
Myoxanthus ruschii (Orchidaceae), a New Species from Brazilian Atlantic Forest, Espírito Santo

Claudio Nicoletti de Fraga

Instituto de Pesquisas Jardim Botânico do Rio de Janeiro, Programa Zona Costeira/Curadoria de Coleções Vivas. Rua Jardim Botânico, 1008, 22470-051, Jardim Botânico, Rio de Janeiro-RJ, Brazil. cnfraga@jbrj.gov.br

Ludovic Jean Charles Kollmann

Museu de Biologia Prof. Mello Leitão, Av. José Ruschi, 4, 29650-000, Santa Teresa, Espírito Santo-ES, Brazil. ludovic@escelsa.com.br

ABSTRACT. *Myoxanthus ruschii* (Orchidaceae), a new species from the Santa Lúcia Biological Station in the Atlantic forest of Espírito Santo, Brazil, is described and illustrated. This new species is related to *Myoxanthus punctatus*, *Myoxanthus lonchophyllus*, and *Myoxanthus seidelii*, from which it differs by non-clavate petals and the general form of the lip with a subtruncate base with a pair of reflexed lateral lobes on the end.

Key words: Atlantic forest, Brazil, Espírito Santo, *Myoxanthus*, Orchidaceae.

The eastern Brazilian Atlantic coastal forest, although at present highly fragmented, is one of the places with the highest biodiversity on Earth (Myers et al., 2000). One of these fragments with special interest is the Santa Lúcia Biological Station, a site for biological research and conservation encompassing about 440 ha of Atlantic forest located in the municipality of Santa Teresa, in the state of Espírito Santo. According to recent research on trees, birds, mammals, and butterflies there is an especially high biological richness in this region, even when compared with other Atlantic forest areas (Mendes & Padovan, 2000). As a result of fieldwork at this station, we have found a new orchid species that is described and illustrated in this paper.

The Neotropical genus *Myoxanthus* Poeppig & Endlicher, long in the synonymy of *Pleurothallis*, was reinstated by Luer (1982). Later, Luer (1992, 1997) presented a revision of the genus, consisting of 48 species in 3 subgenera, subg. *Satyria* Luer, subg. *Silenia* Luer, and subg. *Myoxanthus*, with this last subgenus containing section *Myoxanthus*, section *Antennella* Luer, and section *Scandentia* Luer. Seven species were cited for Brazil for the autonymic subgenus of *Myoxanthus*: four endemic to

the eastern Atlantic forest, two in the Amazonian region, and one with disjunct distributions in eastern Brazil and northwestern South America.

Myoxanthus ruschii Fraga & L. Kollmann, sp. nov. TYPE: Brazil. Espírito Santo: Santa Teresa, Valsugana Velha, Santa Lúcia Biological Station, dry trail, ca. 19°57'10"–19°59'00"S, 40°31'3"–40°32'25"W, elev. 750 m, 16 June 2001 (fl), C. N. Fraga 780 (holotype, MBML; isotype, RB). Figure 1.

Species haec *Myoxantho punctato*, *M. lonchophyllo* et *M. seidelii* affinis, sed floribus parvis successivis pedunculatis aggregatis, sepalo postico oblongo, sepalis lateralibus oblongis apice obtusis, petalis elliptico-ovatis, labello trilobatis, et lobo antico elliptico-ovato, marginibus verrucosis, et lateralibus brevibus retrorsis differt.

Epiphytic, caespitose herb. Roots coarse. Ramicauls 14–21 × 0.15–0.2 cm, ascending to erect, stout, and enclosed by 5 to 8 purple-colored, tubular hispidulous and paleaceous sheaths. Leaf 8.5–13 × 2–3 cm, erect, thickly coriaceous, narrowly elliptic to narrowly ovate, acute, base cuneate below into a subpetiole. Inflorescence a fascicle of single, successive flowers, at the apex of the ramicaul, occasionally 2 flowers at anthesis simultaneously, the peduncles purple, 7–9.5 mm long, minutely purple pubescent; floral bracts 3–5 × 2–2.5 mm wide expanded, paleaceous, purple pubescent. Flowers resupinate; pedicels 2–3 mm long; ovary 2–4 mm long; sepals yellow with red spots, glabrous, the dorsal sepal 7–8 × 2.5–3 mm, oblong, narrowly subacute, 5-veined, the lateral sepals 7–8 × 3–3.5 mm, connate at the base, oblong-ovate, apex rounded, 4(–6)-veined; petals 7–8 × 2–2.5 mm, yellow with red spots, glabrous, narrowly elliptic-ovate, obtuse, with revolute margins at the apex, 3-veined; labellum 5–6 × 2–2.5 mm, red with yellow base, non-deflexed, glabrous, the apical

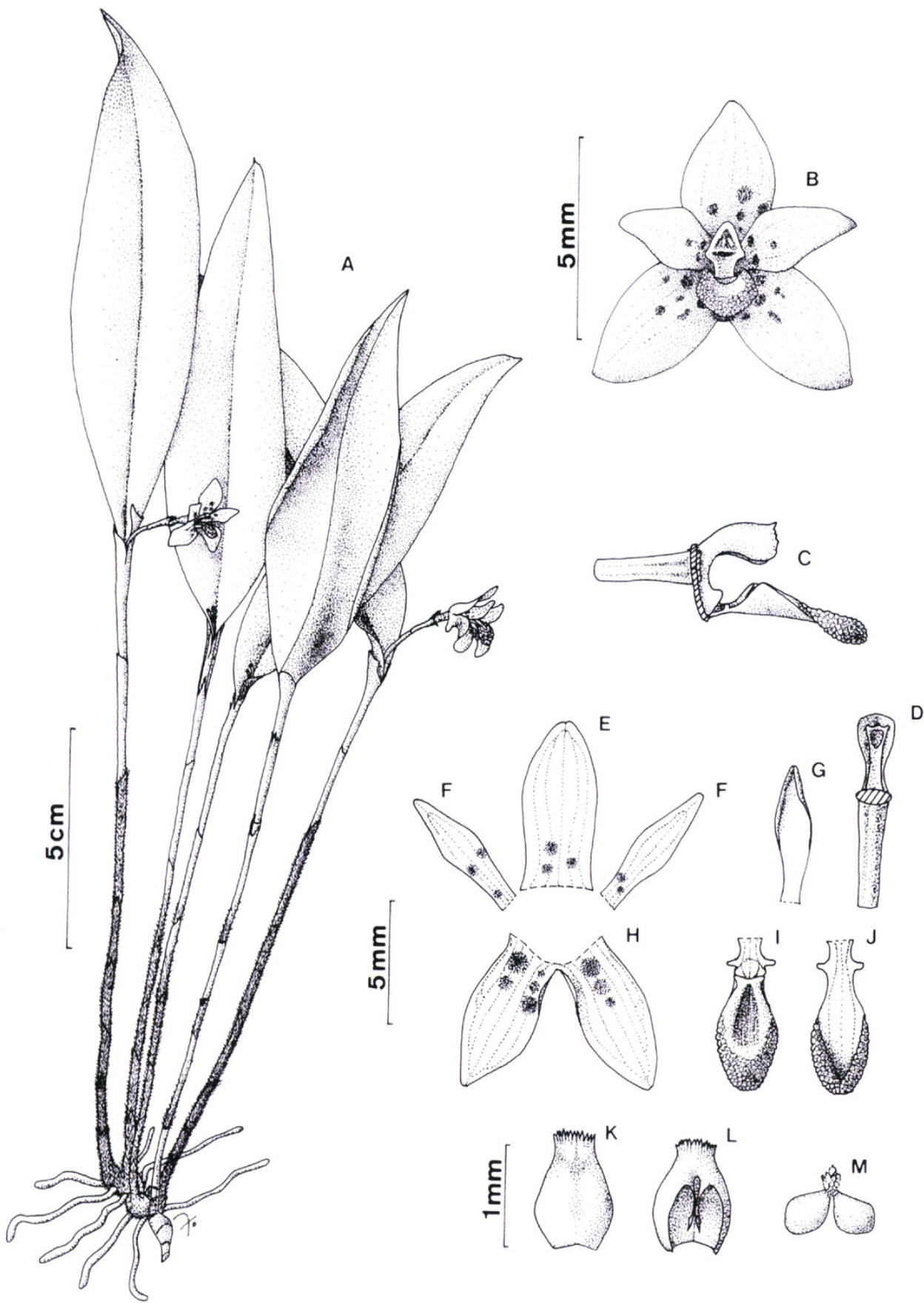


Figure 1. *Myoxanthus ruschii* Fraga & L. Kollmann. —A. Habit and inflorescence. —B. Flower. —C. Ovary, column, and lip, side view in normal position. —D. Ovary and column, from below. —E. Dorsal sepal. —F. Petal, from above. —G. Petal, from below. —H. Lateral sepal, from above. —I. Lip, from above. —J. Lip, from below. —K. Anther, from above. —L. Anther, from below. —M. Pollinia. Drawn from the type specimen (C. N. Fraga 780), by C. N. Fraga.

lobe elliptic, obtuse, somewhat verrucose with revolute margins, thick, the lower half with low, erect, rounded margins, the disc with a broad, smooth, slightly concave area, the base subtruncate, with a pair of minute lateral lobes reflexed on the end, 3-veined; column 1–1.5 × 0.5 mm, yellow, flecked with red, stout incurved, 3 mm long, with rounded wings above the middle, the column-foot stout, 2 mm long, concave, with a pair of thick calli near the apex, the upper margin of the anther fimbriate, 2 pollinia-pairs, yellow, obovoid. Capsule unknown.

Etymology. The name of the new species pays homage to Augusto Ruschi, a naturalist involved in the conservation of natural areas in Espírito Santo, especially through the Santa Lúcia Biological Station, which was where he started his botanical studies, particularly with Orchidaceae.

The new species is apparently related to *Myoxanthus punctatus* (Barbosa Rodrigues) Luer, *M. lonchophyllus* (Barbosa Rodrigues) Luer, and *M. seidelii* (Pabst) Luer, from which it is distinguished by its elliptic leaves, labellum thick and non-deflexed with revolute margins, and fimbriate anther.

The presence of an elliptical labellum with the terminal lobule having a verrucose margin, also observed in *Myoxanthus punctatus* and *M. seidelii*, distinguishes *M. ruschii* from *M. lonchophyllus*, which has an ovate labellum, somewhat hispid-papillose apically.

The yellow coloring with red spots, non-clavate petals, and general elliptic form of the labellum with subtruncate base with a pair of lateral lobes reflexed on the end, found in *Myoxanthus ruschii*,

are characters absent in *M. punctatus* and *M. seidelii*.

Paratype. BRAZIL. **Espírito Santo:** Santa Teresa, Val-sugana Velha, Santa Lúcia Biological Station, dry trail, ca. 19°57'10"–19°59'00"S, 40°31'30"–40°32'25"W, 700 m, Atlantic forest, 28 Apr. 2000 (fl), L. J. C. Kollmann 2899, C. N. Fraga, V. G. Demuner, E. M. C. Leme & B. R. Silva (MBML).

Acknowledgments. We acknowledge Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for financial support, Helio de Queiroz Boudet Fernandes, Director of the Mello Leitão Biological Museum and MBML herbarium curator, for assistance during fieldwork in Santa Teresa, Jorge Fontella Pereira for the Latin diagnosis, and Fábio de Barros, Marcos Sobral, and two reviewers and the editor for suggestions and help with the English.

Literature Cited

- Luer, C. A. 1982. A reevaluation of the genus *Myoxanthus* (Orchidaceae). *Selbyana* 7: 34–54.
- . 1992. Icones Pleurothallidarum IX: Systematics of *Myoxanthus*. Addenda to *Platystele*, *Pleurothallis* subgenus *Scopula* and *Scaphosepalum*. *Monogr. Syst. Bot. Missouri Bot. Gard.* 44: 1–128.
- . 1997. Icones Pleurothallidarum XV: Systematics of *Trichosalpinx*. Addenda to *Dracula*, *Masdevallia*, *Myoxanthus* and *Scaphosepalum*. Corrigenda to *Lepanthes* of Ecuador. *Monogr. Syst. Bot. Missouri Bot. Gard.* 64: 1–136.
- Mendes, S. L. & M. P. Padovan. 2000. A Estação Biológica de Santa Lúcia, Santa Teresa, Espírito Santo. *Bol. Mus. Biol. Mello Leitão* (n. sér.) 11/12: 7–34.
- Myers, N. R. A., C. G. Mittermeier, G. A. B. Fonseca & J. Kent. 2000. Biodiversity hot spots for conservation priorities. *Nature* 403: 853–858.



Fraga, Cláudio Nicoletti de and Kollmann, Ludovic Jean Charles. 2003.
"Myoxanthus ruschii (Orchidaceae), a new species from Brazilian Atlantic Forest, Espírito Santo." *Novon a journal of botanical nomenclature from the Missouri Botanical Garden* 13, 49–51. <https://doi.org/10.2307/3393564>.

View This Item Online: <https://www.biodiversitylibrary.org/item/14673>

DOI: <https://doi.org/10.2307/3393564>

Permalink: <https://www.biodiversitylibrary.org/partpdf/25135>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.