

Rediscovery of *Anthurium gustavii* Regel and *Anthurium metallicum* Linden ex Schott (Araceae) in Colombia

Jorge Jácome

Albrecht von Haller Institut für Pflanzenwissenschaftler

Abteilung Systematische Botanik

Untere Karspüle 2, 37073

Göttingen, Germany

jjacome@hotmail.com

Thomas B. Croat

Missouri Botanical Garden

P.O. Box 299

St. Louis, MO 63166

Thomas.Croat@mobot.org

ABSTRACT

Anthurium gustavii Regel and *A. metallicum* Linden ex Schott, both previously poorly known taxonomically and phytogeographically, are redescribed based on new information.

KEY WORDS

Anthurium, rediscovery, Colombia, Araceae.

INTRODUCTION

Anthurium gustavii was described from a cultivated plant originally collected in the area of Buenaventura, Colombia by Gustav Wallis. It was vouchered from a living plant at Leiden, Kew and St. Petersburg, but the species remained uncollected until it was found again in 1990 by the second author. The original species description was inadequate, but the recollection of the species has allowed a better description to be prepared. The species is such a worthy ornamental that its new circumscription provided here is warranted.

Anthurium metallicum was recently rediscovered as well. The species was described almost one and a half centuries ago, but was never known well enough to place its origin even within a single coun-

try. The original collection was based on a living specimen supposedly from tropical America. The species is a member of *Anthurium* section *Cardiolonchium*, and is certainly one that needs to be reintroduced to the botanical and horticultural community.

Anthurium gustavii Regel, *Gartenflora* 67: 324. 1878. t. 1076. Engl. in DC. *Mon. Phan.* II. 640. 1879. Type: COLOMBIA, Valle del Cauca: vic. Buenaventura. Lectotype: Ex horto bot. Petropolitano, 6 Apr. 1890, *Regel s.n.* (W, LE). Figures 1, 2A.

Epiphytic, **internodes** short, 3.5–6 cm diam.; **cataphylls** with fibers forming semi-intact net-like reticulum; **petioles** 0.6–1.2 m long, brittle, medium green, weekly glossy, sharply flattened adaxially with a deep medial sulcus and acute, weakly spreading lateral margins with a pair of acute ribs on either side of the petiole toward the base, 4.5 cm diam. at the base, 2 cm diam. midway, 1.8 cm diam. at apex, geniculum 4–5 cm long, 2.2 cm diam. LEAVES erect-spreading; **blades** ovate-sagittate, 70–122 cm long, 55–86 cm wide, 1.4 times longer than wide, moderately coriaceous, medium green to dark green and matte above, moderately paler and semiglossy below, drying medium

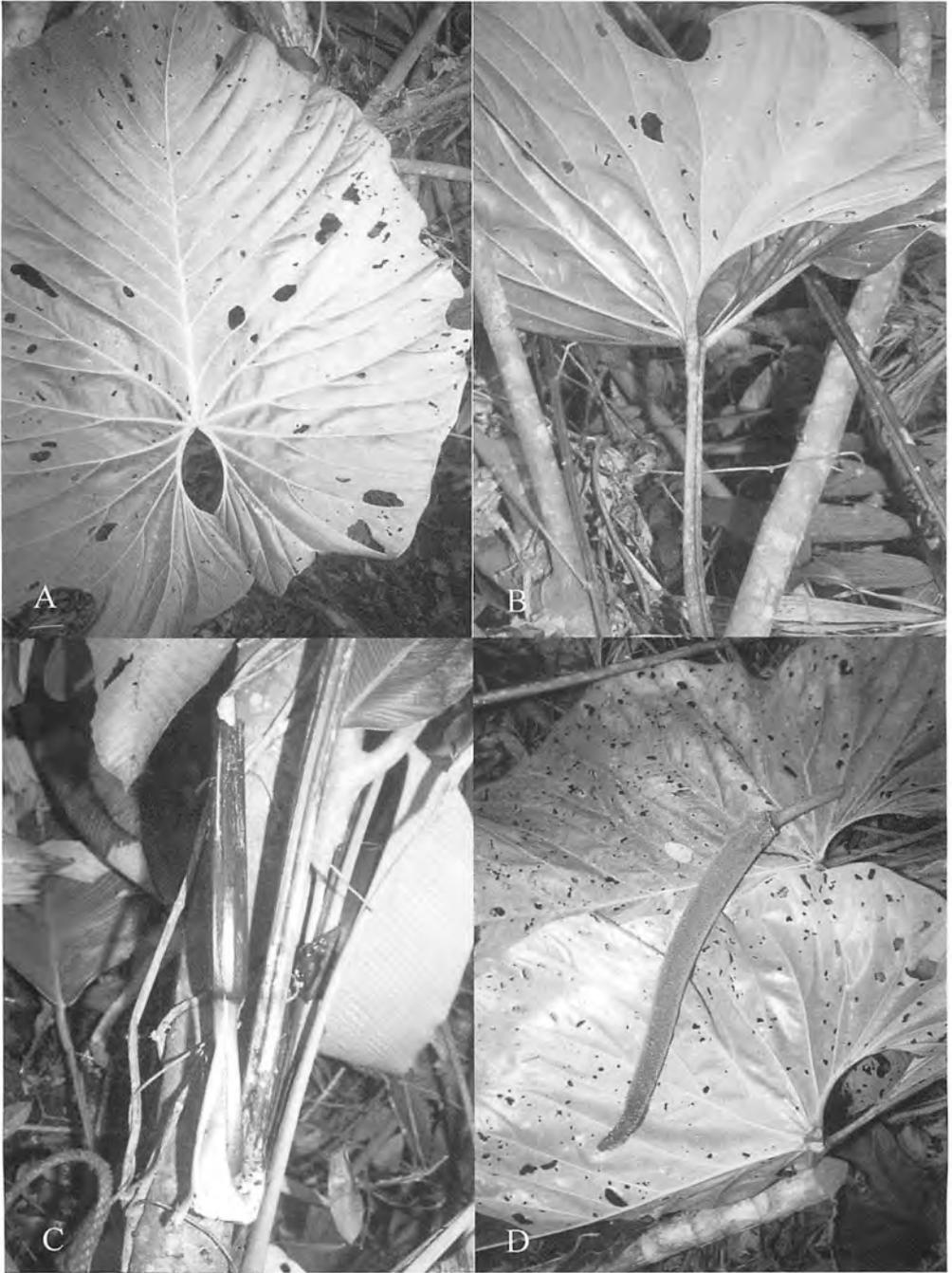


Fig. 1. *Anthurium gustavii* Regel. (Croat 84137). A. Leaf adaxial surface. B. Leaf abaxial surface and petiole. C. Petiole and petiole sheath. D. Leaf with inflorescence.

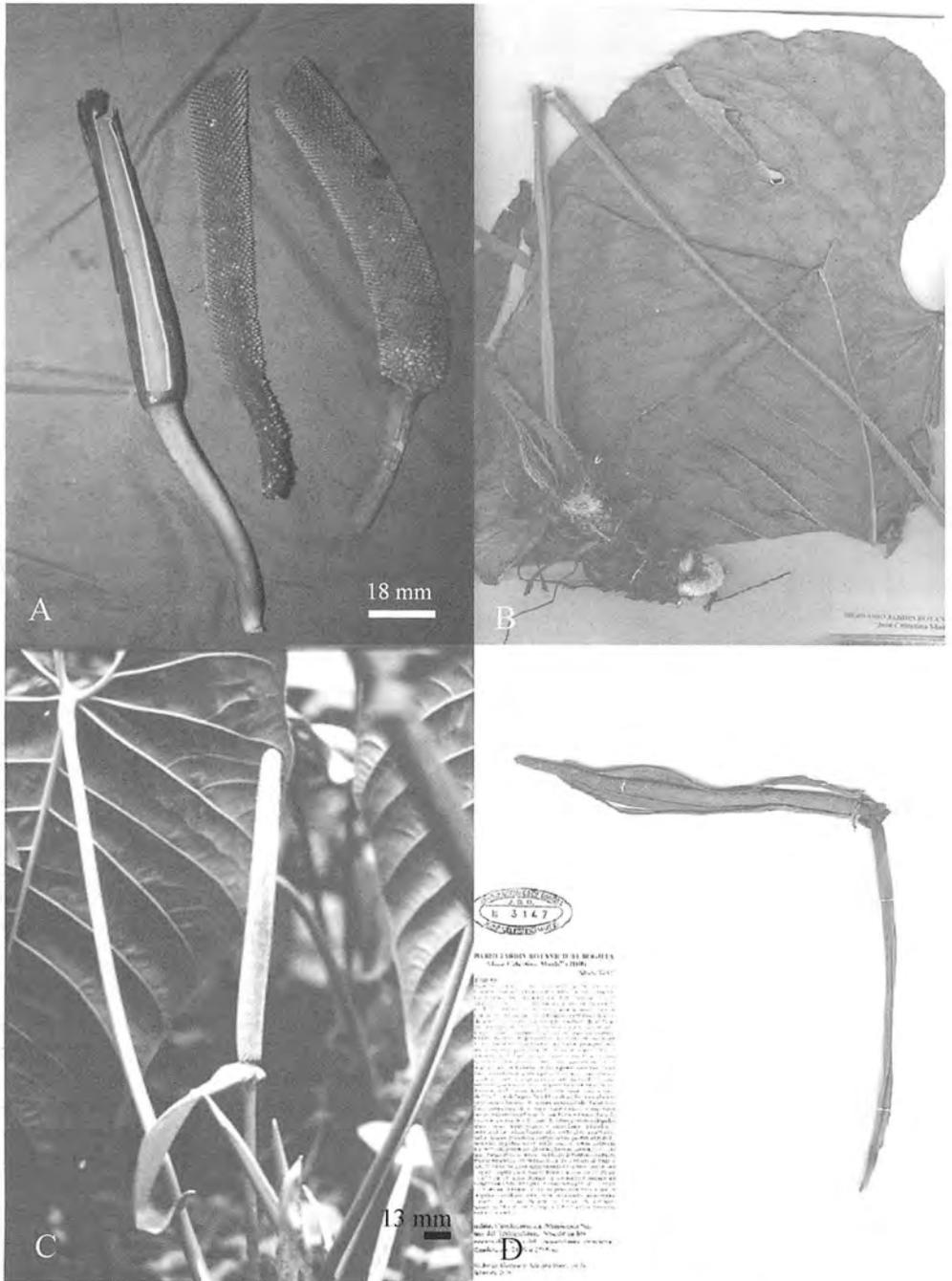


Fig. 2. A. *Anthurium gustavii* Regel. (Croat 84137). Spadix and spadix cross-section. B–D. *Anthurium metallicum* Linden ex Schott. (Jácome 3147). B. Herbarium specimen. C. Leaf abaxial surface and inflorescence. D. Herbarium specimen inflorescence.

grayish green, matte to weakly glossy above, moderately glossy below; anterior lobe 48–89 cm long, margins broadly convex; posterior lobes 13–32 cm long, broadly rounded; sinus hippocrepiform, 15–25 cm deep, 10–26 cm wide; **basal veins** 7–8 pairs; the 1st–3rd free to the base; **midrib** narrowly acute and paler above, convex with weak ribs extending down from primary lateral veins and paler below; **primary lateral veins** 9–10 pairs, acute and paler above, acute to bluntly acute and paler below; tertiary veins in part weakly raised below, drying moderately prominent. INFLORESCENCE stiffly erect, **peduncle** 5–17 cm long, 2.0 cm diam.; **spathe** 28–31 cm long, when furled 2.5 cm diam. at base, 1.8 cm diam. midway, dark violet-purple and thickly ribbed outside, greenish white inside; **spadix** (13–) 30–31 cm long, 2.5 cm diam. at base, 1.8 cm diam. midway, sessile, medium violet-purple, tapered to apex, erect. INFRUDESCENCE 58 cm long, 5 cm diam. at base, 3.5 cm diam. midway, 1.5 cm diam. near apex; **berries** red, early emergent.

Anthurium gustavii ranges from Colombia (Bolívar and Chocó) to Ecuador (Esmeraldas) from 110–500 m in *Tropical rain forest* (T-rf) life zone (Holdridge *et al.*, 1971). The species is characterized by its persistent net-like cataphyll fibers, huge leaves with sharply sulcate petioles about as long as the blade (to 1.2 m long), large ovate-sagittate, greenish gray-drying blades, and short-pedunculate, short-tapered purplish violet spadix closely enveloped by a ribbed spathe that is purplish violet outside and white within.

The species was first collected by Gustav Wallis in 1867 or 1868, and was described from cultivated material in 1878. Later it was redescribed in *Gartenflora* in 1882. The earliest voucher existing was prepared from a flowering plant in St. Petersburg on April 6, 1890, and is designated here as the lectotype. Another voucher was prepared from an identical living plant at Kew on November 22, 1894, and was illustrated in the *Botanical Magazine* (*Bot. Mag.* t. 7437. 1895). The species is similar to *Anthurium hodgei* Croat & Ob-

erle, but that species ranges from near sea level to 1300 m and has smaller leaf blades that range to less than 50 cm long.

Boyle & Boyle 3273 from 760 m elevation in Carchi Province, vicinity N of Lita, may be this species, but its lower blade surface dries matte with finer reticulate venation, whereas *A. gustavii* has lower blade surfaces drying semiglossy with coarser reticulate veins.

Cuadros 3657 from Bolívar Department in Colombia differs from the material in Ecuador in having blades that dry matte and dark yellow-brown on the lower surface rather than semiglossy and yellow-green, but it otherwise appears to match the Ecuadorian material, and is included here under specimens examined.

Specimens examined—ECUADOR. **Esmeraldas:** San Lorenzo Cantón, Parroquia Ricaurte, centro Pambilar, 1°08'N, 78°36'W, 500 m, *Aulestia & Aulestia 996* (QCNE); Lita–San Lorenzo, along side rd. W to Río Tulubí, departing main rd. at 33.4 km W of Gasolinera San Lorenzo, 5.6 km W of main Hwy., 1°05'12"N, 78°38'33"W, 110 m, 17 July 2000, *Croat et al. 84137* (MO). COLOMBIA. **Bolívar:** Serranía de San Lucas, Vereda La Libertad, 150 m, 19 July 1987, *Cuadros 3657* (MO). **Chocó:** Pueblo Rico–Istmina, along Quebrada Antón, 15 km W of Santa Cecilia, 6 km W of Chocó–Risaralda border, ca. 20 km E of Playa del Oro, along steep trail up hogback ridge beginning at W end of bridge, 5°20'30"N, 76°13'45"W, 240–350 m, 23 Feb. 1990, *Croat 70959* (MO).

Cultivated plants. Type of *Bot. Mag.* t. 7637, Kew Gardens, 22 Nov. 1896, and 13 Jan. 1910, native of the vic. of Buenaventura, Cauca Province, Colombia, *N.E. Brown s.n.* (K).

Anthurium metallicum Linden ex Schott, *Prodr. Syst. Aroid.* 506. 1860. Type: COLOMBIA, Schott drawing #643–645, Nicolson, D. H. 1984. *Alphabetical index to Schott's Icones Artoideae and Reliquiae*. IDC AG, Zug, Switzerland. Figures 2B–2D.

Terrestrial to hemiepiphytic herb; stems

erect or suberect, with long adventitious roots, growing down laxly to the soil, 4–6 mm diam., violet-purple, departing in groups of 5 or more around the stem; stems to ca. 1 m long, brownish gray, erect or repent; **internodes** 2.5–3.2 cm long, 3.6–4.3 cm diam.; leaf scars circular to elliptic, to 3.5 cm wide, 3.6–4.3 cm high; **cataphylls** dark red to purplish violet, 27 cm long, persisting as longitudinal fibers forming a network of fibers, straw-colored. LEAVES sub-erect to spreading, aggregated mostly at the apex of the stem; **petioles** (40–)74–92 cm long, 0.8–1.3 cm diam., terete, deeply sulcate adaxially toward the apex, smooth, light green to purplish violet in the apical portion and near the base; geniculum (2.0–)3.5–6 cm long, 1 cm diam., deeply sulcate; **blades** (30–)55–70 cm long, (25–)35–48 cm wide; margins undulate; upper surface dark lustrous green and velvety above with major veins light green to cream along the major veins; the major veins prominently U-shaped on lower surface; **midrib** and basal veins pale green, bluntly V-sulcate above, tinged with violet-purple at the insertion of the petiole; **primary lateral veins** (4–)8–10 pairs slender and prominent; interprimary veins and secondary veins flat to weakly sunken above; lower surface light yellow-green; minor veins sunken, dark green; collective veins arising from the 1st pair of basal veins, 1 cm from the margins. INFLORESCENCE erect to slightly spreading; **peduncle** 24–31 cm long, 0.8–1.0 cm

diam., green, purplish violet near the base, purplish violet to red near the apex; **spathe** dark pink to red, 15–21 cm long, 2–7.5 cm wide, elliptic, coriaceous, recurved at anthesis; **spadix** stipitate (stipe 1.5 cm long, 9 mm diam.), slightly darker green than the spathe, yellowish green, 12.5–19 cm long, to 1.4 cm diam. INFRUDESCENCE 31–40 cm long, 2.8–3 cm diam.; **berries** yellow at maturity.

Anthurium metallicum is endemic to Colombia and is known only from the Department of Cundinamarca growing erect or semi-erect in ravines or along the border of trails.

This species was described from a horticultural collection believed to have been from Colombia, but was essentially unknown until recently when the first author recollected the species in Cundinamarca Department.

Specimens examined—COLOMBIA. **Cundinamarca:** San Antonio, Bosque contiguo al Salto del Tequendama, *Jácome* 3147 (JBB); 3148 (JBB).

ACKNOWLEDGMENTS

The authors would like to thank Emily Yates (MO) for general manuscript editing and preparation of figure plates.

LITERATURE CITED

- Holdridge, L. R., W. H. Hatheway, T. Liang & J. A. Tosi. 1971. *Forest Environments in Tropical Life Zones*. Pergamon Press, New York.