the eastern slope of the Andes which approaches *A. santiagoense* in size is *A. fasciale*, which has more or less oblong leaf blades with more irregular primary lateral veins, and petioles that are rounded abaxially. *Anthurium narinoense*, from the Pacific slope in Colombia, is remarkably similar in overall appearance and differs mainly by its more slender spadix.

ECUADOR. MORONA-SANTIAGO: Río Bomboiza and Río Zamora confluence, Proveduria, 600 m, 3°25'S, 78°27'W, *Palacios 1492* (MO, NY, QAME); Cordillera de Cutucú, W slopes, Logroño-Yaupi, 2°46'S, 78°6'W, *Madison et al. 3382* (SEL).

Anthurium sarukhanianum Croat & Haager, sp. nov. TYPE: Mexico. Guerrero: 2–3 km N of Zihuatanejo, dry slopes, less than 100 m, *Haager s.n.* (holotype, MO 3582582; isotypes, MEXU, PR). [Cultivated in Praha and Brno.] Figures 277, 284.

Planta epilithica; internodia brevia, ad 3 cm diam.; petiolus U-formatus, adaxialiter sulcatus, abaxiliter rotundatus, 6–10 cm longus, 12–17 mm diam.; lamina oblanceolata ad anguste obovata, 40–75 cm longa, 17–23 cm lata; nervis primariis lateralibus 9–12 utroque; pedunculus 20 cm longus; spatha erecta, viridis multum suffusa purpurea introsum, 3.5–5 cm longa, 2.5–3.5 cm lata; spadix clavatus, 4–5 cm longus, 1.3–1.7 mm diam.

Epiphytic, to less than 1 m tall; stem short, 3 cm diam.; roots dense, 3–5 mm diam., whitish (green when moistened); cataphylls triangular, 7 cm long, weathering into brown fibers. *Leaves* erect-spreading; petioles 8–12 cm long, 12–18 mm diam., obtusely U-shaped, deeply sulcate adaxially, the margins erect to incurved (in plants cultivated under epiphytic conditions), rounded abaxially; geniculum shaped like and paler than petiole, 1.2–1.7 cm long; blades moderately coriaceous, oblanceolate to narrowly obovate, shortly acuminate at apex, acute to narrowly rounded at base, 40–75 cm long, (12)17–23 cm wide, the margins broadly and conspicuously undulate; upper surface weakly quilted, glossy, medium green, lower surface matte, slightly paler; midrib above convexly raised (with obscure medial rib on drying), becoming convexly raised toward the middle, below prominently convexly raised and weakly speckled; primary lateral veins 9–12 per side, departing midrib at 40–45° angle, moderately straight to the margin, then ascending, convex on both surfaces; interprimary veins lacking or few; major tertiary veins weakly sunken above, weakly raised and slightly darker than surface below; reticulate veins visible only on lower surface; collective vein absent. *Inflorescences* erect, much shorter than leaves; peduncle 20 cm long, 5 mm diam., drying 3.5 mm diam., 2–3× as long as petiole, terete; spathe erect, broadly ovate, 3.5–5 cm long, 2.5–3.5 cm wide, green, heavily tinged or mottled with purple on both surfaces, especially on the inner surface and along margins outside, inserted at 30° angle on peduncle, rounded and retuse at apex (the acumen short apiculate), rounded to subtruncate at base, the margins tightly recurled, meeting at 180° angle, then decurrent for a short distance; spadix medium green, clavate, sessile, held at 160° angle from peduncle, 5 cm long, 7 mm diam. near base, 1.3–1.7 mm diam. near apex, broadest just below the apex, broadly rounded at apex, evenly tapered to the base; flowers rhombic to sub-4-lobed, 2.3–2.7 mm long (fresh), 1.8–2.2 mm long (dry), 1.8–2.3 mm wide (fresh), 2–2.5 mm wide (dry), the sides almost straight to smoothly sigmoid parallel to spiral, jaggedly sigmoid perpendicular to spiral; 13–16 flowers visible in principal spiral, to 20 or more in alternate spiral; tepals semiglossy, minutely papillate, with few subrounded inclusions visible through the epidermis, drying matte, light reddish brown, weakly warty, with a thin, loose layer of wax; lateral tepals 1.2–1.5 wide, shield-shaped, the inner margins almost straight, the outer margins weakly acuminate; pistils green, umbonate, protruding weakly into the space between the tepals, the exposed area 0.5 mm diam., soon completely obscured by the stamens; stigma linear, drying 0.35 mm long; stamens emerging slowly beginning at the middle of the spadix and proceeding toward both ends, the laterals preceding the alternates, clustered tightly over the pistil; anthers whitish, 0.5 mm long, 0.6 mm wide, held at the level of the tepals; thecae narrowly ovoid, somewhat divaricate. *Infructescence* not known.

Anthurium sarukhanianum is narrowly endemic to western Mexico, known only from the type locality in the state of Guerrero, where it is locally common.

It can be confused with *A. schlechtendalii* subsp. *jimenezii* or *A. halmoorei*, which occur in similar habitats in western Mexico, but can be distinguished from either by its conspicuously clavate spadix, a feature unique among Central American species of *Pachyneurium*.

This species was first collected in 1977 by Jiri Haager of Prague, Czechoslovakia, and is named in honor of José Sarukhán, Director of the Instituto de Biología of the Universidad Autónoma de México, who assisted in the preparation of Haager's expedition in Mexico.

MEXICO. GUERRERO: 2–3 km N of Zihuatanejo, near sea level, *Haager s.n.* (MO, MEXU, PR).

Anthurium schlechtendalii Kunth, Enum. Pl. 3: 75. 1841.

a. Anthurium schlechtendalii subsp. **schlechtendalii.** TYPE: Mexico: Hacienda de La Laguna, *Schiede & Deppe s.n.* (not seen). Figures 278, 285, 286.

Anthurium mexicanum Liebm., Vidensk. Meddel. Dansk Naturhist. Foren. Kjobenhavn 1: 21. 1849. TYPE: Mexico. Veracruz: between Colipa & Misantla (not seen).

Anthurium kunthianum Liebm., Ann. Sci. Nat. Bot. ser. 4, 2: 372. 1854. TYPE: Mexico (no type cited).

Anthurium brachygonatum Schott, Prodr. Aroid. 468. 1860. TYPE: Mexico. Veracruz: Córdoba, *Kerber s.n.* (holotype, B).

Anthurium tetragonum Hook. ex Schott, Prodr. Aroid. 475. 1860. TYPE: locality unknown, Schott Aroid Drawing #541 (Schott Aroideae 541 serves as type).

Anthurium fortinense Engl., Bot. Jahrb. Syst. 25: 366. 1898. TYPE: Mexico. Veracruz: Fortín, *Kerber 9b* (holotype, B).

Anthurium tikalense Lundell, Wrightia 3:161, fig. 55. 1966. TYPE: Guatemala. Petén: Tikal National Park, on temple in Group "H," Mar. 1961, *Lundell 18198* (holotype, LL).

Epiphytic or epilithic; stem usually short, but reported to 40 cm long, 2.5–5.5 cm diam.; leaf scars obscured by root mass, to 4.2 cm wide; roots numerous, dense, ascending to descending, greenish to tan, smooth, short to moderately elongate, tapered, 3–8 mm diam.; cataphylls moderately coriaceous, curved, 7.5–16 cm long, caudate-apiculate at apex, drying brown, initially persisting intact, but eventually as a reticulum of fibers. *Leaves* erect; petioles (2.5)10–23 cm long, 4–20 mm diam., quadrangular to trapezoidal, rarely D-shaped or terete, mostly widest adaxially, flattened to shallowly sulcate and with sharp margins adaxially, sharply to bluntly ribbed abaxially, rarely rounded; geniculum somewhat thicker and paler than petiole, 1–2 cm long; blades coriaceous, obovate-elliptic to broadly oblanceolate, acute to short-acuminate at apex (the acumen apiculate), acute to obtuse at base, (16.5)30–140(175) cm long, (4.5)10–60 cm wide, broadest near or above middle, the margins prominently undulate; both surfaces matte to semiglossy, medium green above, paler below, drying greenish; midrib flat to weakly raised at base, becoming more acute (sometimes weakly ribbed), diminishing and sunken at apex above, raised and square at base below, convexly raised at apex; primary lateral veins 15–16 per side, departing midrib at 50° angle, straight almost to the margin, then arcuate toward the apex, sharply to convexly raised and paler than surface above and below; tertiary veins flat, scarcely visible above, darker than surface below; collective vein arising from near the apex, sunken above, raised below, 2–5 mm from margin. *Inflorescences* erect to spreading, sometimes pendent, shorter than leaves; peduncle 10–43 cm long, (4)6–13 mm diam., 1.6–7.4× as long as petiole, plain green or tinged with violet-purple, terete to weakly flattened and ribbed; spathe spreading to strongly reflexed, coriaceous, plain green or heavily tinged with violet-purple to red or entirely purple, narrowly triangular to lanceolate, (8)10–28 cm long, (0.7)1.5–5 cm wide, inserted at 70° angle on peduncle, acuminate at apex (the acumen inrolled), obtuse at base; spadix green to gray to brown to red to purplish violet, tapered, curved, (5.5)8–29 cm long, (7)17–20 mm diam. near base, 4–6 mm diam. near apex; flowers square, (2)2.2–2.6 mm in both directions, the sides straight to weakly sigmoid; 7–17 flowers visible in principal spiral, 10–14 in alternate spiral; tepals matte, purplish punctate; lateral tepals 1–1.3 mm wide, the inner margins convex and turned up against pistil; pistils emergent to 1 mm, dark purple to brown; stigma linear, 0.8 mm long, droplets appearing ca. 4 days before stamens emerge; stamens emerging rapidly from the base, lateral stamens emerging to midway before alternates emerge; filaments translucent, soon retracting, 0.2–0.5 mm long, 1 mm wide; anthers yellow to pale orange, 0.9 mm long in both directions, inclined over the pistil; thecae ± oblong, scarcely divaricate; pollen orange fading to cream, yeasty-scented at anthesis. *Infructescence* arching-pendent; spathe persisting; peduncle to 4 cm diam.; spadix 15.5–65(80) cm long, 4–6(9) cm diam.; berries bright red, obovoid to oblong to ellipsoid, rounded to acute at apex, 10–29 mm long, (5)6–7 mm diam.; pericarp thickened; mesocarp pulpy, white, with numerous raphide cells; seeds 2 per berry, greenish white, ovoid to oblong, flattened, 3–6 mm long, 1.5–3 mm diam., 1–1.5 mm thick, astringent to taste.

Anthurium schlechtendalii consists of two subspecies. Subspecies *schlechtendalii* ranges from Mexico (central Veracruz) to Nicaragua on the Atlantic slope, from near sea level to 1,600 m (most common below 1,000 m) in various life zones.

Anthurium schlechtendalii is characterized by its trapezoidal to quadrangular petioles, coriaceous spathe, tapered spadix, and bright red berries.

This taxon is most easily confused with *A. schlechtendalii* subsp. *jimenezii*, from the Pacific slope of Mexico, which differs by occurring in sea-