

***Dracula marinii* Baquero, recently discovered Ecuadorian species of orchid in the *Pleurothallidinae* (Orchidaceae)**

Abstract: *Dracula marinii*, a proposed new Ecuadorian species in the Pleurothallidinae (ORCHIDACEAE) is described. Ecological notes on this new species and the genus *Dracula* are presented.

Key words: *Dracula marinii*, Pleurothallidinae, Orchidaceae, synsepal, epichile, sister species

Introduction: Forty-five species within the genus *Dracula* Luer (ORCHIDACEAE) are reported to occur in Ecuador, including possible natural hybrids, recently described species, and doubtful records (Luer 1993, Endara et. al. 2012, Meyer & Cameron 2009, Meyer & Baquero 2012). Around 70% of the species are distributed on the western Andean slopes in the northern provinces of Carchi, Imbabura, and Pichincha. Pichincha has been one of the most researched areas of the country regarding its orchid flora, as the national capital and largest city, Quito, is in the province. However, new findings still occur in this province, where the large tracts of habitat on the western slopes of Mount Pichincha continue to be explored. This article describes a new species from Pichincha, *Dracula marinii* Baquero sp. nov.

***Dracula marinii* Baquero sp. nov.**

Similar to *Dracula diabolus* Luer & Escobar, distinguished by the smaller flowers, deeper sepaline cup, concave lip involute in the front, and profusely pubescent and white-bordered sepals.

Holotype: ECUADOR, Province of Pichincha, close to Quebrada Zapadores next to Saloya river, collected by Alexander Marin, 1900 m elevation. Flowered in cultivation by A. Marin. Quito, Ecuador, Nov 2013. A. *Marin 020* (QCNE)

Description: **Plant** medium in size, epiphytic, densely caespitose; roots slender. Ramicauls stout, erect, 1.8-3 cm long, enclosed by 2-3 loose, tubular sheaths. **Leaf** erect, thinly coriaceous, carinate, very narrowly obovate to linear, acute, 7-16 cm long including an indistinct petiole, 1-1.5 cm wide, the base gradually narrowed into the conduplicate base. **Inflorescence** a lax, successively few-flowered raceme, borne by a stout, sparsely bracted, horizontal to ascending peduncle 6-10 cm long, from low on the ramicaul; floral bract, tubular, 6-8 mm long; 12-16 mm long; ovary dark purple, 3 mm long, smooth, round in cross-section; **sepals** dull white with purple veins externally, cream to yellow towards the base, covered by short hairs which get longer towards the border, dark purple papillae more abundant and dense in the center of the deep sepaline cup, the dorsal sepal broadly ovate, 10-12 mm long, 11-13 wide, deeply connate to the lateral sepals for 5 mm to form a deeply cupped flower, the obtuse apex contracted into a slender, erect, dark purple tail 10-14 mm long, the lateral sepals, ovate, oblique, 13-15 mm long, 9-12 mm wide, connate 8 mm into a deep, broad mentum, the subacute apices contracted into slender, dark purple tails similar to that of the dorsal sepal; **petals** cream, marked with red brown, cartilaginous, oblong, 3 mm long, 1.5 mm wide, the apex obtuse, bivalvate, dark purple papillae between the laminae, the inner laminae denticulate, the outer laminae recurved; **lip** white, 5 mm long, 2.5 mm wide, hypochile white, 2 mm deep, hinged to the column foot, cleft centrally, 2.5 mm long, 2.5 mm wide, the epichile purple, suborbicular, 2.5 mm wide, 2.3 mm long, concave, denticulate border, slightly involute at the apex, the

concavity filled with one thick, central lamella and two secondary, undulating lamellae plus several incomplete segments; **column** yellow, stout, semiterete, 3 mm long, with a thick column foot 2.5 mm long.

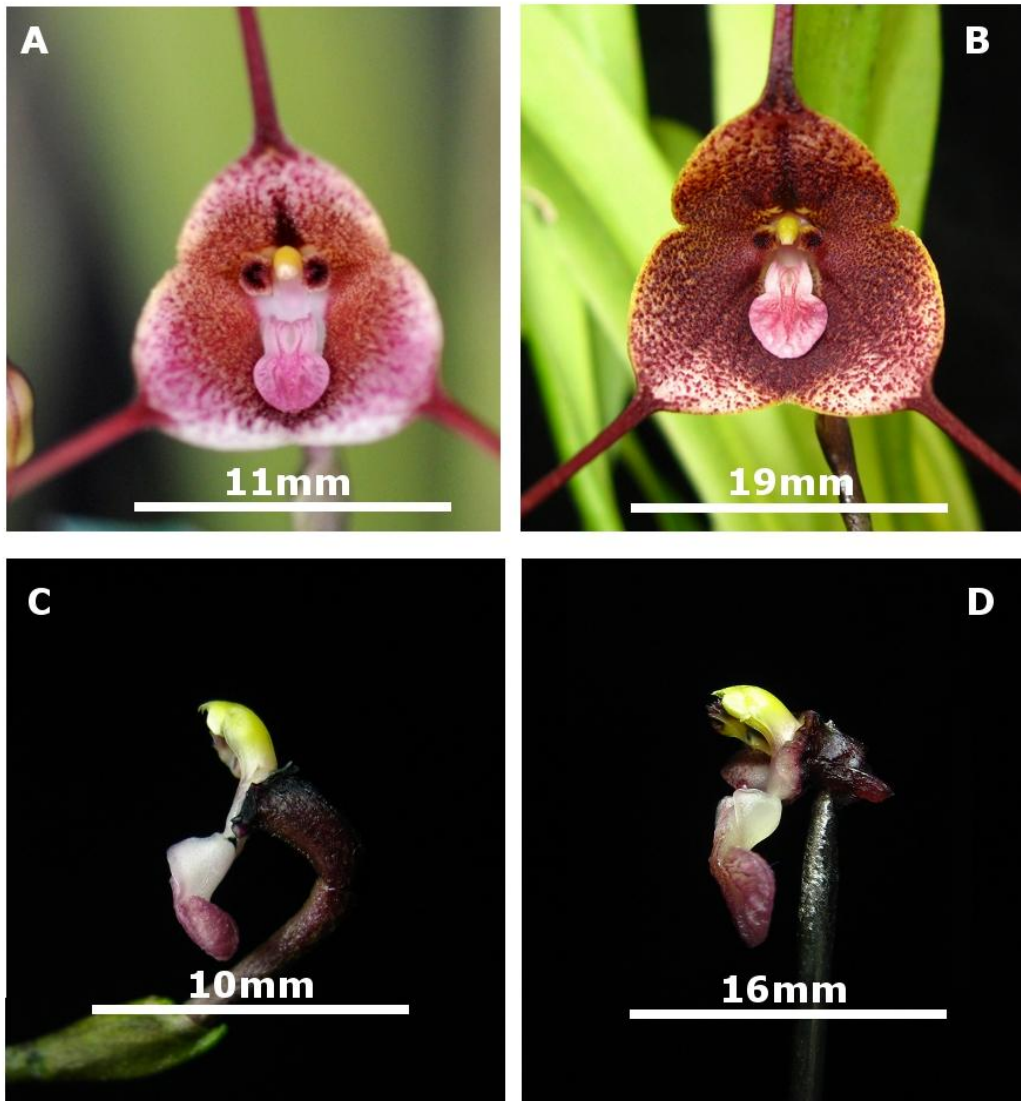


FIGURE 1. A: *Dracula marinii* Baquero, photo: Alexander Marin **B:** *Dracula diabolica* Luer & Escobar, photo: Luis E. Baquero **C:** *Dracula marinii* Baquero (column and lip), photo: Luis E. Baquero **D:** *Dracula diabolica* Luer & Escobar (column and lip), photo: Luis E. Baquero

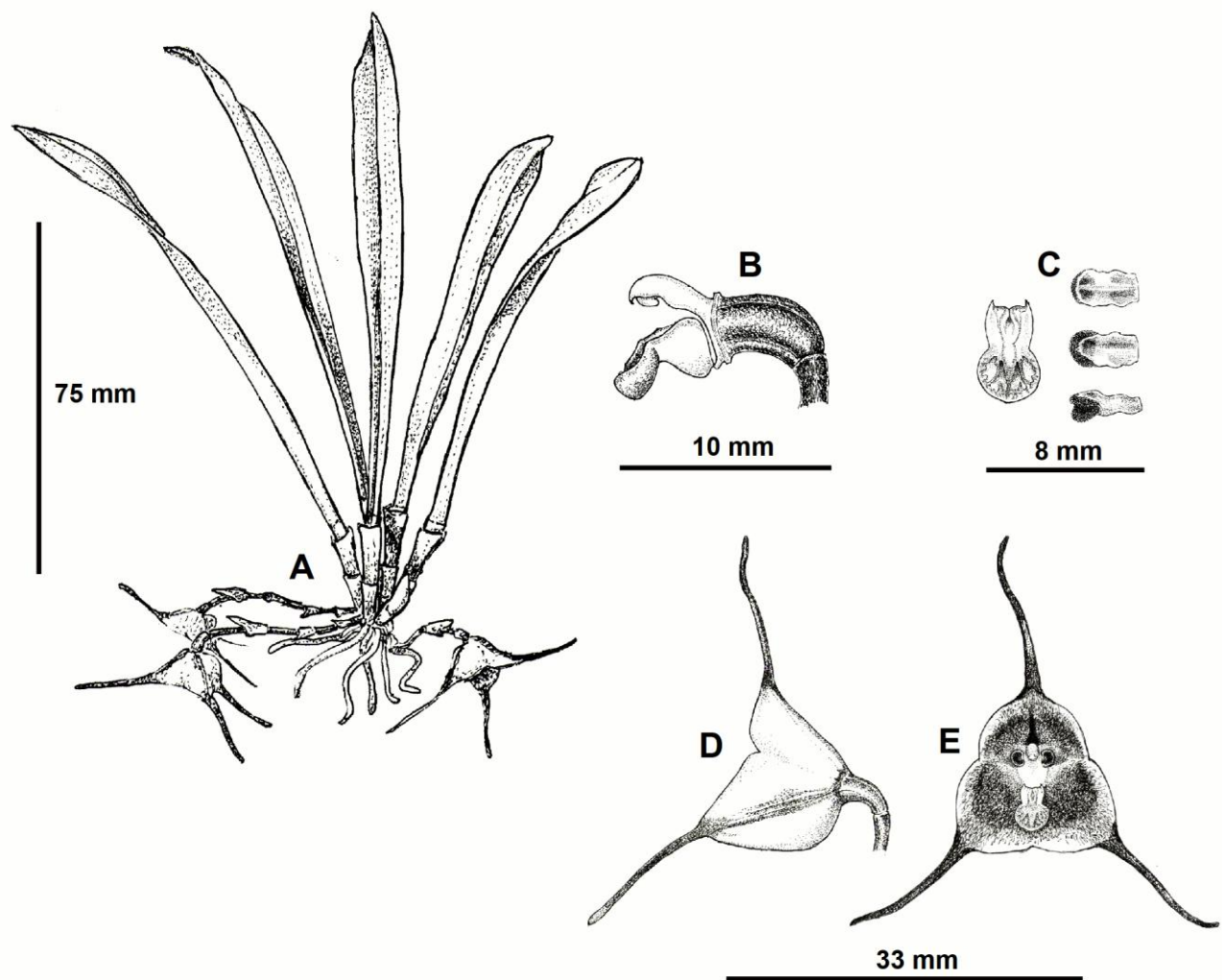


FIGURE 2. *Dracula marinii*: A, habit; B, column and lip; C, lip front view and petal; D, flower lateral view; E, flower frontal view.

Etymology

Named after Freddy Marin of Quito who first collected this species.

Distribution and hábitat

Ecuador: Western Cordillera of Ecuador, west of Quito, near Zapadores, 1900 m

History and Ecological considerations

D. marinii is an apparently scarce species found in a forest west of Quito. In 1989, Monica and Fernando Navarro collected some *Dracula* plants near Tandayapa, close to Quito. The flowers of these plants resembled the Colombian *D. houtteana*, however with much thicker tails and more lamellae in the lip. This species was named *D. navarrorum* Luer & Hirtz, and was recently found again in the same vicinity.

by Alexander Marin. Marin also found some plants in low numbers growing sympatrically with *D. navarrorum* that had shorter and narrower leaves. When these plants flowered, they were not *D. navarrorum*, nor could they be attributed to any other known species of *Dracula*.

D. marinii is most similar to *D. diabolica* Luer & Escobar, which is found more than 1000 kilometers away in the Eastern Cordillera of Colombia. The two species are comparable in plant size, flower, and flowering habitat, but *D. marinii* can be distinguished from *D. diabolica* by its much more deeply cupped synsepal and the prominent dense pubescence on the whiter sepals, compared to the mainly glabrous and dark sepals of *D. diabolica*. Additionally, the epichile of *D. marinii* is concave and incurved at the apex, compared to the flat, almost convex epichile of the lip of *D. diabolica*. **FIGURE 3.:** Distribution *Dracula marinii*: **a.** and **b** (Photo: Alexander Marin Distribution) *Dracula diabolica*: **c.** and **d** (Photo: Luis E. Baquero)

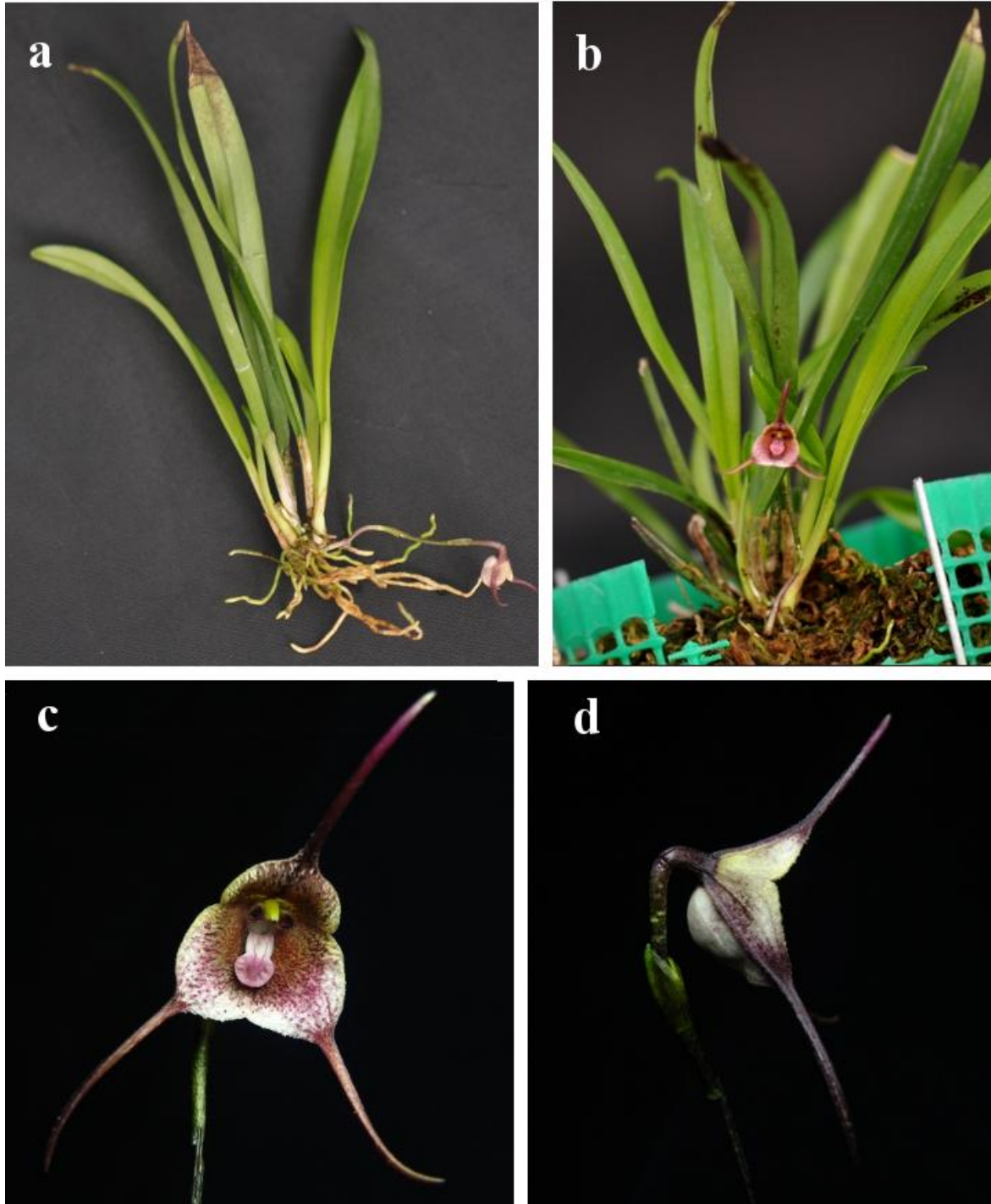


FIGURE 4. **A:** *Dracula marinii* Baquero plant habit photo: Alexander Marin **B:** *Dracula marinii* Baquero plant grown in basket, photo: Alexander Marin **C:** *Dracula marinii* Baquero flower frontal view, photo: Luis E. Baquero **D:** *Dracula marinii* Baquero flower side view, photo: Luis E. Baquero

Conservation status

Considering that Maquipucuna and el Pahuma ecological reserves are close to the forest where *D.* grow within the limits of the reserves. Nevertheless, it is crucial, for *D. marinii* to be protected *navarrorum* and *D. marinii* have been found, there is a good chance that some healthy populations of the two species as a species that some propagations laboratories be able to get seedlings from seed.

Acknowledgements

I want to thank Gary Meyer for the invaluable help on the information and recognition of this new species.

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