

December 8, 2022

Chondroscaphe padreortizii Uribe-Velez, Sauleda & Szlachetko (Orchidaceae), an Addition to the Flora of Colombia.

Carlos Uribe-Velez¹, Ruben P. Sauleda² and Dariusz L. Szlachetko³

¹Calle 115 #5-23 Bogota, Colombia.

²6442 SW 107 Ct. Miami, FL 33173.

³Department of Plant Taxonomy and Nature Conservation, University of Gdańsk, Wita Stwosza 59, 80-308 Gdańsk, Poland.

Abstract

A new species of *Chondroscaphe* (Orchidaceae), *Chondroscaphe padreortizii* Uribe-Velez, Sauleda and Szlachetko is reported for Colombia.

Introduction

The genus *Chondroscaphe* was originally described as a section of *Chondrorhyncha* Lindl. (Dressler, 1983). Section *Chondroscaphe* Dressler included the *Chondrorhyncha* fringed-lip species allied to *Chondrorhyncha flaveola* Rchb.f. and the white-flowered species allied to *Chondrorhyncha bicolor* Rolfe.

Senghas and Gerlach (1993) elevated the section *Chondroscaphe* to generic level. They characterized the genus by the presence of yellowish to yellow flowers. *Chondrorhyncha* was mainly defined by the greenish and white flowers. *Chondroscaphe* sensu Senghas & Gerlach included the large-flowered yellow South American, while the mostly Central American species of the *C. bicolor* complex were retained in *Chondrorhyncha*. This interpretation was followed by Rungius (1996, 1998) in his treatment of *Chondroscaphe*.

However, Dressler's broad circumscription of *Chondroscaphe* is supported by the preliminary results of studies of DNA sequences that were in progress by W.M. Whitten (Dressler 2001). These preliminary results suggested that *Chondrorhyncha* sensu lato was polyphyletic, and that the *C. bicolor* complex was a part of *Chondroscaphe*. The molecular analysis of Whitten *et al.* (2005) is incomplete but also appears to support Dressler's concept.

In Colombia there are six species of yellow-flowered *Chondroscaphe* (WCSP). We here describe a new yellow species, which does not correspond to any of the known species of *Chondroscaphe*.

Chondroscaphe padreortizii Uribe-Velez, Sauleda and Szlachetko, sp. nov.

Type: Colombia, department of Antioquia, near Dabeiba. Collector unknown, from cultivation. March, 2021. (Holotype, HPUJ).

Etymology

This species is named in honor of Padre Pedro Ortiz Valdivieso to acknowledge his contributions to the orchid flora of Colombia.

Diagnosis

Chondroscaphe padreortizii appears to be similar to *Chondroscaphe amabilis* (Schltr.) Senghas & G. Gerlach. It differs in that in *C. padreortizii* the basal part of its labellum is prominently separated from the apical part and is broadly deltoid in outline with long acuminate lateral lobes. The callus has the form of a plate with 3 parallel keels running in the upper half of hypochile only and terminated just below its apex by 3 unequal teeth, from which the middle one is the shortest, triangular and acute, and both laterals are rhombic-ovate, obliquely truncate, and distinctly longer than the middle one. The epichile is subquadrate-ovate in outline with long fimbriate margins, labellum apex is not divided. Petals are obliquely shortly acuminate. The labellum of *C. amabilis* is oblong ligulate above cuneate base, callus is 3-partite in the center, with 2 parallel keels above, running towards lip base, margins are fimbriate and labellum apex is deeply split.

Chondroscaphe chestertonii (Rchb.f.) Senghas & G. Gerlach. and the new species appear to be similar. However, *C. chestertonii* has a labellum callus in the form of 2 parallel lamellae separated by a groove and the petals have irregularly dentate margins.

Chondroscaphe padreortizii has a much smaller labellum callus than *Chondroscaphe escobariana* (Dodson & Neudecker) C. Rungius, consisting of 3 keels where *C. escobariana* has 2 large keels. Another similar species, *Chondroscaphe embrei* (Dodson & Neudecker) C. Rungius differs in the labellum callus being apically bidentate. Labellum is ovate in outline, margins of labellum and petals are irregular and rather shallowly dentate.

The new species differs from *Chondroscaphe dabeibaensis* Harding in the form of callus on the labellum. According to Harding (2008) “*C. dabeibaensis* has a labellum callus bilobed, fused somewhat centrally with a central keel, all ending apically in three acute teeth”. The illustration of the type specimen published by Harding (2008) shows three acute teeth of the same length. In *C. padreortizii* the central keel is shorter than the two lateral keels. In addition, the central keel is acute and the lateral keels are obtuse.

The basal part of its labellum being prominently separated from the apical part, which is broadly deltoid in outline with long acuminate lateral lobes, is a feature that makes this species unique in the genus.



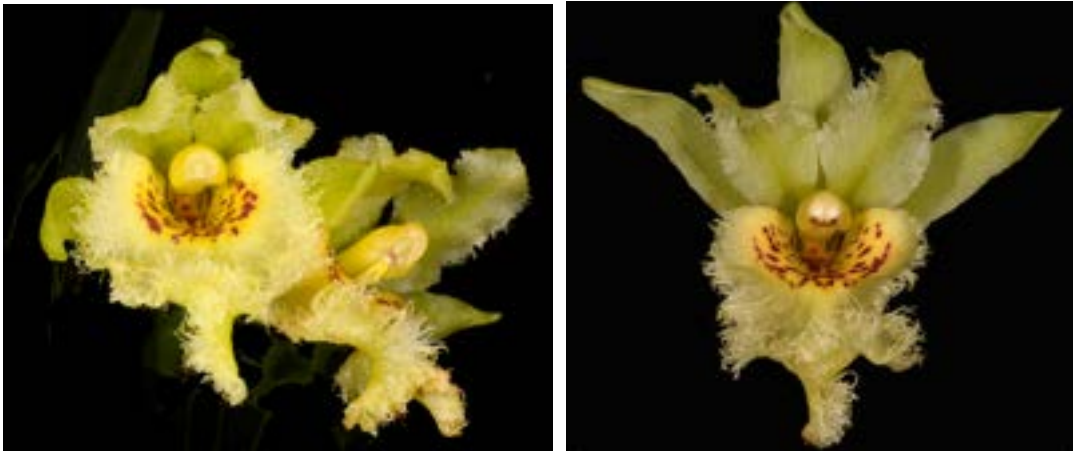
Chondroscaphe padreortizii Uribe-Velaz, Saulea and Szlachetko, keels on labellum.



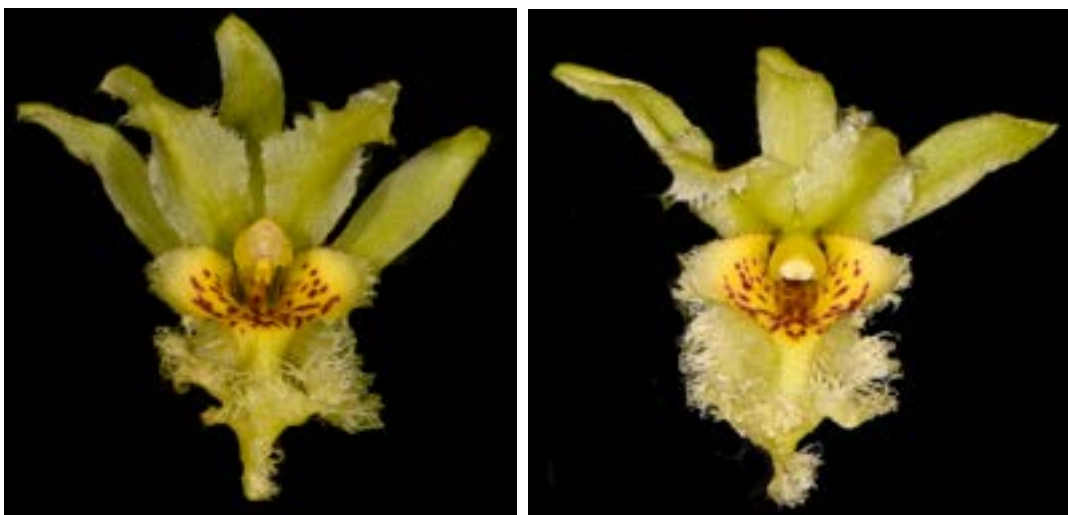
Chondroscaphe dabeibaensis Harding, keels on labellum from type illustration.

Description

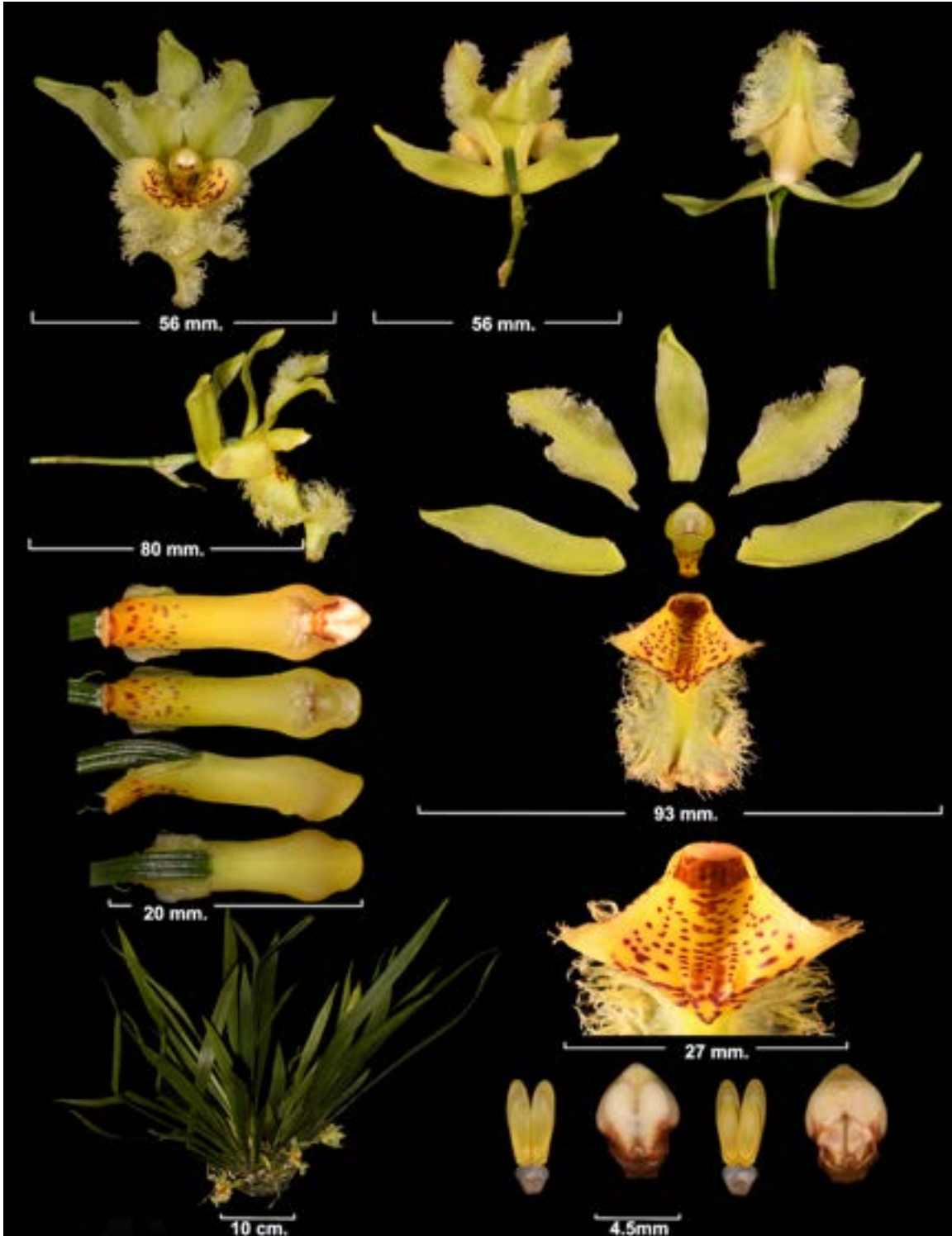
Plants epiphytic, caespitose, to 35 cm tall; stem short, enclosed by imbricating, conduplicate, sheaths with scarious margins, to 4 cm long becoming foliaceous; leaves 4 to 5, conduplicate at the base, the blade linear lanceolate, acuminate, to 32 cm long, to 3 cm wide; inflorescence basal, 1-flowered, peduncle to 2.5 cm long; floral bract elliptic, obtuse, to 1.4 cm long, 1 cm wide; ovary terete, to 2.7 cm long; flowers greenish-yellow, petals centrally darker green, labellum greenish-yellow becoming deep yellow with red spots under column; dorsal sepal narrowly elliptic, acute, to 3.4 cm long, 1.5 cm wide, lateral sepals narrowly oblanceolate, acute, basally incurved, to 4 cm long, 1.4 cm wide; petals elliptic to narrowly ovate, subacute, apiculate, to 3.4 cm long, 2 cm wide; the basal part of its labellum is prominently separated from the apical part and is broadly deltoid in outline with long acuminate lateral lobes, to 2.7 cm wide, 3.2 cm long, blade with villous wavy margin, callus has the form of a plate with 3 parallel keels running in the upper half of hypochile and terminated just below its apex by 3 unequal teeth, the middle one is the shortest, triangular and acute, both lateral keels are rhombic-ovate, obliquely truncate, and distinctly longer than the middle one, epichile is subquadrate-ovate in outline with long fimbriate margins, labellum apex is not divided; column terete, spreading toward apex, widest at stigma, to 2 cm long, 0.5 cm, column foot 0.5 cm long, with obtuse wing behind stigma; anther cap obovate, to 0.4 cm.



Chondroscaphe padreortizii Uribe-Vellez, Saulea and Szlachetko. Flowers opening.



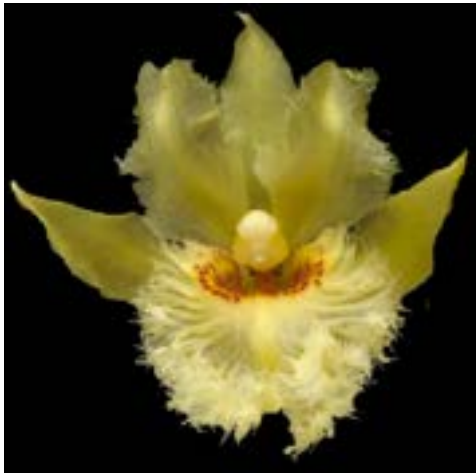
Chondroscaphe padreortizii Uribe-Vellez, Saulea and Szlachetko. Flowers open.



Chondroscaphe padreortizii Uribe-Vellez, Saulea and Szlachetko.



Chondroscaphe padreortizii Uribe-Vellez, Sauleda and Szlachetko.



Chondroscaphe amabilis (Schltr.)
Senghas & G. Gerlach.



Chondroscaphe chestertonii (Rchb. f.)
Senghas & G. Gerlach.

Literature Cited

- Dressler, R.L. 1983. Die Gattung *Chondrorhyncha* in Panama mit zwei neuen Arten: *Chondrorhyncha crassa* und *Chondrorhyncha eburnea*. *Orchidee (Hamb.)* 34(6): 220-226.
- Dressler, R.L. 2001. Sobre el género *Chondroscaphe*, con dos especies nuevas de América Central, *Chondroscaphe atrilinguis* y *C. laevis*. *Orquideología* 22(1): 12-22.
- Harding, P. A. 2008. Three Redefine species of *Huntleya* Clade. *Orquideologia* 25: 165.
- Senghas, K. & G. Gerlach. 1993. *Chondroscaphe* (Dressl.) Sengh. & Gerl. In: R. Schlechter, *Orchideen*, ed. 3, 1/B(27): 1655-1658.
- Rungius, C. 1996. Umkombination von drei *Chondrorhyncha*-Arten aus Ekuador zur Gattung *Chondroscaphe*. *Orchidee (Hamb.) Beih.* 3: 15-17.
- Rungius, C. 1998. Checkliste zu den Gattungen der *Huntleyinae*. *Orchidee (Hamburg)* 49: 172—179, 211—219, 296—298.
- WCSP (2018). World Checklist of Selected Plant Families. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet.
- Whitten, W. M., N. H. Williams, R. L. Dressler, G. Gerlach & F. Pupulin. 2005. Generic relationships of *Zygopetalinae* (Orchidaceae: Cymbidieae): combined molecular evidence. *Lankesteriana* 5(2): 87-107.