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A New Species of *Zootrophion* Luer (Orchidaceae), *Zootrophion arrondeauanum* Uribe-Velez & Sauleda, From the Department of Putumayo, Colombia is Described.

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Abstract

A new species of *Zootrophion* Luer, *Zootrophium arrondeauanum* Uribe-Velez & Sauleda, is described from the department of Putumayo, Colombia.

The genus *Zootrophion* was established by Carl Luer in 1982 (Selbyana 7(1): 80) to accommodate flowers with lateral sepals fused and a dorsal sepal with the tip fused to the tip of the synsepals leaving a small opening for the pollinator to enter. There are 29 recognized species with 13 reported for Colombia (WCSP, 2018).

In the departament of Putumayo, Colombia, near Mocoa, Carlos Alberto Serna discovered a population of *Zootrophion* Luer. Although this species closely resembles several other species in the genus *Zootrophium* the vegetative and floral differences, especially in the structure of the labellum clearly differiantes this species from similar species. The type plant was cultivated by Pascal Arrondeau. For the above reasons we here describe it as a new species.

Zoothrophium arrondeauanum Uribe-Velez & Sauleda, sp. nov.

TYPE: Colombia, Departamento de Putumayo. Collected by Carlos Alberto Serna near Mocoa. From cultivation in collection of Pascal Arrondeau at Finca el Embudo, El Vigilante, Filandia, Quindio, Colombia. Specimen made March 2024. (Holotype, HPUJ).

Etymology

This species is named in honor of Maurice Arrondeau the 93 year old father of Pascal Arrondeau, who made this plant available for study.

Diagnosis

Zootrophion arrondeauanum Uribe-Velez & Sauleda resembles *Zootrophion dodsonii* (Luer) Luer (Colombia) but is differentiated by the number of flowers, the shape of the leaves, structure of the labellum, shape of the apex of the labellum and the shape of the dorsal sepal. *Zootrophion arrondeauanum* has oblanceolate, subacute leaves, *Z. dodsonii* has elliptical acute leaves. *Zootrophion arrondeauanum* produces 2-3 flowers, *Z. dodsonii* produces a single flower. The apex

of the column of *Zootrophion arrondeauanum* has narrow thin wings on each side, *Z. dodsonii* lacks column wings. The labellum of *Z. arrondeauanum* has a long base, the apex of the lateral lobes are obtuse and the apex of the labellum is broadly rounded, in *Z. dodsonii* the base is abrupt, the apex of the lateral lobes are acute and the apex of the labellum is thickened and narrowly rounded.

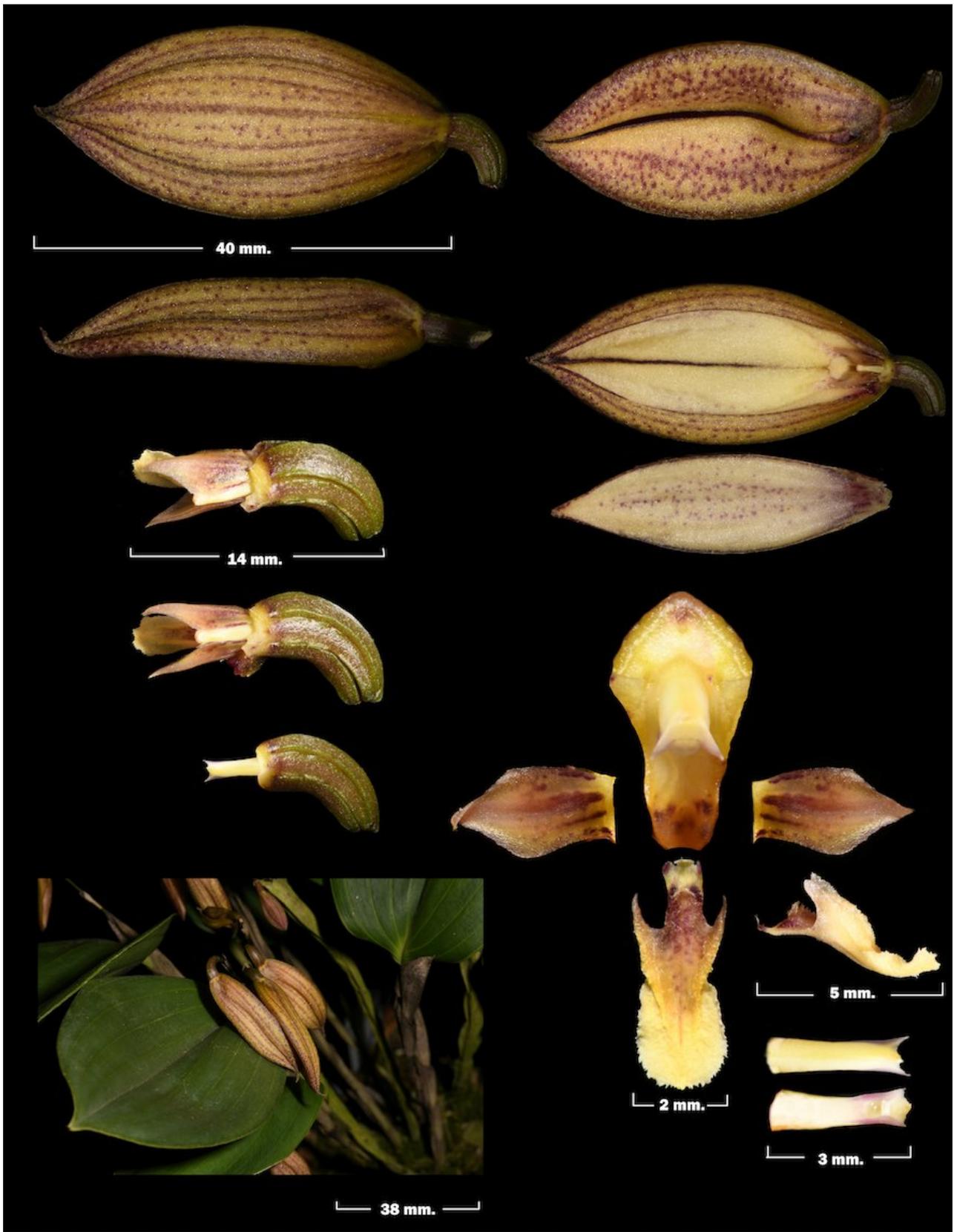
Zootrophion arrondeauanum also resembles *Zootrophium mejiae* Uribe-Velez & Sauleda. *Zootrophion arrondeauanum* differs from *Z. mejiae* in that in *Z. mejiae* the labellum is narrower than in *Z. arrondeauanum*, the lateral lobes of the labellum converge at the apex of the labellum and protrude slightly. In addition, *Z. mejiae* produces a single flower and lacks spots.

Description

Plants epiphytic, to 25 cm tall; caespitose; ramicauls slender, to 12 cm tall, rooting from base, enclosed by 5 close, tubular, acute sheaths, to 5 cm long, 5 mm wide; leaves erect, to 13 cm long, 3.5 cm wide, coriaceous, oblanceolate, subacute, base rounded to broadly cuneate, base contracted into a petiole to 5 mm long; inflorescence with 2-3 flowers baige with minute reddish-brown spots, borne by a slender, erect peduncle, to 4 cm long; floral bract, to 3 mm long, acute; pedicel subverrucose, to 8 mm long, 2 mm wide; sepals glabrous; dorsal sepal to 3 cm long, 1 cm wide unexpanded, elliptic, concave, acute, terminal 4 mm connate to the synsepal; lateral sepals connate into a concave, elliptic synsepal, to 3 cm long, 1 cm wide, unexpanded; petals pentagonalf, truncate, acute, to 1 mm long, 1 mm wide; labellum yellow apically becoming basallly brown, to 4 mm long, 2 mm wide, linear oblong, obtuse. lateral margins crenulate, with two parallel thin lateral acute lobes converging near the apex, crest on labellum ovate, apex broadly obtuse, yellow with crenulate lateral margins; column yellow, to 3,2 mm long, 1 mm wide, apically suffused with pink, linear with two thin acute wings; anther obovate, yellow, to 1 mm long,



Zootrophium arrondeauanum Uribe-Velez & Sauleda.



Zoothrophium arrondeauanum Uribe-Velez & Sauleda.



Zootrophion dodsonii (Luer) Luer, Selbyana 7- 82 (1982). Illustration from Selbyana 5(2): 145. 1979 (type illustration).



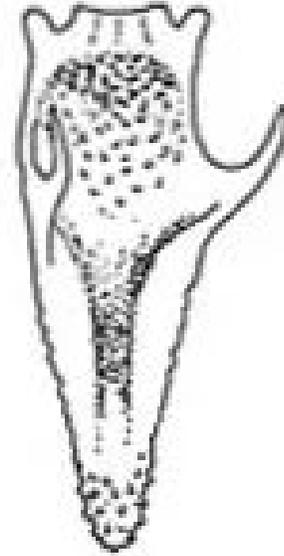
Zootrophion arrondeauanum Uribe-Velez & Saulea.



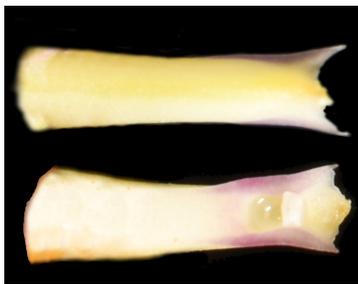
Zootrophion dodsonii (Luer) Luer. Illustration from Selbyana 5(2): 145. 1979.



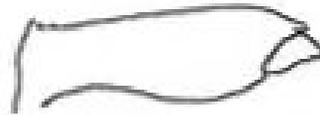
Labellum
Zoothrophium arrondeauanum Uribe-Velez
& Sauleda.



Labellum
Zootrophion dodsonii (Luer) Luer.
Illustration from Selbyana 5(2): 145. 1979.



Column
Zoothrophium arrondeauanum Uribe-Velez
& Sauleda.



Column
Zootrophion dodsonii (Luer) Luer.
Illustration from Selbyana 5(2): 145. 1979.



Zootrophium mejiae Uribe-Velez & Sauleda.

Literature Cited

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