to *P. harlingii*. The attribution of this species to *Physothallis* will alter the criteria for that genus, e.g. lateral sepals free from each other. Conceivably both species could be treated in *Physosiphon* or *Pleurothallis*.

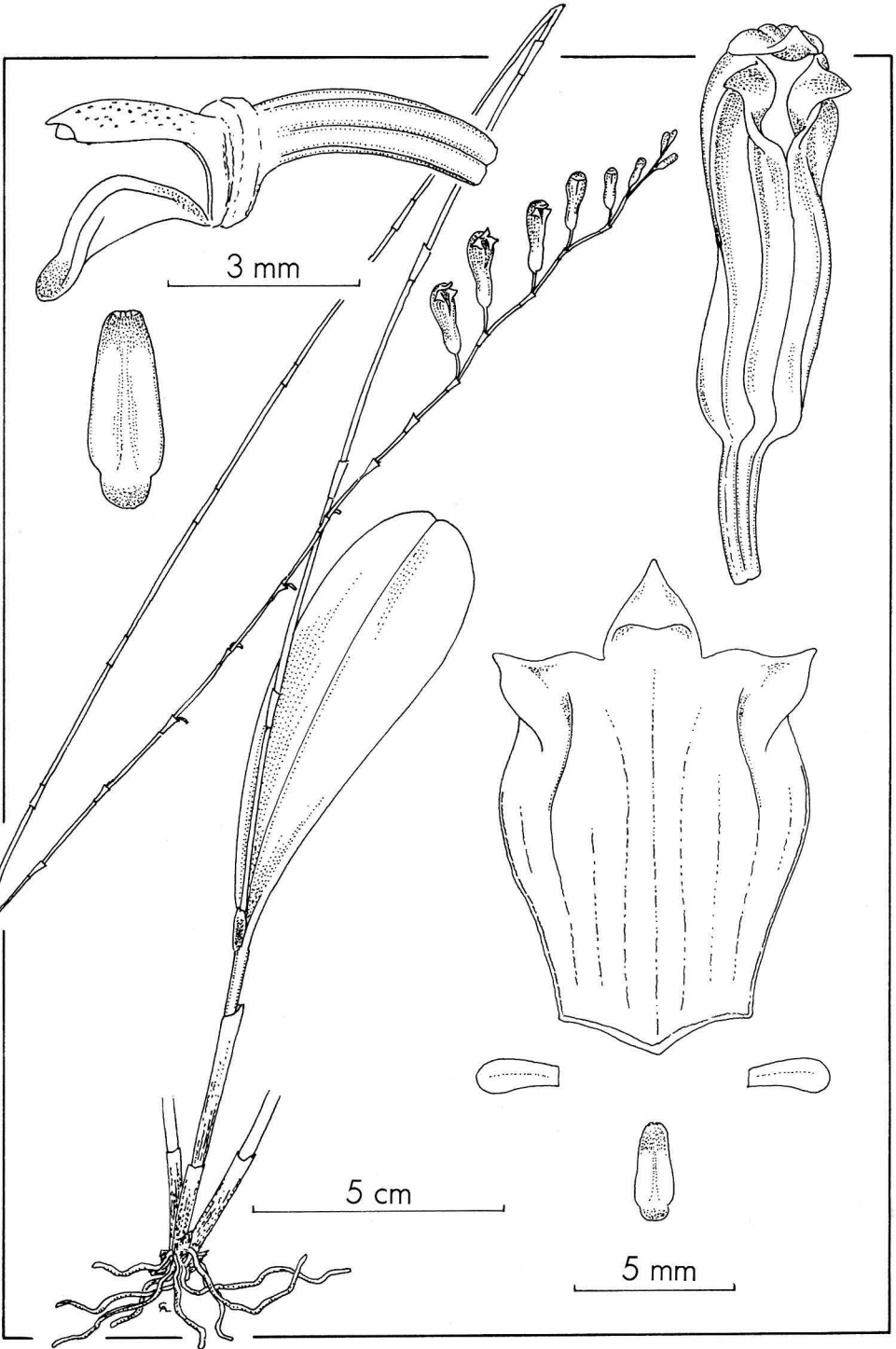


Figure 213. *PHYSOTHALLIS CYLINDRICA* Luer