greatly. The well-demarcated, rounded, toothed epichile of the lip of D. haw-leyi is coursed by several incomplete lamellae to either side of the central carina. The little, smooth epichile of D. levii is indistinctly divided from the hypochile, and only one or two fragments of veins may be seen to either side of the central carina.

## Dracula levii Luer, sp. nov.

Inter species generis *Draculae* Luer foliis longissimis angustissimis, cupula sepalorum nivea glabra conica caudis viriscentibus, petalis bivalvatis spathulatis, labello parvo oblongo et epichilio e hypochilio obscure partito ovato concavo non-denticulato unicarinato cum venulis paucis imperfectis dignoscenda.

Plant medium in size, epiphytic, caespitose; roots coarse, flexuous. Secondary stems well-developed, channeled, unifoliate, 2.5-6 cm long, clothed by 2-3 loose, tubular sheaths. Leaf erect to suberect, thinly coriaceous, very narrowly obovate to linear, carinate dorsally along the midrib, 18-32 cm long, 1.5-2.3 cm wide, the acute apex tridenticulate, gradually narrowed below to the conduplicate base. Inflorescence a 2-to 3(?)-flowered raceme of successive white flowers borne by a suberect to horizontal, sparsely bracted, green peduncle ca. 12 cm long, from a node low on the secondary stem; floral bract tubular, oblique, 15 mm long; pedicel 20 mm long; ovary yellowish white, 6 mm long; sepals glabrous, white, faintly suffused with yellow toward the base within, the dorsal sepal obovate, unicarinate, 20 mm long, 12 mm wide, connate to the lateral sepals for 15 mm to form a conical tube. the free portion triangular, the subacute apex contracted into a 5-7 cm long greenish white tail, the lateral sepals ovate, connate 15 mm into a bicarnate, bifid lamina 25 mm long, 22 mm wide, the acute apices contracted into tails similar to that of the dorsal sepal; petals yellowish white, spatulate, 4 mm long, 2 mm wide, bivalvate at the thickened apex, both valves acute, erose, narrowed and concave below the middle; lip white, oblong-subpandurate, 7 mm long, 3 mm wide, the hypochile more or less oblong, indistinctly divided from the epichile, 3 mm long, 2.5 mm wide, with erect, rounded, marginal angles incurved to meet above a slender, central cleft, the concave base hinged to the column-foot, the epichile ovate, 4 mm long, 3 mm wide, rounded at the subacute apex, concave, the margin smooth, with a central, minutely verrucose carina and 1-2 incomplete, slightly raised venules to either side; column yellow-white, stout, semiterete, with a foot 2 mm long.

ETYMOLOGY: Named in honor of Robert D. Levi of Mill Valley, California, co-discoverer of this species.

Type: ECUADOR: Carchi: epiphytic in cloud forest above Maldonado, alt., ca. 2500 m, 20 May 1976, R. Hawley & R. Levi 7602, cultivated in Mill Valley, California, flowered in cult. 11 Oct. 1978, C. Luer 3455 (Holotype: SEL); same area, 26 Aug. 1978, C. Luer, J. Luer & A. Hirtz 3409 (SEL).

DISTRIBUTION: Northwestern Ecuador.

This species was pictured in an article by Ronald Hawley on page 608 of the July 1977 American Orchid Society Bulletin. Apparently *Dracula levii* is confined to one valley in northwestern Ecuador where it has been discovered several times by independent collectors. It is characterized by the

long, narrow leaves that accumulate into great clumps on the lower, mossy portions of the trunks of arboreal giants. The greenish white tails spread from a white, conical, sepaline tube. The claws of the spatulate petals are somewhat concave. The oblong lip deep inside the sepaline tube is small for the size of the flower, and the transition between the epichile and hypochile, nearly equal in size, is gradual. The little epichile is concave with smooth margins and with only one or two veins to either side of the central carina.

## Dracula radiella Luer, sp. nov.

Species haec *D. fuliginosae* (Luer) Luer persimilis, sed foliis grandioribus et epichilio labelli nondenticulato cum venis radiantibusque dignoscenda.

Plant large, epiphytic, caespitose; roots coarse, flexuous. Secondary stems stout, channeled, 2-4 cm long, unifoliate, enclosed by 2-3 loose, tubular sheaths. Leaf erect, thinly coriaceous, carinate dorsally along the midvein, narrowly obovate, 10-37 cm long, 2.5-4 cm wide, the apex acute, tridenticulate, gradually narrowed below into an indistinct, conduplicate petiole. Inflorescence a successively flowered (up to 10) raceme produced by a horizontal to descending, slender, sparsely bracted peduncle 12-18 cm long, from a node low on the secondary stem; floral bract tubular, 7-10 mm long; pedicel 12-15 mm long; ovary green, speckled with purple, 6 mm long; sepals pale green to greenish white, lightly suffused with blackish brown externally. closely dotted with blackish brown within, sometimes in distinct rows, glabrous, broadly ovate to suborbicular, 15 mm long, 18 mm wide, connate to the lateral sepals for 6-7 mm to form a shallowly cupped flower, the free portions obtuse to rounded, abruptly produced into an erect, black, slender tail 5-8 cm long, the lateral sepals broadly ovate, oblique, connate 10 mm to form a deep rounded mentum, with a thickening sometimes white, radiating from either side of the column-foot, the obtuse free portions produced into tails 5-9 cm long, similar to that of the dorsal sepal; petals cream, marked with dark brown, oblong, 3 mm long, 2 mm wide, the thickened apex rounded, bilvalved, papillose between the laminae, the inner lamina subacute, denticulate; lip pink, marked with darker rose along the veins, spatulate, 6.5 mm long, 5.5 mm wide, the hypochile oblong, 2.5 mm long, 3 mm wide, with erect, rounded, marginal angles, cleft centrally between a pair of acute teeth, the concave base hinged to the column-foot, the epichile suborbicular, 4.5 mm long, 5.5 mm wide, concave with smooth, involute margins, with ca. 8 lamellae radiating from the base of the central keel; column stout, semiterete, white with a few purple ridges near the apex, 3.5 mm long, with an equally long, stout foot.

ETYMOLOGY: From the Latin *radians*, "radiating," and *-ellus*, a diminutive suffix, referring to the radiating lamellae within the epichile of the lip, and the similarity to the larger-flowered *D. radiosa*.

Type: ECUADOR: Carchi: epiphytic in cloud forest above Maldonado, alt. ca. 2500 m, 26 Aug. 1978, C. Luer, J. Luer & A. Hirtz 339 (Holotype: (SEL).

DISTRIBUTION: Northwestern Ecuador.

Additional Material Examined: *ECUADOR*: Carchi: collected by W. Teague & D. Welisch, July 1975, probably from above Maldonado, cultivated by M. & O. Robledo at La Ceja, Colombia, flowered in cult. 17 Oct. 1977, *C. Luer 2104A* (SEL); above Maldonado, J. Landsman, July 1976, culti-