
Orchidaceae Dunstervilleorum I: a New *Dryadella* from the Venezuelan Guayana

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This paper is the first of a series describing new orchid taxa based on material collected by and illustrations prepared by the late G. C. K. Dunsterville. This effort is the first step toward publication of a new volume (number 7) in the series *Venezuelan Orchids Illustrated*, which will include some 100 previously unpublished line drawings now belonging to Nora Dunsterville.

The genus *Dryadella* Luer is a recent segregate of *Masdevallia* Ruiz & Pavón (Luer, 1978). It comprises ca. 40 species distributed in Central America and Andean South America (Luer, 1986: 26), with a secondary center in southern Brazil. The genus seems to be absent from Andean and coastal Venezuela. The new species described here, the only *Dryadella* reported from Venezuela, was previously illustrated as *Dryadella osmariniana* (P. Braga) Luer in Dunsterville & Garay (1979).

***Dryadella lueriana* Carnevali & G. A. Romero**,
sp. nov. TYPE: Venezuela. Bolívar: epiphytic in dense, wet, mossy forest near summit of Cerro Guaiquinima, close to the western cliff margin, 1,650 m, May 1978, *Dunsterville & E. Dunsterville 1399* (holotype, AMES; isotypes, MO, VEN). Figure 1.

Species haec *Dryadellae simulae* (Reichb. f.) Luer similis, sed habitu floribusque multiminoribus, sepalis non maculatis, petalis subquadratis obtusis et labelli minimi lamina obovata differt. Cum *Dryadella osmariniana* (Braga) Garay & Dunsterv. confusa, sed planta floribusque minoribus, rhizomate repente, foliis lineari-ellipticis proportione latioribus, labello breviori latiori et habitu montano recedit.

Epiphytes, 10–20 mm high; rhizome shortly creeping to abbreviate, clothed by tubular sheaths. Stems 2–3(–4) mm long, erect to subhorizontal, 1-articulate, clothed by 2–3 thin, tubulose, loose sheaths. Leaves 8–15(–25) mm long, 1.5–3.5(–4) mm wide, thickly coriaceous, midnerve sulcate, erect

to suberect, linear-elliptic, elliptic to oblanceolate, acute to obtuse, apex fleshily short-mucronate, basally narrowed into a short, wide pseudopetiole. Inflorescences 2–6 mm long, a solitary flower borne successively in a subdense 2–3(–4)-flowered raceme, originated from ca. $\frac{1}{2}$ the length of the stem, subtended by a ca. 0.2 mm long, triangular, acute sheath; peduncle 1–2 mm long, subterete, clothed by a tubulose, loose sheath; floral bract 2–3 mm long, tubulose in the lower $\frac{1}{2}$, imbricating above, thin, loose, when flattened elliptic, abruptly short acuminate, midnerve apically keeled; pedicel 2.5–4 mm long, subterete, longer than the bract, white; ovary 0.7–1 mm long, 3-winged, white. Flowers resupinate, campanulate; sepals 3-nerved, pale brown, largely overlaid by red, darker dorsally along the nerves, midnerves prominently keeled, margins cellular; dorsal sepal 4–5 mm long, 2–2.3 mm wide, ovate, apex acute, thickened, concave and hooded over the column and labellum, basally connate to the lateral sepals for 4–5 mm to form a sepaline cup; the lateral sepals 3–4 mm long, ca. 1.5 mm wide, ovate, acute, oblique, base connate for ca. 0.5 mm above the base and strongly folded into a small mentum, internally with a transverse callus 0.1–0.2 mm long above the decurved base; petals ca. 1 mm long, ca. 1 mm wide, tenuously 2-nerved, subquadrate to broadly obovate-oblong, with an acute angle and an acute, subapical tooth 0.1 mm long on both sides, apex obliquely truncate, rounded or obtuse. Labellum 1.7–1.8 mm long, divided into a basal claw and an apical blade; claw ca. 0.7 mm long, ca. 0.2 mm wide, oblong, flat or lightly channeled longitudinally, margins finely erose, basally with a pair of acute, retrorse lobules; blade 1–1.2 mm long, ca. 1 mm wide, obovate, rounded, margins finely undulate, apex decurved in natural position, basally above the claw with a pair of ca. 0.3 mm long, conic, acute, retrorse lobules; disk with a pair of obtuse lamellae below the middle. Column 1.5 mm

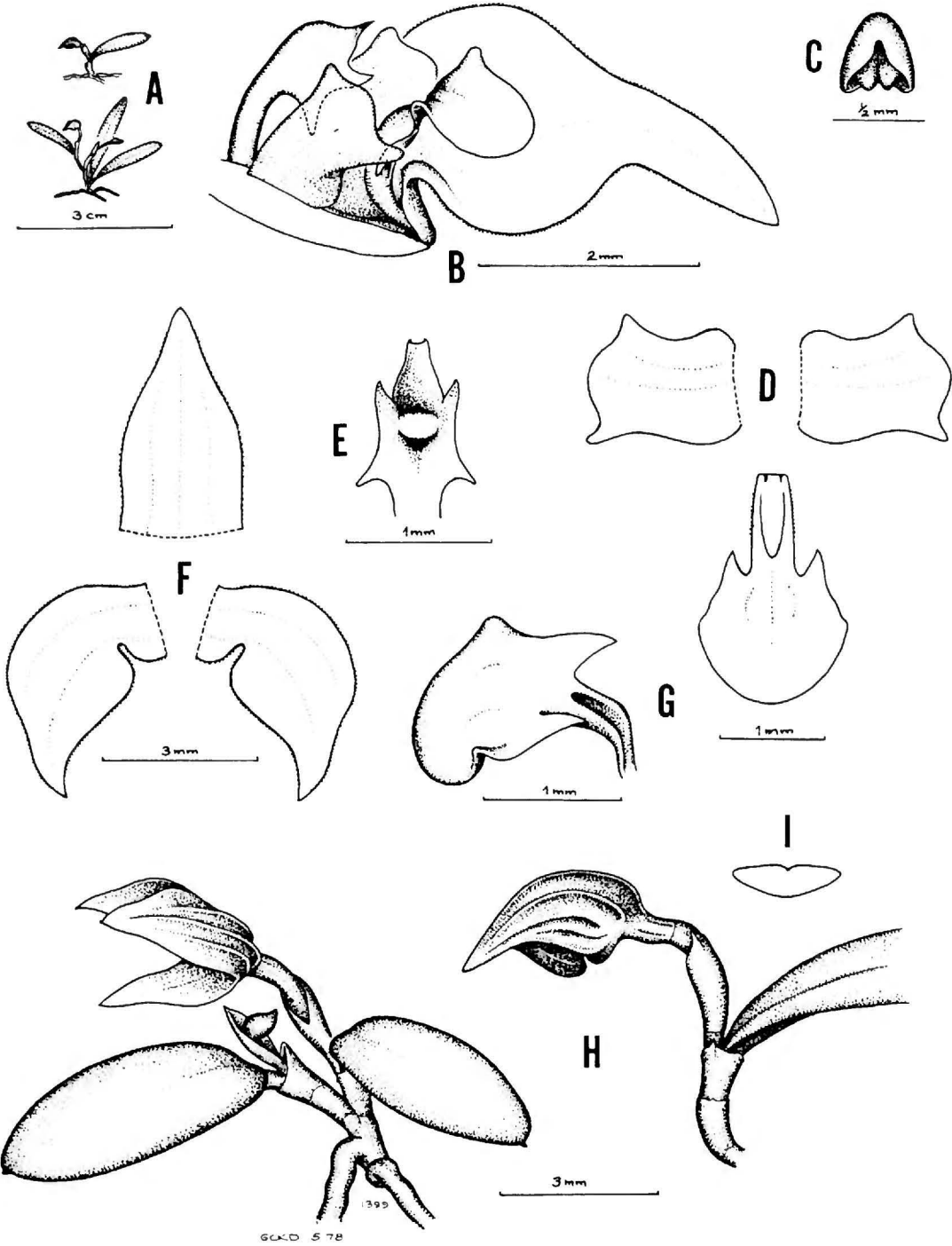


Figure 1. A–I. *Dryadella lueriana* Carnevali & G. Romero. —A. Habit. —B. Side view of flower (dorsal and left lateral sepals removed). —C. Anther and pollinia. —D. Petals, flattened. —E. Face of column. —F. Sepals. —G. Upper and lateral views of the labellum. —H. Details of habit. —I. Leaf, cross section. (Based on *Dunsterville & Dunsterville 1399*.)

long, ca. 0.8 mm wide close to the apex, longitudinally membranously winged on the distal half with a pair of acute, descending teeth, acutely bidentate at the apex, clinandrium 3-dentate, the central tooth wider, basally produced into a ca. 1-mm-long, well-developed, channeled foot.

Dunsterville & Garay (1979) misidentified this new species as *Dryadella osmariniana*, a species from lower elevations in Amazonian Brazil that is vegetatively and florally larger. The relationships of *Dryadella lueriana* are with *Dryadella simula* (Reichb. f.) Luer from which it differs as stated in the Latin diagnosis. *Dryadella lueriana* is the second species of the genus known from the combined Guayana-Amazonas area. It is distinguished by the very small, shortly repent habit; small unspotted flowers with sepals less than 5 mm long, subquadrate petals; a tiny labellum with an obovate blade; and a winged column with a pair of acute, descending processes.

The species is named after Carlyle A. Luer, who first recognized this species as distinct from *Dryadella osmariniana*, for his outstanding contributions to the systematics of the Pleurothallidinae.

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Literature Cited

- Dunsterville, G. C. K. & L. A. Garay. 1979. Venezuelan Orchids Illustrated, A Field Guide. A-G: 172.
Luer, C. A. 1978. *Dryadella*, a new genus in the Pleurothallidinae. *Selbyana* 2: 207-209.
———. 1986. *Icones Pleurothallidarum I. Systematics of the Pleurothallidinae (Orchidaceae)*. Monogr. Syst. Bot. Missouri Bot. Gard. 20.