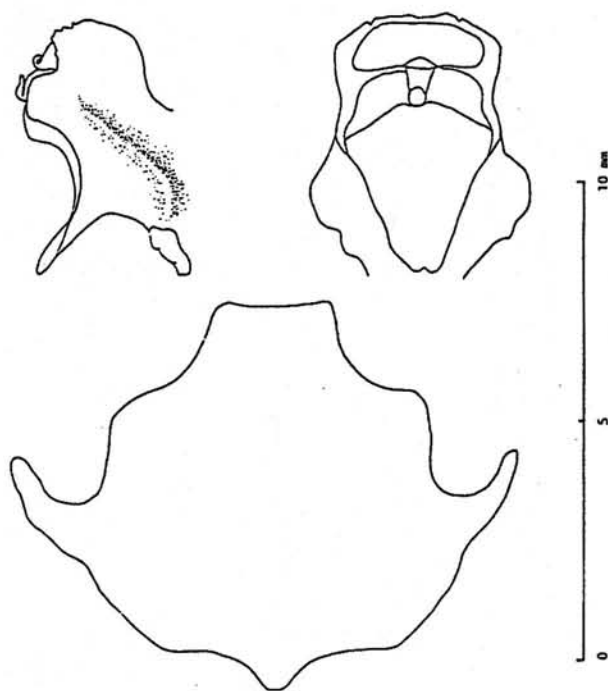


Dichaea violacea Folsom, sp. nov.

Type. Panamá. Cocle: at continental divide, 7 km north of El Cope, 850-950 m, 6 Apr 1985, J. P. Folsom 11283MM (holotype, PMA; isotypes, TEX, HNT). *Planta similis Dichaea lagotis, sed typice caules breviora et effusius folia. Segmenta floralia crassa, valde atropurpurea; flores maxime fragrantem manes.*

Epiphytic herbs to 0.3 m, caespitose. Stems one to few, pendent. Roots filiform. Leaves spaced by 1/2 leaf blade or less, sometimes overlapping; blades slightly reflexed, dark olive to dark green-olive, brownish-olive when young (Ridgeway) green, ovate lanceolate, 11-12 mm long, 4-6.5 mm wide, somewhat coriaceous, 5-6 lateral veins, evident cross-veins, marginally smooth, becoming microciliate apically; sheaths with loose leading edge, light greyed-yellow (160-162), heavily olive-dotted pustulate, midvein cuneate to stem, apically constricted, ± 8 mm long, 4-5 mm wide. Inflorescence solitary; peduncle geniculate at emergence from sheath, ± 10 mm long; inner apical bract narrowly lanceolate-oblong, ± 4.5 mm long; outer apical bract flaring, non-clasping, forming a standard, completely revealing ovary, ± 3.5 mm long; basal bracts tubular sheathing, covering basal ± 5.5 mm of peduncle. Buds greyed-yellow to yellow-olive. Flowers opening fully, violet, strongly fragrant of cloves, large to very large within the section, segments thick petaloid, externally aculeate. Dorsal sepal concavo-convex, bent, solid to mottled violet (R.H.S. 83-C), lanceolate, 11-15 mm long, 4.5-6.6 mm wide, apically acuminate, marginally entire, 5 nerved. Lateral sepals concavo-convex, solid to mottled violet (R.H.S. 83-C), obliquely lanceolate to lanceolate-ovate, 11.8-14.5 mm long, 4.3-5.5 mm wide, apically acuminate, marginally smooth, 4-5 nerved. Petals 2, more or less planar, apically twisted, violet (R.H.S. 83-B), nearly rhombic, subquadrate, somewhat oblique, 10-14.5 mm long, 5.0-6.5 mm wide, marginally smooth, 5 nerved. Labellum projecting, shallow bowl-like, solidly violet (R.H.S. 87-A to 83-A) with white patterning along the longitudinal mid-line, spreading somewhat in the expanded lamina, anchoriform, producing a triangular acute, sulcate apex from a rounded leading edge, laterally forming retrorse lobes; hypochile sharply shouldered and abruptly forming a short claw; labellum 7.7-8.2 mm long in natural position, 8.4-10.0 mm long when spread, 5.4-6.4 mm broad in natural form, (8.5) 10.4-13.4 mm broad when spread, with following particular dimensions: claw 1.5-2.3 mm long, 1.5-2.5 mm wide, longitudinal distance base to shoulder 2.4-3.1 mm, longitudinal distance base to second sinus 4.1-5.2 mm, longitudinal distance base to lateral



Dichaea violacea, column and labellum.
Folsom 11283 MM

lobe line 3.2-5.8 mm, width across shoulders 6.0-8.0 mm, first sinuses usually indistinguishable, width between second sinuses 7.3-9.6 mm, outer sinuses very shallow to indistinguishable, lateral lobe length 1.3-2.3 mm, distance lateral lobe to base 5.1-8.4 mm, distance lateral lobe to apex 6.5-9.0 mm, distance lateral lobe to shoulder 2.0-3.7 mm, distance shoulder to base 3.7-4.8 mm, apex 1.6-2.2 mm long natural form, 0.0-0.3 mm long when spread, surface smooth small papillate, with trichomes on padded shoulder margins, succulent, 9 nerved. Column projecting erect, white with dark violet wings, jowls, and top, broad across frontal plane, with an almost erect anther, deep supra-rostellum, and terete base with backswept, widely flaring wings, 4.3-5.0 mm long top to base, 2.7-3.2 mm long top to ovary summit, with following particular dimensions: distances viscidium to top 2.3-2.7 mm, viscidium to ligule 2.0-3.8 mm, distances ligule to top 4.4-5.4 mm, ligule to ovary summit 3.2-4.5 mm, ligule to base 2.0-2.5 mm, breadths: across clinandrium 3.0-4.0 mm, across anther cap 2.4-2.9 mm, across rostellum 2.6-3.2 mm, across stigmatic cavity 2.1-3.3 mm, across basal wings 3.2-4.3 mm, wings with short to medium, fine conical pubescence. Anther cap white, cellular textured. Pollinia cream-yellow. Viscidium white, 0.4-0.5 mm long. Stigmatic cavity white, transversely rhombic to depressed widely obovate when completely opened, 1.2-2.2 mm long, 2.1-3.3 mm wide. Ligule projecting downward, truncate oblong, slightly bifid, 1.6-1.7 mm long, ± 1.3 mm wide, long conical papillate. Ovary inferior, green-yellow, pilose. Capsule muricate. Flowering apparently June-December, flowers enduring 2-4 days.

Habitat cool, wet montane (700-1,500 m) forest.

Distribution. Western Panamá, 1,000-2,000 meters.

Representative Specimens. PANAMÁ. Code: El Valle de Anton, mesa above town, near chicken farms, J. P. Folsom 11282RR; continental divide 7 km north of El Cope, 6 July 1977, J. P. Folsom 4164; 14 Jun 1980, 8327. Veraguas: Cerro Tute, 19 Jun 1980, J. P. Folsom 8360.

Remarks. *Dichaea violacea* is one species of a South American complex of pendent plants with conspicuous cross-veins in the leaves. It resembles most closely *D. lagotis* of Colombia, being similar in shape of the flower segments, column structure, and time of flowering during the day. It differs from *D. lagotis* by its shorter stems, spreading, closely spaced leaves (versus retrorsely positioned, more widely spaced leaves), strong violet coloration of all floral segments (versus pale greyed-orange sepals and petals) and strong floral fragrance (none was ever detected in *D. lagotis*).

Dichaea violacea is similar to only one other Panamanian species, *Dichaea tuberculilabris*, which also has prominent cross-veins in its leaves. However, *D. violacea* has larger, thick-bodied flowers that are almost totally dark violet. It also lacks the large adaxial labellar tuberculae of *D. tuberculilabris* and its flowers have a strongly cinnamon-vanilla fragrance. In the *Flora of Panama* (Allen, 1949), the plants of these two species (as well as members of the *Dichaea cryptarrhena* complex) are identified as *D. muricata*, which has traditionally been considered the proper name for all of the pendent *Dichaeas* in that country (see *D. latifolia*). The presence of numerous strong cross-veins in the leaves distinguishes this plant from all collections known to date from north of Panamá and from the Caribbean islands. ❖