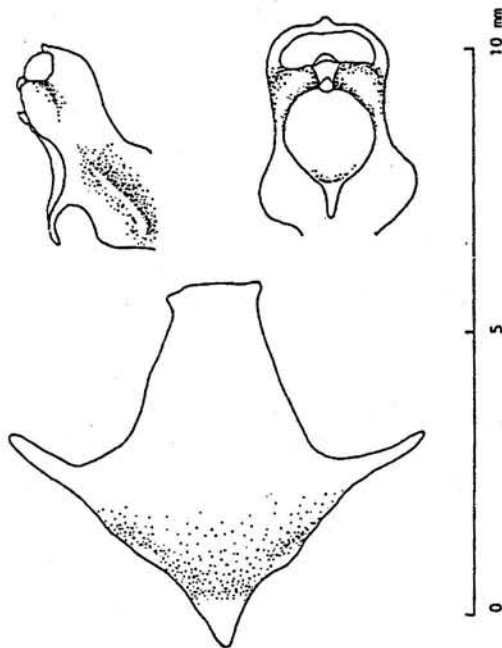


hyaline, apically becoming erose denticulate, 5-6 nerved; sheaths with slightly flaring, undulate free-margin, pale yellow-olive, green pustulate, 3.9-4.6 mm long, 2.5-2.6 mm wide, pustulate. Bud light greyed-orange, widely trullate. Inflorescence solitary, uniflorate; peduncle olive-green, 5.5-8.5 mm long, stout, small pustulate; inner apical bract narrowly oblanceolate-acuminate, apically yellow-green,  $\pm 2.5$  mm long; outer apical bract eccentric funnelform, apically acuminate,  $\pm 2.3$  mm long; basal bracts tubular clasping, short acuminate, covering basal 3.7-4.0 mm of peduncle. Flower opening  $3/4$ , cream-white with purple-violet coloration, no odor detected, small within section, segments petaloid, externally non-tuberculate. Dorsal sepal erect, pale greyed-orange with narrow barring of pale violet, ovate-elliptic to elliptic-oblong, acute to short acuminate, 6.4-7.1 mm long, 2.4-2.8 mm wide, marginally smooth, 3 veins. Lateral sepals 2, pale greyed-orange with a few upper-basal pale violet barlets, obliquely ovate-elliptic to elliptic-lanceolate, acute to acuminate, 6.5-7.8 mm long, 2.5-3.1 mm wide, marginally smooth, 3 veins. Petals 2, planar-undulate, greyed-white, heavily barred (bars composed of small spots) medium to dark violet, elliptic-obovate to oblong-obovate, acute, 5.5-6.2 mm long, 2.6-3.2 mm wide, marginally smooth, adaxial surface cellular-beaded, 5 nerved. Labellum white with dark violet claw band and 2-5 basal violet striations, spreading sagittate with broadly triangular leading edge and cuneate hypochile; apex flat, formed as part of triangular leading edge; lateral lobes attenuate, 5.4-6.2 mm long in natural position, 6.3-6.9 mm long when spread, 3.6-4.4 mm broad in natural form, 5.5-7.9 mm broad when spread, with following particular dimensions: claw 0.5-0.8 mm long, in general indistinct, base 1.0-1.8 mm wide, lacking distinct shoulders, base to second sinus line 2.9-3.3 mm, base to lateral lobe line 2.2-3.4 mm, width between first sinuses 3.2-4.3 mm, width between second sinuses 3.6-5.0 mm, width between outer



*Dichaea retroflexiligula* Folsom sp. nov.

Type. Panamá. Bocas del Toro: 12 km N of Chiriqui border, en route to Chiriqui Grande, 340 m, 10 Apr 1985, J. P. Folsom 11301K (holotype, PMA; isotypes, TEX, HNT). *Planta et folia similis Dichaea oxyglossa, sed habitus plus erectus et caules breviores. Distinguitur ab speciebus similibus per infrastigmaticas ligulatas subtilis deorsum reflexas.*

Epiphytic herbs to 2 dm, caespitose. Stems one to several, semi-erect to pendent to scandent. Roots filiform. Leaves separated by less than  $1/2$  blade width; blades spreading, slightly reflexed, shades of green-citrine to olive to dark olive-green, more citrine in younger leaves, oblong-lanceolate, 4.5-4.8 mm long, 3.2-3.3 mm wide, apiculate, marginally smooth,

*Dichaea retroflexiligula*, column and labellum.  
Folsom 11301 K

sinuses 4.5-5.0 mm, lateral lobe length 0.8-2.0 mm, lateral lobe to base 4.0-5.0 mm, lateral lobe to apex 4.2-5.5 mm, labellum succulent, leading edge (excluding broad triangular apex) appearing short ciliate because of spaced, short conical trichomes, 7 nerved. Column erect, inclined in relation to labellum, white with violet coloration in clinandrium, on wings, along stigma rim (especially along rostellum, corners, and ligule base) and basally near junction with labellum, with clasping clinandrium, discontinuous, basally widely lobed wings, 3.4-3.9 mm long top to base, 2.3-2.7 mm long top to ovary summit, with following particular dimensions: viscidium to top 1.4-1.8 mm, viscidium to ligule 1.8-2.5 mm, ligule to top to 3.7 mm, ligule to ovary summit 1.9-3.1 mm, ligule to base 0.5-0.9 mm, breadths: across clinandrium 1.7-2.1 mm, across anther cap 1.3-1.6 mm, across rostellum 1.8-2.0 mm, across stigmatic cavity 1.7-2.0 mm, across basal wings 2.4-2.9 mm. Anther cap white, biconvex rounded trapezoidal, breadth across pollinia 1.0-1.5 mm; stipe  $\pm$  1 mm long, 0.5-1.0 mm broad. Viscidium white, 0.2-0.3 mm long. Stigmatic cavity off-white, rounded widely obtrullate to circular transverse rhombic, in profile wedge-like, 1.4-1.8 mm long, 1.7-2.0 mm wide. Ligule downturned, dark violet basally, apically white, triangular, 0.4-0.6 mm long, basally 0.2 mm wide, apically with a tuft of white irregular hairs. Ovary inferior, olive-green, covered with long, white murications. Capsule muricate. Flowering throughout year.

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

Distribution. Montane western Panamá.

Specimens Examined. PANAMÁ. Coclé: Alto Calvario, 14 Jun 1980, J. P. Folsom 8282.

Remarks. *Dichaea retroflexiligula* is vegetatively very similar to *D. oxyglossa* and *D. obovatipetala*, with a more erect habit and shorter stems. The flower structure however is substantially different. *Dichaea oxyglossa* has thin-bodied, attenuate floral segments, whereas those of both *D. retroflexiligula* and *D. obovatipetala* are normal to thick petaloid. The ligule of *D. retroflexiligula* is delicate and downward-pointing, distinguishing this plant from *D. obovatipetala*, which has a broad, short, oblong, projecting ligule. Additionally, the labellum of *D. retroflexiligula* lacks well-defined shoulders and claw characteristic of *D. obovatipetala*.

Only two specimens of *Dichaea retroflexiligula* have been collected, but at widely separated sites in Panamá. In the future, this plant will probably be found in wet montane forest in western Panamá.