

Trichocentrum loyolicum Pupulin, Karremans & G. Merino, *sp. nov.* TYPE: ECUADOR. Zamora-Chinchipe: Valladolid, Loyola, 1000–1200 m, collected by G. Merino, 2002, flowered in cultivation in the collection of Ecuagenera at Gualaceo, 3 November 2007, A. Karremans 2133 (Holotype: QCNE). Fig. 1.

Species Trichocentro pulchro Poepp. et Endl. *affinis, a quo floribus minoribus, longitudine calcaris laminae labelli subaequalis, carinis in basi labelli incrassatis recurvis apicibus convergentibus, alis columnae perparvae recedit.*

Plant epiphytic, pseudobulbous, caespitose, erect-patent, with a short rhizome. *Roots* flexuous, thick, produced on the rhizome under the attachment of the pseudobulbs. *Pseudobulbs* nearly obsolete, cylindric-orbicular, to 3.5 mm long, about 3 mm wide, covered by 3 papyraceous sheaths, monophyllous. *Leaf* fleshy, sessile, elliptic to elliptic-oblong, to 5.0 cm long, 2.2 cm wide, acute to acute-acuminate, green, spotted with scattered small purple dots. *Inflorescence* a raceme shorter than leaves, 1-flowered; peduncle terete, to 1.7 cm long. *Floral bracts* ovate, acute, to 8 mm long, 8 mm wide. *Pedicellate ovary* linear-subclavate, triquetrous, to about 2 cm long including the pedicel. *Flowers* not spreading completely; sepals and petals yellowish green, minutely spotted reddish brown, the lip yellowish green, with minute red-brown spots and a whitish

green margin, the callus yellow, with reddish spots. *Dorsal sepal* widely elliptic, concave, dorsally carinate, acute, obscurely apiculate, 1.3 cm long, 0.9 cm wide. *Lateral sepals* obliquely elliptic, dorsally carinate, abruptly acute, 1.3 cm long, 0.6 cm wide. *Petals* ovate to obovate, rounded, 1.3 cm long, 0.8–0.9 cm wide. *Lip* adnate to the base of the column, obovate, rounded at apex, with slightly undulate margins, 1.6 cm long, 0.8–1.0 cm wide, extended at the base into a slender, flexuous spur, about 1.8 cm long; callus formed by 2 thickened, arcuate, converging, papillose keels. *Column* short, stout, about 6–7 mm long, with a pair of very short, obcuneate-dolabriform, lacerate wings. *Anther cap* cucullate, elliptic, densely papillose, 2-celled. *Pollinia* 2, pyriform, complanate, on a triangular stipe; viscidium elliptic, brown.

Distribution: known only from the type locality in southeastern Ecuador.

Etymology: named from Loyola, a small village in the Ecuadorian “oriente” close to the border with Peru, where the species was collected.

Ecology: epiphytic in shade on the lower branches of trees in premontane rain forest at 1000–1200 m. In the area of Valladolid, in the province of Zamora-Chinchipe in the Ecuadorian Amazon, *T. loyolicum* is sympatric with *T. pulchrum*.

Phenology: in cultivation in Ecuador, flowers between September and November.

Conservation status: data deficient.

Among the species of the *Trichocentrum pulchrum* group, *T. loyolicum* is most similar to *T. pulchrum*, from which it differs by the smaller flowers (sepals < 1.5 vs. > 1.7 cm), the spur length subequal to the lip blade (ratio blade length: spur length = 1:1 vs. 1.0:1.5), the basal keels curved and convergent at the apex (vs. incurved, divergent), and the reduced column wings (maximum length = 1 mm vs. 3 mm).

ARTIFICIAL KEY TO THE SPECIES OF THE *TRICHOCENTRUM PULCHRUM* GROUP

- 1a. Spur more than twice as long as the lip *T. longicalcaratum*
- 1b. Spur less than twice as long as the lip 2
- 2a. Disk of the lip with 4 keels; lip obcordate *T. obcordilabium*
- 2b. Disk of the lip with 2 keels; lip obovate 3
- 3a. Keels of the lip glabrous or obscurely puberulent; floral segments greenish white, never with purple spots or blotches *T. viridulum*
- 3b. Keels of the lip papillose; floral segments marked with purple spots and blotches 4
- 4a. Spur 1.5 times longer than the blade of the lip; keels of the lip divergent at apex; column wings 3 mm long *T. pulchrum*
- 4b. Spur as long as the blade of the lip; keels of the lip incurved, convergent at apex; column wings 1 mm long *T. loyolicum*

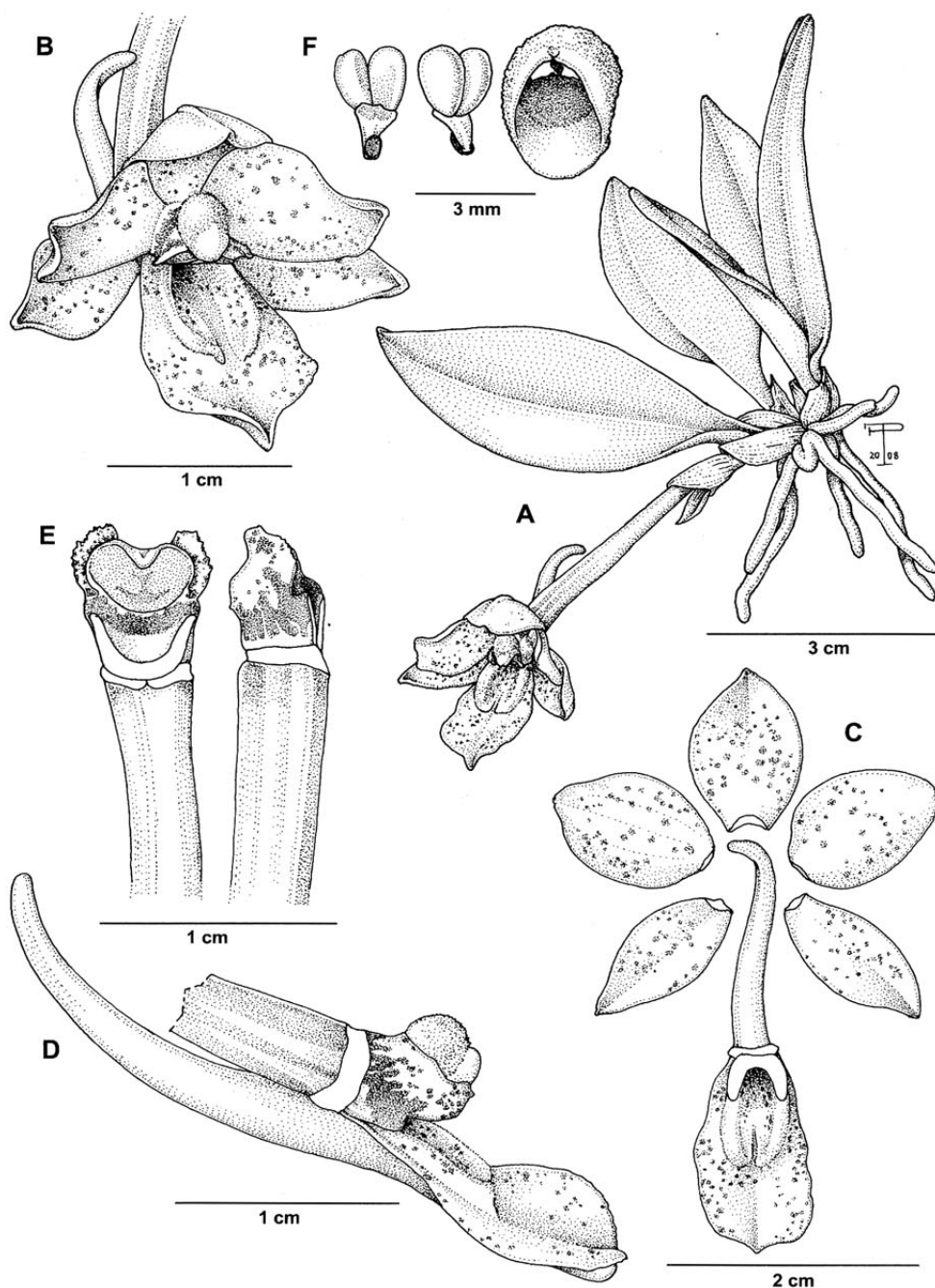


FIGURE 1. *Trichocentrum loyolicum* Pupulin, Karremans & G. Merino. **A**, habit; **B**, flower; **C**, dissected perianth; **D**, column and lip, lateral view; **E**, column, ventral and lateral views; **F**, pollinarium (two views) and anther cap. Drawn by F. Pupulin from the holotype.