

Philodendron pusillum (Araceae), a remarkable new species from Colombia

Authors: Gonçalves, Eduardo G., and Bogner, Josef Source: Willdenowia, 34(1) : 297-300 Published By: Botanic Garden and Botanical Museum Berlin (BGBM) URL: https://doi.org/10.3372/wi.34.34125

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at <u>www.bioone.org/terms-of-use</u>.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

doi:10.3372/wi.34.34125 (available via http://dx.doi.org/)

EDUARDO G. GONÇALVES & JOSEF BOGNER

Philodendron pusillum (Araceae), a remarkable new species from Colombia

Abstract

Gonçalves, E. G. & Bogner, J.: *Philodendron pusillum (Araceae)*, a remarkable new species from Colombia. – Willdenowia 34: 297-300. – ISSN 0511-9618; © 2004 BGBM Berlin-Dahlem.

Philodendron pusillum from lowland Colombia, a small terrestrial herb inhabiting the forest floor, is described as a species new to science and compared with the similar *P. humile* from Brazil. It can be placed into *P.* subg. *Philodendron* but its sectional position is still uncertain.

The neotropical genus *Philodendron* is very variable, comprising woody shrubs to herbaceous climbers. It is divided into three subgenera, and the largest, *P.* subg. *Philodendron*, to which our new species belongs, is again divided into several sections (Croat 1997). Recently one of the smallest species, *P. humile* E. G. Gonç., was recognized among species previously described in the genus *Homalomena* (Gonçalves 2003), but its sectional position could not be determined with certainty. During a visit of the first author to the Munich Botanical Garden in spring 2002, we recognized an undetermined plant from Colombia as an undescribed *Philodendron* species close to but clearly distinct from the Brazilian *P. humile*. We describe it here as new.

Philodendron pusillum E. G. Gonç. & Bogner, sp. nova - Fig. 1-2

Holotypus: Colombia, Amazonas, Rio Caquetá, La Pedrera, 240 m, 1.-4.10.1952, H. Garcia-Barriga 14610 (COL).

Herba diminuta; caudex repens, 4-6 mm in diam., cataphylla persistentes; petiolus 7-11.5 \times 0.15-0.2 cm, rubicundus; lamina elliptico-oblonga vel lanceolata, 13-20 \times 2.4-4.5 cm; nervi primarii laterales utroque 4-5; pedunculus 7-8.5 \times 0.2-0.3 cm; spatha viridis, 4.5-4.8 cm longa; spadix 3.5-4 cm longa.

Small terrestrial herb, 30-35 cm tall. *Stem* rhizomatous, creeping, 1-4 cm long, 0.4-0.6 cm in diam. *Roots* stiff, 1.2-1.5 mm in diam., numerous in the lower portion of the stem and appearing at the nodes. *Leaves* 4-7 per plant, restricted to the shoot apex; cataphylls persistent, membra-naceous, 7-7.5 × 0.4-0.8 cm. *Petiole* 7-11.5 cm long, 0.15-0.2 cm in diam., reddish, sheath short. *Leaf blade* elliptic-oblong to lanceolate, membranaceous, 13-20 × 2.4-4.5 cm, acute to cuneate at Downloaded From: https://complete.bioone.org/journals/Willdenowia on 19 Apr 2024

298



Fig. 1. *Philodendron pusillum* – holotype specimen at COL. – Photograph by F. Höck. Downloaded From: https://complete.bioone.org/journals/Willdenowia on 19 Apr 2024 Terms of Use: https://complete.bioone.org/terms-of-use



Fig. 2. Holotype of *Philodendron pusillum*, close up showing the opened spathe with the spadix and the venation of the leaf blades. – Scale bar = 2 cm; photograph by F. Höck. Downloaded From: https://complete.bioone.org/journals/Willdenowia on 19 Apr 2024 Terms of Use: https://complete.bioone.org/terms-of-use base and acuminate at apex, venation parallel-pinnate, with 4-5 primary lateral veins on each side of a well developed midrib, arising at an angle of 20-30°, 3-6 thinner secondary veins, situated between the primaries, and still much finer veins situated between the secondaries. *Inflorescence* solitary; peduncle 7-8.5 cm long, 0.2-0.3 cm in diam. *Spathe* 4.5-4.8 cm long, 0.8-1 cm in diam., green, hardly constricted (becoming narrower in upper half), apex acute. *Spadix* 3.5-4 cm long, stipitate, stipe 5-6 mm long, c. 1.8 mm in diam.; *female part* slightly conical, 7-9 mm long, proximally 3.5-4 mm in diam., distally 2.5-3 mm in diam.; *sterile part* c. 3 mm long, 3-3.5 mm in diam.; *male part* cylindrical, 23-25 mm long, 4-4.5 mm in diam.; ovary with few locules and 4-7(?) ovules in each locule. *Staminodes* obpyramidal, c. 1.5 mm long. *Male flowers* usually two- to three-androus, apical and basal male flowers with only one stamen; stamens subprismatic, c. 1.5 mm long, c. 1 mm wide. *Fruits* unknown.

Distribution. - Philodendron pusillum is known only from the type locality.

Relationships. – *Philodendron pusillum* is easily recognized by its delicate habit (usually the whole plant is not more than 30-35 cm tall) with elliptic-oblong to lanceolate leaf blades. It is a terrestrial species with slender petioles that are reddish according to the collector. The most similar species seems to be *P. humile* from Brazilian Amazonia (Gonçalves 2003). However, the base of the leaf blade in *P. pusillum* is acute to cuneate, whereas truncate to subcordate in *P. humile*. Another difference is the number of primary lateral veins (4-5 in *P. pusillum* versus 5-7 in *P. humile*) and the angle at which they arise from the midrib (20-30° in *P. pusillum* versus 40-45° in *P. humile*). As with *P. humile*, the sectional position of *P. pusillum* is uncertain.

Acknowledgements

The first author thanks the Margaret Mee Fellowships Programme and the Instituto Plantarum de Estudos da Flora Ltda. for financial support, and FAPESP for the PhD grant (99/02921-7). We also like to thank the Herbario Nacional Colombiana (COL) in Bogotá for the loan of the specimen to Munich.

References

Croat, T. B. 1997: A revision of *Philodendron* subg. *Philodendron (Araceae)* for Mexico and Central America. – Ann. Missouri Bot. Gard. 84: 311-704. [CrossRef]
Goncalves, E. G. 2003 ["2002"]: New aroid taxa from Brazil. – Aroideana 25: 16-35.

Addresses of the authors:

Eduardo G. Gonçalves, Universidade Católica de Brasília, Prédio São Gaspar Bertoni, Sala M-206, QS 7, Lote 1, EPTC, CEP 72030-170 Taguatinga, DF, Brazil. Josef Bogner, Augsburger Str. 43a, D-86368 Gersthofen, Germany.