

ly or not divaricate; pollen yellow fading to white. *Infructescence* with spathe absent; spadix at least 13 cm long, 1.5 cm diam.; berries obovoid, reddish purple, white at base, rounded at apex (truncate when dried), ca. 6.5–7.5 mm long, 5–6 mm diam., mesocarp juicy, translucent; seeds 2, 4.5–5.0 mm long, 2.5 mm diam., scarcely flattened, reddish purple, minutely pale-speckled.

Anthurium remotigeniculatum is recorded only from Peru, where it occurs in the provinces of San Martín and Amazonas at 530 to 1,160 m, in tropical moist and tropical premontane wet forest life zones.

This species is characterized by its terrestrial habit, short cataphylls that remain semi-intact, D-shaped petioles which are obtusely and bluntly sulcate adaxially, and its elongate, long-tapered, dark purple spadix. Especially significant is the leaf blade base, which is long-attenuate (especially in older plants) and eventually naked, making the geniculum seem remote sometimes for as much as 16 cm from the base of the blade, hence the specific epithet. Also characteristic are the coriaceous leaf blades which are ovate, obovate, or broadly elliptic, dark green above and conspicuously paler below, appearing speckled and with a translucent, alveolate pattern under high magnification on fresh plants.

Anthurium remotigeniculatum is most closely allied to *A. pachylaminum*, which differs in having more coriaceous leaf blades lacking the remote geniculum.

Although most of the specimens of *A. remotigeniculatum* display the remote geniculum characteristic very clearly, there are some exceptions. Specimens lacking this feature otherwise show remarkable similarity to more typical material. Observations on living material show that the same plant may produce the characteristic leaves with a remote geniculum and "normal" leaves at the same time, and such aberrant specimens have thus been included in the species concept.

PERU. AMAZONAS: Prov. Bagua, 15.6 km E of main plaza in Bagua, 5 km above La Peca, 1,051–1,160 m, 5°33'S, 78°21'W, *Croat 58360* (B, BM, F, GH, K, M, MBM, MO, NY, P, QCA, SEL, US, USM, W). SAN MARTÍN: Tarapoto–Yurimaguas, 1,200 m, cultivated at SEL (#81-2283) (MO); Dtto. Tarapoto, Tarapoto–Yurimaguas, Km 13, 750–1,000 m, *Rimachi 5781* (IBE); Km 12–13.5, 700 m, *Rimachi 5173* (IBE); Río Huallaga, Tarapoto–Yurimaguas, 530 m, 6°30'S, 76°21'W, *Croat 58114* (B, K, GH, M, MO, NY, QCA, RSA, SEL, TEX, US, USM).

Anthurium salvadorensense Croat, Selbyana 5(3–4): 333. 1981. TYPE: El Salvador. Ahuacha-

pán: 1.5 mi. SW of Tacuba on road to San Francisco Menéndez, riverbank of Río Chokama, 700 m, *Croat 42169* (holotype, MO 2583750; isotypes, CAS, F, ITIC, K, LE, M, MEXU, RSA, SEL, TEX, US). Figures 269, 273.

Terrestrial or epilithic; stem short, 2–5 cm diam.; roots numerous, dense, descending to spreading or ascending, pale green to tinged reddish, smooth to pubescent, short and moderately thick, bluntly pointed at apex, 4–10 mm diam.; cataphylls moderately coriaceous, shortly lanceolate, 5–12.5 cm long, pale yellowish green, acute and apiculate at apex, drying light to dark brown, persisting partially intact, eventually deciduous. *Leaves* erect to spreading; petioles 9.5–46 cm long, (4)6–10 mm diam., \pm quadrangular to D-shaped, broadly and shallowly to deeply sulcate, sometimes with medial rib adaxially, the margins blunt to sharp and raised, rounded to multi-ribbed abaxially, the surface pale-speckled; geniculum thicker than petiole and paler than petiole, 1–2 cm long; blades subcoriaceous, elliptic to broadly elliptic to oblanceolate, gradually to abruptly acuminate at apex (the acumen downturned, ca. 15 mm long), acute to obtuse to narrowly rounded at base, 25–65 cm long, 8–26 cm wide, broadest at or above middle, the margins undulate; upper surface matte to semiglossy, lower surface matte; medium green above, slightly paler below; midrib above flat with weak medial ridge at base, becoming obtusely angular and eventually sunken toward apex, below higher than broad, 1–4-ribbed at base, becoming prominently and convexly raised or convexly raised with a rib toward the apex and slightly paler than surface; primary lateral veins 7–14 per side, departing midrib at 45–60° angle, straight, loop-connected in the upper half, convexly raised above and below, slightly paler than surface; interprimary veins few, raised above and below; tertiary veins sunken to flat above, raised below; collective vein arising from about the middle of the blade or higher, sunken above, raised below, 5–12 mm from margin. *Inflorescences* erect to spreading; peduncle 13–57 cm long, 3–7 mm diam., 1.4–2.8 \times as long as petiole, light green, terete, weakly multi-ribbed; spathe erect to spreading, becoming recurved, moderately coriaceous, pale yellow-green (B & K yellow-green 8/10), ovate-lanceolate to oblong-lanceolate, 4.5–10 cm long, 1–4.3 cm wide, broadest just above the base, inserted at 155–170° angle on peduncle, acuminate at apex (the acumen apiculate and inrolled), subcordate and decurrent on peduncle at base; spadix pale green (B & K green 8/5), sessile, cylindrical

to weakly tapered, somewhat curved, 2.5–11 cm long, 7–12 mm diam. near base, 4–7 mm diam. near apex; flowers \pm irregularly 4-lobed, 2–3.3 mm long, 2.5–3.6 mm wide, the sides prominently jaggedly sigmoid; 6–8(10) flowers visible in principal spiral, 9–12 in alternate spiral; tepals smooth, matte; lateral tepals 1.4–1.7 mm wide, the inner margins rounded, somewhat erose, sometimes turned up against pistil, the outer margins irregularly 2–4-sided; pistils weakly emergent, prominently raised before stamens emerge, dark green; stigma circular to ellipsoid, 0.3–0.4 mm long, erect and brushlike, droplets appearing 2–4 days before stamens emerge, stamens emerging rapidly in a complete sequence from the base, lateral stamens almost to apex before stamens emerge; anthers pale green, 0.8–1.2 mm long, 0.7–1.3 mm wide, contiguous, inclined over pistil; thecae weakly divaricate; pollen pale yellow, soon fading to white, sweetly fruit-scented. *Inflorescence* spreading; spathe persisting and erect; spadix 6.5–10.5 cm long, ca. 2 cm diam.; berries orange-red (B & K yellow-red 5/2.5 to red 4/10), broadly obovoid, rounded to flat or weakly indented at apex, 5.5–9 mm long, 4–9 mm diam.; pericarp moderately thickened, with numerous punctiform raphide cells especially in the apical half; mesocarp pulpy or mealy, with numerous raphide cells; seeds 1 or 2, yellowish white to tan, obovoid to broadly obovoid, 6–6.5 mm long, 5–5.8 mm diam., 3 mm thick, densely covered with punctiform raphide cells.

Anthurium salvadorensis is known only from El Salvador and Guatemala at 500 to 800 m. It was first collected by Sixto Alberto Padilla in 1922 in the Department of Ahuacapán in El Salvador. The species was later collected by Paul C. Standley in the adjacent Department of Jutiapa in Guatemala.

This species is a typical member of the section, and earlier collections were confused with *A. schlechtendalii*, to which it is related. *Anthurium schlechtendalii* differs in being a usually well-rooted plant with fewer, very large fleshy roots and a usually almost elliptic blade, but especially by its inflorescence, which has a pale green, ovate-lanceolate spathe that is weakly convolute at the base and erect, enshrouding the usually short, pale green spadix. *Anthurium schlechtendalii* differs in having usually oblanceolate blades, a coriaceous, more lanceolate, prominently reflexed, usually purplish spathe, and a more elongate, purplish spadix.

EL SALVADOR. AHUACAPÁN: San Francisco Menéndez-Tacuba, El Imposible, 500 m, *Bernhardt s.n.* (MO), *Croat 42092* (B, BM, MO, RSA, U, W); Río Chokama, 1.5 mi. S of Tacuba, 700 m, *Croat 42169* (CAS, F, ITIC, K,

LE, M, MEXU, MO, RSA, SEL, TEX, US). GUATEMALA. JUTIAPA: Jutiapa, *Standley 76313* (F, US); SW of San Cristóbal, *Dunn et al. 23222* (UMO); Monjoy Canyon, 8 mi. W of San Cristóbal, 530 m, *Dunn et al. 19* (MO).

Anthurium salviniae Hemsley, *Diagn. Pl. Nov. Mexic.* 36. 1878. TYPE: Guatemala. Volcán de Fuego, *Salvin s.n.* (holotype, K). Figures 15, 20, 270, 274, 276.

Anthurium giganteum Matuda, *Madroño* 10: 169. 1950. non Engl. 1898. TYPE: Mexico. Chiapas: Escuintla, Salto de Agua, *Matuda 18043* (holotype, MEXU; isotype, UC).

Anthurium enornispadix Matuda, *Revista Soc. Mex. Hist. Nat.* 11: 94. Dec. 1950. TYPE: Same as *Anthurium giganteum* Matuda.

Epiphytic, rarely epilithic; stem to 6 cm diam.; roots dense, usually ascending, some descending, moderately numerous, greenish to white, pubescent, moderately short and tapered, 3–6 mm diam.; cataphylls thick, fistlike, cucullate, rounded at apex, drying brown, persisting intact, ultimately becoming fibrous at base. *Leaves* erect to spreading; petioles (3)5–23 cm long, 10–20 mm diam., \pm D-shaped to terete, flattened to sulcate adaxially, the margins not prominent, rounded abaxially (once reported as prominently 5–7-ribbed), the surface pale-speckled; geniculum paler and thicker than petiole, 0.7–2 cm long; blades moderately coriaceous, obovate to oblanceolate to broadly elliptic, acuminate to obtuse at apex, attenuate to rounded or truncate (rare subcordate) at base, (32)39–180 cm long, (9)13–50 cm wide, broadest usually above (sometimes at or near the middle), the margins slightly undulate; both surfaces semiglossy, medium green (B & K yellow-green 4/7.5) above, slightly paler below; both surfaces drying greenish to brownish green; midrib convexly raised at base, becoming acute toward the apex above, convexly raised at base, becoming obtusely raised toward the apex below; primary lateral veins 9–24 per side, convexly raised above and below; interprimary veins rarely present; tertiary veins weakly raised to obscure above, weakly raised to flat and darker than surface below; collective vein arising from near the apex or absent (often from below the middle in small plants), weakly raised, 3–5 mm from margin. *Inflorescences* spreading to usually pendent, shorter than leaves; peduncle 16–80 cm long, 2–5 mm diam., 3.1–10.3 \times as long as petiole, terete; spathe spreading to recurved, coriaceous to subcoriaceous, purple or sometimes green tinged with red or purple (B & K yellow-green 6/5), lanceolate-linear, (4)10.5–40(50) cm long, 1–2.5 cm wide, inserted at 45–90° angle on peduncle,