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A New Species of *Rodriguezia* Ruiz and Pav. (Orchidaceae) is Described From Colombia.

Ruben P. Sauleda¹ and Carlos Uribe-Velez²

¹6442 SW 107 Ct. Miami, FL, 33173.

²Calle 115 #5-23 Bogota, Colombia

Abstract

A new species of *Rodriguezia* Ruiz and Pav. is described from Colombia and the confusion of related white flowered species is discussed.

The latest treatments of the genus *Rodriguezia* Ruiz and Pav. in Colombia list 13 species according to Kew (WCSP, 2018) or 15 species according to Kolanowska and Trejo (2016) without any clear consensus as to the identity of several species.

Rodriguezia venusta (Lindl.) Rchb. f. and *Rodriguezia arevaloi* Schltr. are considered synonyms of *Rodriguezia bracteata* (Vell.) Hoehne, a Brazilian species, by Kew (WCSP, 2018) and Celis et al. (2016). Several authors Hoehne (1949), Saenz (2007) and Leitao et al. (2014) consider *R. venusta* as a valid species. Other authors Giraldo and Betancur (2011) consider *R. arevaloi* a valid species. In the molecular study of Neubig et al. (2012) both *R. venusta* and *R. arevaloi* are recognized as distinct. Kolanowska and Trejo (2016) in their key to the Colombian species of *Rodriguezia* recognize *R. venusta* and *R. bracteata* as distinct species. A clear separation between the three species has not been established.

The callus is principally used as the distinguishing character between the species. It is difficult to distinguish between *R. venusta* and *R. arevaloi* because the bombing of Berlin during the second world war destroyed the type of *R. arevaloi*. The description of Schlechter is not sufficient to clearly define what separates *R. arevaloi* from *R. venusta*.

In Colombia there are populations with two forms of calli but assigning names to the two forms is difficult and at best arbitrary. In both cases the calli have two yellow-raised lamellae, which have a reddish-orange margin. In some populations the callus ends abruptly but the yellow color extends partially onto the midlobe (*R. venusta*). In other populations the yellow callus extends onto the midlobe (*R. arevaloi*). These differences have been used to distinguish between the two species. *Rodriguezia bracheata* under which *R. arevaloi* and *R. venusta* have been reduced to synonymy has a callus with two raised yellow lamellae without the reddish-orange margin and the yellow lamella continue onto the midlobe.

Plants with the callus corresponding to *R. venusta* have been reported in Brazil (Leitao et al., 2014 and Hoehne, 1949). At the present time more field studies and morphological analysis are necessary to make the determination that *R. venusta*, *R. arevaloi* and *R. bracteata* are either distinct species or all synonyms.

In the department of Chocó, Colombia, a population of *Rodriguezia* was found that is morphologically distinct from the present concepts of *R. venusta*, *R. arevaloi* and *R. bracteata*. The flowers have a pink suffusion on the sepals and petals and a diffuse pink spot on the midlobe of the labellum. The callus on the labellum also differs from all three species. This population is here described as a new species.

Rodriguezia colombiana Saulea, sp. nov.

Type: Department of Chocó, exact location and collector unknown. Specimen made February 2020 from cultivation. Plant in collection of Gustavo Jimenez. Holotype: HPUJ.

Diagnosis

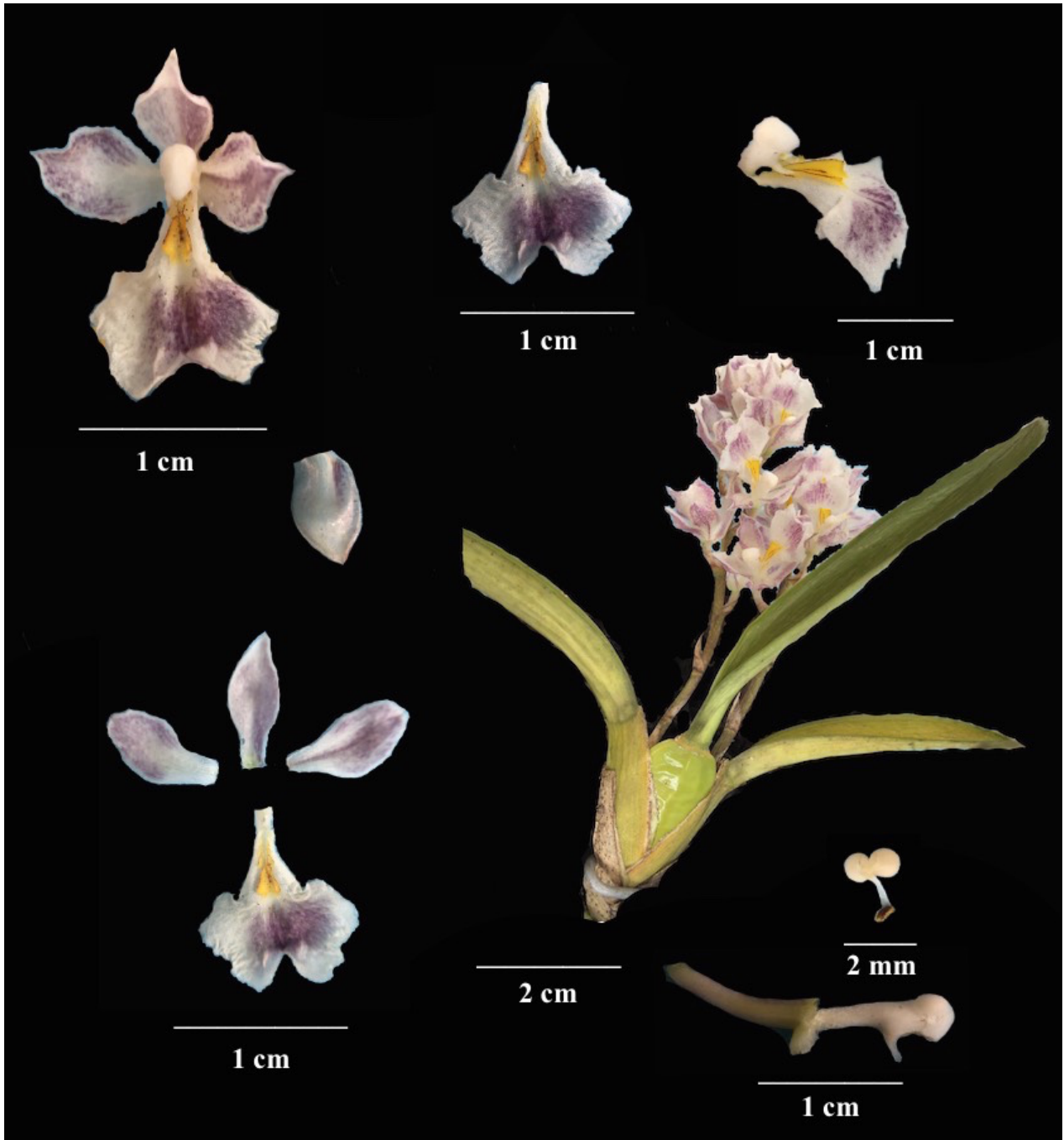
Rodriguezia colombiana differs from *R. venusta*, *R. arevaloi* and *R. bracteata* by the pink suffusion on the flowers, which is lacking in the three species. The callus of *R. colombiana* has a third appendage at the base differentiating it from *R. arevaloi*, which has only one, and differentiating it from *R. venusta*, which lacks any additional basal appendage. The callus of *R. bracteata* does not have the red margin or red stripe between the lamellae differentiating it from *R. colombiana*. In addition the lamellae extend onto the midlobe in *R. bracteata* where the lamellae of *R. colombiana* end abruptly.

Description

Plants epiphytic, to 12 cm tall; pseudobulbs ovoid, compressed to 3 cm long, 1.8 cm wide, apically unifoliate, with 2 to 3 papyraceous sheaths and two leaf-bearing sheaths, leaves conduplicate, elliptic, acute, to 6 cm long, 1 cm wide; apical leaf narrowly elliptic, conduplicate, acute to 9 cm long, 1.8 cm wide; inflorescence 1 to 2, arising from axil of basal leaves, to 14 cm long, erect to arching, racemose, to 18 flowers; floral bracts ovate, acute, to 5 mm long, 4 mm wide; ovary pedicelate to 1 cm long; flowers white flushed with pink; dorsal sepal concave, obovate to oblanceolate, subacute, to 8 mm long, 4 mm wide; lateral sepals fused along entire inner margin forming a tubular synsepal, elliptic, subacute, to 8 mm long 5 mm wide; petals oblanceolate, obtuse, concave, to 8 mm long, 5 mm wide; labellum three-lobed, to 1 cm long, 1 cm wide, lateral lobes elliptic, obtuse, midlobe pandurate, emarginate, callus on labellum two erect, yellow lamellae which end abruptly, with red edges and a red stripe in center, with two small yellow lamellae on each side of base of the main lamellae; column terete, to 1 cm long, with two thin acute, acute column wings to 2 mm long; stigma transverse, oval to 3 mm wide; anther cap oval, to 2 mm wide.



Rodriguezia colombiana



Rodriguezia colombiana



Rodriguezia colombiana



Rodriguezia colombiana



Rodriguezia colombiana



Rodriguezia venusta



Rodriguezia venusta



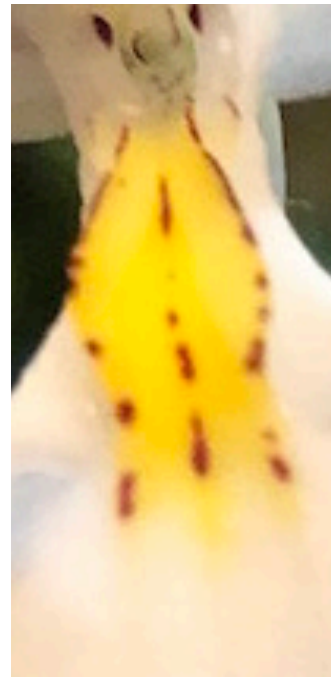
Rodriguezia colombiana



Rodriguezia colombiana



Rodriguezia venusta



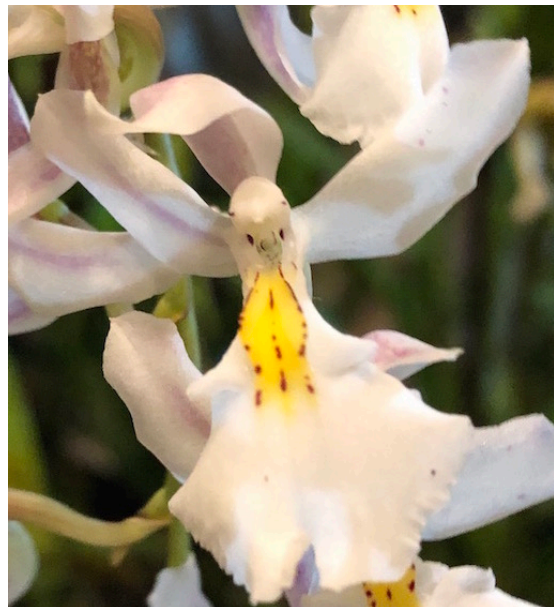
Rodriguezia arevaloi



Rodriguezia colombiana labellum flattened.



Rodriguezia venusta



Rodriguezia arevaloi

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