A New Species of *Philodendron* subgenus *Philodendron* from Northern Colombia

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ABSTRACT

Philodendron luxurians Croat, D. P. Hannon & R. Kaufmann is being published as a new species of *Philodendron*, subgenus *Philodendron*. The species is a member of section *Philodendron* in a natural and as yet unpublished series consisting of species with repent stems, erect long-petiolate leaves, typically attractive (variegated) leaf blades and inflorescences with pluriovulate ovules with axile placentation.

KEY WORDS

Colombia, new species, *Philodendron*, section *Philodendron*, subgenus *Philodendron*

INTRODUCTION

The genus *Philodendron* with 482 published species continues to be a rich source of novelties in Araceae (Croat, 1997; Croat, Delannay & Kostelac, 2010; Croat, Swart & Yates, 2004); Grayum, 1996); and no area is richer in new species than the western Andes of South America. Although the senior author is in the process of describing many new species, this one, the product of

Figure 1. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Leaf blades, adaxial surface. Photo: R. Kaufmann.

Figure 2. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Leaf blade, abaxial surface. Photo: R. Kaufmann.

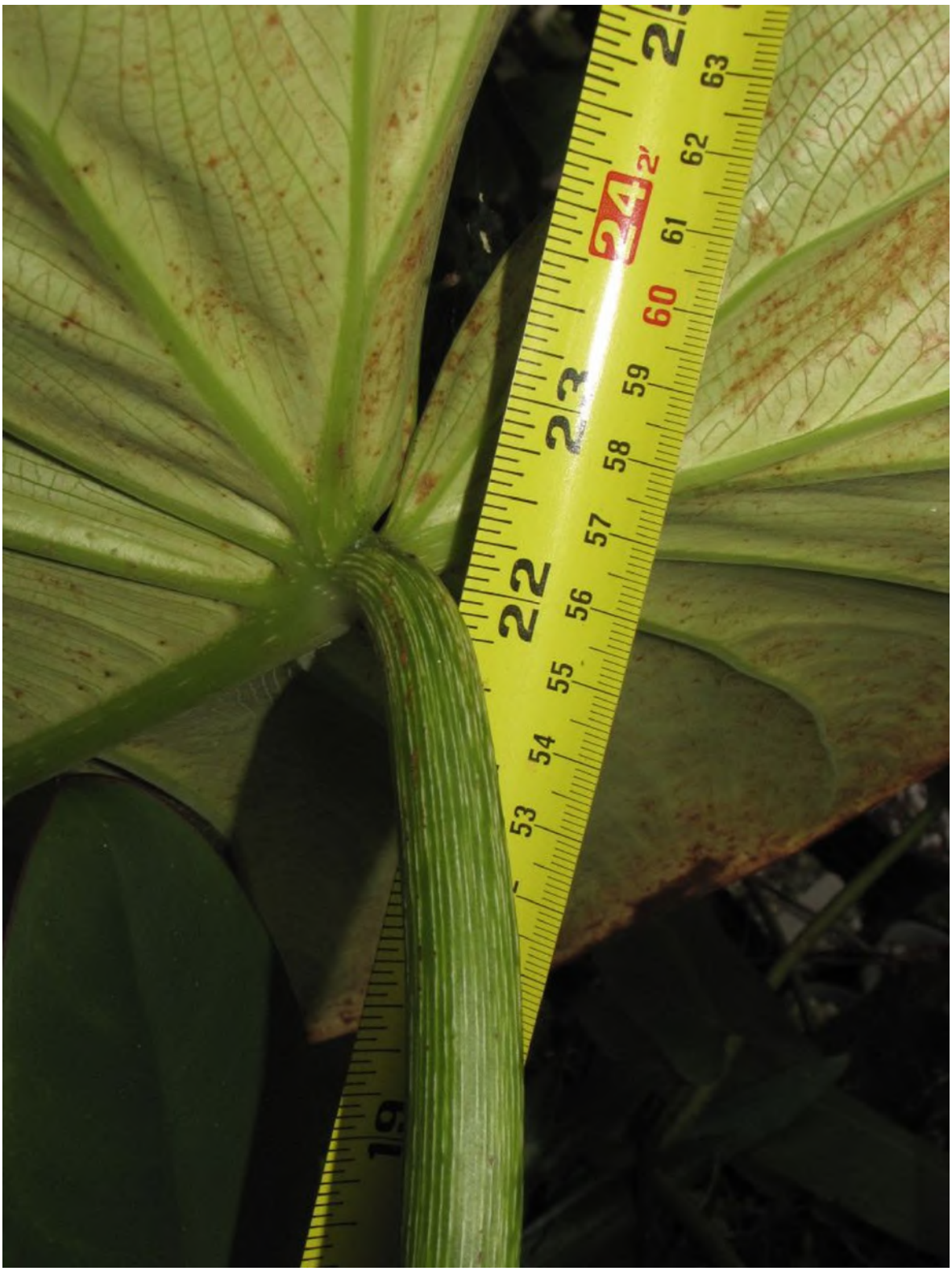

Figure 3. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Leaf blade, abaxial surface with subterete petioles. Photo: R. Kaufmann.

Figure 4. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Stem showing sharply 2-ribbed reddish cataphyll. Photo: R. Kaufmann.

Figure 5. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Stem, petioles and inflorescences. Photo: R. Kaufmann.

Figure 6. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Inflorescences 2 per axil, open one in face view. Photo: R. Kaufmann.

Figure 7. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Inflorescence with blade open and staminate portion protruding forward. Note pale-streaked petioles. Photo: R. Kaufmann.

a collaborative effort between the three authors, warrants a special publication. The species was first brought to the attention of the senior author by coauthor Ron Kaufmann who had been cultivating the plant. The species is also in cultivation at the Huntington Botanical Garden in San Marino, California. It is a spectacular addition to horticulture and a seemingly close relative of the well-known *Philodendrom gloriosum* André.

Philodendron luxurians Croat & D. P. Hannon & R. Kaufmann, **sp. nov.** Type: COLOMBIA. Chocó Department: Pacific lowlands, less than 300 m elevation, original collector unknown; cultivated at Huntington Botanical Gardens under HBG accession number 95836, vouchered by Dylan Hannon and Sean Lahmeyer, *T. B. Croat, D. P. Hannon & S. Lahmeyer 103536* (holotype, MO-2353064–65; isotypes, COL, HBG, K, QCNE, US); bar code 6353108–09). **Figures 1–14.**

The species is a member of subgenus *Philodendron* section *Philodendron*, subsect. *Philodendron*, series *Rupicola* Croat (ined.) characterized by its terrestrial habit, repent creeping stem, persistent intact cataphylls, terete petioles, ovate-cordate blades which are dark green, matte and velvety above, moderately paler and faintly purplish violet to reddish pink, semiglossy below with the 1st and 2nd pair of basal veins free to the base and conspicuous cross-veins with the appearance of crazed glass, as well as by the paired inflorescences with the spathe green on tube creamy white on blade outside (tinged heavily with red on open margins and on the other margin near the apex of the tube outside) and creamy white throughout on the inner surface.

The species is perhaps closest to *Philodendron gloriosum* André which occurs only on the eastern slopes of the Cordillera Oriental and at the edge of the llanos in Colombia. That species differs in having acuminate blades with well-developed posterior ribs, a mostly open sinus, one pair of basal veins free to the base, major veins white and glossy on the upper surface and without a highlighted zone along their margin, a slightly glossy lower blade surface and inconspicuous minor veins connective veins (lacking the look of "crazed" glass).

Terrestrial, stems creeping over the ground; **internodes** moderately short, 3–4 cm long, 1–2 cm diam., ranging up to 3.5 cm diam. near apex, with the epidermis greenish to light brown; **cataphylls** 15 –27 cm long, sharply 2-low-ribbed, turning medium brown to red-brown and persisting more or less intact with a pale network of fibers on the inner surface. LEAVES erect to spreading; **petioles** 40–87 cm long, 1.0–1.5 cm diam. (drying 7–8 mm diam., dark brown, finely ribbed, matte), subterete, smooth, semiglossy, bright medium green, prominently pale-striate, striations broken, to 2 cm long, contiguous in upper 1/3 of petiole, , the geniculum not apparent on dried specimens (only narrowed 1–2 cm distally in live plants); **blades** broadly ovate,

Figure 8. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Inflorescence with spathe tube cut open. Photo: R. Kaufmann.

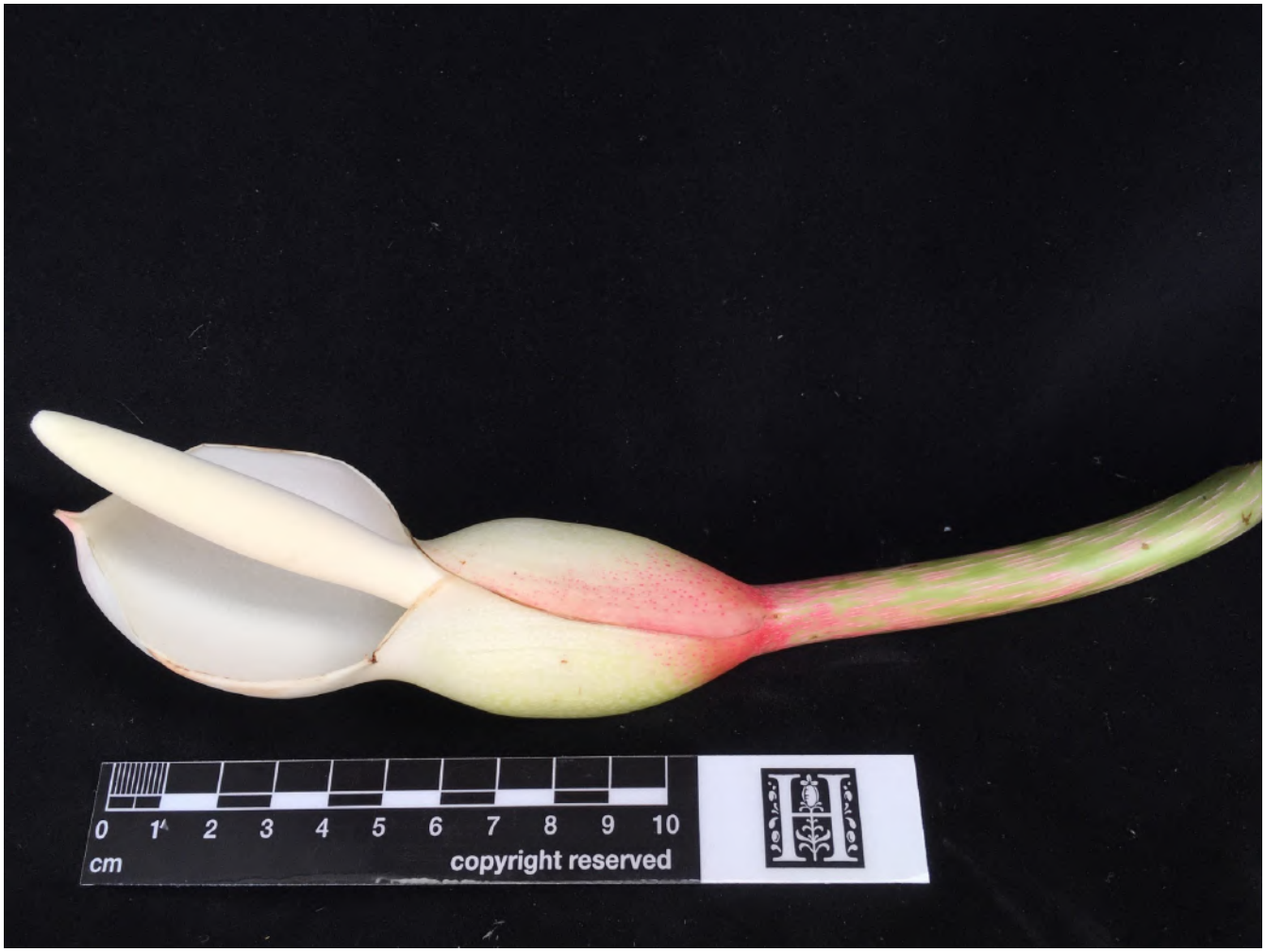

Figure 9. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Inflorescence at anthesis. Photo: D. P. Hannon.

Figure 10. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Pistillate portion of spadix and lower portion of sterile staminate portion. Photo: R. Kaufmann.

Figure 11. *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann. Stem showing light brown internodes and remnants of petioles. Photo: R. Kaufmann.

Figure 12. Leaf blade, adaxial surface: *Philodendron gloriosu*m André (L), *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann (R). Photo: D. P. Hannon.

Figure 13. Leaf blade, abaxial surface: *Philodendron gloriosu*m André (L), *Philodendron luxurians* Croat, D. P. Hannon & R. Kaufmann (R). Photo: D. P. Hannon.

Figure 14. *Philodendron gloriosum* André. Inflorescence. Photo: D. Scherberich.

38 –54 cm long, 30 –43 cm wide, 1.1–1.2 times longer than broad, 0.87 times as long as petioles, obtuse to acute and abruptly acuminate at apex, prominently cordate at base, dark green, matte and velvety above, conspicuously paler and faintly reddish pink, semiglossy below, drying gray and matte, minutely papillate above; anterior lobe 25 –36 cm long, broadly rounded on margins; **posterior lobes** broadly rounded, overlapping, 14.5–22 cm long, 18.5 cm wide; sinus hippocrepiform on younger plants, spathulate to closed on larger plants with overlapping lobes all the way to the base so that there is no open sinus; **basal veins** 5–6 pairs, the 1st & 2nd pairs free to the base; 3rd and higher pairs of veins fused to 2.5 cm, 4th & 5th fused to 7 cm; **posterior ribs** to 7 cm long, moderately straight, short, broad, scarcely or not at all naked along the margins; major veins prominently paler (pale yellowish green) and bordered by a discolorous, slightly paler margin along their length on the upper surface above, round-raised, paler green, matte and nearly concolorous below, drying concolorous above, darker brown below; **midrib** weakly sunken and paler above, narrowly rounded and darker below, drying with an irregular medial rib below; **primary lateral veins** (3–) 4 pairs, arising at a 55–65° angle, broadly flattened-concave and paler above, round-raised, pale green and matte below; **minor veins** moderately sparse and widely spaced, arising from both the midrib and primary lateral veins, drying markedly undulate, narrowly raised and darker below; cross-veins darker and conspicuous with appearance of crazed glass on lower surface, drying conspicuous and somewhat raised below. INFLORESCENCES 1–2 per axil; peduncle 8.4–9.3 cm long, 1.0 cm diam., pale green, semiglossy, tinged bright red (at least at apex), densely short pale-lineate, coarsely short-ridged at apex and on base of spathe, clearly demarcated from the spathe; **spathe** 15.5–17.7 cm long, semiglossy outside, glossy inside, smooth on both surfaces, apparently lacking resin canals on inner surface, abruptly short-acuminate at apex; **tube** 9.3 cm long, 2.7 cm diam. when furled, convolute in lower 2/3 to lower 3/4, to 3.5 cm diam. at anthesis, medium green outside, densely short-pale-lineate, tinged heavily with red on open margins and on the other margin near the apex of the tube, the inner surface creamy white throughout except tinged purplish violet on the outer margin, the constricted area to 2 cm diam. when furled; **blade** 2.3 cm diam. when furled (to 2.7 cm diam. at anthesis), to 9 cm wide when flattened, creamy white, tinged pinkish owing to minute speckles on the outside, creamy white on the inside; **spadix** sessile, 15–16.5 cm long; staminate spadix 9.3–9.7 cm long; sterile staminate portion white, 1.2–1.5 cm long, 1.2 cm wide at apex, 1.3 cm diam. at base, turning orange-brown in pickled condition; fertile staminate portion flatted laterally (narrowed parallel to the axis), the broadest portion 1.2 × 1.3 cm diam., narrowly rounded at apex, contained within the spathe, eventually forming brownish globular droplets, the constricted area 1 cm diam.; pistillate portion 5.2 cm long in front, 4.0 cm long in rear, 1.5 cm diam. in middle, 1.2 cm diam. at apex; pistils 2.4–2.5 mm? long, 1.6–2 mm diam.,

broadest across style, 1.6–1.8 mm diam. at base; **ovules** ca. 20 per locule, placentation axile, the ovules attached in the lower 2/5 of locule; locules 1.2 mm long, 0.2 mm wide; stigma (0.6)0.8–1.2 mm diam., 0.2 mm thick; style with rounded margins, obtusely 4–5 sided by compression; ovules 0.1–0.15 mm long, 0.03 mm diam., funicle short, less than ½ as long as ovule.

Philodendron luxurians is apparently endemic to Colombia, known only from the lowlands of the Colombian Chocó Department in the region of the Río Negro.

In comparison with *Philodendron gloriosum*, the inflorescence of *P. luxurians* is proportionately more long-pedunculate with the peduncle paler green and lacking the dense cluster of raised short lines at its apex; the spathe tube is whitish, proportionately narrower, more red-tinged at the base but less tinged red around the periphery of the lower portion of the blade and smoother on the surface (in contrast the peduncle of *P. gloriosum* is darker green, is conspicuously raised short-lineate at the apex, has the spathe tube more broadly elliptic, medium green and conspicuously short pale-lineate with the border of the spathe tube and much of the margin of the spathe blade tinged reddish. Moreover, the sterile male portion of the spadix for *Philodendron luxurians* is diffuse as it merges with the fertile portion of the spadix, making the line of demarcation difficult to see. In contrast, the sterile male portion of *Philodendron gloriosum* is distinct where it connects to the fertile male portion of the spadix.

The species epithet "luxurians" comes from Latin (*luxus*, *luxuriosus*), meaning extravagant, luxuriant, profuse, excessive, or immoderate, and refers to the remarkably attractive velvety leaf blades of this new species..

Prior to the recent introduction and availability of *Philodendron luxurians* in the horticultural trade, this species was represented in Exotica (Graf, 1957) under the novel cultivar name *Philodendron gloriosum* 'Terciopelo Redondo'. This name is attached to a plant or clone that is presumably, though without absolute certainty, extirpated in cultivation. As such, it is a nomenclatural entity with only historic significance. Graf's description of this plant in Exotica ("slow creeper with thick. . . velvety leaves. . . pinkish gray beneath"), the origin he provides (Chocó, Colombia) and leaf blade shape and appearance of the major veins in the photo, all agree with our circumscription of *Philodendron luxurians*. It is noteworthy that Graf viewed his 'Terciopelo Redondo' as pertaining to *Philodendron gloriosum*. In the present paper, we suggest that *Philodendron gloriosum* may in fact be the closest living ally of *P. luxurians*. This early documentation of *Philodendron luxurians* places its initial introduction to cultivation to at least 60 years ago.

Although this plant has generated recent excitement in the horticultural community, it has proven to be a challenge to grow satisfactorily for long periods. This

is another way in which the new species differs from *Philodendron gloriosum*, which is a comparatively easy subject to cultivate.

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