8799 (NY); Dtto. Colón, Casigua el Cubo, 150 m, Bunting et al. 7241 (NY); on the outskirts of Casigua El Cubo, sector Los Manuels, 7–14 km N of Casigua, Bunting et al. 7377 (NY); Dtto. Lagunillas, Serranía de Ziruma-El Empalado, 13 km N of Embalse, 550–600 m, Bunting et al. 11279 (NY); Dtto. Mara, 400–530 m, Steyermark et al. 1226874 (MO).

Anthurium galactospadix Croat, sp. nov. TYPE: Brazil. Acre: N bank of Rio Juruá, opposite Cruzeiro do Sul, *Prance et al. 2924* (holotype, INPA; isotypes, NY, US). Figures 140, 143, 193, 343, 344.

Planta epiphytica; internodia brevia, 2–3 cm diam.; cataphyllum lanceolatum, persistens semi-intactum; petiolus 11.5–28 cm longus, 5–10 mm diam., adaxile uninervis, abaxile rotundatus vel trinervis; lamina late oblanceato-elliptica, 51–92 cm longa, 18–34 cm lata; nervis primariis lateralis 7–14 utroque. Pedunculus (4)6–11 cm longus, 3.5–5 mm diam., 0.4–0.7-plo longiores quam petiolo; spatha late lanceolato-elliptica, (4.5)5.5–12 cm longa, 1.5–3.5 cm lata, viridis; spadix leviter contractus, 7.5–11 cm longus, 8–14 mm diam., eburnius. Baccae ignotae.

Epiphytic; stem 2-3 cm diam.; roots dense, short, 3-5 mm diam.; cataphylls coriaceous, lanceolate, 7-9 cm long, acute to emarginate at apex, drying reddish brown, persisting semi-intact as a reticulum of fibers, splitting at apex. Leaves erectspreading; petioles 11.5-28 cm long, 5-10 mm diam., D-shaped, with a prominent medial rib and sharply raised margins adaxially, rounded to 3-ribbed abaxially; geniculum shaped like and slightly thicker than petiole, 0.5-2 cm long; sheath 2.5-6.5 cm long; blades coriaceous to subcoriaceous, broadly oblanceolate-elliptic, acute to acuminate at apex, often attenuate with concave margins to long-acute to obtuse at base, 51-92 cm long, 18-34 cm wide, broadest above the middle, the margins moderately to strongly undulate; midrib sharply raised above, 3-ribbed near the base, becoming obtuse to acute below; primary lateral veins 7-14 per side, departing midrib at 40-50° angle, ascending straight or arcuate to the margin, acutely raised above, convexly raised below; interprimary veins absent except toward base and apex; tertiary veins obscure above, flat and darker than surface below, prominulous on both surfaces on drying; reticulate veins obscure; collective vein absent. Inflorescences erect; peduncle (4)6-11 cm long, 3.5-5 mm diam., $0.4-0.7 \times$ as long as petiole, terete; spathe usually erect to erect-spreading, sometimes reflexed, coriaceous, dark green to greenish white, broadly lanceolate-elliptic, flattened to navicular, (4.5)5.5-12 cm long, 1.5-3.5 cm wide, broadest at or near the middle, obtuse at apex (the acumen apiculate), acute at base, sometimes decurrent for up to ca. 1 cm; spadix pale green to creamy white, sessile, scarcely tapered, erect, slightly curved, (4)7.5-11 cm long, 8-14 mm diam. midway, 7-8 mm diam. near apex; flowers square, 1.1-1.9 mm long, 1.1-1.8 mm wide, the sides mostly straight parallel to spirals, jaggedly sigmoid perpendicular to spirals; 13-25 flowers visible in principal spiral, 15-28 in alternate spiral; tepals matte, smooth or covered with a waxy layer or minutely papillate; lateral tepals 0.5-0.8 mm, the inner margins rounded, weakly turned up against the pistil, the outer margins 2-sided; pistils emergent before stamens appear, square, ca. 1 mm in both directions, pale purplish lavender when fresh, colored ± like the tepals when dried; stigma 0.5 mm long, slitlike when young, becoming brushlike; stamens emerging somewhat sporadically from near the base, the laterals emerging to the apex before the first alternates appear, held erect on drying; anthers 0.4-0.6 mm long, 0.4-0.5 mm wide; thecae oblong-ellipsoid, not divaricate. Infructescence erect; spathe persisting; spadix (4)6-13 cm long, 0.8-1.7 cm diam.; mature fruits unknown.

Anthurium galactospadix is restricted to the western Amazon basin in "Trapecio Amazonico" in extreme southeastern Colombia, east-central Loreto near the Brazilian border in Peru, and in Acre and southern Amazonas in Brazil. It comprises epiphytes in tropical wet and tropical moist forest life zones (at least in Peru and Colombia), at 300 m or less.

This species is readily distinguished by its thick, relatively short, whitish spadix with the spathe usually longer than the spadix, its short peduncle, and its broadly elliptic-oblanceolate blades which are often attenuate with conspicuously concave margins toward the base. It is most closely related to A. ernestii, which differs in having usually thin, straw-colored cataphylls that perisist intact as fine reticulate fibers (vs. semi-intact with more coarse fibers), a shorter and narrower spathe and much less stout spadix which is variously colored but never whitish, and in usually having somewhat orange primary lateral veins upon drying (especially on the lower surface). In addition, the spadix of A. ernestii always surpasses the spathe, while in the present species it is shorter than the spathe. The specific epiphet for this species comes from "galacto-" (Greek), meaning milky white, alluding to the color of the spadix.

Two collections from Acre in Brazil (Cid & Nelson 2563 and Prance et al. 7471) are ten-

tatively placed here. They differ in having a stem only 1-1.5 cm diam., leaf blades 43-76 cm long, and 11-20 cm wide, a peduncle $0.2-0.5\times$ the length of the petiole, a spathe 4.5-6.5 cm long, 1.5-1.7 cm wide, and a spadix 3.1-5 cm long and 4-7 mm diam. In addition, the Prance et al. collection reports the spadix color as brown, and in the Cid & Nelson collection the peduncle equals the petiole in length. Another aberrant specimen is $Tessmann\ 5463$, from Yarina Cocha in Loreto, Peru, which has a more slender spadix and a spathe more than twice as long as the spadix. All of the above are probably aberrant specimens rather than representatives of distinct taxa.

BRAZIL: ACRE: Cruzeiro do Sul-Rio Branco, 44 km E of Cruzeiro do Sul, Fazenda da Dona Cabuca, 150 m, 7°38'S, 72°35'W, Croat 62329 (INPA, MO); Sena Madureira-Rio Branco, Km 5.5, 140 m, 9°04'S, 68°39'W, Croat & Rosas 62721 (CAS, IPA, K, MO, NY, US); Rio Acre, Seringal de São Francisco, Ule 9206 (K, MG); Rio Moa, Cruzeiro do Sul, 150 m, 7°37'S, 72°37'W, Croat & Rosas 62305 (AAU, F, INPA, MO); Mpo. Canamari Amazonas, Rio Jurua, opposite Cruzeiro do Sul, Prance et al. 2924 (INPA, NY, US); 1 km upstream from Floresta, 150 m, 7°37'S, 72°36'W, Croat 62533 (INPA, MO); Mpo. Cruzeiro do Sul, Cruzeiro do Sul-Rio Branco, vic. INCRA headquarters, 160 m, 7°38'S, 72°35'W, Croat 62633 (INPA, MO); Mpo. Sena Madureira, Sena Madureira, Cid & Nelson 2563 (INPA); Sena Madureira-Rio Branco, Km 7, Prance et al. 7659 (NY, INPA); Mpo. Tarauaca, Tarauaca, 8°08'S, 70°50'W, Prance et al. 7471 (NY, INPA, US). AMAZONAS: Mpo. Labrea, Rio Purus, 5 km above Labrea, Prance et al. 8126 (NY, INPA). COLOMBIA: AMAZONAS: Río Loretoyacu: NW of Leticia, Schultes & Black 8527 (COL, US). PERU. LORETO: Yarina Cocha, Pucallpa, Tessmann 5463 (NY); Prov. Coronel Portillo, Río Abujao, Caserío de J.C. Mariategui-Mejico, one hour by boat from Caserío de Abujao, 300 m, 8°15'S, 73°45'W, Diaz et al. 753 (MO).

Anthurium glaucospadix Croat, sp. nov. TYPE:
Colombia. Cundinamarca: along road between
Tena and La Mesa, 6 km NE of La Mesa,
1,300 m, 4°39'N, 74°26'W, Croat 55257
(holotype, MO 3033409; isotypes, B, CAS,
COL, F, GH, K, MBM, NY, RSA, SEL, US;
live at MO). Figures 141, 142, 144, 145,
151.

Planta terrestris aut epiphytica; internodia brevia, 3–5(6) cm diam.; cataphyllum lanceolatum aut late lanceolata; petiolus 4–26(63) cm longus, 4–13 mm diam., acute D-formatus vel C-formatus aut plus minusve subquadrangularis, adaxile complanatus aut sulcatus, abaxile rotundatus aut 3–5(8) costatus; lamina 30–110 cm longa, (8)15–38 cm lata, plerumque oblanceolata, apica plerumque rotundato; nervis primariis lateralibus (7)9–18 utroque; pedunculus 30–60(90) cm longus, 3–10 mm diam.; spatha oblongo-lanceolata, purpureo-violacea aut viridis, (6)10–32 cm longa, (1)2–3.5 cm lata; spadix glaucus, caeruleo-viridis, longus et graduatim contractus,

(7.5)14-33 cm longus, 5-12 mm diam. Baccae rubrae, oblongae, apice quadrato.

Terrestrial or epiphytic; stem to ca. 30 cm long, 3-5(6) cm diam.; roots dense, ascending, gra sh white to pale green, soft, fuzzy, heavily woollypubescent, short, tapered, less than 10 cm long, 3-6 mm diam.; cataphylls subcoriaceous, lanceolate to broadly lanceolate, 3-12 cm long, acute to prominently emarginate at apex, green tinged with red, drying tan to reddish brown, persisting as a reticulum of fibers. Leaves semi-erect to spreading, occasionally pendent; petioles 4-26(63) cm long, 4-13 mm diam., sharply D-shaped or C-shaped to ± quadrangular, flattened to sulcate, often with a medial rib adaxially, the margins acutely raised, rounded to 3-5(8)-ribbed abaxially, the surface short-lineate, sometimes pinkish at base; geniculum slightly paler and thicker than petiole, becoming minutely fissured and scurfy adaxially, 1-3.5 cm long; sheath 3-7 cm long; blades moderately coriaceous, mostly oblanceolate, sometimes elliptic or oblong-oblanceolate, mostly rounded or roundedemarginate on larger leaves, acute to slightly acuminate on smaller leaves at apex (the acumen inrolled, apiculate, sometimes inequilateral, downturned), mostly attenuate or acute (rarely rounded to obtuse) at base, 30-126 cm long, (8)15-47 cm wide, broadest in upper third, the margins slightly to moderately undulate; upper surface glossy to semiglossy or weakly glossy, medium green or yellow-green, lower surface semiglossy or occasionally matte, slightly paler, sometimes weakly to conspicuously whitish glaucescent; midrib flat at base, becoming obtusely to acutely raised toward the apex above, prominently obtuse-raised to 3-6ribbed at base, becoming prominently convex toward the apex below, paler than surface above and below; primary lateral veins (7)9-18 per side, departing midrib at (30)50-70(80)° angle, weakly arcuate-ascending to the margin, sometimes appearing sinuate, convexly raised above, prominently convexly raised below, paler than surface; interprimary veins few, scarcely visible, sunken above, weakly raised below; tertiary veins weakly sunken or weakly raised above, prominently raised below; collective vein arising from near the apex, occasionally in the lower third (especially in smaller plants), sunken above, raised below, 3-9 mm from margin. Inflorescences semi-erect to spreading or pendent, shorter than, or almost equaling leaves; peduncle 30-60(98) cm long, 3-10 mm diam., $2-7\times$ as long as petioles, green weakly tinged with red, pale short-lineate, terete to subterete, occasionally ribbed abaxially; spathe spreading to re-