## A New Variety of *Anthurium clavigerum* (Araceae) from Sucre Department, Colombia

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Abstract. Anthurium clavigerum Poepp. var. corazaense Croat, Carrascal & Herazo is described as a new variety of A. clavigerum, a member of section Dactylophyllium (Schott) Engl. It is found in the Reserva Forestal Protectora Serranía de Coraza in the Department of Sucre, Colombia. Key words: Anthurium, Araceae, Colombia, new species, section Dactylophyllium.

The family Araceae belongs to the order Alismatales and is one of the most diverse tropical monocot families. It includes 144 genera and approximately 3645 known published species (Boyce & Croat, 2011 onward; Díaz et al., 2015). It is estimated that the family could have ca. 6489 species in 150 genera (Boyce & Croat, 2011 onward). For Colombia, 776 species have been reported in 27 genera, of which 269 are native. Colombia is considered one of the most species-rich countries for Araceae (Bernal et al., 2016).

The genus Anthurium Schott has more than 950 species described in the Neotropics (Boyce & Croat, 2011 onward). It is characterized by having bisexual flowers, a persistent spathe, leaves with reticulated tertiary venation, and collective veins near the margin of the leaf (Mayo et al., 1997). This genus has been divided into 18 different sections, including the section Dactylophyllium (Schott) Engl., which is characterized by the presence of palmately compound leaves with segments free to the base (Croat & Sheffer, 1983). Croat and Carlsen (2013) reappraised section Dactylophyllium by molecular analysis and published a list of accepted species belonging to this section, with 20 species and four varieties or subspecies, including the species A. clavigerum Poepp.

The material being described here is the result of a study made in an unusually arid region (atypical for most Araceae) by the first author. The study site in Montes de María, Reserva Forestal Protectora Serranía de Coraza, in the state of Sucre (Fig. 1), was the subject of a thesis project. Material collected was shared with T. Croat, who agreed to assist with the determinations. His judgment was that a specimen related to *Anthurium clavigerum* was new to science. This taxon is well out of the range of the normal mesic habitats where typical *A. clavigerum* occurs and is being described here at the varietal level.

Anthurium clavigerum Poepp. var. corazaense Croat, Carrascal & Herazo, var. nov. TYPE: Colombia. Sucre: N of Colombia, municipality of Colosó, Montes de María, Reserva Forestal Protectora Serranía de Coraza, near the Don Juan stream, 09°29′21.91″N, 75°23′29.27″W, 304 m, 12 June 2017, D. Carrascal P., J. Percy B. & F. Herazo V. 11 (holotype, HEUS!; isotype, MO-6840915!). Figures 2–6.

Diagnosis. Anthurium clavigerum Poepp. var. corazaense Croat, Carrascal & Herazo is distinguished from the typical variety of A. clavigerum by its somewhat smaller, weakly lobed leaves, leaflets with the primary lateral veins arising at a  $17^{\circ}$  angle, light yellow spathe, and small lilac spadix.

Hemiepiphyte; stems 2–3 cm diam.; adventitious roots 30–350 cm  $\times$  4.5–5.5 mm, extending to the ground, reddish in juvenile phase, brown in adult phase; internodes short, 3–6 cm; cataphylls weathering to brownish fibers; petioles terete, 40–56 cm  $\times$  4–7 mm, sheathed at base, light green. Leaves spreading; blade pedatisect (i.e., palmately divided), spreading in an arc 80 cm wide, with 7 to 11 leaf segments; leaflets 36–57  $\times$  6–11 cm, weakly lobed although in juvenile stage the lobes are not as marked, apex

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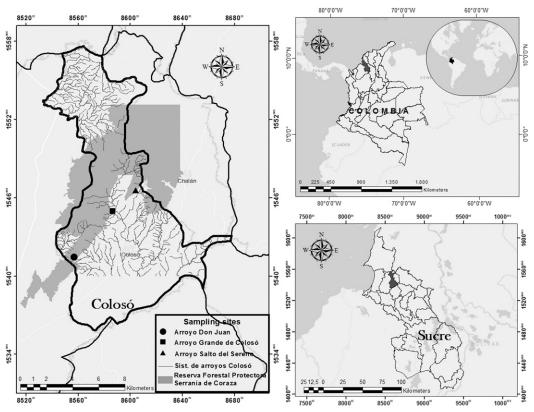


Figure 1. Map of Colombia showing the Department of Sucre, Montes de María region, municipality of Colosó, Reserva Forestal Protectora Serranía de Coraza. Note: Dpto. Sucre is blackened in the upper right map; Mpio. Colosó is blackened in lower right map; and the Reserva Forestal Serranía de Coraza is shaded gray.



Figure 2. Live plant of Anthurium clavigerum Poepp. var. corazaense Croat, Carrascal & Herazo, showing leaf blade, abaxial surface with portion of inflorescence.



Figure 3. Type specimen of Anthurium clavigerum Poepp. var. corazaense Croat, Carrascal & Herazo, showing leaf blades, abaxial surface with apex folded over, and inflorescence on right (D. Carrascal P., J. Percy B. & F. Herazo V. 11 [HEUS]).



Figure 4. Type specimen of Anthurium clavigerum Poepp. var. corazaense Croat, Carrascal & Herazo, showing leaf blades, bottom leaflets showing abaxial surface, the others showing adaxial surface (D. Carrascal P., J. Percy B. & F. Herazo V. 11 [HEUS]).

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Figure 5. Type specimen of Anthurium clavigerum Poepp. var. corazaense Croat, Carrascal & Herazo, showing leaf blades, abaxial surface with inflorescence (D. Carrascal P., J. Percy B. & F. Herazo V. 11 [HEUS]).



Figure 6. Type specimen of Anthurium clavigerum Poepp. var. corazaense Croat, Carrascal & Herazo, showing leaf blades, abaxial surface with close-up of inflorescence (D. Carrascal P., J. Percy B. & F. Herazo V. 11 [HEUS]).

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acuminate, base attenuate, dark green and glossy above, light green and matte below, drying reddish brown above, yellowish green below; midrib narrowly raised on both surfaces, diminishing toward leaf apex; primary lateral veins 2 to 3 on each side, arising from midrib at 17° angle, arching upward to join collective veins near margin of leaflet. Inflorescence semi-erect, arched; peduncle terete, 38 cm × 7 mm near apex, 1.2 cm diam. at base, drying to 3 mm diam. at apex, 6 mm diam. at base; spathe lanceolate, light yellow with purple parallel lines, 19 cm long, 1 cm wide at base, 4 mm wide at apex; spadix lilac,  $16-36 \text{ cm} \times 6 \text{ mm}$  diam. at apex, 8 mm diam. at base; flowers 8 visible in principal spiral, 5 flowers in secondary spiral, bisexual, rhombic, 3–4 mm wide; tepals  $3 \times 2$  mm; gynoecium 3 mm; stamens yellowish, emerging from base, covering stigma. Infructescence not seen.

Ecology and distribution. Anthurium clavigerum var. corazaense is endemic to Colombia, known only from one collection in Sucre Department in the far north of the country, in the municipality of Colosó, in the Serranía de Coraza Protective Forest Reserve at 304 m in a Tropical dry forest life zone. The variety is isolated in an area of Caribbean vegetation, with unique calcareous soils, which may be influencing the patterns of diversity and endemism in the area (Herazo Vitola et al., 2017).

Etymology. The epithet "corazaense" refers to the type locality of Reserva Forestal Protectora Serranía de Coraza, where the type specimen was collected.

Discussion. Anthurium clavigerum var. corazaense is most closely related to A. clavigerum, but differs from the typical variety in having smaller leaves, with the leaflets less than 60 cm long and only weakly lobed, petioles only 56 cm long, primary lateral veins departing the midrib at a  $17^{\circ}$  angle, a lilac spadix up to 36 cm long,

and a light yellow spathe. In contrast, the typical variety of A. clavigerum has leaflets up to 100 cm long with quite marked lobes, petioles between 65 and 150 cm long, primary lateral veins spreading at a 45° angle, as well as a purple spadix up to 75 cm long with a purple spathe.

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