persisting as linear fibers, probably deciduous. Leaves with petioles 6-7 cm long, 4-5 mm diam., broadly sulcate adaxially, rounded abaxially; geniculum 0.4-0.5 cm long; blades, oblanceolate, narrowly acuminate at apex, narrowly cuneate at base, 45-48 cm long, 6-8 cm wide, broadest above the middle, both surfaces matte; midrib prominently and narrowly raised above and below; primary lateral veins 10-15 per side, departing midrib at 20-30° angle, arcuate to the collective vein; reticulate veins prominulous; collective vein arising from one of the lowermost primary lateral veins, 3-4 mm from margin. Inflorescences equaling or longer than leaves; peduncle 40-48 cm long, to 5 mm diam., terete; spathe narrowly lanceolate, inserted at 45° angle on peduncle; spadix greenish, glaucous, long-tapered, 20-24 cm long, 13 mm diam. near base, 6 mm diam. near apex; flowers rhombic, 2-2.4 mm long, 2.4-2.6 mm wide; 13-14 flowers visible in principal spiral, 9-10 in alternate spiral; pistils not emergent; stigma ellipsoid, slitlike, 0.5 mm long; stamens emergent, held at edge of tepals; thecae ovoid.

Anthurium machetioides is endemic to central Mexico on the Atlantic slope. The type was from the region of Chinantla in northeastern Oaxaca (a region comprising parts of four districts south of Valle Nacional), at 1,200 m in "selva baja caducifolia," and a second collection was made relatively nearby at 200 m in the District of Tuxtepec (between Valle Nacional and Tuxtepec).

This species is characterized by its oblong-linear leaves with a collective vein arising from near the base, primary lateral veins that are scarcely more prominent than the tertiary veins, and a very elongate, gradually tapered spadix.

In describing this species Matuda posited its relationship as sect. Leptanthurium; however, despite the fact that it has a collective vein arising from the base, its affinities are more likely with Anthurium schlechtendalii, which often has a collective vein from near the base in juvenile leaves. It differs from A. schlechtendalii in its proportionally narrow leaves, the presence of a collective vein, and in its proportionally much longer spadix.

MEXICO. OAXACA: Chinantla, 1,200 m, Ramírez 144 (MEXU); Dist. Tuxtepec, Chiltepec, 200 m, Martínez-Calderón 844 (LL, MICH).

Anthurium maguirei A. Hawkes, Bull. Torrey Bot. Club 75: 633. 1948. TYPE: Surinam. Table Mountain, 564 m, Maguire 24218 (holotype, NY; isotypes, F, US). Figure 191A.

Description based on dried material only. Terrestrial or epiphytic; stem moderately elongate, horizontally creeping; internodes short, 0.8-1 cm diam.; roots moderately few, brownish, smooth, moderately slender and elongate, ca. 2-3 mm diam.; cataphylls broadly triangular, 1.5-3.5 cm long, acute at apex, reddish brown to dark brown, persisting intact. Leaves with petioles 4.5-21 cm long, ca. 2-3 mm diam., apparently subterete or C-shaped, sharply and narrowly sulcate adaxially, rounded abaxially; geniculum slightly thicker than petiole, 0.3-0.7 cm long; blades coriaceous, oblong-ovate to broadly elliptic, obtuse at apex (the acumen apiculate), rounded (occasionally obtuse) at base, 9.5-16 cm long, 2.8-5.7 cm wide, broadest at or below the middle; both surfaces matte. yellowish brown; midrib apparently acutely raised above, convexly raised below; primary lateral veins 5-8 per side, departing midrib at 30-45° angle, arcuate, probably flat or weakly sunken above, raised below; interprimary veins almost as conspicuous as primary lateral veins; tertiary veins weakly raised below; collective vein arising from near the apex, sunken above, raised below, equally as prominent as primary lateral veins, 2-6 mm from margin. Inflorescences longer than leaves; peduncle 22-26.5 cm long, ca. 2-3 mm diam., 3.1-5.5 × as long as petiole, terete; spathe probably spreading or reflexed, subcoriaceous, green, lanceolate, 3-4 cm long, 0.6-0.8 cm wide, broadest near the base, acuminate at apex (the acumen inrolled, 1-2 mm long), acute at base; stipe 2-2.2 cm long in front, 1.7-1.8 cm long in back; spadix green, cylindroid, 4.3-4.5 cm long, 4 mm diam.; flowers square, 2-2.4 mm in both directions, the sides straight to smoothly sigmoid; 5-6 flowers visible in principal spiral, 3-4 in alternate spiral; tepals apparently smooth; lateral tepals 1.2-1.5 mm wide, the inner margins straight, the outer margins 2-sided; pistils exposed; stigma linear, 0.2-0.3 mm long; anthers 0.4 mm long, 0.5 mm wide, inclined over and obscuring the pistil; thecae oblong-ovoid, slightly divaricate. Infructescence not seen.

Anthurium maguirei appears to be a local relict of the Guiana Shield flora, known only from Table Mountain in Surinam at 564 to ca. 1,000 m. It has been recorded as growing terrestrially in a "marshy" area as well as "terrestrial/epiphytic, climbing," although the last attribution is dubious.

This species is characterized by its very small size, moderately elongate stem and more or less elliptic leaf blades. It is one of the most distinctive species within sect. *Pachyneurium* and is unlikely

to be confused with any other. Its presumed closest ally is *A. bonplandii* subsp. *bonplandii*, which is much larger in overall size and occurs further to the west at lower elevations.

Anthurium yutajense is another relict species of the Guiana Shield which superficially resembles A. maguirei. The former is placed provisionally in sect. Urospadix because its leaf blades have a collective vein originating at the base, while leaves of A. maguirei have free-ending (except near the apex) primary lateral veins.

SURINAM. Table Mountain, 564 m, Maguire 24218 (F, NY, US); Tafelberg, Herbarium Suriname Forest Service 16571 (MO, U).

Anthurium manabianum Croat, sp. nov. TYPE: Ecuador. Manabí: Portoviejo-Pichincha, 12 km E of San Plácido, 450 m, Harling & Andersson 24750 (holotype, GB 1304-9, 1304-10). Figures 191, 192.

Planta terrestris aut epiphytica; petiolus 22 cm longus, 6–8 mm diam., complanatus; lamina late oblanceolata, 95.5 cm long, 27 cm lata; pedunculus 24 cm longus; stipes 2.5–3 cm longus; spadix cylindricus, 6.5–10 cm longus, 4 mm diam., purpureo-brunneus.

Description based on dried material only. Terrestrial; stem, roots and cataphylls unknown. Leaves spreading; petioles 22 cm long, 6-8 mm diam., apparently flattened adaxially, with sharply raised margins; geniculum slightly darker and scarcely thicker than petiole, 1 cm long; sheath 3 cm long; blades chartaceous (probably young), broadly oblanceolate, shortly acuminate at apex, long-attenuate at base, 95.5 cm long, 27 cm wide, broadest in the upper third, the margins slightly sinuate; both surfaces nearly matte, gray-green; midrib weakly and convexly raised toward the base, more prominently raised toward the apex above, prominently convex below; primary lateral veins ca. 27 per side, departing midrib at 40-50° angle, straight to the collective vein, convexly raised above, less conspicuously so below; interprimary veins absent except near the apex, almost as conspicuous as primary lateral veins; tertiary veins obscure above, weakly visible below; reticulate veins not visible; collective vein arising from near the base, as conspicuous as larger tertiary veins, 2-8 mm from margin. Inflorescences spreading; peduncle 24 cm long, 2 mm diam., 1.1 × as long as petiole, green, terete; spathe erect-ascending, chartaceous, green with numerous, conspicuous raphide cells, oblongelliptic, 9-10 cm long, 1.3-1.5 cm wide, broadest at or near the middle, acuminate-caudate at apex (the acumen 10 mm long), obtuse-rounded at base;

stipe 2.5-3 cm long; spadix purplish brown, cylindroid, moderately curved, semi-erect, held at ca. $30-40^{\circ}$ angle from peduncle, 6.5-10 cm long, 4 mm diam. throughout or 3 mm diam. near apex; flowers square, 1.2-2 mm long, 1.5-2 mm wide, the sides straight to smoothly or jaggedly sigmoid; 3-5 flowers visible in principal spiral, 5-8 in alternate spiral; tepals very weakly papillate; lateral tepals 0.9-1.1 mm wide, the inner margins rounded, weakly erose, the outer margins 3-sided; pistils not visible; stamens \pm erect; filaments exserted 0.2-0.4 mm; anthers brownish yellow, 0.5-0.6 mm long, 0.2-0.4 mm wide; thecae oblong-ellipsoid, not divaricate. Infructescence not seen.

Anthurium manabianum is known only from the type specimen, collected in Ecuador in Manabi Province (hence the name) in a premontane wet forest life zone at 450 m.

This species is characterized by its broadly oblanceolate, thin, greenish drying blades which are shortly acuminate at the apex and attenuate at the base, and by its small, long-stipitate, weakly tapered, purplish brown spadix.

Anthurium manabianum appears to be superficially similar to A. lennartii; see discussion of that species for details.

ECUADOR. MANABÍ: Portoviejo-Pichincha, 12 km E of San Plácido, 450 m, Harling & Andersson 24750 (GB).

Anthurium manuanum Croat, sp. nov. TYPE: Peru. Madre de Dios: Manú, Salvación a Gloria, 710 m, *Vargas 17747* (holotype, CUZ). Figure 192A.

Planta epiphytica; internodia ad 1.5 cm diam.; cata-phyllum persistens intactum apud nodos superiores; petiolus 4.5–9 cm longus, 3–4 mm diam., D-formatus, adaxile sulcatus, margine et costa media manifeste elevata; lamina subcoriacea, oblanceolata, 26–39 cm longa, 7–12 cm lata. Inflorescentia tam longa quam petioli; pedunculus 8 cm longus; spatha linearis-lanceolata, 4–5 cm longa, 8 mm lata; spadix glaucus, cylindricus, 4.2 cm longus, 3–4 mm diam. Baccae ignotae.

Description based on dried material only. Epiphytic; stem 1.5 cm diam.; roots brownish gray, densely woolly-pubescent, elongate, at least 3 cm long, 1–1.5 mm diam.; cataphylls probably subcoriaceous, 3–7.5 cm long, acuminate at apex, brown to brownish gray, persisting intact at least at the upper nodes, probably persisting as a reticulum of fibers on the lower ones. Leaves erect to spreading; petioles 4.5–9 cm long, 3–4 mm diam., ± D-shaped, sulcate with the margins and medial rib prominently raised adaxially, ± rounded abaxially; geniculum slightly darker than petiole, ca.