



A new species of *Anthurium* Sect. *Leptanthurium* from Colombian Amazonia

OSCAR MAURICIO LÓPEZ–FLORIANO^{1,2,4*}, THOMAS B. CROAT^{3,5} & MARCO A. CORREA-MUNERA^{1,2,6}

¹ Universidad de la Amazonia, Calle 17 Diagonal 17 con Carrera 3F, Florencia, Caquetá, Colombia.

² Herbario Enrique Forero HUAZ, Universidad de la Amazonia, Carrera 11 #5–69, Florencia, Colombia.

³ P.A. Schulze Curator of Botany, Missouri Botanical Garden

⁴ os.lopez@udla.edu.co; <https://orcid.org/0000-0002-0456-0203>

⁵ thomas.croat@mobot.org; <https://orcid.org/0000-0001-6810-0567>

⁶ ma.correa@udla.edu.co; <https://orcid.org/0000-0003-2683-7733>

*Corresponding author

Abstract

A new species of *Anthurium* sect. *Leptanthurium* is described and illustrated. It is compared with *A. miritiparanaense*, another endemic to the Colombian Amazonia as well as to *A. raphaelense* from Ecuador.

Keywords: Araceae, new species, Tropical Moist Forest, Colombian Amazonia

Introduction

Anthurium Schott (1829: 828) sect. *Leptanthurium* (Schott 1860: 441) Engler (1905: 87) was first recognized by Schott (1860) as one of his informal “greges”. It was later officially accepted by Engler (1905) in his sect. *Leptanthurium* who continued to recognize it as a section with only one species, *A. gracile* (Rudge 1805: 23) Schott (1829: 100). That species was quite unique among *Anthurium* species in possessing roots with velamen and a chromosome base number of 10, seemingly unique in *Anthurium*; until recent years it remained alone and considered to be the only species with these aforementioned characters (Delannay & Croat, 2020).

In 2006 another species, *A. barrieri* Croat *et al.* (2006) was published. More recently Delannay & Croat (2020) greatly expanded the section and added 16 species, including 8 undescribed species. These species are *A. debilipeltatum* Croat in Croan & Lingan (2008: 149), *A. ellenbergii* Delannay & Croat (2020: 89–90), *A. fornicifolium* Croat in Croat *et al.* (2005: 350–352), *A. huanucense* Engler (1905: 165), *A. leptos* Croat in Delannay & Croat (2020: 126–127), *A. longegeniculatum* Engler (1898: 379), *A. lutheri* Croat in Delannay & Croat (2020: 140–142), *A. minutipustulum* Croat in Delannay & Croat (2020: 142–143), *A. miritiparanaense* Croat & J.Watt in Delannay & Croat (2020: 143–149), *A. pallidiflorum* Engler (1898: 395–396), *A. raphaelense* Croat & Delannay in Delannay & Croat (2020: 161–162), *A. rectinervium* Delannay & Croat (2020: 163–164), *A. rocirojasiae* Delannay & Croat (2020: 164–170), *A. sodiroanum* Engler (1898: 412), *A. timplowmanii* Croat in Croat & Lingan (2008: 161) and *A. vittariifolium* Engler (1905: 88). Seven of those species were previously assigned to other sections (see Delannay & Croat 2020).

The section *Leptanthurium* is characterized by the following characters (adapted from Delannay & Croat 2020): (i) petioles sheathed at the base, with base of sheath clasping the adjacent peduncle; (ii) stems generally with short internodes, often fully covered by remnants of the cataphylls; (iii) roots sometimes velamentous; (iv) blades elongated, usually several times longer than wide; (v) primary lateral veins numerous, sometimes poorly visible, often interspersed with minor veins running in parallel and, (vi) blades usually drying medium to light grayish green, sometimes medium green or brownish green.

Another likely character is the unique chromosome number $2n=20$ known for *A. gracile*, the type species of the section but this needs to be verified for other species. With the addition of this new species, section *Leptanthurium* now contains 19 species. Even so it remains one of the smallest of *Anthurium* sections. Owing to the fact that *Anthurium gracile* is one of the most widespread species of *Anthurium*, the section *Leptanthurium* ranges throughout the range of the genus from Mexico to the Guianas, Brazil, and Bolivia, lacking only in Paraguay and Uruguay.

Materials and methods

The description of this species was made from a population found during the assembly of a permanent monitoring plot in a tropical rainforest located in Vereda Peregrinos, county of Solano-Caquetá, Colombia (00° 2' 334'' S, 74° 34' 119'' W). The descriptions were made of fertile material in the Enrique Forero-HUAZ Herbarium. Specimens were compared with known taxa reported in the literature of the genus *Anthurium* (Croat & Bunting 1979, Croat 1983, Croat & Sheffer 1983, Croat 1986, Delannay & Croat 2020); the descriptive terminology is according to Croat & Bunting (1979) and Beentje (2010).

Taxonomy

Anthurium peregrinense O.López-Floriano, Croat & M.Correa, *sp. nov.* (Figs. 1–3)

The species is separated from its closest congener, *A. miritiparanaense* Croat & J.Watt (also endemic to Colombian Amazonia), by the angle of the primary lateral veins, (50–82° versus 25–30° for *A. miritiparanaense*) and by the dried blade coloration (light yellow-green on upper surface and bright greenish yellow at lower surface versus greenish gray on both surfaces for *A. miritiparanaense*) as well as by the spadix color (light yellow at apex and yellowish purple at the base versus purplish violet-red for *A. miritiparanaense*).

Type:—Colombia. Caquetá: Municipio Solano, Vereda Peregrinos; 0° 2' 334'' N, 74° 34' 119'' W, 190 m. 10 de Abr., 2021, Oscar López-Floriano, Claudia Santofimio, Marco Correa, Ramiro Rojas, Orlando 117 (holotype, HUAZ!, isotypes, COL!, MO!).

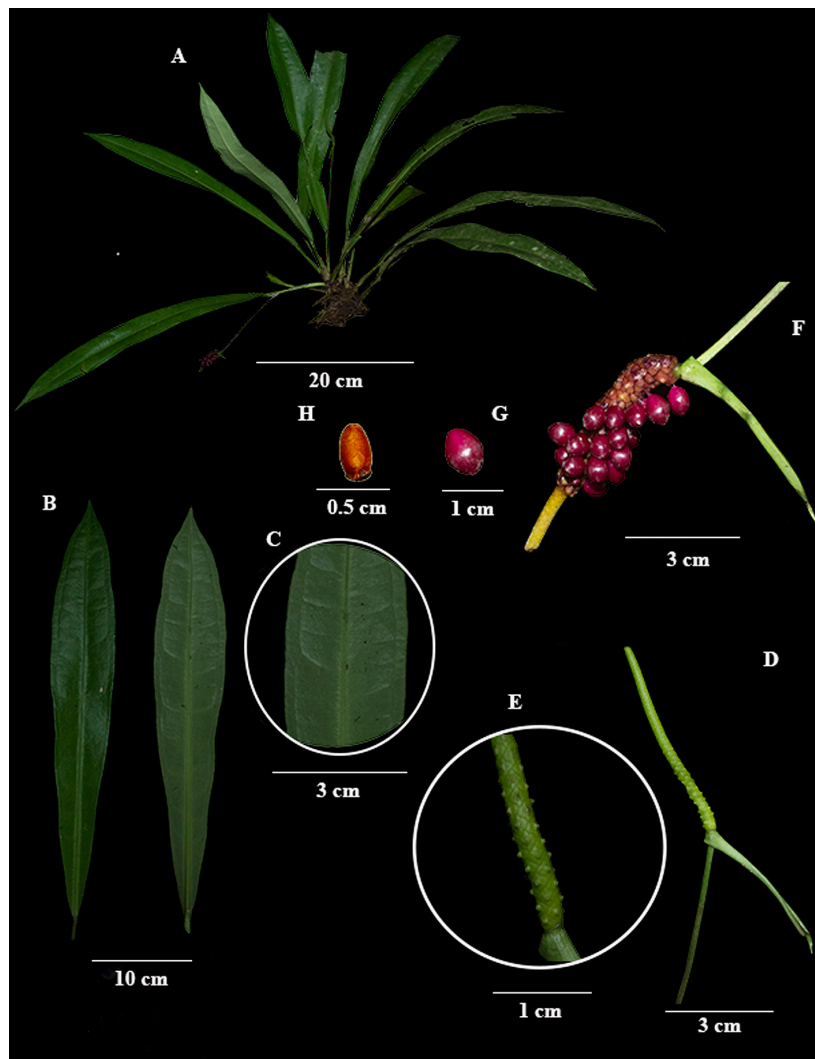


FIGURE 1. *Anthurium peregrinense*. (A) Habit; (B) Leaf blades (Adaxial surface and abaxial surface); (C) Approaching to veins; (D) Inflorescence; (E) Spadix; (F) Infructescence; (G) Berry; (H) Seed.



FIGURE 2. *Anthurium peregrinense* (López 117, HUAZ 021411). Herbarium specimen showing dried of leaves with both surfaces exposed, cataphylls, and inflorescences.

Epiphyte; **internodes** short, 1.0–1.2 cm long, 0.6 cm diam.; **stem** short and slightly thickish, 7 cm length and 5.3 mm diam., **cataphylls** subcoriaceous 4.5–5.7 × 1.0–1.2 cm wide at base, persistent on fibers, drying reddish brown at the base and dull greenish yellow towards the apex, acuminate apex; **petioles** 6.5–9.0 cm long, 2–3 mm diam., 0.15–0.24 cm times as long as blade, broadly and obtusely sulcate adaxially, weakly ribbed abaxially, sheathed 55–67 %, rounded or auriculate towards at apex of the sheath; **geniculum** thicker and paler than petiole, 7.30 mm long, 3 mm diam. LEAVES erect; **blades** oblong-oblancoate 37–42 × 4.3–4.5 cm, 8.2–9.7 times longer than wide, 4.1–6.4 times longer than petioles, attenuate and long-tapering at the base, attenuate or long-acuminate at apex; coriaceous, discolorous, drying light yellow-green at upper surface and bright greenish yellow at lower surface; **midrib** bluntly acute at upper surface, discolorous, drying weakly ribbed at surface lower; **primary laterals** 32–34 pairs, slightly prominent both surface and easily mistaken for interprimary veins, concolorous, arising at 50–82°; **interprimary veins** slightly prominent, concolorous, easy to deferens with the naked eye; **collecting vein** arising from base of blade, 2.6–4.6 mm from margin. INFLORESCENCE 26–30 cm long., **peduncle** 23.8 cm long. 1.6 mm diam, slightly ribbed around the circumference, greenish yellow with striped short dark brown-lineate; **spathe** spreading-reflexed, oblong-lanceolate, light green with dark green lines, 5–6.2 × 0.5–0.7 cm wide, abruptly acuminate at apex, drying dull greenish yellow; **spadix** greenish yellow, 5.6–7.1 cm long, 3.7 mm diam.; **stipitate** greenish yellow, 0.4–1.0 mm long and 2.8 mm diam., **flowers** 3 visible per spiral, 2.4 × 2.2 mm, lateral tepal 1.1 × 0.8 mm, posterior tepal 1.1 × 1.4 mm, anterior tepal 0.8 × 1.2 mm (measurements taken from a flower preserved in alcohol). INFRUTESCENSE with **spadix** 6.2 cm long and 5–6 mm diam. Light yellow at apex and yellowish purple at the base with berries emerging; **berries** ovoid-obovoid, bright purplish red, 7 mm long and 4.8–6.0 mm diam., two seeds per berry; **seeds** dull brownish yellow, ellipsoid 3.6 mm long and 1.8 mm diam. 1 per locule.

Etymology:—The plant is named for the type locality at Vereda Peregrinos, in county of Solano, located at south of department of Caquetá in Colombia and also in honor to the community from Peregrinos.

Distribution:—This species is endemic to Colombian Amazonia, known only from the type locality near Solano, department of Caquetá where specimens are infrequent.

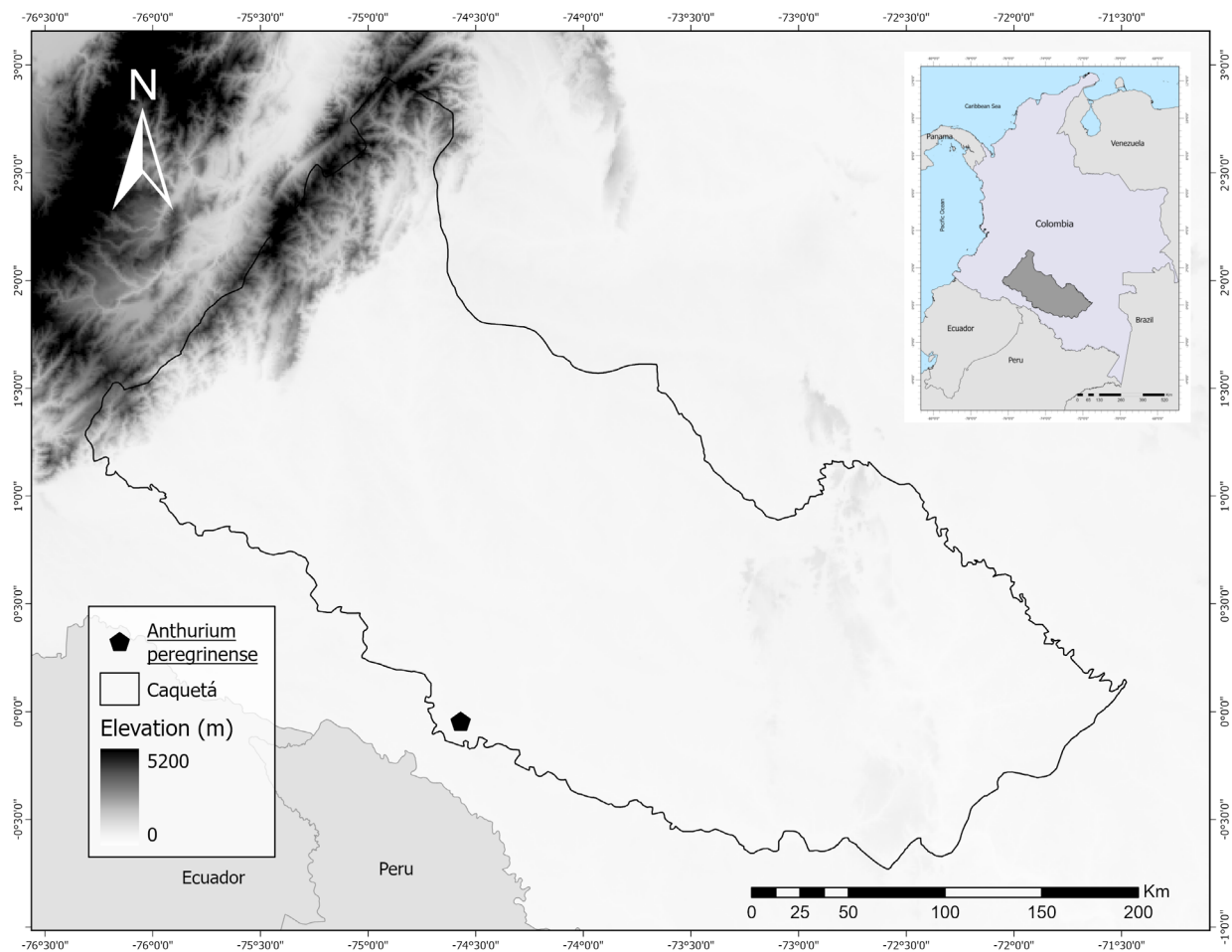


FIGURE 3. Type location of *Anthurium peregrinense* in Vereda Peregrinos, county of Solano, Caquetá department, Colombia.

Habitat and ecology:—*Anthurium peregrinense* grow at 190 m elevation in a *Tropical Moist Forest* life zone (Holdridge *et al.* 1971).

Taxonomic notes:—*Anthurium peregrinense* is easily confused with *A. miritiparanaense* also endemic to Colombian Amazonia, differs in the angle at which the veins arise (25–30°), by having blades drying greenish gray, spadix purplish violet-red and spathe yellowish. The species is also similar to *A. raphaelense* (Croat & Delannay 2020) from Ecuador but differs by its elliptic blades, both surfaces drying bright green to very brownish, petioles thickened and sheathed throughout with the sheath free-ending and rounded to bluntly acute at apex and one seed per berry.

Additional specimens examined (paratypes):—Colombia. Caquetá, Municipio Solano, Vereda Peregrinos, Sendero Peregrinos Mágico y Salvaje II, Parcela Permanente. 0° 2'334" N 74° 34' 119" W. 171 msnm. 04 Abr. 2021, Marco Correa, Oscar López-Floriano, Claudia Santofimio, Jenniffer Diaz, Milady Molina, Mauren Ordoñez, Tatiana Cerón, Johan Trujillo, Ramiro Rojas and Raúl Perdomo 10538 (HUAZ!).

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