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A New Species of *Stelis* (Orchidaceae) is Described from the Bota Caucana,
Department of Cauca, Colombia.

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Abstract

A new species of *Stelis* (Orchidaceae) is described from the Bota Caucana,
Department of Cauca, Colombia.

Stelis Sw. is the second largest genus in the subtribe *Pleurothallidinae*. (*Stelis* Swartz, Journal für die Botanik (Schrader) 2(4): 239, t. 2, fig. 3, a-g, 1799, nomen conservum; Lectotype species: *Epidendrum ophioglossoides* Jacquin = *Stelis ophioglossoides* (Jacquin) Swartz). Only the genus *Lepanthes* Sw. has more species (WCSP, 2018). However, the number of species recognized varies depending on the system of classification. According to Luer (2007, 2009), whose classification system was based on morphological characters, the genus included 900 species. In the treatment of Pridgeon and Chase (2001) almost 1100 species are recognized. At present KEW (WCSP, 2018) recognizes 1291 species. Many species originally described in other genera were transferred to the genus *Stelis*. A review of the species recognized in the treatment of Pridgeon and Chase (2001) and the KEW listing, several distinct morphological groups can be distinguished.

We here describe a new species of *Stelis*, which is clearly in a group that should be considered a distinct genus from *Stelis* as typified by *Epidendrum ophioglossoides* Jacq. (*Stelis ophioglossoides* (Jacq.) Sw.) based on column structure. We are including this species in the genus *Stelis* until classifications using whole plant DNA genome, which at present is unattainable (Turudić, et al., 2010), are used to determine the proper genus and not classifications based on chloroplast DNA nor ribosomal DNA neither, of which have any bearing on the morphology of the plant.

This new species was discovered growing epiphytically in the region known as La Bota Caucana. It is a region in the southeast corner of the department of Cauca. The region owes its name to the shape of the region, which resembles a boot.

We here name this new species for the area where it was discovered.

Stelis bota-caucanensis Uribe-Velez and Sauleda, *sp. nov.*

Type: Colombia, Department of Cauca, from La Bota Caucana, near the headwaters of the Caqueta River, 1700 m. From cultivation. Collector: Julio Cesar Ordoñez, *s. n.*, 2019, (Holotype: HPUJ).

Description

Plants epiphytic, caespitose, to 15 cm tall; roots slender; ramicauls erect, slender, to 10 cm long, enclosed to abscission layer by a tubular sheath, basally with several sheaths, unifoliate; leaves erect, petiolate, petioles to 5 cm long, blades coriaceous, cuneate, elliptical, acute to subacute, 5 cm long, 4 cm wide; inflorescence erect, to 10 cm tall, subtended by a spathe to 2 cm long, peduncle to 8 cm long, loosely many-flowered, flowers opening simultaneously, floral bracts oblique, tubular, to 1.5 mm long; flowers to 3 mm wide, 6 mm tall, ovary pedicelate to 3 mm long, sepals yellow to yellowish-brown, expanded, glabrous, margins erose, with tiny short apicula, dorsal sepal free, narrowly ovate, obtuse to 4 mm long, 2 mm wide, lateral sepals fused basally, widely ovate, obtuse to 3 mm long, 2 mm wide, petals yellow with reddish-brown margin, concave, obcuneate to 2 mm long, 1 mm wide; labellum yellow with reddish-brown lateral margins, fleshy, hinged to base of column, basally truncate, triangular, subacute, 2 mm long, 1.5 mm wide, disc with deep groove basally and thick callous near apex; column yellow, to 2 mm long, 1.5 mm wide, with two lateral obtuse, truncate appendages and a long central subacute appendage where the vicidium attaches; anther cucullate.

Diagnosis

Stelis bota-caucanensis Uribe-Velez and Sauleda is similar to several species of *Stelis*, differing primarily in the shape and color of the petals, the lateral appendages of the column and the shape, color and angle of the labellum. One of the species *S. bota-caucanensis* is similar to is *Stelis braccata* Rchb.f. & Warsz., which ranges from Venezuela to Ecuador, differing in the color of the petals which are yellow in *S. braccata* but are yellow with a reddish-brown margin in *S. bota-caucanensis*. Also the apexes of the lateral appendages of the column in *S. braccata* are obtuse where in *S. bota-caucanensis* the apex of the lateral appendages are truncate. In addition, *S. braccata* has equal segments where *S. bota-caucanensis* has a dorsal sepal longer than the lateral sepals and different in shape to the lateral sepals. In *S. bota-caucanensis* the dorsal sepal is narrowly ovate where in *S. braccata* the dorsal sepal is broadly ovate and equal to the lateral sepals.



Stelis bota-caucanensis Uribe-Velez and Saulea.



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Literature Cited

Luer, C. A. 2007. Icones Pleurothallidinarum XXIX: A third century of *Stelis* of Ecuador. Monogr. Syst. Bot. Mo. Bot. Gard. 112: 1–2.

Luer, C. A. 2009. Icones Pleurothallidinarum XXX: Systematics of *Stelis* of Ecuador, part four. Monogr. Syst. Bot. Mo. Bot. Gard. 115: 31–36.

Pridgeon, A. M. and M. W. Chase. 2001. A phylogenetic reclassification of *Pleurothallidinae* (Orchidaceae). Lindleyana 16: 235–271.

Turudić, A., Z. Liber, M. Grdiša, J. Jakše, F. Varga, Z. Šatović. 2010. Towards the Well-Tempered Chloroplast DNA Sequences. Plants 10, 1360.
<https://doi.org/10.3390/plants10071360>.

WCSP. 2018. World Checklist Of Selected Plant Families. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet.