



Dichaea schlechteri, column and labellum.
Folsom 11005

Dichaea schlechteri Folsom sp. nov.

Type. Costa Rica. San Jose: Braulio Carrillo Park, 500-700 m, 16 Sep 1984, J. P. Folsom 11005 (holotype, CR; isotype, TEX). *Planta similis* *Dichaea cryptarrhena*, sed *ubique parvior et textura tenuis*. *Flos similis* *Dichaea cryptarrhena*, sed *omnis dimensions parvior et ligulatus rectus*.

Epiphytic herbs to 5 dm. scandent to pendent. Stems one to several, occasionally branching. Roots filiform. Leaves separated by 0.5 blade width or less; blades spreading to slightly retrorse, green, widely ovate-oblong, apically rounded, 4.5-5.5 mm long, 3.5-5.0 mm wide, abaxially drawn to a small triangular apex along main vein terminus, marginally smooth,

microscopically erose at apex, thin-grassy textured, generally with 6 lateral veins each side of main vein, lacking conspicuous cross-veins; sheaths clasping, green, 4.5-5.0 mm long, ± 2.5 mm wide, textured as blades. Inflorescence solitary, uniflorate; peduncle perpendicular to stem, 10-15 mm long; inner apical bract lanceolate, 2.3 mm long; outer apical bract eccentric funnel-form with narrowly triangular apex, 2.2-2.5 mm long; basal bracts tubular, covering basal ± 4 mm of peduncle. Flower segments spreading, well-separated at anthesis, pale green to yellow-green with purple to violet coloration, no odor detected, small-medium within section, thin-textured, externally small, rounded tuberculate. Dorsal sepal bowed and bent, pale green to yellow-green (#150C), basally with small purple to violet spotting, elliptic-acute to ovate-attenuate, 8.0-8.8 mm long, 3.2-4.4 mm wide, with entire margins, ± 9 nerved. Lateral sepals 2, spreading at anthesis, colored as dorsal sepal with less pronounced spotting, obliquely oblong-elliptic acuminate, 7.4-7.8 mm long, 2.6-3.6 mm wide, marginally smooth, 5-7 nerved. Petals 2, pale green to pale yellow-green (R.H.S. 150C) with small purple to violet spots in basal half, eccentrically ovate, short acuminate, 7.0-7.7 mm long, 2.8-3.4 mm wide, marginally smooth; ± 7 nerved. Labellum projecting, white with medium to dark violet mottle-barring in claw, in a shoulder band, and distally in skirt, anchoriform, bowled with a tightly sulcate, narrowly triangular apex, when spread with a long narrow apex from a rounded leading edge, lateral lobes retrorse triangular; hypochile with narrow shoulders and a clawed base; labellum 5.1-6.5 mm long in natural position, 6.0-7.8 mm long when spread, 3.0-4.0 mm broad in natural position, 6.4-8.0 mm broad when spread, with following particular dimensions: claw 0.7-1.2 mm long, 1.3-1.6 mm wide, base to shoulder line ± 1.4 mm, base to second sinus line 2.3-2.7 mm, base to lateral lobe line 1.6-2.3 mm, widths across shoulders 2.8-3.1, between second sinuses 4.2-4.3 (first

sinuses indistinct), between outer sinuses 4.3-4.6; lateral lobes 1.7-2.3 mm long, lateral lobe to base 3.8-4.7, lateral lobe to apex 5.5-6.2, lateral lobe to shoulder \pm 2.4, shoulder to base 1.8-2.3; apex 1.5-1.9 mm long in natural position, 0.8-1.2 mm long when spread; labellum with micropubescence on leading edge and long, thin spreading trichomes along shoulders, 9 nerved. Column short, projecting-erect, green with dark violet wings and jowl patches, white clinandrium, in shape with clinandrium laterally flaring-triangular lobed, continuous with backswept wings; wings flared (frontal view) basal to stigma, almost subquadrate lobed; column 3.2-3.5 mm long top to base, 2.4-3.0 mm long top to ovary summit, with following particular dimensions: viscidium to top 1.5-1.6 mm, viscidium to ligule 1.5-2.0 mm, ligule to top 3.1-3.5 mm, ligule to ovary summit 3.0-3.1 mm, ligule to base 1.9-2.1 mm, breadths: across clinandrium 2.5-2.7 mm, across rostellum 2.0-2.2 mm, across stigmatic cavity 1.8-2.0 mm, across basal wings 2.3-2.7 mm. Anther cap white. Viscidium white, 0.25-0.3 mm long. Stigmatic cavity green, rounded widely obtrullate, 1.2-1.4 mm long, 1.8-2.0 mm wide. Ligule straight, projecting (slightly downward), truncate lanceolate, 1.2-1.8 mm long, sparsely tangled-pubescent. Ovary inferior, trichome muricate. Capsule muricate. Flowering apparently throughout the year.

Habitat wet, montane (600-2,000 m) forest.

Distribution. Known only from Costa Rica.

Representative Specimens. COSTA RICA. San Jose: Braulio Carillo Park, 1,000-1,200 m, 17 Sep 1984, J. P. Folsom 11017A.

Remarks. *Dichaea schlechteri* has the appearance of a smaller version of *D. cryptarrhena*. The leaves of both species are oblong and apically blunt or rounded, though blades of *D. schlechteri* are smaller and of thinner substance. Sepals of both species are usually acuminate

and in habit bowed and bent. The columns of the two species are similar, though that of *D. schlechteri* is smaller, bears more prominent basal wings, and produces a straighter (and smaller) ligule.

In having a more scandent plant habit, thin foliar texture, and smaller leaves, *D. schlechteri* differs most from *D. cryptarrhena* and is more comparable to plants of the *D. oxyglossa* complex.

Between the extremes represented by concepts described in this study as *Dichaea poicillantha*, *D. cryptarrhena*, and *D. schlechteri*, there are numerous specimens of intermediate character. Sufficient material has not been available to resolve completely the nature of the relationships in this complex.

Dichaea violacea, column and labellum.

Folsom 11283 MM