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

Abstract


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 × 0.15-0.2 cm, rubicundus; lamina elliptico-oblonga vel lanceolata, 13-20 × 2.4-4.5 cm; nervi primarii laterales utroque 4-5; pedunculus 7-8.5 × 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, membranaceous, 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
Fig. 1. *Philodendron pusillum* – holotype specimen at COL. – Photograph by F. Höck.
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.
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., apex blunt. Gynoeicum c. 1.5 mm long, 0.9-1 mm in diam.; stigma 0.7-0.8 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

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.