New Species of *Anthurium* from Western Ecuador

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ABSTRACT

Two species of *Anthurium* are described as new to science. The new species are *A. churutense* Croat & X. Cornejo and *A. colonchense* Croat & X. Cornejo, both members of *Anthurium* section *Porphyrochionium*.

KEY WORDS

Anthurium, Ecuador, *Anthurium churutense, Anthurium colonchense,* new species.

INTRODUCTION

The junior author collected both species described during floristic studies in Guayas province in western Ecuador. The species described were collected from a broad area in three different provinces of Ecuador, but are both from isolated and elevated areas in the western part of the country. The western part of central and southern Ecuador is unusual for its general lack of aroids, mainly because much of the region has been deforested and is more arid than areas of northwestern Ecuador. Some of the remaining forest is in small private or public ecological reserves where a high percentage of the aroids are endemic. The species described here fall in this category. Among the areas under investigation by the junior author are the Loma Alta in the Cordillera de Chongón-Colonche NNE of Guayaguil and the Cerro Pancho Diablo in the Reserva Ecológica Manglares Churute. Both these areas are either *Premontane moist forest* (bh-T) or *Tropical wet forest* (bmh-T).

Anthurium churutense Croat & X. Cornejo, **sp. nov.** Type: ECUADOR, Guayas: Reserva Ecológica Manglares Churute, Cerro Pancho Diablo, 2°25'S, 79°39'W, 450 m, 4 Jan. 1997, *Cornejo & Bonifaz 5549* (holotype, GUAY). Figure 1.

Planta epiphytica; internodia brevibus, 1 cm diam., petiolus teres, 10–11.5 cm longus, sulcatus; lamina oblongo-elliptica vel oblongo-oblanceolata, 26–33.5 cm longa, 6.2–7.7 cm lata; pedunculus 23 cm longus, spatha 1.6 cm longa, 4 mm lata, viride; spadix 10 cm longus.

Epiphyte (measurements from dried material only); **internodes** very short, 1 cm diam., roots dense, drying 1–2 mm diam., dark gray-brown; **cataphylls** 4 cm long, promptly becoming red-brown fibers, the fibers slender, parallel; **petioles** terete, 10–11.5 cm long, drying 2–3 mm diam., dark brown, narrowly sulcate adaxially, deeply so on drying; geniculum sulcate, 6–11 mm long, slightly thicker and darker than petiole on drying; **blades** oblong-elliptic to oblong-oblanceolate, 26–33.5 cm long, 6.2–7.7 cm wide, 4.1–4.3 times longer than wide, narrowly acuminate at apex, acute at base; **midrib** drying bluntly acute to acute and concolorous above, narrowly rounded and darker brown below; upper surface eglandular, drying matte and dark gray; lower surface densely and finely dark glandular-punctate, medium yellow-brown and slightly

Figs. 1–2. —1 (top L.). *Anthurium churutense* Croat & X. Cornejo (*Cornejo & Bonifaz 5549*). Live plant. —2 (top R.). *Anthurium coloncbense* Croat & X. Cornejo (*Cornejo & Bonifaz 5494*). Herbarium specimen. Photo by X. Cornejo.

glossy; **primary lateral veins** 6–7 per side, arising at 55–60° angle, drying weakly raised, undulate and concolorous above, weakly raised, narrowly rounded and darker than surface below; collective veins arising from the base, 4–7 mm from the margin, more deeply sunken than the primary lateral veins on the upper surface, about equaling the primary lateral veins below. INFLORESCENCE erect-spreading; **peduncle** 23 cm long, drying ca. 1 mm diam., dark brown, matte; **spathe** erect-spreading, 1.6 cm long, 4 mm wide, green, drying dark yellow-brown; **spadix** 10 cm long, drying 4 mm diam.; flowers 3.8–4.0 mm long, 1.8–2.0 mm wide, 4–5 visible per spiral; lateral tepals 1.4–1.6 mm wide, broadly rounded on inner margin, 2-sided on outer margin; stamens 3–4 mm long, 4–5 mm wide. INFRUCTESCENCE not seen.

Anthurium churutense is endemic to Guayas in Ecuador, known only from the type specimen. It is a member of *Anthurium* sect. *Porphyrochitonium*. The species resembles *Anthurium margaricarpum* Sodiro, another species with similar blade shape, which also has eglandular upper blade surfaces. That species differs in having longer petioles (10–35 cm long), more primary lateral veins (20–23 pairs), and a much larger spathe (2–7 cm long). In contrast, *A. churutense* has petioles 10–11.5 cm long, 6–7 primary lateral veins, and the spathe 1.6 cm long.

The epithet refers to the Reserva Ecológica Manglares Churute (hence *A.* "churutense") the name of the biological reserve that is the type locality.

Anthurium coloncbense Croat & X. Cornejo, **sp. nov.** Type: ECUADOR, Guayas: Cordillera Chongón-Colonche, Bosque Protector Loma Alta, 1°48′S, 80°47′W, 600 m, 22 Dec. 1996, *Cornejo & Bonifaz 5494* (holotype, MO-04931354; isotypes, GB, GUAY). Figure 2.

Planta epiphytica vel terrestris; interno-

dia brevia, 1.5 cm diam.; petiolus (3.5)10–14 cm longus, sulcatus; lamina anguste oblanceolata vel elliptico-oblanceolata, (16)19–43.5 cm longa, (3)5–9.0 cm lata; pedunculus 25–36 cm longus; spatha viridis 10–13 cm longa; spadix aureus vel pallide aurantiacus, 8–17.5 cm longus, 5–6 mm diam.

Epiphytic or terrestrial; **internodes** short, 1.5 cm diam.; **cataphylls** 5–7 cm long, soon becoming reddish-fibrous, these sometimes becoming disorganized; **petioles** (3.5)10–14 cm long, obtusely and prominently sulcate adaxially, drying prominently sulcate and dark brown; **blades** narrowly oblanceolate to elliptic-oblanceolate, (16)19–43.5 cm long, (3)5–9.0 cm wide, 3.5–8.5 times longer than wide, 3.8–8 times longer than the petioles, slightly inequilateral (one side as much as 4 mm wider), narrowly acute to abruptly acuminate at apex, acute to weakly attenuate at base, drying dark yellow-brown rarely grayish brown above; moderately paler and grayish yellow-brown to grayish green below, both surfaces conspicuously glandular-punctate, drying matte to weakly glossy; **midrib** prominently raised and concolorous above, drying acutely raised and darker than surface; **primary lateral veins** 10–12 per side, arising at (35)55–65° angle, weakly sunken above, weakly raised below; collective veins arising from the base, 3–6 mm from the margin, about as prominent or slightly more prominent than the collective veins. INFLORESCENCE erect-spreading to spreading; **peduncle** 25–36 cm long, drying dark brown; **spathe** 10–13 cm long, green, erect-spreading to reflexed, sometimes folded back obliquely above the middle; **spadix** yellow to pale orange, turning purplish brown after anthesis, 8–17.5 cm long, 5–6 mm diam.; flowers 5–6 visible per spiral, 2.0–2.2 mm long; tepals drying conspicuously warty with pale, irregular bumps. INFRUCTESCENCE 28 cm long, to 2 cm diam.; spadix green; **berries** white, broadened in the direction of the axis, more or less truncate at apex.

Anthurium colonchense is endemic to Ecuador, known only from Guayas Province in the Cordillera Chongón-Colonche in *Premontane wet forest* (bmh-P), and in the Reserva Ecológica Manglares Churute in *Premontane moist forest* (bh-T) at 400–600 m. The name "colonchense" refers to Colonche in the type locality. It is characterized by its fibrous persistent cataphylls, comparatively short petioles, blades narrowly oblanceolate to elliptic-oblanceolate, brownish drying and glandular-punctate on both surfaces, and by the yellow-orange spadix which develops brownish warty excrescences over the surface of the tepals.

The species is compared with *A. marginellum* Sodiro, which is similar size and shape and has glandular punctations on both surfaces. That species differs in having longer petioles (20–40 cm long), more primary lateral veins (16–24 pairs), the spadix white to cream, and berries violet-purple.

Paratypes—ECUADOR. **Guayas**: Santa Elena Cantón, Reserva Comunal Loma Alta, 5 km NW of Suspiro, 1°49′S, 80°36′W, 400 m, 22 Jan. 1997, *Clark et al. 3836* (QCNE); 500 m, 9 Oct. 1998, *Roponen et al. 5:8* (MO); Cordillera Chongón-Colonche, Bosque Protector Loma Alta, 1°48′S, 80°47′W, 600 m, *Cornejo & Bonifaz 5208* (GUAY, MO, QCNE); Cordillera Chongón-Colonche, Communa Olón, 1°46′S, 80°41′W, 350–400 m, 8 June 1994, *Cornejo & Bonifaz 2846* (GUAY, QCNE); Reserva Ecológica Manglares Churute, Cerro Pancho Diablo, 2°25′S, 79°39′W, 450 m, 4 Jan. 1997, *Cornejo & Bonifaz 5524* (QCNE).