

Planta grandis robusta caespitosa, racemo multifloro folio elliptico longiore, sepalis lateralibus oblongis semiconnatis, petalis anguste oblongis trinervis, labello crassissimo ad apicem bilobo et ad medium parvibicalloso distinguitur.

Plant large, epiphytic, robust, caespitose; roots slender. *Ramicauls* stout, erect, 25–40 cm long, with a close, tubular sheath below the middle and 1–2 imbricating sheaths about the base. *Leaf* erect, coriaceous, elliptical, subacute to obtuse, 14–18 cm long, 5.5–6.5 cm wide, contracted below into a petiole 1.5 cm long. *Inflorescence* 1–2 racemes, erect, densely and simultaneously many-flowered, to 22 cm long including the peduncle 5–6 cm long, subtended by a spathe 1.5 cm long, from an annulus 2–4 mm below the abscission layer; floral bracts 2 mm long; pedicels 1 mm long; ovary 2.5 mm long; *sepals* glabrous, subcarinate, minutely apiculate, the dorsal sepal ovate, obtuse, concave, 7 mm long, 4.5 mm wide, 3-veined, the lateral sepals oblong, obtuse, carinate, 8 mm long, 4.5 mm wide together, connate 2 mm below the middle; *petals* narrowly oblong, truncate at the apex, 5 mm long, 1.5 mm wide, 3-veined; *lip* thick, ovate-subquadrate, bilobed above the middle, 4 mm long, 3 mm wide, the apical lobes rounded, erect, the sides below the middle broadly rounded, the disc with a pair of small, rounded calli near the middle, the base concave, solidly connate to the column; *column* stout, 2 mm long, the foot thick, 1.5 mm long, the anther and stigma subapical.

Etymology: Named for Glenda Mendieta, currently of Gamboa, Panama, collector of this species.

This large, robust species is known from only the original collection in southeastern Ecuador. Except for the unusual lip, the vegetative and floral parts are variations of those found in the genus. The habit is large and robust with multiple, simultaneous flowers in an elongated raceme. The lateral sepals are semiconnate; the petals are oblong; and the lip is thick, ovate and bilobed at the apex with only a small pair of low calli on the disc above the middle.

Except for two pollinia, the floral parts have nothing in common with the genus *Stelis* Sw., which, no doubt, will share some DNA similarity.

Crocodelanthe mendietae Luer, Thorerle & F.Werner, *sp. nov.* TYPE: ECUADOR. Zamora-Chinchipe: area of Estación Científica San Francisco, alt. 2225 m, February 2006, G. Mendieta 501 (Holotype: LOJA, Isotype: SEL), C. Luer illustr. 21619. Fig. 14.

