

Trichocentrum dianthum Pupulin & Mora-
Retana, sp. nov. (FIGURE 3).

TYPE. Costa Rica: Prov. of San José, epiphytic
in forest near Las Nubes de Quizarrá (1,000 m),
1988, *J. Cambronero s.n.*, flowered in cultivation
in March 1989 (holotype, USJ!).

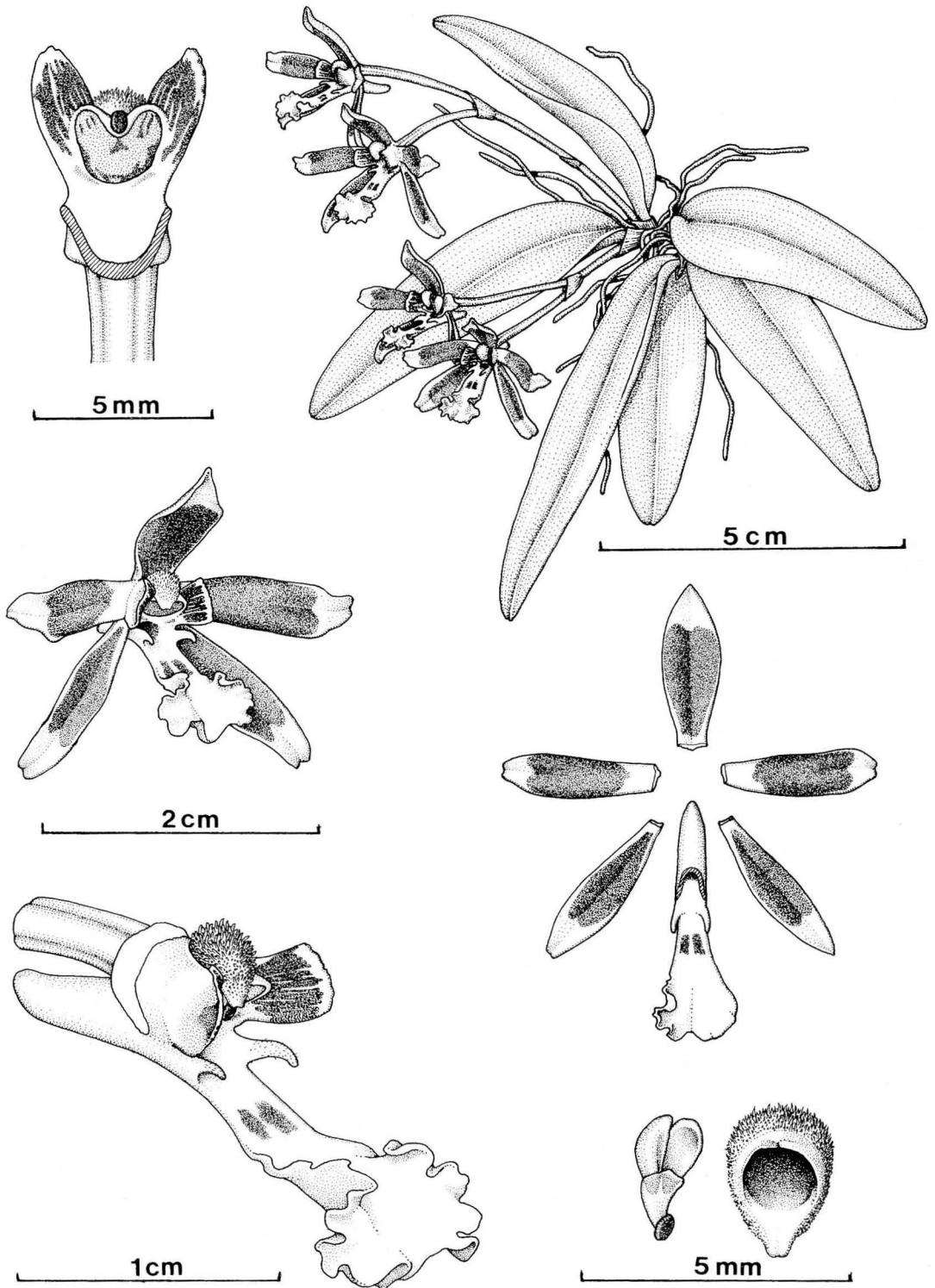


FIGURE 3. *Trichocentrum dianthum*. Illustration voucher: Costa Rica: Prov. of San José: Perez Zeledon, Las Nubes de Quizzarrá, J. Cambronero s.n. (USJ).

Species *Trichocentrum pfavii* Rchb. f. affinis, sed calcar majore, labello spatulato et alis columnae subquadratis brunneo striatis differt.

Plant epiphytic, pendent; rhizome abbreviated. *Roots* filiform, glabrous, with green apex. *Pseudobulbs* minute, cespitose, rounded, to 5 mm long, unifoliate. *Leaf* light green, oblong-elliptic to obovate-oblong, acute to minutely retuse, sessile, from a conduplicate base, to 9.7 cm long, 3 cm wide. *Inflorescences* up to four, lateral, basal, erect, 2-flowered; peduncle terete, green, 3.5–4 cm long. *Bracts* conspicuous, ovate, concave, spreading, brownish, to 5 mm long. *Ovaries* linear-clavate, 2.3 cm long including the pedicel. *Flowers* spreading, with sepals and petals yellow covered by a very large brown blotch, and white lip, marked near the base by two rose-purple blotches. *Dorsal sepal* erect, elliptic-oblongate, obtuse to subacute, carinate, to 16.5 mm long, 6.3 mm wide. *Lateral sepals* spreading, obliquely oblongate, carinate, to 17 mm long, 4 mm wide. *Petals* linear-oblong, acute, subcarinate, to 16.5 mm long, 5 mm wide. *Lip* spatulate, adnate to the base of the column, 25 mm long, 9.2 mm wide near the apex, with two narrow, falcate, lateral lobes at the base, the midlobe rounded in front and with crisped margins, producing at the base an elongate, slender, conic spur, 11 mm long. *Column* short, stout, footless, to 5 mm long, with a pair of fleshy, erect, subquadrate wings, brown striped. *Anther* white, cucullate, hirsute. *Pollinia* 2, pyriform, complanate, on a short, triangular stipe; viscidium peltate, brown.

ETYMOLOGY. From the Greek *di-* “two, double” and *anthos* “flower,” referring to the two-flowered inflorescences.

DISTRIBUTION. Known only from Costa Rica.

COSTA RICA. Prov. of San José: Perez Zeledón, Las Nubes de Quizarrá, *J. Cambroneiro s.n.* (USJ!); Alto de San Juan (980 m), on *Citrus aurantium* trees, *F. Pupulin & W. Fonseca 22*, flowered in cultivation, March 1990 (USJ!); slopes of the Cerro Vueltas (about 2,000 m), *A. Herrera s.n.*, flowered in cultivation, November 1989 (USJ!). Without locality, *M. Flores s.n.* (Herb. Pupulin!).

HABITAT. *Trichocentrum dianthum* is extremely rare with few known localities, and is probably extinct in the type locality owing to deforestation. It seems to be restricted between 1,000 to 2,000 m to the northern part of the Rio General valley in the watershed of the Fila Costera and slopes of the Cordillera de Talamanca, and to the high western intramountain valleys of the Cerro Vueltas. At the type locality, which was a patch of primary forest facing a little tributary

of the Rio General, it grew with *Lacaena spectabilis*, *Kefersteinia costaricensis*, *K. lactea*, *Restrepia muscifera*, *Macroclinium* sp., and *Trichocentrum capistratum*. We have collected it at Alto de San Juan growing on short *Citrus* in a pasture, where the plants were established on shady, smaller branches of the host trees with thick layers of moss. *Trichocentrum dianthum* grows sympatrically with *T. caloceras*, *T. capistratum* and *T. pfavii* which seem to prefer somewhat different microhabitats. *T. caloceras* and *T. capistratum* grow high in the canopy where light is stronger, whereas *T. dianthum* and *T. pfavii* grow lower on the trunks in deeper shade where roots are immersed in moss.

Both the areas, Las Nubes de Quizarrá and San Juan, are characterized by a hot, very moist climate with moderate dry season. The rains are particularly heavy during October and November, when *T. dianthum* matures its new growths. By the end of December, the inflorescences arise and flowers open nearly simultaneously from February until April. Cultivated plants sometimes flower in December.