

REPRESENTATIVE SPECIMENS: VENEZUELA. Bolívar: between Tumeremo and El Dorado, *G.C.K. & E. Dunsterville* 409; north of Tumeremo, *G.C.K. & E. Dunsterville s.n.*; near the Angel Falls, *G.C.K. & E. Dunsterville s.n.* SURINAM. Brownsberg Mazaroni top, *Determann* 154 and 163 (SEL). FRENCH GUIANA: Mont Atachi Bacca, région de l'Inini, 7 km à l'est de Gobaya Soula, 480 m, 53° 55', 31° 33', *Granville et al.* (AY). BRAZIL: Amazonas: Río Negro, without collector (BR); *Wallis s.n.* (type of *T. cornucopiae*, W). Bahía: Ilheus, *cult. Pupulin ex Seidel s.n.* (Herb. Pupulin). Goiás: Inhumas, *cult. Pupulin ex Seidel s.n.* (Herb. Pupulin). Pernambuco, without specific locality, *Pfister s.n.* (Herb. Pupulin). Rio de Janeiro: along the Rio Paqueta, *Neves-Armond* 40 (BR); Rio de Janeiro, *Gaudichand* 377 (P). Matto Grosso: San Luiz de Cáceres, *Hoehne s.n.* (SP). Espírito Santo: Linhares-Mun-Callatine, *Mulford & Qaine Foster s.n.* (AMES). Without locality, *Hort. Sander* (K, BR). ECUADOR: Zamora-Chinipe: Paquisha, *F. Pupulin* 272 and 273 (Herb. Pupulin); *Hirtz* 2819 (RPSC). BOLIVIA. Consata, *C. Luer s.n.* (SEL, three specimens). Santa Cruz: Chiquitos, Robaré, *Vasquez* 895 (Herb. Vasquezianum); Tumupasa, *White* 1120 (AMES); Rurrenabaque, *White* 2323 (AMES). PERU. Mono Calzada, *D.E. Bennett* 3245 (SEL). Without collection data: *Hort. Linden* (K); *cult. Hort. Bot. Kew* (K); *Hort. White* (K); *Hort. Sander* (K); *Hort. Mantin* (K); *Hort. Finet* (K).

*T. panduratum* Schweinf., *Amer. Orchid Soc. Bull.* 14: 104. 1946. TYPE: PERU. San Martín: Juan Jui, Alto Río Huallaga, *G. Klug* 4260 (Holotype, AMES; Isotype, K).

DISTRIBUTION: Endemic to Peru.

REPRESENTATIVE SPECIMENS: PERU: San Martín: Huallaga, Bellavista, *J. Schunke V. sub D. Bennett* 1135; Moyobamba, *R. Stümpfle s.n.* (photo in Teuscher, 1964).

*T. purpureum* Lindl. ex Rchb.f., *Gard. Chron.* 772. 1854. TYPE: GUYANA. *Ex hort. Veitch* (Holotype, K).

DISTRIBUTION: Endemic to Guyana.

*T. recurvum* Lindl., *Edwards's Bot. Reg.* 29: misc. 9. 1843. TYPE: GUYANA. *Ex hort. Lodiges s.n.* (Holotype, K!).

*T. cornu-vaccae* Rchb.f. in Reichenbach *Herb.*, Ms.

*T. plectrophora* Rchb.f. in *Herb. Jard. Bot. Etat Bruxelles* (BR), Ms., non (Lodd. ex Lindl.) Rchb.f. [= *Plectrophora iridifolia*].

DISTRIBUTION: Ecuador (?), Guyana and Surinam.

REPRESENTATIVE SPECIMENS: ECUADOR. Morona-Santiago: Misión Bomboiza, *Holm-Nielsen et al.* 4197 (not seen, but very dubious). SURINAM. Paramaribo, 27 Feb. 1858, *Focke s.n.* (W). Concordia: Saramacca, without collector (as *T. cornu-vaccae*, BR); same locality, without collector (BR). Without locality, *Wulfschlaegel s.n.* (W); *cult. Dull s.n.* (W).

*T. tenuiflorum* Lindl., *Paxt. Flow. Gard.* 1: 12. 1850. TYPE: BRAZIL. Bahia: Without locality, *Morel s.n.* (Holotype, K).

DISTRIBUTION: Brazil.

*Trichocentrum wagneri* *Pupulin sp. nov.* TYPE: BRAZIL. Without locality, introduced by A. Seidel, flowered in cultivation by A. Wagner in Santa Margherita, Italy, 25 Sept. 1990, *F. Pupulin* 289 (Holotype, SEL). Fig. 14.

Species ad *Trichocentrum fusco* Lindl. similis, sed calcar multo magis longiore quam labelli, labello oblongo-pandurato rotundato marginibus leviter crenulatis, callis parallelis et alis columnae brunneo striatis differt.

**Plant** epiphytic, caespitose, pendent to suberect, with abbreviated rhizome. **Roots** filiform, flexuous, glabrous, silvery white with green apex. **Pseudobulbs** subglobose, up to 5 mm long, 3.5–4.5 mm wide, monophyllous. **Leaf** ovate-oblong to elliptic-oblong, retuse, narrowed to a conduplicate, sessile base, light green, 6–11 cm long, 3–3.5 cm wide. **Inflorescence** lateral, basal, pendent, successive, 1–many-flowered; peduncle terete, 7–9 cm long, concealed by 2–3 concave, ovate, papiraceous bracts, to 8 mm long. **Ovaries** linear-clavate, terete, about 4 cm long including the pedicel. **Flowers** with free sepals and petals, dull brown with yellowish apexes and ivory white lip, marked near the base by yellow with purple–brown radiating lines and blotches. **Dorsal sepal** oblanceolate, acute, concave toward the apex, to 20 mm long, 6.5 mm wide. **Lateral sepals** obliquely subfalcate, acute to subobtusate, subcarinate towards the apex and slightly concave, to 21 mm long, 5–

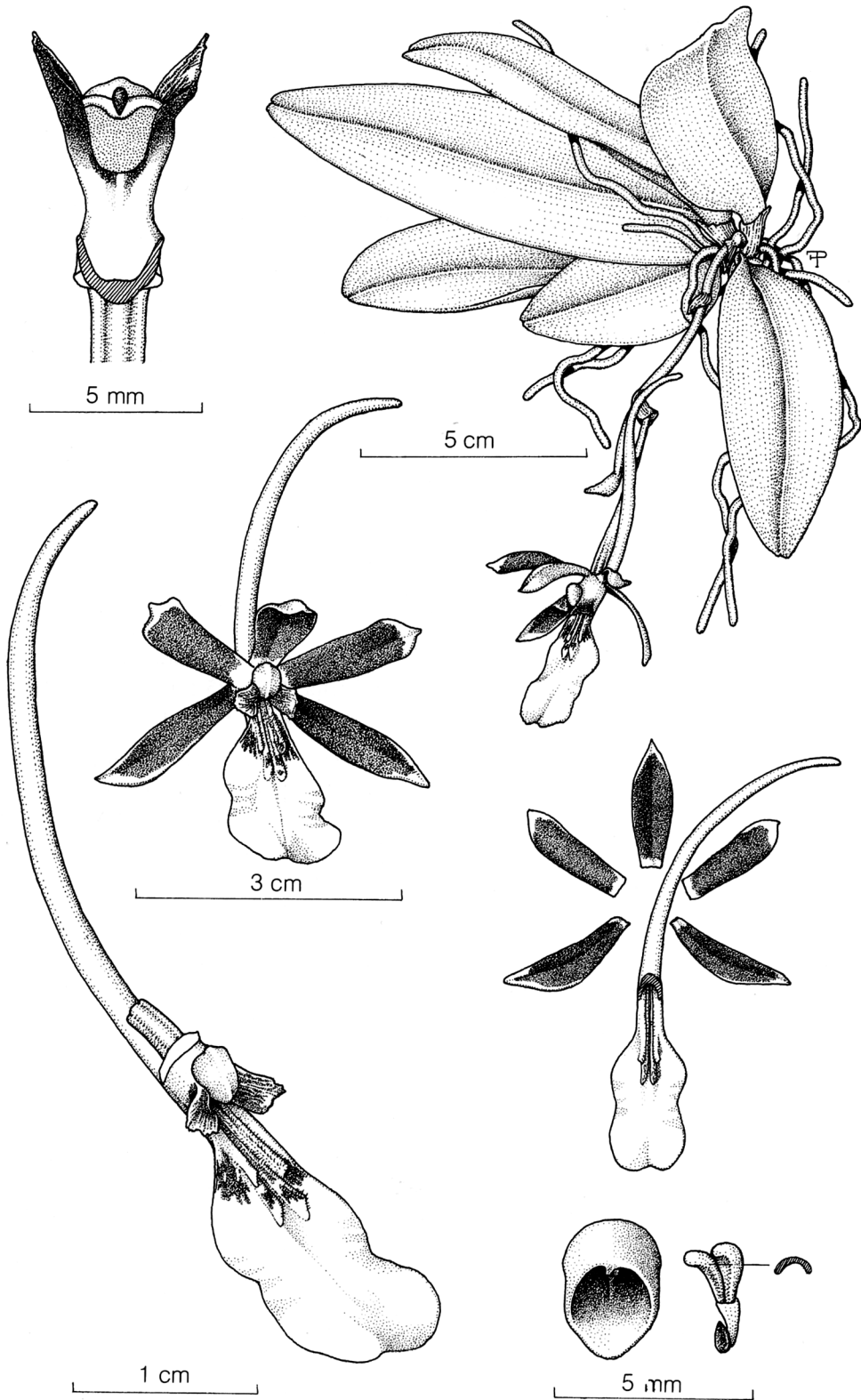


Fig. 14. *Trichocentrum wagneri* Pupulin. Voucher: without collection data, introduced by A. Seidel, flowered in cultivation by A. Wagner, *F. Pupulin* 289 (SEL).

5.5 mm wide. **Petals** linear-obovate, obtuse, sometimes slightly concave towards the apex, 18.5 mm long, 5.5 mm wide. **Lip** from a cuneate base oblong-subpandurate, adnate to the column, to 26 mm long, 11.5 mm wide, emarginate in front, with plane to slightly crenulate margins, producing with the column base a slender, linear-attenuate, fexuous spur, 5 cm long, 0.35 cm wide at the base; disc with four slender, puberulent keels, the external ones shorter, extending parallel from the base to the middle of the lip. **Column** short, stout, without a foot, to 6 mm long, with a pair of large, erect, cuneate, subquadrate, irregularly erose-dentate wings, completely striped with brown. **Anther** white, subglobose, glabre. **Pollinia** 2, pyriform, deeply concave, on a short obtriangular stipe; viscidium peltate, brown.

**ETYMOLOGY:** Named in honor of Alessandro Wagner, of Milan, Italy, who first flowered the species in his collection.

**DISTRIBUTION:** Brazil.

**REPRESENTATIVE SPECIMENS:** BRAZIL. Without collection data, introduced by A. Seidel and flowered by *F. Pupulin* 290 (Herb. Pupulin); cultivated by A. Riboni, *F. Pupulin* 291 (Herb. Pupulin).

The species was introduced in Italy in early summer 1989 together with a group of *T. fuscum* plants coming from Brazil. Several specimens flowered in cultivation in 1990, showing flowers that only superficially resemble those of *T. fuscum* Lindl. *Trichocentrum wagneri* may be easily distinguished from *T. fuscum* mainly on the basis of spur length which is twice longer than the lip, whereas it is as long as the lip or slightly shorter in *T. fuscum*. The lip is oblong, plane, only slightly crenulate towards the middle. It presents on the disc four slender, puberulent keels, that run parallel from the entrance of the spur to the middle of the lamina. Column wings are wide, cuneate, subquadrate and concave; they are intensively striped by brown, whereas they are slightly spotted in *T. fuscum*. The species flowers in late autumn, from September through December.

### *Trichocentrum brachyceras* group

Only two species belong in this group, one endemic to Colombia and the other to Peru (Fig. 15). *Trichocentrum brachyceras* Schltr. is known only from a Schlechter's tracing of the type (published by Mansfeld, 1929). *Trichocentrum bra-*

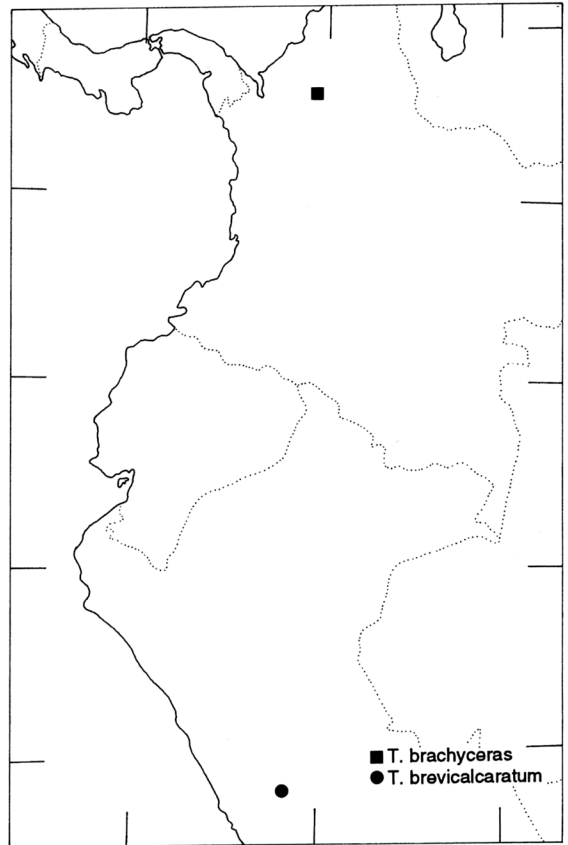


Fig. 15. Distribution of the species of *Trichocentrum brachyceras* group.

*chyceras* flowers, as well as these of *T. brevicealcaratum* C. Schweinf., present a narrow, deeply concave lip with acute apex and short, tubular spur. Both the highly revolute margins of the lip and its acute to acuminate apex are useful characters to distinguish the taxa of this group from the main body of the genus. The two species can be easily distinguished by the length of the lip: it is longer than the sepals and with two keels near the base in *T. brachyceras*, while it is markedly shorter than the sepals and without keels in *T. brevicealcaratum*. Nothing is known about the vegetative morphology of *T. brachyceras*, but *T. brevicealcaratum* presents a typical habit for the genus, with short, 1-flowered inflorescences.

### Key to the species of *Trichocentrum brachyceras* group

- 1a. Lip longer than sepals, apiculate, with two distinct keels near the base . . . . . *T. brachyceras*
- 1b. Lip markedly shorter than sepals, minutely retuse, without keels . . . . . *T. brevicealcaratum*