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A New Species of *Sudamerlycaste* Archila (Orchidaceae) is Described from La Bota Caucana, department of Cauca, Colombia.

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Abstract

A new species of *Sudamerlycaste* Archila, *Sudamerlycaste mejia* Sauleda, Uribe-Velez and Szlachetko is described from La Bota Caucana, department of Cauca, Colombia.

Introduction

In 2002 Archila described the genus *Sudamerlycaste* in Revista Guatemalensis volume 5, no. 2. Unfortunately the author did not publish at the time a Latin diagnosis with the new genus, therefore the genus was considered invalid.

Archila then published in the next issue, no. 3, in the same volume 5, a correction validating *Sudamerlycaste*. The year 2002 is printed on the front-page of Revista Guatemalensis volume 5, nos. 2 and 3. Both nos. 2 and 3 were published at the same time in volume 5. Ryan and Oakeley (2003) suggest that the year 2002 printed on the front-page is not the year the publication was distributed and that probably issues 2 and 3 of volume 5 were distributed in 2004. Therefore in 2003 Ryan and Oakeley published in Orchid Digest (67: 9; 2003) the genus *Ida* to replace *Sudamerlycaste*. If *Ida* was distributed in 2003 and *Sudamerlycaste* in 2004, then *Ida* is has priority. Pridgeon *et al.* (2009) accepted *Ida* in his treatment, considering at the time that *Sudamerlycaste* was invalid. Chase *et al.* (2015) recognize *Sudamerlycaste* as a valid genus for the clade of former *Lycaste* that is sister to *Anguloa* without explanation. No clear evidence has been presented that *Sudamerlycaste* was not distributed 2002. In the absence of compelling evidence we must agree with Chase *et al.* (2015) and several other authors Kolanowska *et al.* (2011), Kolanowska and Szlachetko (2012), Kolanowska (2014), Kolanowska (2014a) of the date of 2002 for *Sudamerlycaste* and thereby publish this new species in the genus *Sudamerlycaste*.

Sudamerlycaste mejia Sauleda, Uribe-Velez and Szlachetko *sp. nov.*

Type: Ex hort. Esperanza Mejia, *s. n.*, 2022. Cultivated by Esperanza Mejia. Colombia, Department of Cauca, from La Bota Caucana, near the headwaters of the Caqueta River. Collector: Jorge Luis Aguirre. (Holotype, HJPU).

Etymology

This species is named in honor of Esperanza Mejia de Moreno who made this species available to us for study. A native of the municipality of Salamina, Caldas, she has been growing ornamental plants since very young and has dedicated herself to the department of Quindio. Her passion for orchids and the department of Quindio lead her to create the book *Orquideas del Quindio* an excellent reference work with all the species photographed by her. In addition she is a national orchid judge and has one of the finest collections of orchids in Colombia.

Diagnosis

Sudamerlycaste mejia is similar to *Sudamerlycaste fimbriata* (Poepp. & Endl.) Archila, but *S. mejia* has flowers uniformly green or yellowish-green, *S. fimbriata* has labellum, petals and gynostemium pure white to greenish-white. *Sudamerlycaste mejia* has the midlobe of the labellum obovate-pandurate and the margins are irregularly erose-fimbriate. The midlobe of *S. fimbriata* is elliptic-obovate and the margins are fimbriate. In *S. mejia* the lateral lobes of the labellum have erose margins, in *S. fimbriata* they are entire. In *S. mejia* the petals are obliquely elliptic-ligulate and lateral sepals are obliquely elliptic-lanceolate, where in *S. fimbriata* the petals are obliquely elliptic-ovate and the sepals are obliquely obovate-lanceolate.

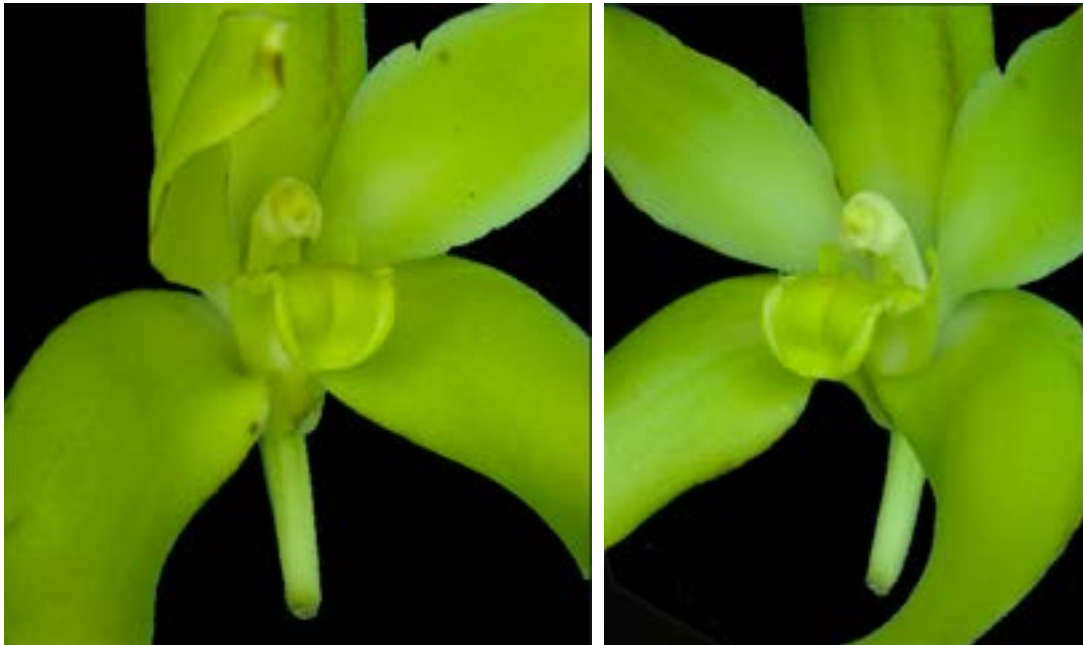
Sudamerlycaste mejia is similar to the Ecuadorian congener *Sudamerlycaste ejirii* (Oakeley) Archila, but differs in that *S. ejirii* has broadly deltoid petals with irregularly fimbriate-erose margins near the middle. In addition, *Sudamerlycaste gigantea* (Lindl.) Archila from Colombia and Ecuador is similar but differs by having lateral sepals much longer than dorsal sepal, labellum midlobe obovate with middle section of margins fimbriate and apical part entire. *Sudamerlycaste diastasia* (D. E. Benn. & Oakeley) Archila from Peru and *Sudamerlycaste jimenezii* (Oakeley) Archila from Colombia are both similar but differ in the shape of the labellum. *Sudamerlycaste mejia* has an obovate-pandurate midlobe and obliquely elliptic-ligulate petals, *S. diastasia* and *S. jimenezii* both have an oblong midlobe and oblanceolate petals.

Description

Plants to 80 cm tall with short rhizomes; pseudobulbs clustered, without spines at abscission point, smooth, ridged, obovate, to 12 cm tall, 5 cm wide, to three leaves at apex; leaves broad lanceolate, acute, to 62 cm long, 18 cm wide, petiole to 10 cm long, with to 3 bracts becoming leaf-like, to 28 cm long, 9 cm wide; floral bracts tubular covering the ovary to 5 cm long, 1.5 cm wide; inflorescence erect, pedicle to 5 cm long, flowers green or yellowish-green, to 10 cm natural spread, dorsal sepal erect, linear-lanceolate, to 6 cm long, 2.6 cm wide, subacute; lateral sepals falcate, incurved, elliptic-lanceolate, obtuse, to 6 cm long, 3 cm wide; petals obliquely elliptic-ligulate; labellum three lobed, lateral lobes oblong, obtuse, with erose margins, midlobe obovate-pandurate, margins irregularly erose-fimbriate basally, apically erose with edges slightly revolute upwards, to 4.2 cm long, 2 cm wide, central callus on midlobe with 5 shallow keels terminating in two thick keels; column white, with two triangular wings at apex, to 2 cm long, 0.3 cm wide; anther cap white to 0.3 cm wide.



Sudamerlycaste mejia Sauleda, Uribe-Velez and Szlachetko.



Sudamerlycaste mejia Sauleda, Uribe-Velez and Szlachetko.



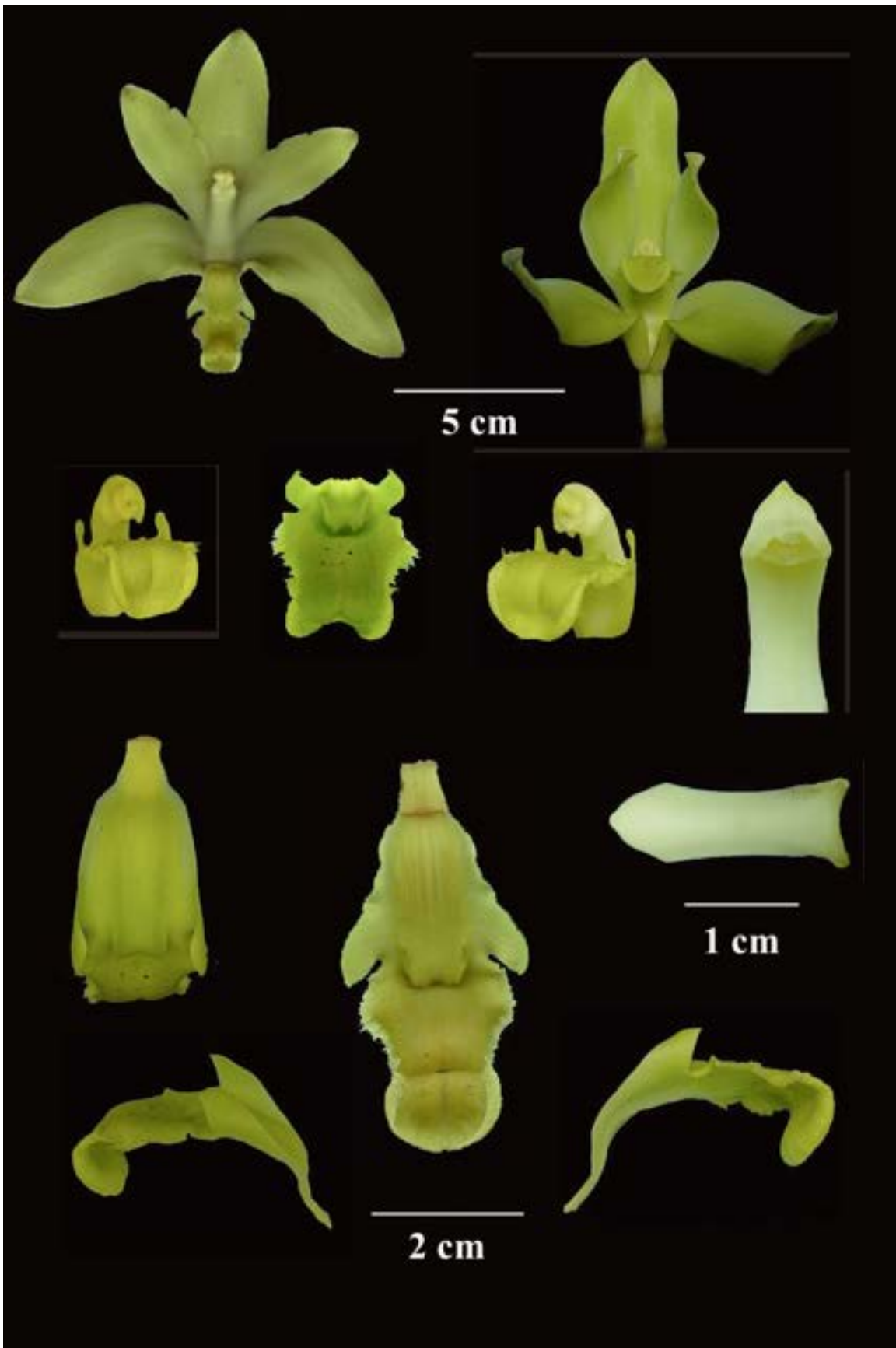
Sudamerlycaste mejia Sauleda, Uribe-Velez and Szlachetko.



Sudamerlycaste mejia Sauleda, Uribe-Velez and Szlachetko, apex of labellum.



Sudamerlycaste mejia Sauleda, Uribe-Velez and Szlachetko, apex of column.



Sudamerlycaste mejia Saulea, Uribe-Velez and Szlachetko.



Sudamerlycaste fimbriata (Poepp. & Endl.) Archila.



Sudamerlycaste jimenezii (Oakeley) Archila. Photograph courtesy of Orquideas del Valle.



Sudamerlycaste fimbriata (Poepp. & Endl.) Archila.
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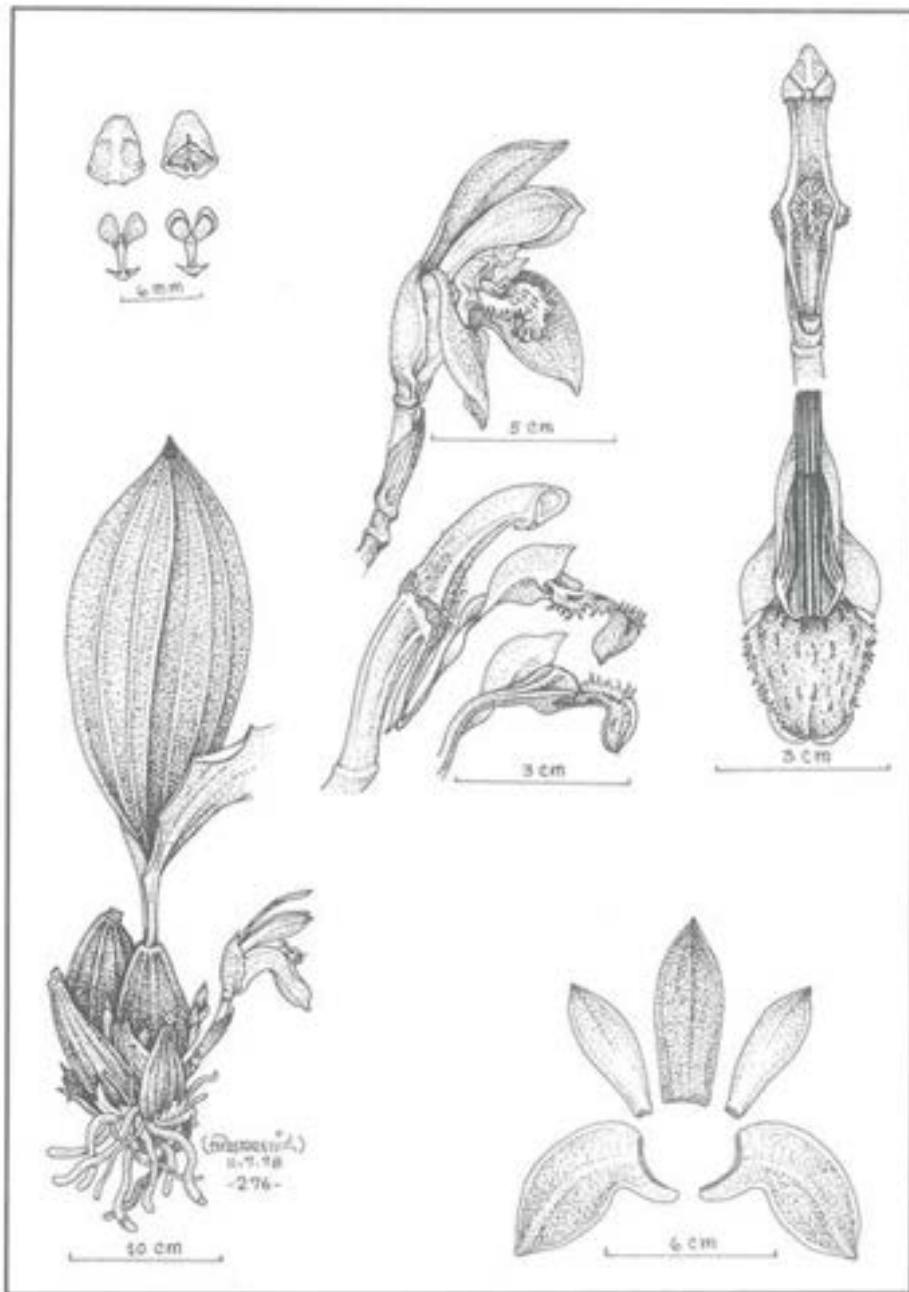
Sudamerlycaste ejirii (Oakeley) Archila.

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Sudamerlycaste gigantea (Lindl.) Archila.
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LYCASTE DIASTASIA D. E. Benn. & Oakeley
 Icones Orchidacearum Peruvianarum

Plate 488
 (1998)

Sudamerlycaste diastasia (D. E. Benn. & Oakeley) Archila.
 From *Icones Orchidacearum Peruvianarum*, pl. 488. Ed. David E. Bennett. Published by A. Pastorelli de Bennett, 1998.

Acknowledgments

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Chase, M. W., K. M. Cameron, J. V. Freudenstein, A. M. Pridgeon, G. Salazar, C. van den Berg and A. Schiteman. 2015. An updated classification of Orchidaceae. *Botanical Journal of the Linnean Society*, 177, 151–174.

Kolanowska, M., O. A. Pérez Escobar, E. P. Sánchez and D. L. Szlachetko. 2011. An illustrated field guide to the orchids of the Yotoco Forest Reserve (Colombia). *Fundacja Rozwoju Uniwersytetu Gdańskiego ul. Armii Krajowej 119/121*, 81-824 Sopot.

Kolanowska, M. & D. L. Szlachetko. 2012. Orchids of the Department of Valle del Cauca (Colombia). Volume 1. Cypripediaceae, Orchidaceae. Orchidoideae, Spiranthoideae, Vanilloideae, Epidendroideae (Malaxideae, Elleantheae) KOELTZ SCIENTIFIC BOOKS. P.O. Box 1360, D-61453 Koenigstein / Germany.

Kolanowska, M. 2014. The orchid flora of the Colombian Department of Valle del Cauca. *Revista Mexicana de Biodiversidad*, vol. 85, núm. 2, 2014, pp. 445-462
Universidad Nacional Autónoma de México. Distrito Federal, México

Kolanowska, M. 2014a. Orchids of the Darién Gap. Koeltz Scientific Books. P.O. Box 1360, D-61453 Koenigstein / Germany.

Pridgeon, A. M., P. J. Cribb, M. W. Chase, F. N. Rasmussen. 2009. *Genera orchidacearum*, Vol. 5. Oxford: Oxford University Press.