

Stelis croatii Luer, *sp. nov.* TYPE: COSTA RICA. Cartago; Tapantí Reserve, south of Quebrada Salto, alt. 1500–1800 m, 29 Sept. 1987, T. B. Croat & M. H. Grayum (Holotype: MO). Fig. 29.

Species haec *S. loculifera* Luer affinis, sed racemis paucis folio brevioribus, sepalis intus minute verrucosis et labello subquadrato plano distinguitur.

Plant medium to large in size, epiphytic, densely caespitose; roots slender. Ramicauls erect, slender, 10–20 cm long, enclosed by a tubular sheath near the middle, and 2–3 other sheaths at the base. **Leaf** erect, coriaceous, long-petiolate, elliptical, acute, the blade 6–10 cm long, 2.5–3.5 cm wide, cuneate below into a slender petiole 2–3 cm long. **Inflorescence** 2–3 erect, congested,

second, many-flowered racemes with many flowers open simultaneously, 5–10 cm long including the peduncle 1–1.5 cm long, subtended by a spathe 1–1.5 cm long, from an annulus below the apex of the ramicaul; floral bracts oblique, acute, 2 mm long; pedicels 1 mm long; ovary 1 mm long; flowers nodding, partially expanded; **sepals** fleshy, greenish, glabrous externally, minutely verrucose within, the dorsal sepal connate 1 mm basally to the lateral sepals to form a short sepaline tube, oblong, concave, obtuse, 3 mm long, 1.75 mm wide, 3-veined, the lateral sepals oblong, obtuse, 3 mm long, 1.75 mm wide, 3-veined; **petals** green, elliptical, shallowly concave, 0.75 mm long, 0.5 mm wide, the apex thickened, obtuse; **lip** green, thick, subquadrate, 0.6 mm long, 0.6 mm wide, 0.3 mm deep, the apex truncate, the anterior surface concave, the dorsum broad with a flat callus and a small glenion anteriorly; the base broadly truncate, hinged to the base of the column; **column** stout, 0.5 mm long, 0.6 mm wide, the foot obsolescent, the anther and the stigma apical with the stigma bilobed.

ETYMOLOGY: Named in honor of Dr. Thomas B. Croat who collected this species.

This species is apparently rare and local in Costa Rica. It is related to *S. loculifera* from western Panama, but differs in bearing several, much shorter racemes, sepals minutely verrucose within, and a flat, subquadrate lip. Although obviously related to *S. loculifera*, the stigmatic lobes of the latter are more or less confluent, while the lobes of the stigma of *S. croatii* are diverging, which, according to Garay's classification, the two species would be in different genera.

