Anthurium chamberlainii Masters (Araceae) Rediscovered

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ABSTRACT

Anthurium chamberlainii Masters, a species described from unknown origin in the late 19th Century is fully redescribed and illustrated providing assurance that the species does indeed originate in Venezuela. A modern and detailed description as well as illustrations are provided. The species is a member of section *Belolonchium*.

KEY WORDS

Anthurium chamberlainii, rediscovery Venezuela.

INTRODUCTION

Anthurium chamberlainii was originally described by Masters (1888) based on a living collection that was thought to be introduced from Venezuela toward the end of the 19th century. There was always considerable doubt of its provenance owing to the fact that the species had never been seen in Venezuela despite extensive botanizing by the senior author of this paper, and by George Bunting who spent most of his long career in Venezuela working on Araceae. Gilberto Morillo who studied the flora of the higher portions of the Cordillera de Merida reported never seeing the species (G. Morillo, pers. com.). Thus it came as a great surprise to learn that a collection at the Munich Botanical Garden, occurring in the State of Merida in Venezuela by Frank Hase, a bromeliad enthusiast from Bochum, Germany, has proven to be this long lost species. Since Masters' specimen was rather quaintly described and does not comport to modern descriptions in content or style, the species is herein being completely redescribed. The original specimen prepared by Masters is complete and thus capable of being interpreted, thus there is no need for an

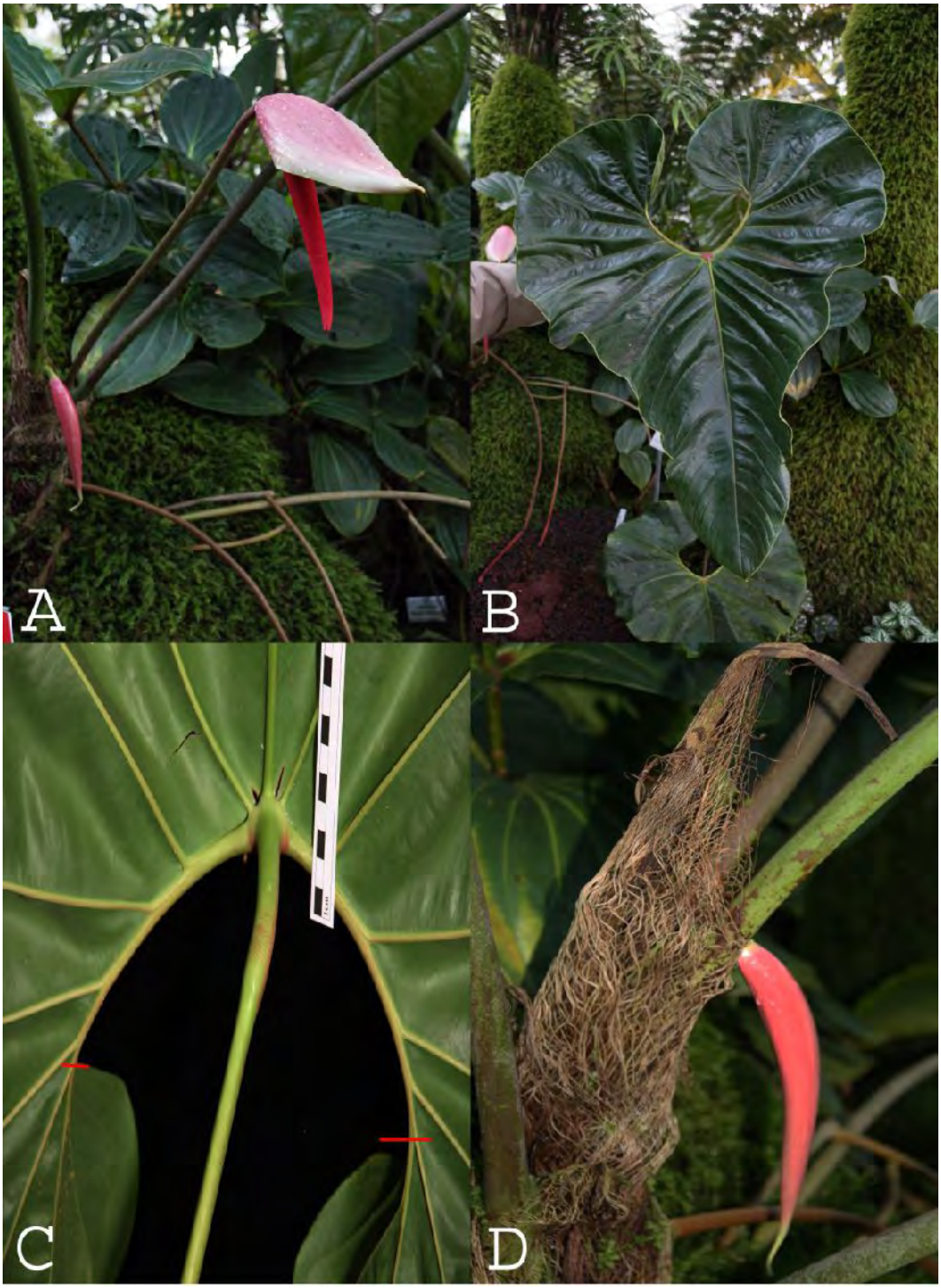

Figure 1. A–D. *Anthurium chamberlainii* Masters. (*Croat & Gröeger 103048*). A. Habit with spathe and spadix showing inflorescence on upper right open and young inflorescence on lower left closed. B. Leaf blade, adaxial surface. C. Leaf blade, abaxial surface showing close-up of sinus and posterior ribs. D. Weathered cataphylls and petiole bases with young inflorescence.

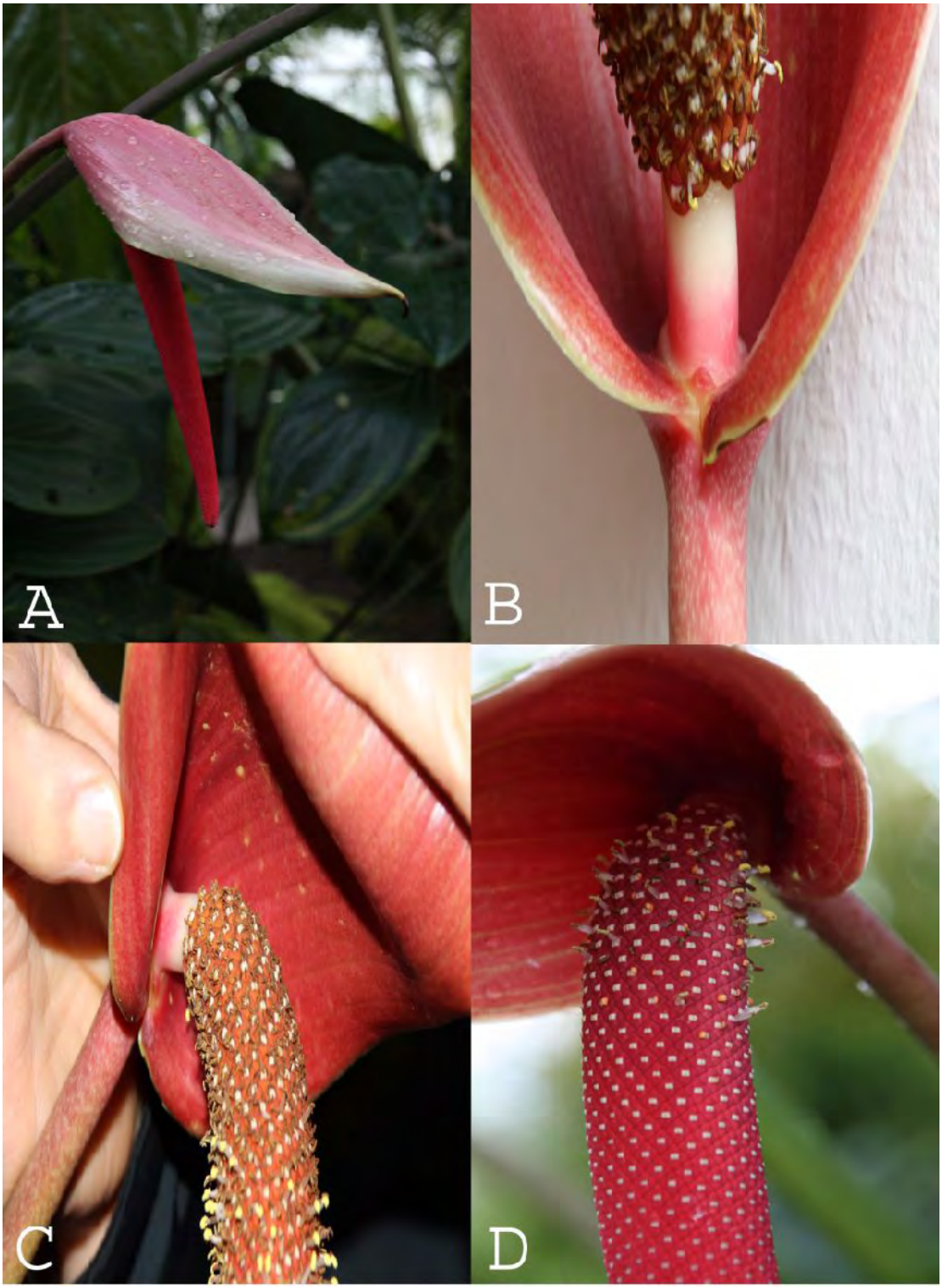

Figure 2. A–D. *Anthurium chamberlainii* Masters. (*Croat & Gröeger 103048*). A. Inflorescence showing spreading spathe and pendent spadix. B. Base of inflorescence showing bicolored stipe. C. Base of inflorescence showing stipe, base of spadix and open exserted anthers with pollen. D. Base of inflorescence, close-up showing long emergent stamens.

epitype. However the current collection cited below serves to provide greater accuracy of location and its description is comparable to other species making direct comparisons possible. The new description was reentered into the Lucid Anthurium Key.

Anthurium chamberlainii Masters, *Gard. Chron.*, III, 1888(1): 462. Figure 67. 1888. Type: Venezuela, exact locality unknown, *Masters s.n.* (K). Figures 1. & 2.

Stems to less than 1 m long; **internodes** short, to 4 cm diam.; **cataphylls** to 20 cm long, persisting as a network of reddish brown fibers; **petioles** 150 cm long, erect-spreading, subterete, unribbed, smooth geniculum 6 cm long, slightly thicker than petiole, tinged conspicuously with red; **blade** ovate-triangular-sagittate, 95 cm long, 70 cm wide, 1.4 times longer than wide, dark green and semiglossy above, moderately paler and semiglossy below, short-acuminate at apex, deeply lobed at base; margin broadly undulate more or less throughout; **anterior lobe** weakly concave and broadly convex along margins; **posterior lobes** 22 cm long, 25 cm wide, directed inward and held somewhat erect in live condition; **sinus** hippocrepiform, 11 cm deep, 18 cm wide, closed and subreniform when closed, more or less rounded at apex; **major veins** narrowly rounded, unribbed, moderately paler than the surface; **basal veins** 9–10 pairs, 1st pair free to the base, 2nd pair fused 5.5 cm, 3rd pair fused 8–8.5 cm, 4th pair fused 12–12.5 cm, 6th & 7th and higher order pairs fused 15 cm, 8th & 9th fused to 16–17.5 cm; **posterior rib** weakly moderately curved, especially toward the apex 17.5 cm long, naked along the sinus for most of its length, to 15 cm; **primary lateral veins** 7–8 pairs, arising at a 45–50° angle; **collective veins** arising from the 4th pair of basal veins, but weakly loop-connecting from 6th pair of basal veins, (2–)5–10 mm from margin; **tertiary veins** moderately obscure, weakly raised upon drying. INFLORESCENCE erect spreading; **peduncle** 60 cm long, 1.3 cm diam.; **spathe** 20–21 cm long, 10–11 cm wide when flattened, hooding, spreading forward at ca. 120° from peduncle, naviculiform, prominently attenuated at apex, reddish in bud, reddish violet except light greenish along margin at anthesis outside, reddish violet except thin, light greenish margin inside; **spadix** stipitate (stipe 12 mm long, 9 mm diam., whitish except pinkish at apex) 24.8–26 cm long, 3 cm diam. (drying to 1.8 cm diam.), oblong-fusiform, orangish red (drying reddish brown), directed mostly downward and an angle of 90°, gradually tapered to apex, narrowly rounded at apex; **flowers** 12–15 visible per spiral, 3.2–3.5 mm long, 1.8–2.1 mm wide; **tepals** drying medium reddish brown, matte, conspicuously granular; lateral tepals 1.8–2 mm, inner margin broadly rounded, outer margin 2-sided; **stamens** whitish, protruded at anthesis and persisting to ca. 3 mm above tepals; anthers 1.8–2 mm long, 0.6 mm wide; pollen yellow.

Anthurium chamberlainii is endemic to Venezuela, known only from the State of

Merida at 1500–1800 m but specific localities for the species are as yet unknown so the life zones (Holdridge, 1971) are undetermined. Most assuredly however the species occurs in some type of *Premontane forest* or *Montane forest* life zones since members of section *Belolonchium* nearly all occur at high elevations in wet forest.

The species might be most easily confused with *A. betanianum* Croat, another large *Belolonchium* which differs in having the collective veins arising from one of the primary lateral veins.

In the Lucid Anthurium Key the species tracks to *A. cartilagineum* (Desf.) Kunth, differing by having much smaller leaves (less than 75 x 40 cm) with the collective veins arising from the first pair of basal veins and very remote from the margin as well as by having a spadix with fewer flowers per spiral and much larger flowers; *A. macarenense* Schultes & Idrobo, differing by having a much narrower spathe with deep red or maroon on both sides with greenish veins; *A. oxybelium* Schott, differing by having more slender internodes typically longer than broad, a more cylindroid spadix with the stamens exserted and *A. supianum* Engl. from western Colombia, differing by having much smaller leaves (blades to 40 cm long) and a smaller more slender spreading spathe (to 7 cm long and 1.5 cm wide).

Other members of section *Belolonchium* in Venezuela also differ. *Anthurium berryi* Bunting differs by having the primary lateral veins from the uppermost basal veins; *A. davidsei* Croat and *A. ginesii* Croat, both differing in having the collective veins from the uppermost basal veins and by having a reflexed spathe; *A. tatei* G. S. Bunting, differing in having a mitered sinus, 6 pairs of basal veins, collective veins arising from 4th pair of basal veins and a spreading green spathe; *A. nubicola* Bunting, differing by having much smaller blades (52 x 28 cm) with the collective veins from the 1st or 2nd pair of basal veins and with a much shorter and stubbier purple spadix and *A. tachiranum* Croat, differing in having hastate to subhastate blades with the collective veins arising from the primary lateral veins from the upper basal veins.

Additional specimen seen: Venezuela. Merida: 1500–1800 m, originally collected by Frank Hase, exact locality unknown, cultivated at Munich Botanical Garden, *T. B. Croat & A. Gröeger 103048* (M, MO).

REFERENCES

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

Masters, M. *Anthurium chamberlainii*. *Gard. Chron.*, III, 1888(1): 462. Figure 67. 1888.