

ICONES STELIDARUM (ORCHIDACEAE) ANTILLANORUM

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Abstract. The 18 species accepted as valid for the genus *Stelis* from the islands of the Antilles, excluding Trinidad and Tobago, are described and illustrated. One new species, *S. minima*, is proposed, a neotype is selected for *Stelis crassifolia*, and a lectotype is selected for *S. tippenhaueri*.

Keywords: Orchidaceae, Pleurothallidinae, *Stelis*, Greater Antilles, Lesser Antilles, Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe, Haiti, Hispaniola, Jamaica, Martinique, Nevis, Puerto Rico, St. Lucia, St. Vincent

The species of the genus *Stelis* Sw. found in the Antilles have been treated in different ways for many years but most have not been published with complete illustrations. In the senior author's recent treatment of *Stelis* of the Greater Antilles (Luer, 2014), only two illustrations were published. Five species described by Donald D. Dod (1912–2008) were published in Moscosoa (1986) with illustrations by one of us (C.A.L.). For convenience, these illustrations are included herein. With the exception of Jamaica, with only two endemic species, and Cuba with three species, all other species in the Antilles east of Cuba are listed alphabetically

and treated together. Whenever possible, we attempted to examine all available historical materials, either personally or through analysis of images available on the Jstor Global Plants database, by online access to several herbaria databases, or through personal communication with herbarium curators. In some instances, however, we were unable to locate collections. One of them is the set of type specimens of species described by Donald D. Dod, who extensively collected in Hispaniola. According to Ackerman (2014), the majority of his types have never been distributed and are misplaced and possibly lost.

JAMAICA

Only two common, vegetatively similar species are known to inhabit the island, *Stelis micrantha* (Sw.) Sw. and *S. trigoniflora* Garay. They have been repeatedly misidentified in herbaria and literature as *S. ophioglossoides* (Jacq.) Sw. from the Lesser Antilles. Until recently, we have considered them conspecific, and almost 100 herbarium specimens from various institutions have been named *S. micrantha*. Dried collections of the two species are difficult to identify without rehydration of flowers. Vegetatively they are too variable. Re-examination of all these materials would be necessary to determine the two taxa correctly within these collections. Therefore, in this work, we do not cite them in the list of specimens examined. The present treatment is the first to demonstrate the differences between these two taxa. A detailed discussion of both species follows the description of *S. trigoniflora*.

Stelis micrantha (Sw.) Sw., J. Bot. (Schrader) 2: 240. 1800. Basionym: *Epidendrum micranthum* Sw., Prodr. 125. 1788. TYPE: JAMAICA. Without locality: "Habitat super arbores, adque latera rupium in altis montibus Jamaicae," O. Swartz s.n. (Lectotype designated by Fawcett and Rendle [1910], here clarified: BM [barcode BM000084089, excluding specimen in

packet by Marquis of Blandford and dated 1802]; Isolectotypes: B [barcode B-W16900-010], G [barcode G00169055], LD [barcode LD1731046]; LINN [LINN-HS1405-2], S [S07-7994], SBT [barcode SBT11283], W [W-Rchb.Orch. 0016947]) non Barb. Rodr. 1882. Fig. 1–2.

Synonym: *Stelis polystachya* Cogn., Repert. Spec. Nov. Regni Veg. 6: 306, 1909, *nom. illeg. non* Willd. 1805. TYPE: JAMAICA. Near Cinchona, 5000 ft, 3 November 1899, W. Harris 7764a (Lectotype: BR, selected by Luer [2014]; Isolectotype: K). Etymology: from the Latin *polystachyus*, "many spikes," referring to the inflorescences.

Plant medium to large, epiphytic, caespitose; roots slender. Ramicauls erect, slender to stout, 5–8 cm long, with a tubular sheath from below the middle, and 2–3 sheaths below and at the base. *Leaf* erect, coriaceous, elliptical, subacute to obtuse, 8–14 cm long, 1–2 cm wide, narrowly cuneate below into a petiole ca. 1.5 cm long. *Inflorescence* 1–3 erect, distichous to subsecund, subdensely many-flowered racemes, 6–17 cm long including the peduncle 3–5 cm long, with a few bracts, subtended by a spathe 5–8 mm long, from below the apex of the ramicaul; floral bracts oblique, acute, 2.5 mm long; pedicels 1.5 mm long;

The authors are grateful to the staff members of AMES, MO, and SEL for making their specimens available for study; to the Center for History of Science, the Royal Swedish Academy of Sciences, for permission to use Orlof Swartz's unpublished illustrations reproduced in Fig. 2 and 4 in the present work; to herbaria cited herein that facilitated loans and provided miscellaneous critical resources; to Kanchi Gandhi (GH) for his assistance with nomenclature; to Wade Collier and Nancy Karam, volunteers at SEL, for help in assembling the illustrations and proofreading an earlier version of the manuscript, respectively; to Stig Dalström for inking the figures presented herein, all based on pencil drawings by the senior author; and to the generosity of the Pleurothallid Alliance for making the inking possible.

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ovary 1 mm long; *sepals* yellow-green, often suffused with rose, subequal, glabrous, connate 1 mm, transversely ovate, obtuse, 2.2 mm long, 2.8 mm wide, 3-veined; *petals* purple, transversely ovate, shallowly concave, 0.8 mm long, 1 mm wide, 3-veined, the apex broadly rounded with the margin thickened; *lip* purple, subquadrate, 0.5 mm long, 1 mm wide, 0.8 mm deep, the apex obtuse with thickened margins, concave below a bar with a glenion, the dorsum shallowly concave with a small ovoid callus, the base truncate, hinged to the base of the column; *column* stout, 0.85 mm long, 0.85 mm broad, the anther and the bilobed stigma apical.

Etymology: from the Greek *micranthos*, “small flower,” referring to the size of the flower.

Additional specimen examined: JAMAICA. Portland: above Johnson Mountain, 650 m, 14 November 1985, C. Luer, J. Luer, P. Jesup and A. Jesup 11497 (MO).

Stelis trigoniflora Garay, Bot. Mus. Leaf. 26: 25. 1978. TYPE: JAMAICA. Without locality, O. Swartz s.n. (Lectotype designated by Luer [2014], here clarified: BM [barcode BM000923770]; Isolectotypes: C [barcode C10016311], LINN [LINN-HS 1405.1], SBT [barcode SBT11282], W [W-Rchb.Orch.0016951]). Fig. 3–4.

Synonym: *Epidendrum trigoniflorum* Sw. Observ. Bot. (Swartz) 332. 1791, replaced synonym, *non* Sw. 1788 *nec* Turton 1806.

Plant medium to large, epiphytic, caespitose; roots slender. Ramicauls erect, slender to stout, 9–12 cm long, with a tubular sheath from below the middle, and 2–3 sheaths below and at the base. *Leaf* erect, coriaceous, elliptical, subacute to obtuse, 9–14 cm long, 1.5–2.3 cm wide, narrowly cuneate below into a petiole ca. 1.5 cm long. *Inflorescence* 1–3 (rarely to 7) erect, distichous to subsecund, subdensely many-flowered racemes, 10–18 cm long including the peduncle 3–4 cm long, with a few bracts, subtended by a spathe 10–12 mm long, from below the apex of the ramicaul; floral bracts tubular, acute, 2.5 mm long; pedicels 2 mm long; ovary 1.5 mm long; *sepals* light yellow, subequal, glabrous, connate 1 mm, triangular-ovate, acute, 3.3 mm long, 2.6 mm wide, 3-veined; *petals* red-purple, transversely ovate, shallowly concave, 0.8 mm long, 1 mm wide, 3-veined, the apex broadly obtuse with the margin thickened; *lip* red-purple, subquadrate, 0.6 mm long, 0.9 mm wide, 0.66 mm deep, the apex broadly obtuse with thickened margins, concave below a bar with a glenion, the dorsum shallowly concave with a small ovoid callus, the base truncate, hinged to the base of the column; *column* stout, 0.85 mm long, 0.85 mm broad, the anther and the bilobed stigma apical.

Etymology: from the Latin *trigoniflorus*, “triangular flowered,” referring to the shape of the flowers.

Additional specimen examined: JAMAICA. Surrey: Fairy Glade above Hardwar Gap, 1350 m, 13 November 1985, C. Luer, J. Luer, A. & P. Jesup 11494 (MO).

Orlof Swartz (1788) described both *Stelis micrantha* and *S. trigoniflora* from Jamaica in *Epidendrum* without making any reference to preserved specimens. Luer (2014) designated a lectotype for *E. trigoniflorum* and followed Fawcett and

Rendle (1910), who provided a lectotype designation for *E. micranthum*. Although the citation “Type in Herb. Mus. Brit.” in Fawcett and Rendle (1910: 51) does not explicitly indicate which specimen is being selected as the type of *E. micranthum*, Swartz’s name is cited in the list of collections studied. Despite how vague it may be, Fawcett and Rendle’s designation fulfills all the requirements of Article 7.11 of the International Code of Nomenclature (ICN; Turland et al., 2018) for names published before 2001. The lectotype of *E. micranthum* is preserved at BM (barcoded BM000084089), and it is mounted together with a collection by Marquis of Blandford, dated 1802, which is kept within a packet on the same herbarium sheet. Blandford’s collection served as the basis of an illustration by James Sowerby (1757–1822), which was published in Smith (1805).

When Swartz described *Epidendrum trigoniflorum*, he compared it with Jacquin’s *E. ophioglossoides* (= *Stelis ophioglossoides*) from Martinique, which was listed in the synonymy. The citation of a legitimate name, *E. ophioglossoides*, in the synonymy rendered *E. trigoniflorum* illegitimate and superfluous according to Article 52.1 of the ICN (Turland et al., 2018). In 1791, however, Swartz discussed the differences between *E. ophioglossoides* and *E. trigoniflorum*, recognized them as two distinct species, and unintentionally published *E. trigoniflorum* as a name of a new species based on his Jamaican plant. Unfortunately, his 1791 name is also illegitimate because it was a later homonym of his *E. trigoniflorum* published in 1788. In 1978, Garay proposed the new combination “*Stelis trigoniflora* (Sw.) Garay, comb. nov.” based on the 1788 illegitimate name of Swartz, *E. trigoniflorum*, excluding the synonyms. He explicitly cited Swartz (1791) in the discussion and referred to the fact that Swartz already distinguished the two species in that work. It is the consensus of the Nomenclature Committee of the ICN (K. Gandhi, pers. comm.; see also IPNI, 2019) that Garay inadvertently published *S. trigoniflora* as a new name for *E. trigoniflorum* (1791), and for this reason *S. trigoniflora* Garay is the name we follow in the present work. Swartz cited the name *E. trigoniflorum* in the synonymy of *E. ophioglossoides* in his subsequent publications (1799, 1800), including in his erection of the genus *Stelis* in 1800, where the name *E. trigoniflorum* was not transferred to *Stelis*. In their volume on Orchidaceae for the *Flora of Jamaica*, Fawcett and Rendle (1910) followed Swartz and perpetuated the misconception of *E. trigoniflorum* as synonymous with *S. ophioglossoides*, listing it in the synonymy of the latter.

Distinguishing *Stelis micrantha* from *S. trigoniflora* has been a problem. Fawcett and Rendle (1910) used variable features in identifying them. There are no constant differences in size, relative length of leaves and ramicauls, or number and length of racemes. Swartz distinguished *Epidendrum micranthum* with broadly lanceolate leaves and subrotund, hexagonal flowers, and *E. trigoniflorum* with oblong-lanceolate leaves and triangular flowers. Swartz made identifiable illustrations of both species, which, unfortunately, had remained unpublished until today.

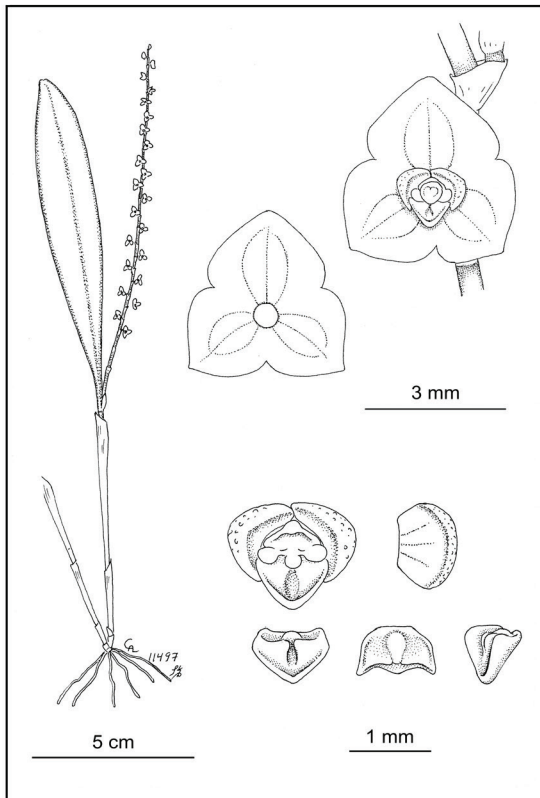


FIGURE 1. *Stelis micrantha* (Sw.) Sw.

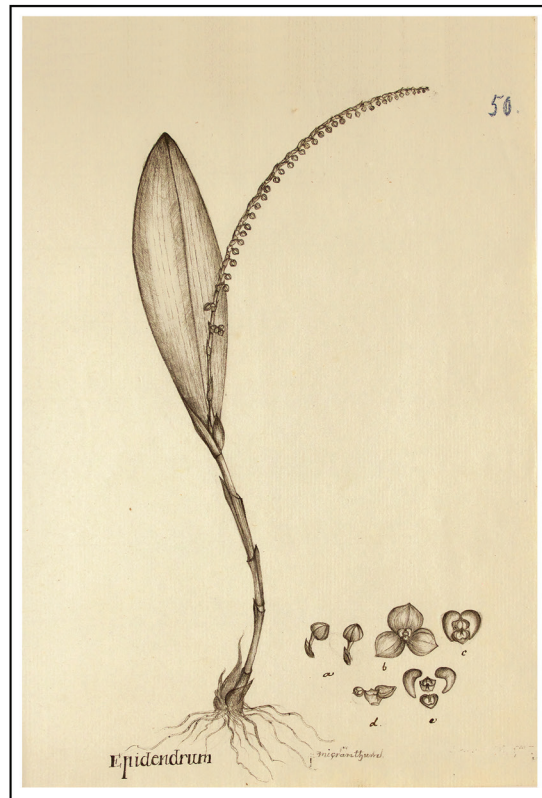


FIGURE 2. *Stelis micrantha* (Sw.) Sw. Swartz's original plate 50 in *Descriptiones et Icones Plantarum Incognitarum*.

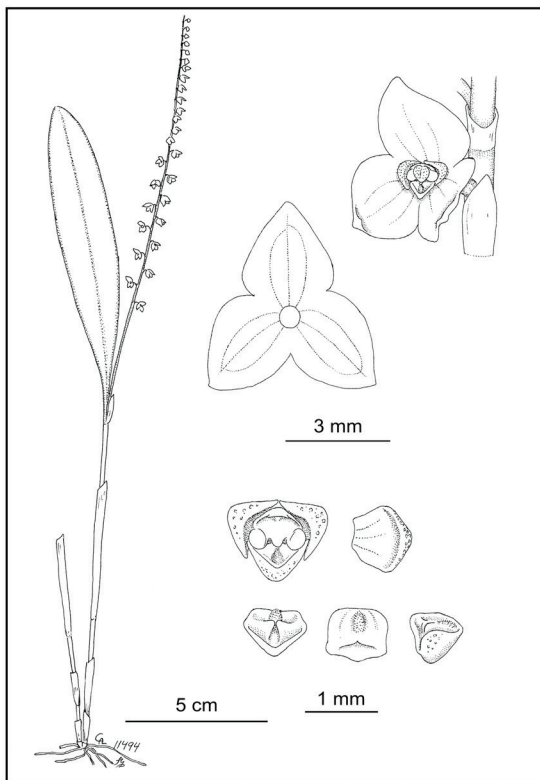


FIGURE 3. *Stelis trigoniflora* Garay

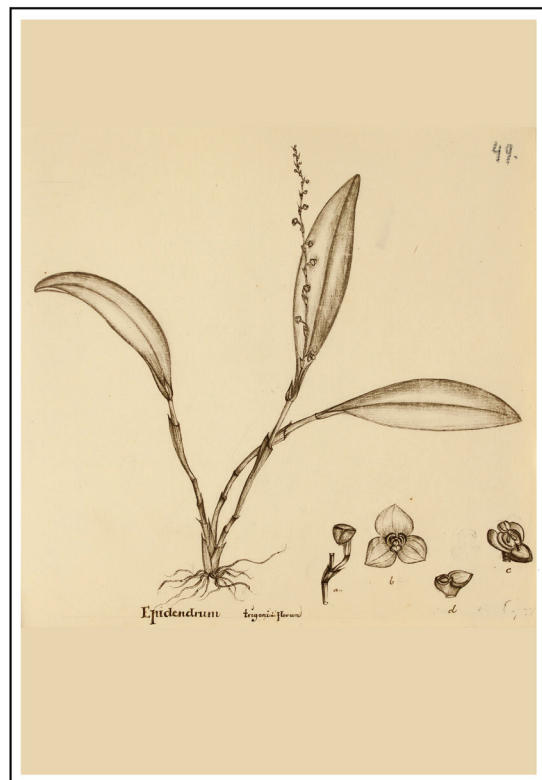


FIGURE 4. *Stelis trigoniflora* Garay. Swartz's original plate 49 in *Descriptiones et Icones Plantarum Incognitarum*.

They are part of an unpublished manuscript, "Descriptiones et Icones Plantarum Incognitarum quas in India occidentali detexit atque delineavit," deposited in the library of the Royal Swedish Academy of Sciences, and are reproduced herein for the first time. The sepals in Swartz's illustration

of *E. micranthum* (Fig. 2 herein) are more rounded and obtuse, and those of *E. trigoniflorum* (Fig. 4 herein) are more or less triangular and acute. He was also aware of the size of the flowers because he chose the name *micranthum* to distinguish the species with the smaller flowers.

CUBA

Three species are known from Cuba. One is the common, variable, and widely distributed *Stelis ophioglossoides*, while the other two are uncommon but with related species on Hispaniola and the Lesser Antilles.

Stelis cubensis Schltr., Symb. Antill. 9: 60. 1923. TYPE: CUBA. Santiago de Cuba: Sierra Maestra, Loma de Regino near Pico Turquino, 1700 m, 16 April 1915, *E. L. Ekman* 5407 (Holotype: S; Isotypes: G, NY, US). Fig. 5.

Plant small to medium in size, lithophytic to epiphytic, densely caespitose; roots proportionately fleshy. Ramicauls erect, stout, 3–9 cm long, enclosed above the middle by a tubular sheath and 2–3 other sheaths below. *Leaf* erect, thickly coriaceous, narrowly elliptical-linear, obtuse to subacute, subpetiolate, 3.5–8 cm long including a petiole 0.5–1 cm long, the blade 0.5–0.7 cm wide, 2.5 mm thick, narrowly cuneate below into the petiole ca. 1 cm long. *Inflorescence* 1–3 erect, distichous to secund, simultaneous and subdensely many-flowered racemes, 3–8 cm long, including the peduncle ca. 1 cm long, subtended by a spathe 6–7 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 1.5 mm long; pedicels 0.75 mm long; ovary 0.75 mm long; *sepals* expanded and recurved, subequal, pale yellow, glabrous, free nearly to the base, ovate, subacute to obtuse, 1.2–1.4 mm long, 1–1.1 mm wide, 3-veined; *petals* light green, obcuneate, truncate, shallowly concave, 0.4–0.5 mm long, 0.6 mm wide, faintly 3-veined, the apex broadly truncate with minimal marginal thickening, microscopically cellular; *lip* light green, thick, oblong, 0.6 mm long, 0.4 mm wide, 0.3 mm deep, the apex triangular, obtuse to subacute, shallowly concave below an intact bar, the dorsum convex, cellular, becoming densely pubescent below the middle, the base truncate, hinged to the base of the column; *column* stout, 0.6 mm long, 0.8 mm broad, the anther cucullate with the stigmatic lobes expanded.

Etymology: named for Cuba, where the species was collected.

Additional specimens examined: CUBA. Santiago de Cuba: Sierra Maestra, near Pico Turquino, 1950 m, 17 April 1915, *E. L. Ekman* 5492 (published as 5592); Pico de Turquino, 7 June 1999, *J. Llamacho* 0015 (MO); Pico Suecia, lithophytic, 21 February 2003, *Y. Aubry* no. 1 (MO), *C. Luer* illustr. 20798; lithophytic, 21 February 2003, *Y. Aubry* no. 8 (MO).

This species is endemic to the mountains of southeasternmost Cuba. The inflorescence is similar to that of *Stelis dominguensis* Cogn., which is widely distributed on Hispaniola. *Stelis cubensis* varies from the latter in having thick and narrower, sublinear leaves. Most distinctive is the entire bar of the lip, which is cleft in the others.

Stelis minima Luer & Toscano, *sp. nov.* TYPE: CUBA. Holguín: Moa, Camino a La Melba, Arroyo Las Comadras, 350 m, 29 November 1997, *C. Luer* 18656 (Holotype: MO). Fig. 6.

Plant small, caespitose, leaves narrowly elliptical, surpassed by a loose, several-flowered raceme of minute, white flowers with three-veined sepals and petals, and a lip with a central callus.

Plant small, epiphytic, caespitose; roots slender. Ramicauls erect, slender, 8–15 mm long, with 1–2 tubular sheaths below. *Leaf* erect, coriaceous, narrowly elliptical, acute to subacute, 18–30 mm long including a petiole ca. 3 mm long, the blade 0.3–0.6 cm wide, narrowly cuneate below into the petiole. *Inflorescence* an erect, distichous, lax, subflexuous, several-flowered raceme, 3–5 cm long, including the peduncle ca. 1 cm long, subtended by a spathe 2 mm long, from below the apex of the ramicaul; floral bracts oblique, acute, 0.5 mm long; pedicels 0.5 mm long; ovary 0.5 mm long; *sepals* subequal, white, glabrous, similar, ovate, obtuse, 3-veined, 1 mm long, 1 mm wide, connate below the middle; *petals* transversely ovate, concave, 0.3 mm long, 0.4 mm wide, 3-veined, the apex broadly obtuse, thickened along the margin; *lip* subtruncate, 0.4 mm long, 0.4 mm wide, 0.2 mm deep, concave below a central, rounded bar, the apex rounded with a slightly thickened margin, the dorsum slightly convex, the base truncate, hinged to the base of the column; *column* stout, 0.4 mm long, 0.4 mm broad, the anther and stigmatic lobes apical.

Etymology: from the Latin *minimus*, "the least," referring to the minute habit.

This little species was collected on a field trip with J. Ackerman, R. and K. Dressler, C. and J. Luer, M. Díaz, and J. Llamacho, who attended the "IV Taller Internacional de Orquideas" at the Soroa Botanical Garden in 1997. These collections lay long-overlooked until preparation for this issue of *Harvard Papers in Botany*. The largest leaf with ramicaul stands no more than 4 cm tall; a loosely flowered raceme of minute, white flowers reaches 5 cm. The three-veined sepals and petals are not unusual in the genus, but the lip with a prominent bar without a glenion is unusual in the Antilles, most closely resembling that of *Stelis pygmaea* Cogn.

Stelis ophioglossoides (Jacq.) Sw., J. Bot. (Schrader) 2(2): 239. 1800.

Basionym: *Epidendrum ophioglossoides* Jacq., Enum. Syst. Pl. 29. 1760; Sel. Stirp. Amer. Hist. (ed. 1): 225, t. 176, fig. 2. 1763 et Sel. Stirp. Amer. Hist. (ed. 2): 109, t. 211. 1780. TYPE: MARTINIQUE. Without locality, *N. J. von Jacquin s.n.* (Lectotype selected by Fawcett and Rendle [1910], here clarified: BM [barcode BM000082011]). Fig. 7–8.

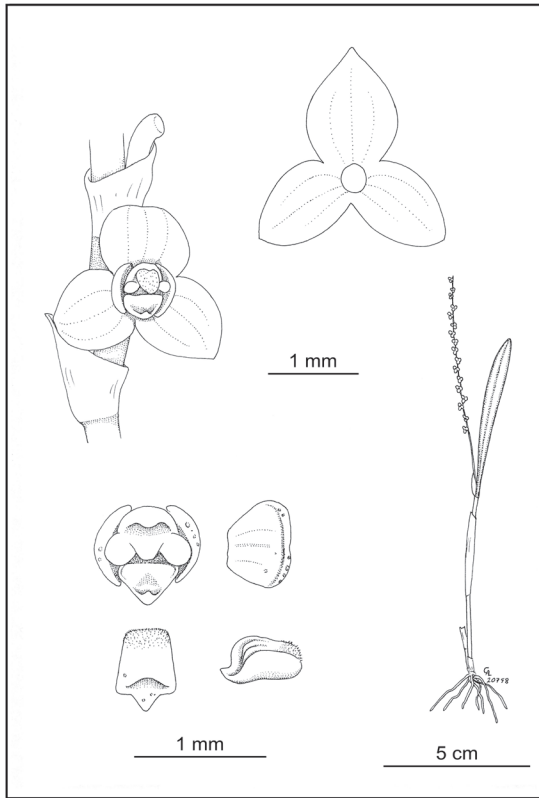


FIGURE 5. *Stelis cubensis* Schltr.

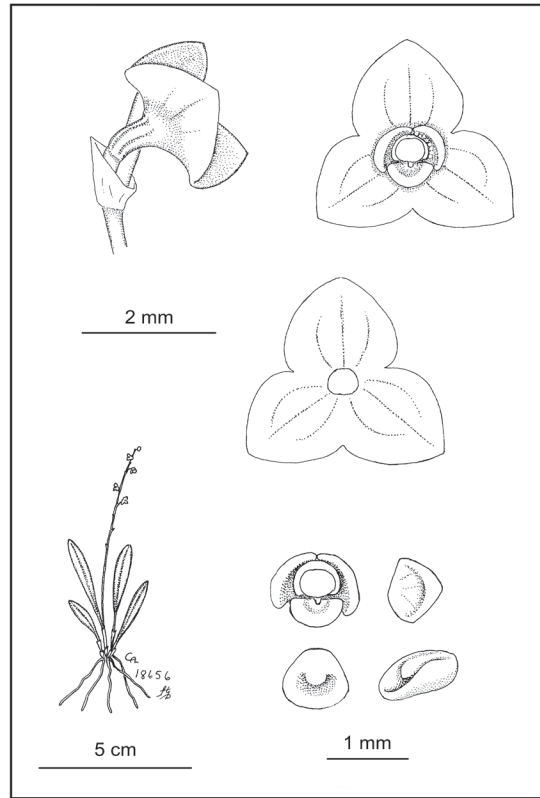


FIGURE 6. *Stelis minima* Luer & Toscano

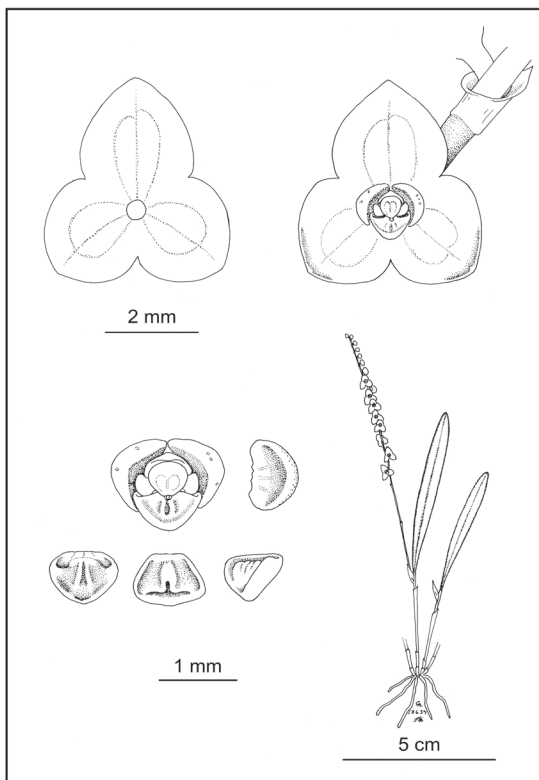


FIGURE 7. *Stelis ophioglossoides* (Jacq.) Sw.

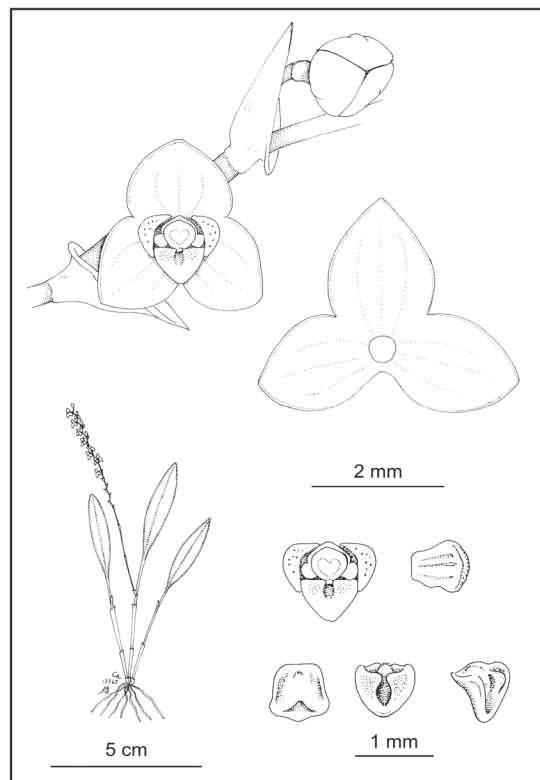


FIGURE 8. *Stelis ophioglossoides* (Jacq.) Sw.

Synonyms: *Epidendrum trigoniflorum* Sw., Prodr.: 125. 1788, *nom. superfl. & illegit. non* Swartz 1791 *nec* Turton 1806.

Dendrobium ophioglossoides (Jacq.) Sw., Nova Acta Regiae Soc. Upsal. 6: 83.1799, *non* Sieber ex Lindl. 1830.

Stelis scabrida Lindl., Ann. Nat. Hist. 5: 115. 1840. TYPE: DOMINICA. Without locality, *J. S. Henslow s.n.* (Holotype: K). Etymology: from the Latin *scabridus*, "scabrous," referring to the margins of the petals when dried.

Stelis toepfferiana Rchb.f., Flora 69: 556. 1886. TYPE: DOMINICA. Forest at Laudat, 700 m, January 1882, *H. F. A. von Eggers* 996 (Holotype: W; Isotype: AMES). Etymology: named in honor of Adolph Toepffer, who distributed von Eggers's specimens.

Stelis ekmanii Schltr., Symb. Antill. 9: 60, 1923. TYPE: CUBA. Holguín, Sierra de Nipe, Loma Mensura, 1000 m, 19 October 1914, *E. L. Ekman* 3187 (Holotype: S). Etymology: named for the collector E. L. Eckman.

Stelis cristalensis H. Dietr. Feddes Repert. 96(7–10): 564. 1985. TYPE: CUBA. Holguín, Frank Pais, Sierra del Cristal, 500–600 m, 1 May 1981, *J. Bisse, H. Dietrich, M. Duharte, L. Lepper, G. González Géigel, B. Mory, #HFC 45254* (Holotype: HAJB; Isotypes: B, JE). Etymology: named for Sierra del Cristal, where the species was collected.

Pleurothallis ophioglossoides (Jacq.) Garay & H.R. Sweet, J. Arnold Arbor. 53: 391. 1972.

Plant small to medium in size, epiphytic, densely caespitose; roots slender. Ramicauls erect, slender, 2–4 cm long, enclosed by 2–3 tubular sheaths. *Leaf* erect, coriaceous, narrowly elliptical, acute, subpetiolate, 3–7 cm long, 0.5–0.9 cm wide, narrowly cuneate below into the petiole. *Inflorescence* an erect, distichous to secund, densely many-flowered raceme, 5–10 cm long including the peduncle 1–3 cm long, with a few bracts, subtended by a spathe 7–9 mm long, from below the apex of the ramicaul; floral bracts oblique, infundibular, acute, 1.5–2 mm long; pedicels 1 mm long; ovary 1 mm long; *sepals* subequal, yellow, rose, red to purple, glabrous, connate basally less than 1 mm, broadly ovate, obtuse, 2–2.5 mm long, 2–2.5 mm wide, 3-veined; *petals* purple, transversely ovate, shallowly concave, 0.5–0.6 mm long, 0.75–0.9 mm wide, 3-veined, the apex broadly rounded with the margin thickened, microscopically cellular-glandular; *lip* purple, thick, ovoid, 0.6–0.8 mm long, 0.8–1 mm wide, 0.6 mm deep, the apex broadly rounded, concave below a bar with a concave glenion, shallowly concave on the dorsum with an ovoid, microscopically pubescent callus, the base truncate, hinged to the base of the column; *column* stout, 0.5 mm long, 1 mm broad, the anther and bilobed stigma apical.

Etymology: compared by Jacquin to *Helleborine ophioglossa similis* of Plumier, not based on the latter (see Taxon 32: 282. 1983); from the Greek *ophioglossa*, "snake-tongue," referring to the labellum.

Additional specimens examined: CUBA. Holguín: Crest of Sierra de Nipe, 600–700 m, 16–17 October 1941, *C. V. Morton & J. Acuña* 3234 (AMES, US); Sierra de Nipe, Monte La Plancha, 19 April 1940, *J. P. Carabia* 3675 (NY); Sierra de Nipe, 950 m, 26 November 1997, *C. Luer, J. Luer, M. Díaz, J. Llamacho, J. Ackerman, R. & K. Dressler* 18634 (HAJB, MO); Cayo Las Mujeres, 750 m, 25 November 1997, *C. Luer, J. Luer, M. Díaz, J. Llamacho, J. Ackerman, R. & K. Dressler* 18630 (HAJB, MO); Moa, road to Melba, Arroyo Las Comadres, 350 m, 29 November 1997, *C. Luer, J. Luer, M. Díaz, J. Llamacho, J. Ackerman, R. & K. Dressler* 18656 (HAJB, MO). Oriente: Monte Verde, 18 March 1860, *C. Wright* 658, (AMES, BR, BREM, C, G, O, K, W); Pinal de Santa Ana, 800 m, 1 April 1889, *H. F. A. von Eggers* 5052 (BR, C, K, US); above Bella Vista, trail to Monte Libano, 29 July 1907, *W. R. Maxon* 4273 (US); Sierra Maestra, Pico Turquino, Falda Sur Pico Turquino, 2 August 1935, *J. Acuña* 13890 (AMES). Sierra Maestra, Pico Turquino, 1800 m, 17 April 1915, *E. L. Ekman* 5437 (S, US). Sierra Maestra, Alto de Iberia, 900 m, 12 November 1916, *E. L. Ekman* 8302 (S, US). Sierra Maestra, Pico Turquino, 1800 m, July 1922, *Bro. León* 11066 (AMES). Sierra Maestra, Loma del Gato, January 1928, *Bro. Clement* 1021 (AMES). Sierra Maestra, Pico de Turquino, 3750 ft, 31 July 1935, *J. T. Roig & J. Acuña* 6634 (HAC-Roig); Sierra Maestra, Pico de Turquino, 3750 ft, 31 July 1935, *J. T. Roig & J. Acuña* 6635 (HAC-Roig); Sierra Maestra, Pico de Turquino, 1–2 August 1935, *J. Acuña* 6836 (HAC-Roig); crest of Sierra Maestra between Pico Turquino and La Bayamesa, 1350 m, 27–28 October 1941, *C. V. Morton & J. Acuña* 3762, 3793 (US); Sierra de Cristal, Mayarí, 2–7 April 1956, *Hn. Alain, J. Acuña & M. López F.* 5525 (AMES); Sierra de Cristal, Parte Alba Río Lebina, 1900–2200 m, 26 August 1959, *M. López* 159 (US); Sierra Maestra, Bayamesa Mt., 5–8 April 1955, *M. López F.* 2117 (AMES, HAC); Sierra Maestra, Manguito, loma Barrio Nuevo, 1400–1500 m, 22 March 1970, *H. Lippold* 16288A (JE); Sierra Maestra, cerca del batey del aserrio Manguito, monie nublado, May 1968, *J. Bisse* 9303 (JE); Sierra Maestra, Pico Turquino, between Paso de las Angiostas and la cima, 1800–2000 m, 11 May 1972, *H. Lippold & Gonzales* 19110 (JE); Sierra Cristal, las cabezades del Río Lebisa, 700–800 m, April 1970, *J. Bisse* 15842 (JE); Sierra Maestra, El Uvero, alto de La Francia, 1100–1400 m, 2 April 1969, *J. Bisse & H. Lippold* 13944 (JE); Moa, La Melba, sur de la Sierra de Moa, 28 December 1968, *J. Bisse & H. Lippold* 11565 (JE); Sierra Maestra, El Uvero, Loma Siberia, 900–11000 m, 29 March 1969, *J. Bisse & H. Lippold* 13731 (JE); Sierra Maestra, Pico Bayamesa, 1800, 20 March 1970, *H. Lippold* 16138 (JE); Oriente: Sierra Maestra, firme de la Sierra entre Alcarraza y Punta de Lanza, 800–1000 m, 28 April 1969, *J. Bisse & H. Lippold* 14208 (JE).

MARTINIQUE. Without locality, February 1867–70, *L. Hahn* 1452a (K); St. Pierre, February 1868, *L. Hahn* 92 (K, US); without locality, 1879, *P. Duss* 388 (BR, US); without locality, 1901, *P. Duss* 4666 (AMES); Deur Chouse, 28 September 1940, *H. & M. Stehlé* 6461 (US); Gros Morna aux Deux Chorex, 560 m, 4 September 1937, *H. Stehlé* 2159 (AMES).

DOMINICA. Without locality, 1858, *Dr. Imray 305* (K); without locality, 1891, *H. A. Nichols 141* (K); without locality, 1932, *S. Haweis 31* (US); without locality, January 1882, *H. F. A. von Eggers 96* (US). Lisdara, 457 m, 27 August 1937, *W. H. Hodge 390* (AMES); forest along Pegoua River, Deux Branches, Concorde Valley, 6 May 1940, *W. H. & B. T. Hodge 3483* (AMES); Bains Chauds du Matouba, 1000 ft, 10 December 1959, *G. R. Proctor 20357* (AMES); Slopes of Micotrin beyond Fresh Water Lake, 14 July, 1964, *R. L. Wilbur 7460* (AMES, US); Trois Pitons, Rosalie to Pont Cassé, 1600 ft, 22 July 1964, *R. L. Wilbur 7814* (US); St. George: Bellevue between Rose Hill and Loubiere, 550 m, 23 October 1997, *M. A. Nir 46, 47* (AMES, NY).

GUADELOUPE. Bagatelle du Camp Jacob, 500–1000 m, 1893, *P. Duss 3340* (AMES, US); Camp les Anglais, 500 m, 9 December 1944, Stehlé 5487 (US); Basse Terre, road to Soufriere above Sainte Claude, 8–11 July 1964, *H. A. Hespenheide & D. R. Wiseman 502* (Duke, US); Aire de Petit David, Route de Traverse, 8 July 1972, *J. Fournet 91* (GUAD); Morne a Louis, 700 m, 4 February 1976, *J. Fournet 2504* (GUAD); Petit Bourg, La Glaciere, Jardin J. Fournet, 11 December 1991, *J. Fournet 4952* (AMES, GUAD); Mamelles, Debut de la trace des Cretes, 14 December 1991, *J. Fournet 4958* (AMES, GUAD); 900 m, 1 November 1995, *C. Luer 17765* (MO).

ST. LUCIA. Trail from Quillesse to Piton St. Esprit, 10 May 1950, *R. A. Howard 11632* (AMES); Savanne Edmund District, SE of Piton Troumassée, 1800–2000 ft, 20 November 1960, *G. R. Proctor 21586* (AMES).

ST. VINCENT. 10 January 1890, *H. F. A. von Eggers 6931* (BR): 500–2000 ft, 1890, *H. H. Smith & G. W. Smith 90* (K); Marriagua Valley, 1500 ft, *H. H. Smith & G. W. Smith 1661* (K); south fork of Cumberland River, 300–750 m, 13 May 1947, *C. V. Morton 5817* (AMES, US); Grand Bonhomme, 800–930 m, 24 May 1947, *C. V. Morton 6160* (US); Spring Valley, 1500–2000 m, 3 March 1971, *R. A. Howard 17684* (AMES).

NEVIS. Nevis Peak, south slope, 300–600 m, 11 April 1956, *A. C. Smith 10512* (AMES, US).

This species was first described as *Epidendrum ophioglossoides* by Jacquin in his “Enumeratio systematica plantarum” in 1760, which, without illustrations, comprises a list of the genera and species of plants that he collected in the Caribbean, as well as very brief descriptions of those species that he considered to be new. Jacquin did not indicate a type, and his diagnosis of *E. ophioglossoides* contained only five words. He cited in the synonymy a plate by C. Plumier (1758, t. 176, fig. 3), but this is now known to represent a species of the genus *Acianthera* Scheidw., most probably *A. floribunda* (Lindl.) F. Barros, which is also common in Martinique.

Jacquin intended the “Enumeratio” as a prodromus of a much more detailed and complete work, namely the “Selectarum Stirpium Americanarum Historia,” which would contain illustrations and more ample descriptions. As pointed out by some authors (e.g., D’Arcy, 1970; Stafleau, 1971; Stafleau and Cowan, 1979), the “Enumeratio” and the

“Selectarum” should be consulted together for the correct understanding and interpretation of Jacquin’s names. The “Selectarum” was published in 1763 and included not only more information and much longer descriptions, but also engravings of Jacquin’s original drawings, including, in ink, a crude drawing of *Epidendrum ophioglossoides*. A more lavish work, which contained Jacquin’s colored illustrations, appeared in 1780—the second edition of the “Selectarum,” a rare publication with only 30 extant copies in libraries worldwide (Madriñán, 2013). In this work, Jacquin’s illustration of *E. ophioglossoides* is depicted in color for the first time.

An extensive account of Jacquin’s botanical expedition to the Caribbean and the publication of the “Selectarum,” including reproduction of the colored plates that appeared in its second edition, was recently published by Madriñán (2013). According to Madriñán (2013: 25), Jacquin abandoned the practice of preparing herbarium specimens after termites destroyed all his dried collections in Martinique. For this reason, together with Van der Schot, Jacquin began to illustrate in detail the plants he collected. This fact might explain the scarcity of Jacquin’s collections from the West Indies mentioned by Stafleau and Cowan (1979). However, some Martiniquais specimens seem to have survived; one of them, original material of *E. ophioglossoides*, is now preserved at BM. It is mounted on the same sheet with the lectotype of the Jamaican *Epidendrum trigoniflorum* and is annotated “*Herb. Dr. Jacquin.*” It has most certainly been among the materials acquired by Joseph Banks (Stafleau and Cowan, 1979). Garay and Sweet (1974) and Garay (1978) seem to have examined this same collection at BM but failed to explicitly cite a specimen accession number or other information that would help identify it. Both publications referred to Jacquin’s specimen as *Stelis scabriflora* Lindl., a name here considered a synonym of *S. ophioglossoides*. As in the case of *E. micranthum*, previously discussed in this article, Fawcett and Rendle (1910: 51) designated a lectotype for *E. ophioglossoides* in their account of the Orchidaceae in the *Flora of Jamaica*. They did not explicitly indicate which specimen was being selected as the type of *E. ophioglossoides*. We therefore clarify this by providing the barcode number of the specimen at BM.

Stelis ophioglossoides, superficially similar to numerous species of Central and South America and the Greater Antilles, is characterized by a small to medium-sized caespitose habit with acute, elliptical to narrowly elliptical-oblong, petiolate leaves. The largest variations of the leaf are found in Cuba. A crowded raceme of little greenish to purplish flowers surpasses the leaf. The floral bracts are acute, longer than the pedicels, and more or less conspicuous. The sepals are broadly ovate and obtuse, about 2 mm long, and connate below the middle. The petals are oblong, thin, shallowly concave and three-veined. The lip is ovoid, obtuse, and concave below the bar with a glenion and a small, rounded callus on the dorsum. Citations of *S. ophioglossoides* (Jacq.) Sw. from Jamaica are misidentifications of *S. micrantha* (Sw.) Sw. and *S. trigoniflora* Garay.

HISPANIOLA

Stelis chabreana Mansf., Ark. Bot. 20A(15): 15. 1926. TYPE: HAITI. Massif du Nord, Gros-Morne, Morne Chabre, 1130 m, 10 May 1925, E. L. Ekman H-5009 (Holotype: S; Isotypes: AMES, G, GH, K, NY, S, US). Fig. 9.

Plant small, epiphytic, caespitose-ascending, the rhizome abbreviated, covered by more or less horizontal bases of ramicauls and roots, up to 5 cm long. Ramicauls ascending-fasciculate, slender, 1–3 cm long, enclosed by a tubular sheath and 2–3 other sheaths below. *Leaf* erect, coriaceous, narrowly obovate, petiolate, obtuse to rounded at the tip, 2–4 cm long including the petiole 0.5–1.5 cm long, 0.3–0.6 cm wide, gradually narrowed below into the petiole. *Inflorescence* 1–3 erect, lax, distichous racemes, 4–6 cm long including the peduncle 1–2 cm long, from the apex of the ramicaul; floral bracts oblique, acute, 1–1.5 mm long; pedicels 1 mm long; ovary 1 mm long; *sepals* similar, color unknown, glabrous, ovate, obtuse, 1.5 mm long, 1.5 mm wide, 3-veined, connate basally; *petals* thin, obcuneate, broadly rounded at the apex, 0.5 long, 0.5 mm wide, 3-veined, shallowly concave; *lip* subquadrate, 0.4 mm long, 0.4 mm wide, 0.3 mm deep, concave below a shallowly notched bar, the apex broadly obtuse, the dorsum microscopically pubescent toward the base, hinged to the base of the column; *column* stout, ca. 0.5 mm long and wide, the anther and minute stigmatic lobes apical.

Etymology: named for Morne Chabre, where the species was collected.

Additional specimens examined: DOMINICAN REPUBLIC. El Murazo, November 1976, fl. in cult. November 1978, *D. Dod 656* (JBSD, MO), C. Luer illustr. 22001. Sierra de Yaroa, 850 m, 28–29 January 1969, A. H. Liogier 13581 (AMES, NY); Puerto Plata: Loma del Puerto, 750 m, 18 September, 1969, A. H. Liogier 15943 (AMES, NY), C. Luer illustr. 20118; same collection data, A. H. Liogier 15947 (AMES, NY).

Stelis chabreana is endemic to the island of Hispaniola. The habit is distinctive, but the flowers are similar to those of *S. pusilla* Kunth, which is ubiquitous in the Andes, and with which *S. chabreana* was confused in Luer (2014). It differs mostly in possessing 3-veined petals instead of single veined.

Vegetatively, this small species is distinguished by a creeping, ascending rhizome, mostly composed of the overlapping bases of ramicauls and roots. The leaves are narrowly obovate, petiolate, more or less rounded at the tip, and exceeded by a loose, several-flowered raceme. The sepals are ovate, obtuse, three-veined and glabrous; the petals are three-veined; and the tiny lip is concave below a shallowly notched bar.

Stelis choriantha Dod, Moscosoa 4: 160. 1986. TYPE: HAITI. Massif de la Hotte: Les Cayes, Formond, 950 m, 15 December 1981, *D. Dod 966* (Holotype: JBSD [not located]; AMES [not located], Isotype: MO), C. Luer illustr. 12339. Fig. 10.

Plant small to medium in size, epiphytic, densely caespitose; roots slender. Ramicauls erect, slender, 2.5–3.5 cm long, enclosed by 3 tubular sheaths. *Leaf* erect, coriaceous,

narrowly elliptical-obovate, obtuse, petiolate, 3–4 cm long including a petiole ca. 1 cm long, the blade 0.8–1.1 cm wide, narrowly cuneate below into the petiole. *Inflorescence* an erect, distichous, lax, many-flowered raceme with most flowers open simultaneously, to 7 cm long, including the peduncle ca. 1 cm long, subtended by a spathe 4 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 1.5–2 mm long; pedicels 1 mm long; ovary 0.75 mm long; *sepals* subequal, light yellow-green, glabrous, free nearly to the base, ovate, subacute to obtuse, 1.2 mm long, 1 mm wide, 3-veined; *petals* obcuneate, truncate, shallowly concave, 0.4 mm long, 0.6 mm wide, 3-veined, the apex broadly truncate without thickening; *lip* thick, oblong-subquadrate, 0.5 mm long, 0.4 mm wide, 0.2 mm deep, the apex contracted into an obtuse triangle, shallowly concave below a rounded bar, the dorsum, slightly convex, minutely pubescent above the base, the base truncate, hinged to the base of the column; *column* stout, 0.5 mm long, 0.5 mm broad, the anther cucullate with the stigmatic lobes apical.

Etymology: from the Greek *choriantha*, “membranous-flowered,” referring to the inflorescence.

Additional specimens examined: HAITI. Formond, near Les Cayes, 1000 m, February 1982, *D. Dod 1-F* (SEL).

This species is very similar to the frequent and variable *Stelis domingensis* Cogn. but is distinguished from the latter by a single, laxly flowered raceme conspicuously longer than the leaf.

Stelis domingensis Cogn., Symb. Antill. 6: 692. 1910. TYPE: DOMINICAN REPUBLIC. La Vega: near Constanza, 1400 m, June 1910, *H. von Türckheim 3330* (Holotype: BR; Isotypes: AMES, BM, G, K, L, M, W). Fig. 11.

Synonyms: *Stelis tippenhaueri* Urb., Repert. Spec. Nov. Regni Veg. 15: 103, 1917. TYPE: DOMINICAN REPUBLIC. Barahona, between tributaries of the Cañada, *M. Fuertes 1489c* (Holotype B [destroyed]). Lectotype here designated: AMES [barcode 00084455, inflorescence in glycerin]. Etymology: named in honor of Louis Gentil Tippenhauer.

Stelis desportesii Urb., Repert. Spec. Nov. Regni Veg. 15: 156. 1918. TYPE: DOMINICAN REPUBLIC. Barahona, near Constanza, 1200 m, *H. von Türckheim 3372c* (Holotype B [destroyed]). Etymology: named in honor of Jean-Baptiste René Pouppé-Desportes.

Plant small to medium in size, epiphytic, densely caespitose; roots slender. Ramicauls erect, slender, 2–8 cm long, enclosed above the middle by a tubular sheath and 2–3 other sheaths at the base. *Leaf* erect, coriaceous, elliptical, obtuse to subacute, petiolate, 2–6 cm long including a petiole 0.5–1 cm long, the blade 0.7–1.6 cm wide, narrowly cuneate below into the petiole. *Inflorescence* 1–3 erect, distichous to secund, loosely to densely many-flowered racemes with most flowers open simultaneously, 2–8 cm long, including the peduncle ca. 1 cm long, subtended by a spathe 3–5 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 1.5–2 mm long; pedicels 0.5–1 mm long; ovary 0.5–0.75 mm long; *sepals* subequal, pale green to yellow or yellow-green, glabrous, connate basally,

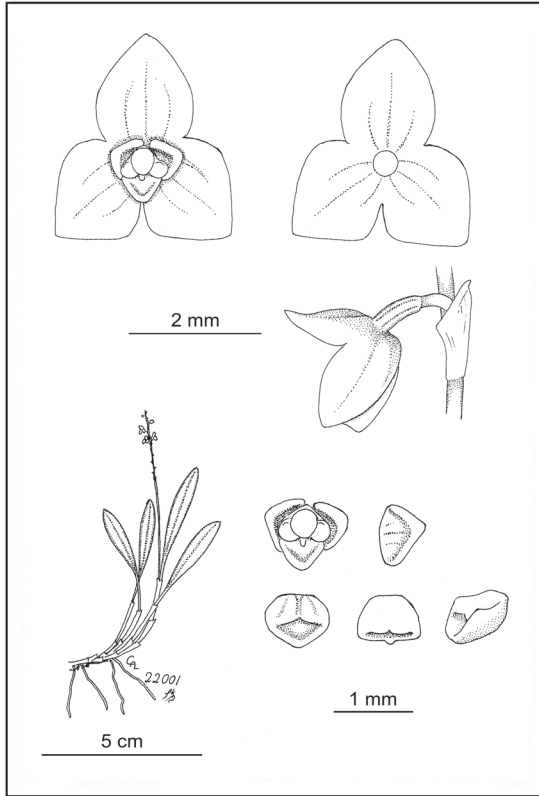


FIGURE 9. *Stelis chabreana* Masnf.

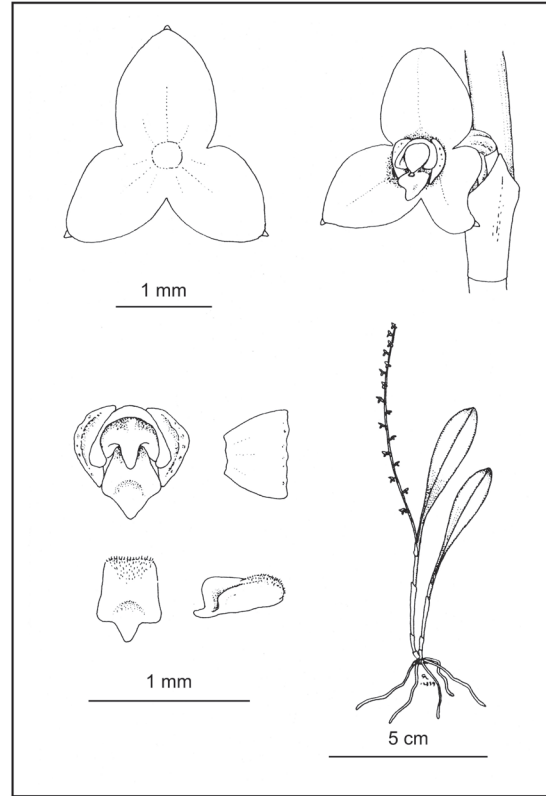


FIGURE 10. *Stelis choriantha* Dod

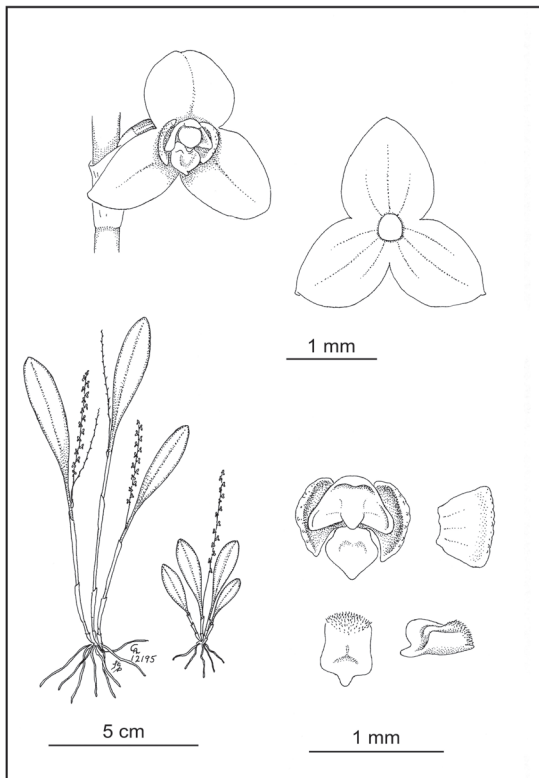


FIGURE 11. *Stelis domigensis* Cogn.

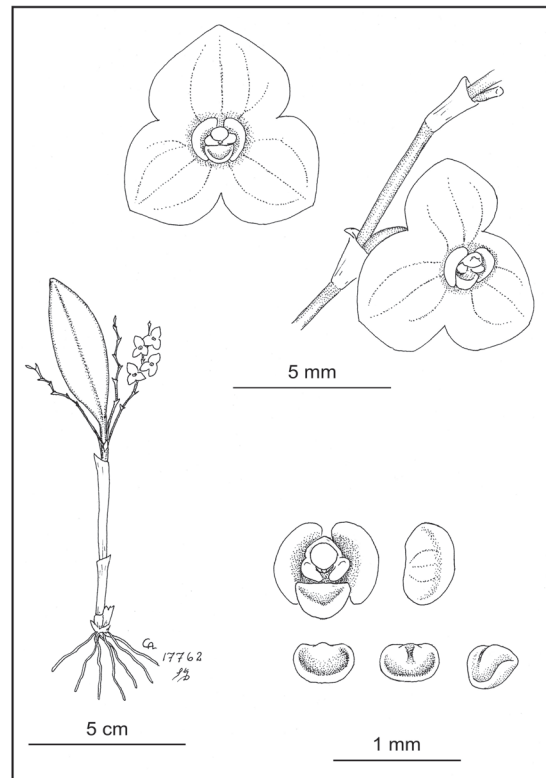


FIGURE 12. *Stelis dussii* Cogn.

ovate, subacute to obtuse, often minutely apiculate, 1.2–1.5 mm long, 1–1.4 mm wide, 3-veined; *petals* light green, obcuneate, truncate, shallowly concave, 0.4–0.5 mm long, 0.6–0.9 mm wide, 3-veined, the apex broadly truncate with minimal thickening, microscopically irregular and cellular; *lip* light green, thick, oblong, 0.5–0.7 mm long, 0.3–0.4 mm wide, 0.2–0.3 mm deep, the epichile, obtuse, triangular at the tip, shallowly concave below the bar below a slightly notched bar, the hypochile subquadrate, slightly convex, densely pubescent toward the truncate base, hinged to the base of the column; *column* stout, 0.5 mm long, 0.5–0.8 mm broad, the anther cucullate with the stigmatic lobes apical.

Etymology: named for Santo Domingo, the country where the species was collected.

Additional specimens examined: DOMINICAN REPUBLIC. Loma de La Vieja, 1900 m, 6 November 1929, *E. L. Ekman 14029* (AMES, S); Constanza, 1200 m, May 1910, *H. von Türckheim 3760* (AMES); north of Constanza, La Cienaga, 1700 m, 16 May 1959, *J. Jiménez 3999* (US); NE of La Culata, Cuatro Alas, Constanza, 1600 m, 25 September 1969, *A. H. Liogier 16108* (AMES, NY); south of Constanza, 6200 ft, 24 February 1982, *T. Zanoni et al. 19376* (AMES, NY, UPRRP); Parqué Nac. J. A. Bermúdez, Ciénaga de Manabao, 1400–1620 m, *T. Zanoni et al. 38198* (NY, US). Sierra del Bahoruco, Pueblo Viejo above Puerto Escondido, 1850 m, 19 February 1969, *A. H. Liogier 14074* (AMES, NY); Sierra de Bahoruco, toward Pueblo Viejo, 1700 m, 6 May 1986, *C. Luer, J. Luer & D. Dod 12193, 12195, 12164, 12195, 12272, 12339, 12340* (MO); Sierra del Bahoruco, camino a la Entrada de Cortico y El Gajo, 4200–4400 ft, *T. Zanoni et al. 20350* (AMES, NY, UPRRP); Río Grande, new road to Valle Nuevo, 1400 m, 16 July 1955, *J. Jiménez 2992* (US). Santiago: Diego de Ocampo, 14 May 1958, *J. Jiménez 3670* (US). Zapoten Abajo, above Aquacate, 1300 m, 5 May 1986, *C. Luer, J. Luer & D. Dod 12188, 12190* (MO).

HAITI. Massif de la Selle, Morne La Visite, 2200 m, 12 August 1924, *E. L. Ekman H-1449* (AMES, G, K, S). Massif de la Pelle, Petionville, Morne La Visite, 2200 m, 12 August 1924, *E. L. Ekman H-1449* (AMES, K, S, US); Valle Nuevo, 1900 m, 30 May 1887, *H. F. A. von Eggers 2176, partim* (K); Jarabacoa: Loma de la Sal, 1100–1250 m, 24 May 1968, *A. H. Liogier 11424* (AMES, NY, US); Cord. Central, Bañaderos del Valle, base of la Pelona, 1700 m, 1–7 October 1968, *A. H. Liogier 12816* (AMES, NY, US); San José de las Matas, Loma del Oro, south of Mata Grande, 4 June 1968, *A. H. Liogier 11553* (NY, US).

Stelis domingensis is endemic, common, and variable on the island of Hispaniola. It is characterized by elliptical leaves, one to three usually shorter inflorescences, and ramicauls more or less equally long. The leaf is elliptical, obtuse, and shortly petiolate. The racemes are usually shorter. The small sepals are ovate, expanded, and free nearly to the base. The tips are subacute to obtuse with or without a minute or obscure apiculum. The petals are cuneate with a broadly truncate, minimally callous margin. The lip is oblong with the epichile triangular and shallowly concave. The hypochile is thick and densely pubescent toward the

base. The only collection of *S. minipetala* is distinguished from *S. domingensis* only by racemes shorter than the leaf, and a longer, triangular epichile of the lip.

The holotypes of *Stelis desportesii* and *S. tippenhaueri* were destroyed in Berlin. No isotype is known for the former, and only a fragment of the latter, an inflorescence preserved in glycerin, is found at AMES. We herein select this fragment as lectotype. Most probably, these two species are merely vegetative variations of *S. domingensis*.

Stelis dussii Cogn. in I. Urban, *Symb. Antill.* 6: 389. 1909. TYPE: GUADELOUPE. Rivière Noire, 760 m, 16 February 1898, *P. Duss 3986* (Holotype: BR). Fig. 12.

Plant medium in size, epiphytic, caespitose; roots slender. Ramicauls erect, slender, 4–8 cm long, enclosed above the middle by a tubular sheath and 2–3 other sheaths below and at the base. *Leaf* erect, coriaceous, elliptical, acute, petiolate, 3–7 cm long including a petiole 1 cm long, the blade 1.5 cm wide, cuneate below into the petiole. *Inflorescence* 1–3 erect, loose, subflexuous racemes 3–5 cm long, including the peduncle ca. 1 cm long, subtended by a spathe ca. 5 mm long, from below the apex of the ramicaul; floral bracts oblique, 2 mm long; pedicels 2 mm long; ovary 2 mm long; *sepals* expanded, yellow, glabrous, connate below the middle, broadly ovate, obtuse, dorsal sepal 3.5 mm long, 4 mm wide, 3- to 5-veined, lateral sepals 3 mm long, 3.5 mm wide; *petals* orange, transversely oblong, thick, shallowly concave, 0.75 mm long, 1.2 mm wide, 3-veined, the apex broadly rounded; *lip* orange, subquadrate, 0.6 mm long, 1 mm wide, 0.3 mm deep, shallowly concave below a thick bar, the apex rounded, the hypochile slightly convex, cellular, the base truncate, hinged to the base of the column; *column* stout, ca. 0.75 mm long and wide, the anther and stigmatic lobes apical.

Etymology: named in honor of the Rev. Père Antoine Duss, collector of this species.

Additional specimens examined: GUADELOUPE. Without locality, 600 m, 26 January 1970, *J. Renz 10467* (RENZ); Mamelle de Petit Bourg, 750 m, 19 January 1992, *P. Feldmann 17* (GUAD); Mamelle de Pigeon, 7 July 1973, *J. Fournet 917* (GUAD); Mamelle de Pigeon, 28 October 1875, *C. Luer, J. Luer & P. Feldman 17762* (SEL).

This species is endemic to the island of Guadeloupe, where it is uncommonly found. It is distinguished by a medium-sized plant with acute, elliptical leaves, and loosely flowered inflorescences shorter than the leaves. The flowers are the largest of all the species of *Stelis* known from the Antilles, excluding Trinidad and Tobago. The sepals are transversely ovate with three primary veins and incomplete lateral, accessory veins that may be present to bring a total of five veins, or they may be totally absent. The petals are thick and three-veined. The lip is thick and shallowly concave below a thick bar. Floral dissections are based on *C. Luer et al. 17762* and habit on the holotype specimen.

Stelis glacensis Dod, *Moscossa* 4: 166, 1986. TYPE: HAITI. Massif de la Hotte, Camp Perrin, Rivière Glace, 800 m, 23 April 1982, *D. Dod 968* (Holotype: JBSD [not

located]; Isotypes: AMES [not located], MO, SEL [not located], NY [not located], US [not located]); C. Luer illustr. 12271. Fig. 13.

Plant small, epiphytic, densely caespitose; roots slender. Ramicauls erect, slender, 1.5–2.5 cm long, enclosed by 2–3 tubular sheaths. *Leaf* erect, coriaceous, elliptical-obovate, obtuse to subacute, petiolate, 2.5–4 cm long including a petiole less than 1 cm long, the blade 0.7–1.2 cm wide, narrowly cuneate below into the petiole. *Inflorescence* a succession of erect, distichous, subaxillary several-flowered racemes with most flowers open simultaneously, 2–3 cm long, including the peduncle ca. 1 cm long, subtended by a spathe less than 5 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 1.8 mm long; pedicels 0.5 mm long; ovary 0.5 mm long; *sepals* expanded, subequal, yellow, glabrous, free nearly to the base, ovate, subacute to obtuse, 1–1.2 mm long, 0.8 mm wide, 3-veined; *petals* yellow, obcuneate, shallowly concave, 0.5 mm long, 0.5 mm wide, 1-veined, the apex broadly subtruncate with minimal thickening; *lip* yellow, thick, oblong, 1 mm long, 0.3 mm wide, 0.25 mm deep, the epichile subacute, shallowly concave below a narrowly, rounded bar, the hypochile densely pubescent at the base, the base truncate, hinged to the base of the column; *column* stout, 0.5 mm long, 0.5 mm broad, the anther cucullate with the stigmatic lobes apical.

Etymology: named for the Rivière Glace, where the species was collected.

This small species, endemic to the western part of Hispaniola, is another entity closely related to *Stelis domingensis*. Dod's provisional name for the species was "*semperflorens*," because the plant continues to produce flowering racemes, one after another. It is distinguished by a small habit and one to three, several-flowered racemes shorter than the leaf. The sepals are free, ovate, and about 1 mm long. The petals are membranous, cuneate-subtruncate, and faintly single-veined. The lip is oblong with a triangular epichile, and concave around the central margin of the bar. The hypochile is thick and densely pubescent at the base.

Stelis jenssenii Urb., Ark. Bot. 17(7): 20. 1921. TYPE: HAITI. Ma Blanche, W slope, 1400 m, *J. Jenssen 542* (Holotype: S). Fig. 14.

Plant small to medium in size, epiphytic, caespitose; roots slender. Ramicauls erect, slender, 3–5 cm long, enclosed above the middle by a tubular sheath and 2–3 other sheaths at the base. *Leaf* erect, coriaceous, elliptical, obtuse, petiolate, 3–5 cm long including a petiole ca. 1.5 cm long, the blade 0.1–1.5 cm wide, narrowly cuneate below into the petiole. *Inflorescence* an erect, distichous to subsecund, many-flowered raceme, loosely several-flowered below, densely flowered above, with most flowers open simultaneously, 10–15 cm long, including the peduncle ca. 5 cm long, subtended by a spathe 6–7 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 2 mm long; pedicels 1.25 mm long; ovary 0.75 mm long; *sepals* widely expanded, subequal, yellow-green, glabrous, free nearly to the base, ovate, obtuse, 2–2.25 mm long, 1.75 mm

wide, 3-veined; *petals* light green, obcuneate-suborbicular, concave, 1 mm long, 1 mm wide, 3-veined, the apex broadly rounded and thickened, cellular-glandular; *lip* light green, thick, subrotund, 0.9 mm long, 0.8 mm wide, 0.4 mm deep, the epichile obtuse, concave with the margin thick, the hypochile thick, convex, cellular, becoming densely pubescent above the base, the base truncate, hinged to the base of the column; *column* stout, 0.75 mm long, 0.75 mm broad, the anther and stigmatic lobes apical.

Etymology: named for the collector, J. Jenssen.

Additional specimens examined: HAITI. Without locality, collected and cultivated by *D. Dod s.n.*, flowered in cultivation 4 May 1986, *C. Luer 12218* (MO).

This species, apparently endemic in the fragments of mountainous forests of Haiti, is similar to the frequent and variable *Stelis domingensis*. From the latter, *S. jenssenii* is distinguished by a longer-petiolate, elliptical leaf far surpassed by a slightly larger-flowered raceme that is loosely flowered below and congested above. The widely expanded sepals are ovate, non-apiculate, and free to near the base. The petals are suborbicular and concave with a broadly rounded, callous margin. The lip is thick, about as long as wide, with an obtuse, concave apex with a thick margin, and a densely pubescent base.

Stelis magnicava Dod, Moscosoa 5: 233.1989. TYPE: HAITI. Massif de la Hotte, *D. Dod 1018* (Holotype: JBSD [not located]; Isotypes: AMES [not located], MO, SEL [not located], NY [not located], US [not located]); C. Luer illustr. 13730. Fig. 15.

Plant medium in size to large, epiphytic, densely caespitose; roots slender. Ramicauls erect, slender, 9–11 cm long, the middle third enclosed by a tubular sheath and 2–3 other sheaths at the base. *Leaf* erect, coriaceous, narrowly elliptical-obovate, obtuse to subacute, petiolate, 8–9 cm long including a petiole ca. 2 cm long, the blade 1.5–1.8 cm wide, narrowly cuneate below into the petiole. *Inflorescence* 1–3 erect, distichous, subaxillary many-flowered racemes with most flowers open simultaneously, 9–10 cm long, including the peduncle ca. 1 cm long, subtended by a spathe 7 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, obtuse, 1.5–2 mm long; pedicels 1 mm long; ovary 0.5 mm long; *sepals* expanded, subequal, yellow, glabrous, free nearly to the base, ovate, subacute to obtuse, 1.75 mm long, 1.5 mm wide, 3-veined; *petals* yellow, obcuneate, shallowly concave, 0.5 mm long, 0.75 mm wide, 3-veined, the apex broadly truncate with minimal thickening; *lip* yellow, thick, subquadrate, 0.5 mm long, 0.5 mm wide, 0.2–0.3 mm deep, the apex broadly obtuse with the tip shortly acuminate, shallowly concave below the apex, the hypochile thick, convex, densely pubescent toward the base, the base truncate, hinged to the base of the column; *column* stout, 0.75 mm long, 1 mm broad, the anther and the expanded, stigmatic lobes apical.

Etymology: from the Latin *magnicavum*, "large cavity," possibly referring to the lip, but not obvious on the type plant.

This close relative of *Stelis domingensis*, which is frequent and variable on the island of Hispaniola, is known

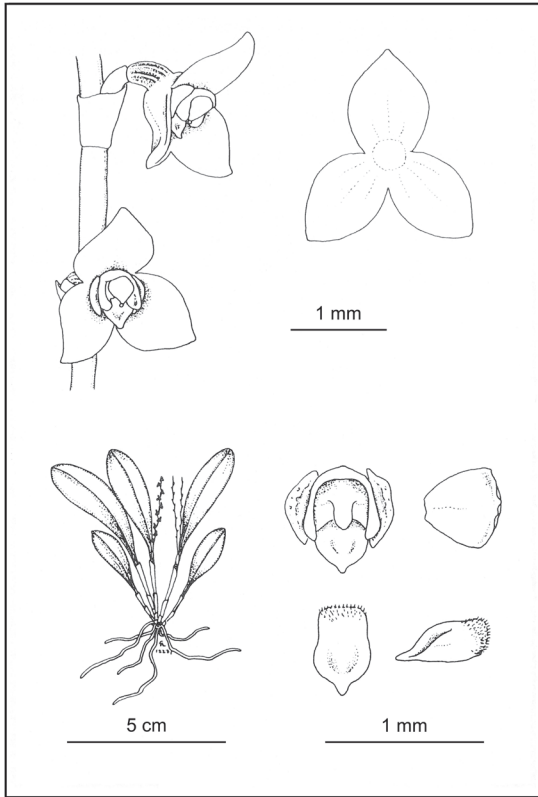


FIGURE 13. *Stelis glaucensis* Dod

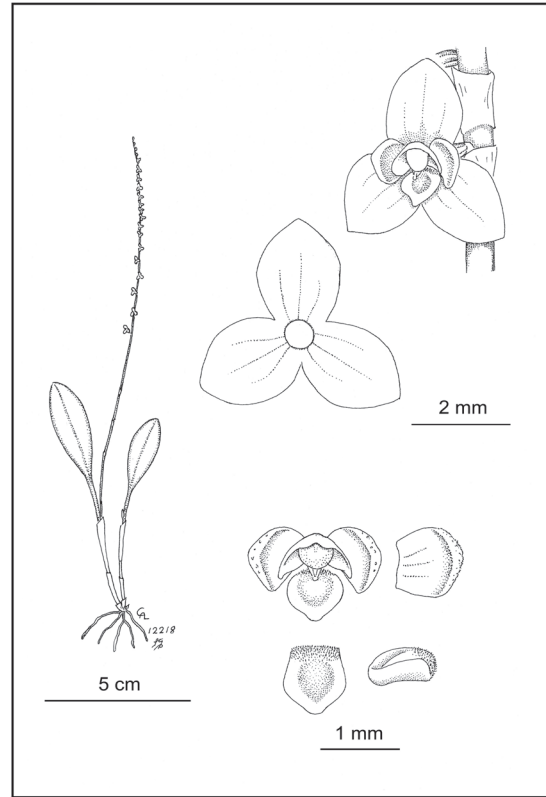


FIGURE 14. *Stelis jenssenii* Urb.

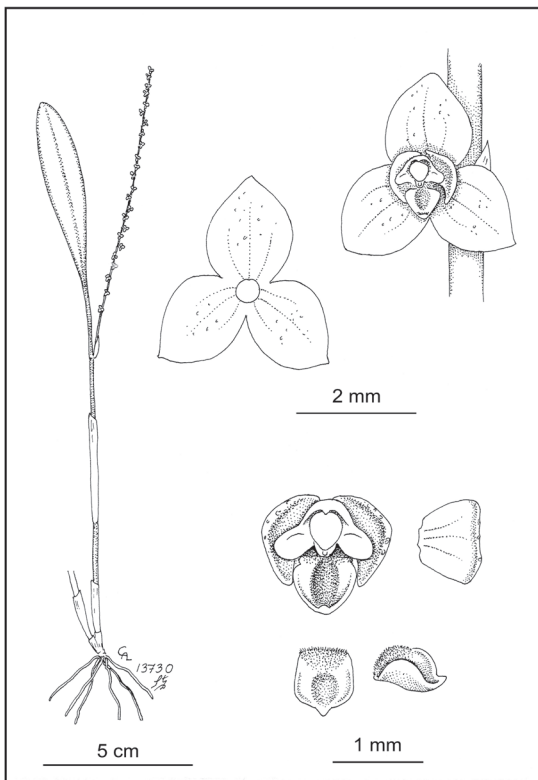


FIGURE 15. *Stelis magnicava* Dod

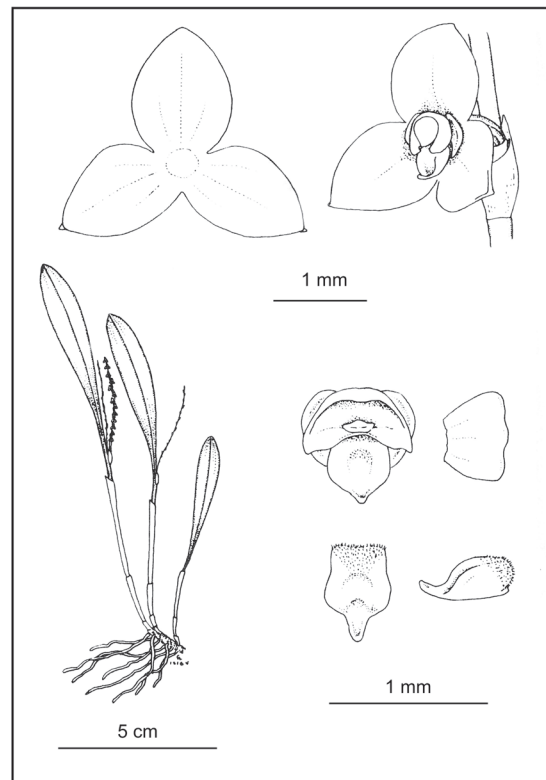


FIGURE 16. *Stelis minipetala* Dod

only from the Massif de la Hotte in Haiti. It is distinguished from the variations of *S. domingensis* by a larger habit, a long, petiolate leaf, and a subdensely many-flowered raceme that barely surpasses the leaf. The ovate sepals and subtruncate petals of the tiny flowers are basically the same in size and shape. The lip is also similar, but the cavity occupies most of the epichile behind a shortly acuminate tip. Below the middle, the lip is thick and densely short-pubescent.

Stelis minipetala Dod, Moscosoa 4: 162. 1986. TYPE: HAITI. Massif de la Hotte, Sierra de Formond, Camp #1C, 1550 m, 6 January 1983, *D. Dod* 967 (Holotype: JBSD [not located]; Isotypes: AMES [not located], MO, NY [not located], SEL [not located]). Fig. 16.

Plant small to medium in size, epiphytic, caespitose; roots slender. Ramicauls erect, slender, 3–5 cm long, enclosed above the middle by a tubular sheath and 2–3 other sheaths at the base. *Leaf* erect, coriaceous, elliptical, obtuse, petiolate, 3–5 cm long including a petiole ca. 1.5 cm long, the blade 0.1–1.5 cm wide, narrowly cuneate below into the petiole. *Inflorescence* an erect, distichous to subsecund, many-flowered raceme, loosely several-flowered below, densely flowered above, with most flowers open simultaneously, 10–15 cm long, including the peduncle ca. 5 cm long, subtended by a spathe 6–7 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 2 mm long; pedicels 1.25 mm long; ovary 0.75 mm long; *sepals* widely expanded, subequal, yellow-green, glabrous, free nearly to the base, ovate, obtuse, 2–2.25 mm long, 1.75 mm wide, 3-veined; *petals* light green, obtuse-suborbicular, concave, 1 mm long, 1 mm wide, 3-veined, the apex broadly rounded and thickened, cellular-glandular; *lip* light green, thick, subquadrate, 0.9 mm long, 0.8 mm wide, 0.4 mm deep, concave below a thick bar, the apex with a subacute triangle that is obtuse at the tip, the hypochile thick, cellular, becoming densely pubescent toward the base, the base truncate, hinged to the base of the column; *column* stout, 0.75 mm long, the apical anther with the stigmatic lobes 1 mm wide.

Etymology: from the Latin *minipetala*, “with minute petals,” referring to the petals.

This species, another close relative of *Stelis domingensis*, is known only from the Massif de la Hotte in Haiti. It is distinguished from the variations of *S. domingensis* by a larger habit, a long-petiolate leaf, and a subdensely many-flowered raceme less than half as long as the leaf. The ovate sepals are free nearly to the base. The petals, about a millimeter long, appear small behind a large, expanded clinandrium 1 mm wide with stigmatic lobes, and they are not significantly smaller than the lip.

Stelis mucrouncata Dod, Moscosoa 4: 164. 1986. TYPE: DOMINICAN REPUBLIC. Cordillera Central, Piedra Blanca, Rancho Arriba, La Vigia, 1000 m, 30 November 1981, *D. Dod* 1039 (Holotype: JBSD [not located]; Isotypes AMES [not located], MO, NY [not located], SEL [not located], US [not located]), C. Luer illustr. 12273. Fig. 17.

Plant small, epiphytic, loosely caespitose to shortly repent with the rhizome 1–5 mm long between ramicauls; roots slender. Ramicauls ascending, slender, 1–2.5 cm long, enclosed by 2–3 tubular sheaths. *Leaf* erect, coriaceous, narrowly elliptical, subacute, shortly petiolate, 3–4.5 cm long including a petiole ca. 0.5 cm long, the blade 0.7–0.9 cm wide, narrowly cuneate below into the petiole. *Inflorescence* an erect, distichous, loosely several-flowered raceme with most flowers open simultaneously, 3–4 cm long, including the peduncle ca. 1.5 cm long, subtended by a spathe 3 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 1 mm long; pedicels 1 mm long; ovary 0.5 mm long; flowers: *sepals* expanded, equal, green to straw-colored, glabrous, free nearly to the base, elliptical-ovate, subacute to acute, the laterals minutely apiculate, 1.4 mm long, 1 mm wide, 3-veined; *petals* light green, obtuse, truncate, shallowly concave, 0.5 mm long, 0.5 mm wide, 1-veined, the apex broadly truncate with slight thickening on the margin; *lip* light green, thick, oblong-subtrilobed, 0.5 mm long, 0.3 mm wide, 0.2 mm deep, concave below the bar, the apex with a subacute triangular lobe, with obtuse corners of the hypochile below the lobe, the hypochile oblong, densely pubescent toward the base, the base truncate, hinged to the base of the column; *column* stout, 0.5 mm long, 0.5 mm broad, the anther and stigmatic lobes apical.

Etymology: from the Latin *mucrouncatus*, “a hooked point,” referring to the tips of the sepals.

This little species, endemic to Hispaniola, is related to the long-repent *Stelis repens* Cogn. The rhizome of *S. mucrouncata* is slender, shortly repent, and ascending with leaves twice as long as those of *S. repens*. The racemes are similar but shorter than the leaf because the leaf is longer. The sepals are nearly free, ovate with the lateral sepals minutely apiculate. The petals are truncate and single-veined. The lip is similarly three-lobed with the triangular midlobe more deeply concave. The hypochile is densely pubescent at the base.

Stelis perpusilliflora Cogn. in I. Urban, Symb. Antill. 6: 386.1909. TYPES: GUADELOUPE. Near Matouba, *P. Duss* 3756 (Holotype: B [destroyed]; Lectotype selected by Garay and Sweet [1974]: AMES; Isolectotypes: BR, NY, PH, US). Fig. 18.

Plant medium in size to large, epiphytic, densely caespitose; roots slender. Ramicauls erect, slender, 4–9 cm long, enclosed above the middle by a tubular sheath and 2–3 other sheaths below and at the base. *Leaf* erect, coriaceous, elliptical, obtuse to subacute, petiolate, 5–9 cm long including a petiole 1–1.5 cm long, the blade 1–2 cm wide, narrowly cuneate below into the petiole. *Inflorescence* 1–3 erect, subdistichous to secund, densely several-flowered racemes with most flowers open simultaneously, 2–4 cm long, including the peduncle ca. 5 mm long, subtended by a spathe 3–6 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 1.5 mm long; pedicels 1 mm long; ovary 1 mm long; *sepals* not widely expanded, similar, pale green to yellow-green, glabrous, free nearly

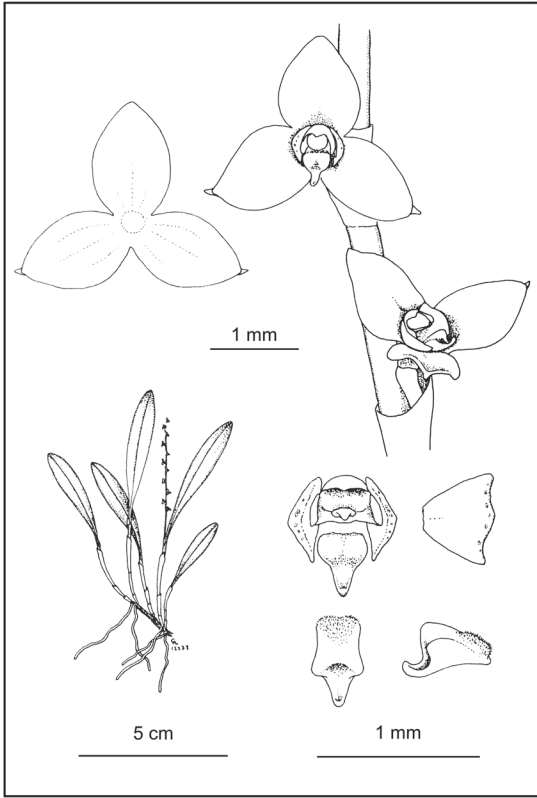


FIGURE 17. *Stelis mucrouncata* Dod

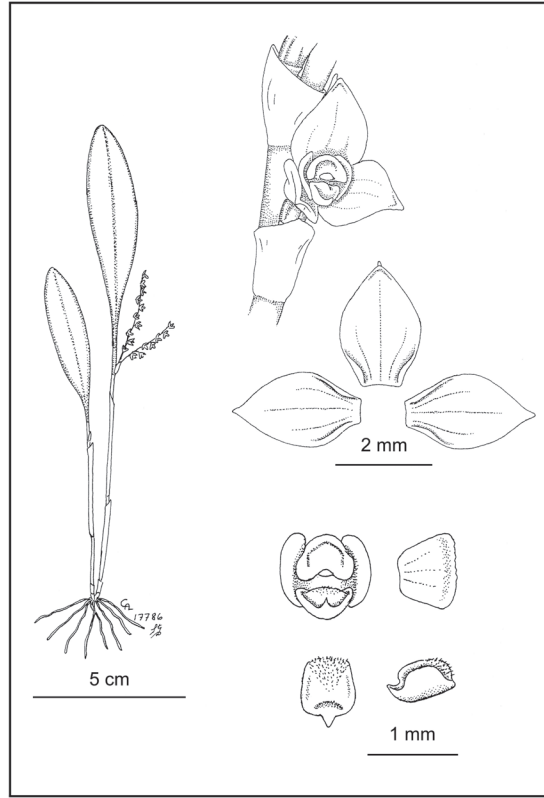


FIGURE 18. *Stelis perpusilliflora* Cogn.

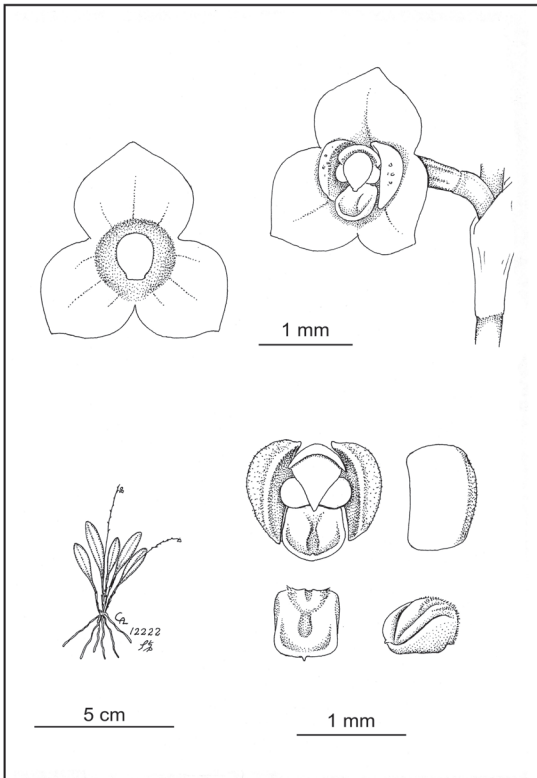


FIGURE 19. *Stelis pygmaea* Cogn.

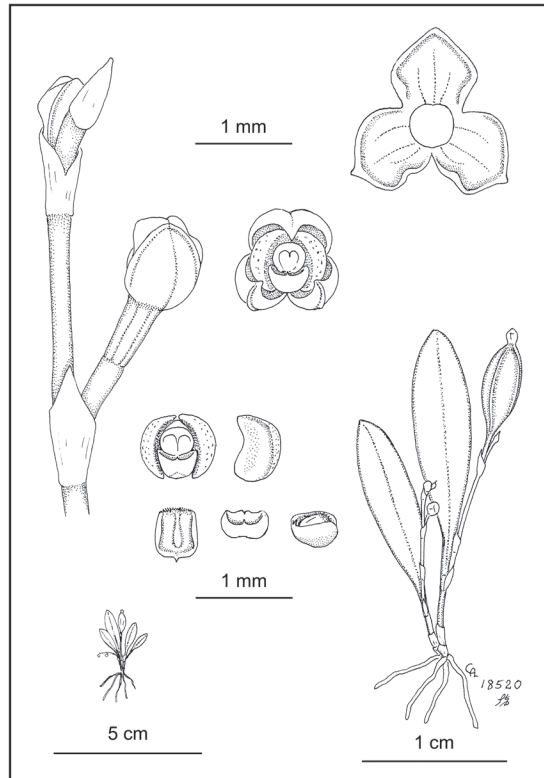


FIGURE 20. *Stelis pygmaea* Cogn.

to the base, ovate, subacute, shortly acuminate into a small apiculum, 1.8 mm long, 1.2 mm wide, 3-veined; *petals* light green, obtuse, shallowly concave, 0.6 mm long, 0.7 mm wide, the apex broadly truncate without thickening, microscopically irregular and cellular; *lip* light green, subquadrate, 0.6 mm long, 0.5 mm wide, 0.4 mm deep, shortly concave below a thick bar, the apex triangular, subacute, the hypochile slightly convex, cellular, becoming densely pubescent toward the base, the base truncate, hinged to the base of the column; *column* stout, 0.5 mm long, 0.5 mm broad, the anther and stigmatic lobes apical.

Etymology: from the Latin *perpusilliflorus*, “very small-flowered,” referring to the inflorescence.

Additional specimens examined: GUADELOUPE. Bains Jaunes, 600 m, 6 Sept. 1938, *A. Questel 2094* (US); Grande Decouverte along Trace Victor Huues, 900 ft, 8 December 1959, *G. R. Proctor 200331* (AMES); Soufriere, above Sainte Claude, 8–11 July 1964, *H. A. Hespeheide & D. R. Wiseman 478* (AMES, DUKE); Pointe-Noire, 650 m, 18 September 1974, *J. Jérémie 169* (AMES, P); Saint Claude, Foret de Bains Jaunes, 8 March 1992, *J. Fournet & P. Feldmann 5152* (GUAD); Basse-Terre, Massif de la Soufriere, 1000 m, 5 May 1974, *C. & F. Sastre 2888* (GUAD, P); Basse-Terre, Massif de la Soufriere, Bains Jaunes, 900 m, 29 October 1995, *C. Luer. J. Luer & P. Feldmann 17764* (MO).

DOMINICA. Ridge of Morne Plat Pays, 800 m, 5 March 1940, *W. H. & B. T. Hodge 1700, 1723* (AMES); east of Laudat, 665 m, 11 March 1940, *W. H. & B. T. Hodge 1967* (AMES); Morne Plat Pays above Bellevue, 23 July 1964, *R. L. Wilbur et al. 7897* (US); Trois Pitons, Rosalie to Pont Cassé, 1600 ft, 22 July 1964, *R. L. Wilbur et al. 7812* (US).

PUERTO RICO. Sierra de Luquillo, 2000 ft, May 1883, *H. F. A. von Eggers s.n.* (BR); Jayuya, Toro Negro State Forest, 17 February 1961, *R. O. Woodbury 4789* (SJ, UPR); Ponce: Toro Negro Forest Reserve, Río Inabón, 1150–1250 m, 23 March 1992, *F. Axelrod & P. Chavez 4308* (UPRRP); same area, beyond the TV tower, 1170 m, 5 November 1995, *C. Luer, J. Luer, J. Ackerman & F. Axelrod 17786* (MO); Río Grande: Luquillo Mts., Mt. Britton, 860 m, 13 May 1991, *J. D. Ackerman & R. Calvo 2691* (UPRRP); Cayey-San Lorenzo, Carite Forest Reserve, 800 m, 4 April 1984, *J. D. Ackerman 1979* (UPRRP); El Verde, 21 April 1963, *R. O. Woodbury s.n.* (UPR).

HAITI. Formond, near Les Cayes, 1000 m, Apr. 1982, *D. Dod 1-41* (SEL).

This relatively frequent species is confined to Puerto Rico, Guadeloupe, Martinique, and neighboring Dominica. A report from Hispaniola is probably a misidentification of the common and variable *Stelis domingensis* Cogn. *Stelis perpusilliflora* is easily identified by the well-developed ramicaul and an elliptical, obtuse, petiolate leaf; usually a few racemes much shorter than the leaf; and very small flowers that do not expand well. The sepals are free nearly to the base, the subacute tips shortly apiculate. The petals are cuneate and broadly truncate; the lip is oblong with the apex triangular and subacute. The hypochile is thick and densely pubescent below the middle.

Stelis pygmaea Cogn., in I. Urban, *Symb. Antill.* 6: 390. 1909. TYPE: GUADELOUPE. Without locality, October 1893, *P. Duss 4182* (Holotype BR). Fig. 19–20.

Plant very small, epiphytic, caespitose; roots slender. Ramicauls erect, slender, 3–11 mm long, enclosed by 2–3 tubular sheaths. *Leaf* erect, coriaceous, elliptical, obtuse to subacute, shortly petiolate, 10–22 mm long including a petiole 2–3 mm long, the blade 3–5.5 mm wide, narrowly cuneate below into the petiole. *Inflorescence* an erect, distichous to secund, loosely few- to several-flowered raceme with most flowers open simultaneously, 10–35 mm long, including the peduncle 5–10 mm long, subtended by a spathe 1–3 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 1–1.25 mm long; pedicels 1–1.5 mm long; ovary 0.75–1 mm long; *sepals* expanded, not expanded, or cleistogamous, subequal, pale green, glabrous, free nearly to a short, sepaline cup, ovate, obtuse, 0.75–1.7 mm long, 0.75–1.7 mm wide, 3-veined; *petals* light green, transversely oblong, shallowly concave, 0.3–0.5 mm long, 0.6–0.8 mm wide, the apex broadly truncate with a flattened, callous, microscopically cellular, margin; *lip* light green, thick, subquadrate, 0.4–0.5 mm long, 0.3–0.4 mm wide, 0.2–0.3 mm deep, the apex broadly rounded-subtruncate, shallowly concave between with the thickened, minutely apiculate margin, the hypochile thick, convex, densely pubescent toward the base, the base broadly truncate, hinged to the base of the column; *column* stout, 0.5 mm long, 0.3–0.5 mm broad, the anther and stigmatic lobes apical.

Etymology: from the Latin *pygmaeus*, “pygmy, little,” referring to the habit.

Additional specimens examined: GUADELOUPE. Basse-Terre, Massif de le Soufriere, Bains Jaunes, 600 m, 26 June 1937, *H. Stehlé 2573* (AMES); without locality, fl. in cult. 29 October 1995, P. Jesup, 1 June 1997, *C. Luer 18520* (MO).

DOMINICA. Sylvania Estate, 549 m, 9–24 August 1938, *W. H. Hodge 391* (AMES); Coffee grove near Laudat, July 1964, *R. L. Wilbur et al. 7510* (US).

ST. VINCENT. Dalaway District, 1000 ft, 2 March 1971, *R. A. Howard, G. R. Cooley & R. E. Weaver 17642* (AMES).

PUERTO RICO. Río Grande, Luquillo, Caribbean National Forest, 19 Apr. 1963, *R. O. Woodbury 4195* (SJ); El Yunque, June 1961, *R. O. Woodbury s.n.* (UPR); Luquillo Forest, 600 m, 3 August 1982, *A. H. & P. Liogier & L. F. Martorell 33320* (NY, UPR); Río Grande, Luquillo Mts., Río Grande, S of El Verde, 27 October 1987, *J. D. Ackerman & A. Montalvo 2417* (UPRRP); same area, 550–600 m, 19 August 1989, *J. D. Ackerman 2625* (UPRRP).

DOMINICAN REPUBLIC. Puerto Plata: Cordillera de Yaroa, near trail to Arroyo del Toro, 800 m, 28 June 1968, *A. H. Liogier 11877* (AMES, NY, US); La Vega: Alto de Casabito, 1400 m, 11 December 1955, *J. Jiménez & L. Ariza J. 3165* (US); Loma “La Cuesta de La Vaca” 1200 m, 20 August 1982, *T. Zanoni et al. 22811* (NY, UPRRP).

HAITI. Dept. du Nord; vicinity of Marmelade, 800 m, 20 December 1925, *E. C. Leonard 8368* (AMES); Citadel, 23 October 1983, fl. in cult. 4 May 1986, *D. Dod s.n.* (MO), C. Luer illustr. 12222.

This tiny, caespitose species occurs in the Lesser Antilles, Puerto Rico, and Hispaniola. Tiny ramicauls less than 1 cm long bear elliptical leaves less than 2.5 cm long and 0.5 cm wide. Ovate sepals form a short cup at the base. Sometimes the flowers are cleistogamous. The petals are broad with a thick, flattened margin. The lip is thick and shallowly concave around a broadly rounded, convex bar within a minutely apiculate margin.

Stelis repens Cogn., in Urb., Symb. Antill. 6: 692. 1910. TYPE: DOMINICAN REPUBLIC. La Vega: near Constanza, 1450 m, June 1910, *H. von Tüerckheim* 3329 (Holotype: BR; Isotypes: AMES, K, US). Fig. 21.

Plant small, epiphytic, long-repent with the rhizome 0.5–1 cm long between ramicauls; roots slender from a node on the rhizome. Ramicauls ascending, slender, 10–13 mm long, enclosed by 2 tubular sheaths. *Leaf* erect, coriaceous, narrowly elliptical, subacute, shortly petiolate, 18–25 mm long including a petiole 3–4 mm long, the blade 5–8 mm wide, narrowly cuneate below into the petiole. *Inflorescence* an erect, subsecund, loosely several-flowered raceme with most flowers open simultaneously, 3–4 cm long, including the peduncle 0.5–1 cm long, subtended by a spathe 2 mm long, from below the apex of the ramicaul; floral bracts oblique, tubular, 1.75 mm long; pedicels 1.25 mm long; ovary 0.6 mm long; *sepals* yellow, incompletely expanded, unequal, glabrous, free nearly to the base, ovate, subacute to obtuse, the dorsal sepal 1.5 mm long, 1 mm wide, 3-veined,

the laterals more or less forward, minutely apiculate, 1.75 mm long, 0.75 mm wide, 3-veined; *petals* yellow, obcuneate-subquadrate, truncate, shallowly concave, 0.4 mm long, 0.4 mm wide, 1-veined, the apex broadly truncate with minimal thickening on the margin; *lip* light yellow, thick, trilobed, 0.6 mm long, 0.3 mm wide, 0.2 mm deep, the apex narrowly triangular, obtuse, concave below the junction of obtuse lateral lobes near the middle, the dorsum densely pubescent above the base, the base truncate, hinged to the base of the column; *column* stout, 0.4 mm long, 0.4 mm broad, the anther and stigmatic lobes apical.

Etymology: from the Latin *repens*, “repent,” referring to the habit.

Additional specimens examined: DOMINICAN REPUBLIC. Near Farabacoa, 1250 m, June 1912, *M. Fuertes* 1673 (AMES); Monte Cristi: Monción, Lagunas de Cenobi, 1200 m, 4 June 1929, *E. L. Ekman* 12738 (AMES, S, US). Puerto Plata: Loma del Puerto, 750 m, 18 September 1969, *A. H. Liogier* 15945 (NY, US). Santiago: Pico de Igua, 1490 m, 15 August 1947, *J. Jiménez* 1252 (US). Jarabacoa: Loma de la Sal, 1100–1250 m, *A. H. Liogier* 11423 (AMES, NY, US). Without specific locality, fl. in cult. at J & L Orchids, Easton, CT, May 2001, collected by *C. Head & D. Dod*, *s.n.* (MO), *C. Luer* illustr. 19907.

HAITI. Massif du Nord, Morne Colombeau, 900 m, 20 June 1925, *E. L. Ekman* H-4351 (AMES, K, S, US); Morne la Visite, near Seguin, 2000 m, fl. in cult. in Santo Domingo, 24 March 1982, *D. Dod* *s.n.* (SEL).

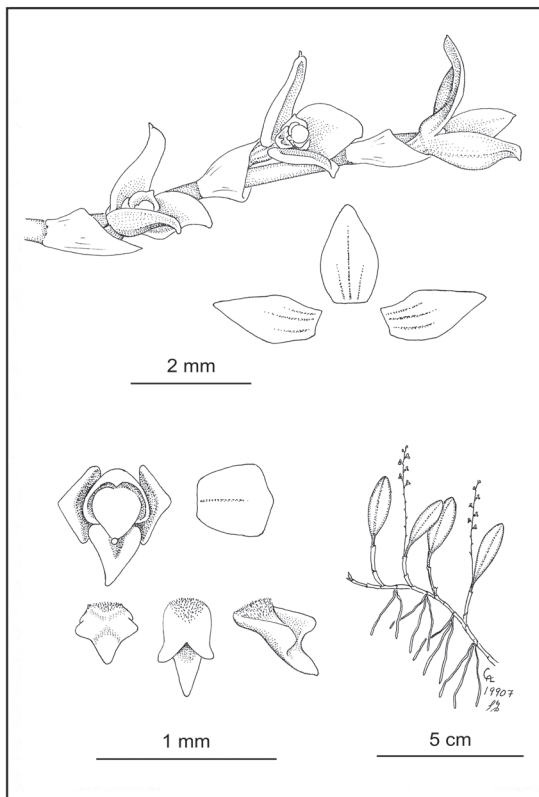


FIGURE 21. *Stelis repens* Cogn.

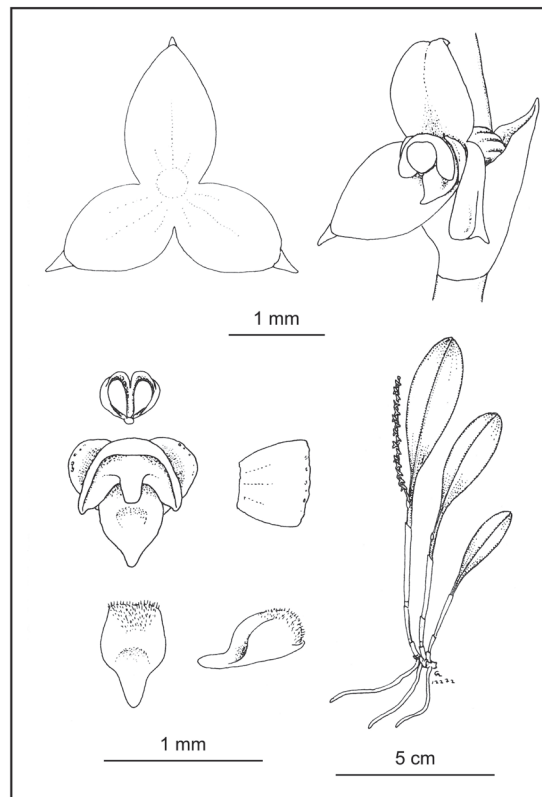


FIGURE 22. *Stelis triapiculata* Dod

This little species is the only distinctly long-repent species of the genus known in the Antilles. A disjunct population is known from southeastern Ecuador. The creeping rhizome is slender and up to one centimeter long between ramicauls. The leaves are narrowly elliptical and shortly petiolate, exceeded by a loosely minutely-flowered raceme of tiny, yellow flowers. The lateral sepals are free and apiculate, but connate basally to the dorsal sepal. The petals are truncate and single-veined. The lip is minute and distinctly trilobed above the middle and densely pubescent above the base.

Stelis triapiculata Dod, *Moscoso* 4: 160, 1986. TYPE: HAITI. Massif de la Hotte, Les Cayes, Formond, 2000 m, 8 January 1983, *D. Dod 969* (Holotype: JBSD [not located]; Isotypes: AMES [not located], MO, NY [not located], SEL [not located], US [not located]), C. Luer illustr. 12272. Fig. 22.

Plant small to medium in size, epiphytic, shortly ascending to densely caespitose; roots slender. Ramicauls erect, slender, 2.5–8 cm long, enclosed by 3 tubular sheaths. *Leaf* erect, coriaceous, elliptical-obovate, obtuse, petiolate, 3–4.5 cm long including a petiole 5–8 mm long, the blade 0.9–1.6 cm wide, acuminate below into the

petiole. *Inflorescence* an erect, distichous, congested, many-flowered raceme with most flowers open simultaneously, 2.5–4 cm long, including the peduncle less than 1 cm long, subtended by a spathe 3–4 mm long, from below the apex of the ramicaul; floral bracts tubular, oblique, acute, 2 mm long; pedicels 1 mm long; ovary 0.75 mm long; sepals subequal, yellow, glabrous, free nearly to the base, ovate, subacute to acute, apiculate, 1.5 mm long, 1 mm wide, 3-veined; petals obcuneate, truncate, shallowly concave, 0.45 mm long, 0.55 mm wide, 3-veined, the apex broadly truncate without thickening; *lip* thick, oblong-subquadrate, 0.6 mm long, 0.4 mm wide, 0.3 mm deep, shallowly concave below a curved bar, the apex contracted into a narrowly obtuse triangle, the hypochile thick, convex, densely pubescent above the base, the base truncate, hinged to the base of the column; *column* stout, 0.5 mm long, 0.7 mm broad, the anther and stigmatic lobes apical.

Etymology: Latin *triapiculatus*, “triapiculate,” referring to the tips of the sepals.

This species, known only from the Massif de la Hotte in Haiti, is very similar to the frequent *Stelis domingensis*. It is distinguished from it by larger, broader leaves, distinctly apiculate sepals, and a triangular tip of the lip.

EXCLUDED SPECIES

Stelis aprica Lindl., *Comp. Bot. Mag.* 2: 353. 1836.

This species, of which *S. crassifolia* Lindl. is a synonym, is widely distributed and known to occur in Brazil, Colombia, Ecuador, Peru, Venezuela and possibly in Bolivia (Luer 2009, 2018a), but so far has not been found in the Antilles. Collections from the Andes and the Antilles have been misidentified as *S. aprica* in herbaria and literature.

Lindley (1842) described *Stelis crassifolia* based on a cultivated material by Sir Charles Lemon, an amateur gardener, at Carclew House, Cornwall, England. Unfortunately, no type specimen is preserved in Lindley’s herbarium at Kew, and no other original material has been located. As Luer (2018b) pointed out, the West Indian provenance of Lemon’s collection is incorrect. In *Folia Orchidaceae*, Lindley (1859) provided a description of *S. crassifolia*, citing his 1842 publication and a Colombian

collection by I. F. Holton, and made no reference to Lemon’s collection from the West Indies. It is possible that both specimens had the same source. We hereby select Lemon’s specimen as neotype as follows:

Stelis crassifolia Lindl., *Edwards’s Bot. Reg.* 28: misc. 9. 1842. TYPE: “Imported from the West Indies in Aug 1841 by Sir C. Lemon” (Holotype: Lost). Neotype here designated: COLOMBIA. Cauca, La Paila, 30 April 1853, *I. F. Holton 160* (K; Isoneotype: AMES [72181]).

Stelis pusilla Kunth in F.W.H.von Humboldt, A.J.A. Bonpland & C.S.Kunth, *Nov. Gen. Sp.* 1: 361. 1816.

The collection identified as being this species in Luer (2014) refers to *S. chabreana*. Therefore, the name *Stelis pusilla* is excluded from the Antillean orchidflora.

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