

66°8'W, *Daly et al.* 2042 (NY). SANTA CRUZ: *Weddell* 3518 (P); Andres Ibanez, 12 km E of Santa Cruz-Cotoca, 375 m, 17°46'-47'S, 63°04'W, *See* 34009 (NY); ca. 40 km S of Asunción dos Guarayos, Nufles de Chaves, 15°55'S, 63°05'W, *Hopkins et al.* 218 (MO); Serranía de Santiago, N slope, Chiquitos, 10 km ENE of Santiago de Chiquitos, 900 m, 18°20'S, 59°28'W, *Daly et al.* 2243 (MO). BRAZIL. ACRE: Mpo. Sena Madureira, Rio Iaco, *Cid & Nelson* 2757 (INPA). AMAZONAS: cultivated, INPA campus, Manaus, *Nelson* 1335 (MO); N of Coreiro, 10 km downstream from Manaus, *Leppard* 1645 (K); Solimões, Mamma, *Kuhlman* 1191 (RB); Lago do Januári, Manaus, *Coelho* 638 (INPA); Manaus, 50 m, *Croat* 53563 (B, G, IBE, INPA, K, MO, NY, RSA, TEX, US); Rio Acre, behind Santa Maria, W bank of Rio Acre, Boca do Acre, *Prance et al.* 2361 (INPA), 2371 (INPA, NY, US); Rio Madeira basin; Humayta, near Livramento, on Rio Livramento, *Krukoff* 6767 (NY). MATO GROSSO: Aripuanã, Cidade Humboldt, 10°12'S, 59°21'W, *Rodrigues* 9816 (INPA); Chapada dos Guimarães, *Hutchison* 8553 (UEC); Porto Espiridião-Porto Velho, 286 km NW of Porto Esperidião, on BR-364-MT, *Hutchison* 8602 (MO, UEC); Urucum, Corumba, 19°00'S, 57°35'W, *Pereira, Egler & Graziela* 447 (RB); Serra Ricardo Franco, 350 m, 15°S, 60°W, *Windisch* 1514 (K). RIO DE JANEIRO: cultivated, Rio de Janeiro, base of Pedra Bonita, Rue Elviro Niemeyer 14, *Casari* 165 (GUA); cultivated by Burle Marx, San Carlos, *Croat* 53701, 53710 (MO). RONDÔNIA: Rio Madeira, Ribirão, Cachoeira Misericórdia, *Prance et al.* 6721 (INPA, NY, US); Abunã-Penha Colorado, *Prance et al.* 8725 (INPA, NY, US); Mpo. Costa Marques, ca. 5 km NW of Costa Marques, 150 m, 12°25'S, 64°14'W, *See* 34548 (NY). PARAGUAY. AMAMBAY: Cerro Chanchito, 22°26'S, 56°3'W, *Schinini & Borda* 20398 (K); Cerro Memby, cultivated in Asunción, *Krapovickas & Schinini* 28533 (K); Sierra de Amambay, Montes Barrancas, Piedra Esperanza, *Hassler* 10640 (G); Parque Nacional Cerro Cora, 300 m, 22°39'S, 56°03'W, *Solomon et al.* 6987 (MO); summit of Cerro Murralla, *Casas* 3955 (NY). PERU. WITHOUT LOCALITY: cultivated at SEL, #81-76-10, and at MO, *Plowman* 6011 B (MO, NY, TEX). SAN MARTÍN: Tarapoto-Juanjui, Km 24-25, 300-500 m, 6°40'S, 76°20'W, *Croat* 50987 (F, MO), *Plowman* 6044 (GH); Rio Huallaga, 29-31 km S of Tarapoto, near El Abra, 450-540 m, 6°40'S, 76°20'W, *Gentry & Smith* 45091 (MO); 350 m, 6°35'S, 76°25'W, *Gentry et al.* 37733 (MO); Rio Mayo, 6 km S of Tarapoto-Moyobamba Rd. at Km 15, Cunumbigue village, 350 m, 6°23'S, 76°39'W, *Croat* 51094 (CM, F, K, MO, RSA).

Anthurium pranceanum Croat, sp. nov. TYPE:

Brazil. Acre: Rio Moa between Cachoeira Grande and Serra de Moa village, *Croat et al.* 12640 (holotype, INPA; isotypes, F, K, NY, U, US). Figure 241.

Planta terrestris; internodia brevia, 1-1.5 cm diam.; cataphyllum lanceolatum, persistens semi-intactum; petiulus 35-65 cm longus, 4-8 mm diam., subtteres, adaxile sulcatus; lamina ovato-elliptica ad ovata, 40-70 cm longa, 17-26 cm lata; geniculum 4-20 cm remotum; pedunculus 24-40 cm longus; spatha lanceolata, violaceus, ca. 4 cm longa, 1.2 cm lata; stipes 1-10 cm longus; spadix violaceus, ca. 5 cm longus, 5-6 mm diam.

Description based on dried material only. Terrestrial; stem 1-1.5 cm diam.; roots densely and finely pubescent, ca. 2-4 mm diam.; cataphylls subcoriaceous, lanceolate, ca. 10 cm long, acute at apex, reddish brown, persisting semi-intact. *Leaves* with petioles 35-65 cm long, 4-8 mm diam., subterete, sulcate adaxially, rounded abaxially; geniculum slightly darker than petiole, ca. 1 cm long, appearing remote from base of blade by 4-20 cm; blades moderately coriaceous, ovate-elliptic to ovate, shortly acuminate at apex, broadly rounded then abruptly attenuate at base, 40-70 cm long, 17-26 cm wide, broadest at or below the middle, lower surface dark glandular-punctate; both surfaces green to yellowish green; midrib convexly raised above, acutely raised below; primary lateral veins 6-9 per side, departing midrib at 50-60° angle, ± straight, becoming arcuate near the margin, apparently convexly raised above and below; tertiary veins weakly raised; collective vein arising from about the middle of the blade, apparently sunken above, raised below, less prominent than primary lateral veins, 7-24 mm from margin. *Inflorescences* erect, shorter than leaves; peduncle 24-40 cm long; ca. 2-5 mm diam., about half as long as petiole, terete; spathe recurled, membranous, violet, lanceolate, ca. 4 cm long, ca. 1.2 cm wide, broadest near the base, narrowly acute at base; stipe 15-28 mm long in front, 1-10 mm long in back; spadix violet, weakly tapered, ca. 7.7 cm long, 5-6 mm diam. near base, ca. 3 mm diam. near apex; flowers rhombic, ca. 2 mm in both directions, the sides ± straight to smoothly sigmoid; 4-6 flowers visible in either spiral; tepals smooth when dried; lateral tepals 1 mm wide, the inner margins straight, the outer margins 2-sided. *Inflorescence* not seen.

Anthurium pranceanum is known only from the type collection made near the Rio Moa in Acre, Brazil, below 300 m.

This species is distinguished by its ovate to ovate-elliptic leaf blades which are dark glandular-punctate below and have the geniculum situated 4-20 cm below the base of the blade.

Anthurium pranceanum is apparently most closely related to *A. krukovii*, which also has a remote geniculum but lacks dark glandular punctations on the lower surface of the leaf blade. It also bears some resemblance to *A. bonplandii* subsp. *bonplandii*, which occurs further north in the Amazon basin and often has similar dark glandular punctations. The latter differs in its proportionately narrower leaf blades which are acute to

attenuate at the base and do not have a remote geniculum.

The species is named in honor of G. T. Prance, one of the foremost explorers of Brazilian Amazonia, who has collected numerous Brazilian Araceae, including the type of *Anthurium pranceanum*.

BRAZIL. ACRE: Rio Moa, Cachoeira Grande-Serra da Moa village, Prance et al. 12640 (F, INPA, NY, U, US).

Anthurium prolatum Croat & R. A. Baker, Brenesia 16(Suppl. 1): 72. 1979. TYPE: Costa Rica. Heredia: Istarú Farm, Tirimbina, Sarapiquí, 220 m, *Lent* 2140 (holotype, F-1724125). Figures 242-245, 259.

Epiphytic; stem short, 1-2.5 cm diam.; roots few, descending, pale greenish, \pm smooth, slender, 3-5 mm diam.; cataphylls moderately coriaceous, narrowly lanceolate, 7.5-36 cm long, acute at apex with subapical apiculum, medium green, drying tan, persisting as fine linear fibers. *Leaves* spreading to pendent; petioles 1-35 cm long, 3-6 mm diam., terete to subterete, weakly flattened to flattened or rounded adaxially, rounded abaxially, the surface weakly pale-speckled; geniculum thicker and paler than petiole, 0.5-1 cm long; blades subcoriaceous to moderately coriaceous, strap-shaped to narrowly oblong-elliptic, long-acuminate at apex (the acumen weakly apiculate), narrowly acute to obtuse to narrowly rounded at base, (35)83-142 cm long, 3.5-10 cm wide, broadest at or near the middle, the margins weakly undulate; upper surface semiglossy, dark green, lower surface semiglossy to glossy, paler; midrib above acutely raised at base, becoming weakly sunken toward the apex, below prominently higher than broad at base, becoming convexly raised toward the apex and paler than surface; primary lateral veins more than 15 per side, departing midrib at ca. 55° angle, \pm straight, obscure to weakly sunken above, somewhat raised and darker than surface below; interprimary veins numerous, almost as conspicuous as primary lateral veins; tertiary veins obscure above, somewhat darker than surface below; reticulate veins prominulous above and below; collective vein arising from near the base, sunken above, weakly raised and darker than surface below, more prominent than primary lateral veins, 3-4 mm from margin. *Inflorescences* with peduncle to 39 cm long, ca. 9 mm diam., slightly longer than petiole, several-ribbed on drying; spathe spreading, subcoriaceous, pale green, linear-lanceolate, to 29 cm

long, ca. 1.5 cm wide, broadest near the base, inserted at 70° angle on peduncle, acuminate at apex (the acumen minutely inrolled), acute at base; spadix brown (fide labels) probably greenish purple, sessile, very narrowly cylindroid, slightly tapered at apex, to 60 cm long, 7-8 mm diam. near base, ca. 4 mm diam. near apex; flowers (dry) rhombic, (2.7)3.4-4.5 mm long, 1.8-2.2 mm wide, the sides jaggedly sigmoid; 7-8 flowers visible in principal spiral, 5-6 in alternate spiral; tepals epuncate, smooth; lateral tepals 2.2-5 mm wide, the inner margins convex; pistils rectangular, green; stigma oblong, ca. 0.7 mm long; filaments retracting on drying. *Infructescence* to more than 30 cm long, probably with orange berries.

Anthurium prolatum is known from western Panama and Costa Rica (in Alajuela, Limón, Heredia, and Cartago provinces) in tropical wet forest at 350-1,000 m.

This species can be distinguished by the unusual, very long and narrow leaves, cataphylls, spadix, and spathe. It is most easily confused with *A. protensum*, differing in its spadix, which is more than twice as long as any observed for *A. protensum*; its spathe, which is considerably narrower and lacking the purple markings characteristic of *A. protensum*; and its flowers, which are twice as long as those of *A. protensum*. In addition, the much more common *A. protensum* is most frequent at about 1,800 m.

COSTA RICA. ALAJUELA: Naranjo-Aguas Zarcas, 8.5 km NE of Villa Quesada, Hwy. 15, 600 m, *Croat* 46979 (MO). CARTAGO: 1.5 mi. E of Cachi, 10.2 mi. NE of junction at Paraiso, *Croat* 47087 (MO). HEREDIA: Tirimbina, Sarapiquí, Istarú Farm, *Lent* 2140 (F). LIMÓN: Lago Dabagri, W coast, toward Río Lei, 1,000 m, 9°38'N, 83°18'W, *Gómez et al.* 23155 (B, K, MO); Río Tor Amarillo, 6 km SW of Guapiles, 400 m, *Jimenez* 2113 (F). SAN JOSÉ: Parque Nacional Braulio Carrillo, entrance-Río Sucio, Estación Carrillo, 400-1,500 m, 10°5-10'N, 84°57-60'W, *Hammel & Trainer* 14266 (MO). PANAMA. BOCAS DEL TORO: Fortuna-Chiriquí Grande, 550-600 m, ca. 8°48'N, 82°10'W, *McPherson* 9154 (MO).

Anthurium protensum Schott, Oesterr. Bot. Z. 8: 181. 1858.

a. *Anthurium protensum* subsp. ***protensum***. TYPE: Costa Rica. Heredia: Volcán Barba, 2,500-2,700 m, *Oersted* 1992 (destroyed?; illustrated by Schott Aroideae 427). Figures 246-248, 260, 261.

Anthurium costaricense Engl., Bot. Jahrb. Syst. 25: 398. 1898. TYPE: Costa Rica. Cartago: above Agua Cali-