A New Species of Brazilian *Philodendron* subgenus *Meconostigma* (Araceae)

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ABSTRACT

Philodendron xanadu is described as new. It represents an interesting member of section Meconostigma but differs from other members of that subgenus by its nearly complete lack of posterior lobes and its weakly developed posterior ribs.

INTRODUCTION

Philodendron xanadu Croat, Mayo & Boos, sp. nov.

Type: Origin unknown. Based on plant cultivated in Wellington, West Palm Beach, Florida, *Croat 81537* (Holotype, RB; isotypes B, F, COL, GH, INPA, K, MO-5291335, NY, R, RSA, SP, TRIN, UB, US.)

Caudex 3.5–5 cm diametro; petiolus 43–51 cm long, subteres, sulcatus; squamulae intravaginales usque 1.5 mm long; lamina pinnatisecta, 25–31 cm longa, 17–25 cm diam; inflorescencia solitaria; pedunculus 3.0–5.5 cm longus, 1.0–1.3 cm diam; spatha (11.5)12.8–18 cm longa, 2.8–3.3 cm diam; spadix 8.5–12.5 cm longus; zona staminata in toto 9.2–12.5 cm longa; pars sterilis staminodia ferens 5.2 cm longus; 2.1 cm basi diametro, 1.8 cm apice diametro; pars fertilis stamina ferens 4–5.5 cm longa, 1.7–1.8 cm diametro, 1.3–1.5 cm diametro versus, longitudius spatha 1.5 superans; zona pistillata 3.0–3.7 cm longa ventraliter, 1.7 longe dorsaliter, apice 1.5–1.8 cm diametro apice, ad medium 1.8–2.0 cm diametro.

Terrestrial; with leaves extended individual plants to 1.6 m wide; stems to 1 m or more tall, 3.5–5 cm diam.; internodes short, dark brown, scurfy; leaf scars conspicuous, 2.7–3.4 cm wide, 9–18 mm high; intravaginal squamules minute, no more than 1.5 mm long; sap acrid, pungent; roots 9–14 mm diam., reddish brown with longitudinal fissures; cataphylls to 21 cm long, medium green, narrowly and deeply sulcate with a medial rib toward the base, drying dark brown and persisting intact; petioles sheathed 3.5–5.5 cm at base, 43–51 cm long, 8–9 mm diam, D-shaped at base, soon becoming subterete, sharply and deeply sulcate, medium green, weakly glossy, flattened at an angle along the sulcus and otherwise finely and weakly ridged circumferentially, darker, somewhat brownish to purplish violet and sometimes weakly scurfy at apex and on petiolar plexus; geniculum more broadly sulcate, sometimes moderately "square-grooved"; blades pinnatisect, subcoriaceous, 25–31 cm long, 17–25 cm wide, the two halves of the blades directed upward at 20–30° angle to the midrib, dark green and moderately glossy on upper surface, slightly paler and weakly glossy below; primary lateral lobes ca. 10 on each side, weakly falcate toward the apex, narrowly rounded at the apex; the sinuses 7–10 cm

Fig. 1. *Philodendron xanadu*. Habit of a full grown individual cultivated in Australia. Photo Neil Crafter.

deep; posterior lobes short, bent upward with their upper surfaces directed toward the apex; sinus arcuate to parabolic when flattened; midrib broadly sulcate to flattened and slightly to moderately paler above, narrowly rounded to bluntly acute and moderately paler, sometimes purplish violet below (whitish toward apex); pri-

Fig. 2. *Philodendron xanadu*. Face view of adult leaf blades. Photo Neil Crafter.

Fig. 3. *Philodendron xanadu*. Stems with thick roots and conspicuous cataphyll scars. Photo Neil Crafter.

mary lateral veins one per lobe, somewhat off-center on the lobes, slightly closer to the posterior margin of the lobes, slightly paler and weakly convex and slightly paler in shallow valleys above, thickly convex, yellow-green to creamy white and moderately paler below; minor veins fine,

Fig. 4. *Philodendron xanadu*. Habit of adult plant with inflorescences. Type plant. *Croat 81537* Photo Tom Croat.

Fig. 5. *Philodendron xanadu*. Inflorescences. Left. Preanthesis. Center. At anthesis. Right. Post-anthesis.

darker than surface; basal veins 4–5 per side, the first free or nearly free to the base, 2nd & 3rd acroscopic, 3rd or 4th straight to the tip of the lobes, usually with 1 or 2 basioscopic and much smaller; posterior ribs (1.5)2.5–3(4) cm long, naked 2.5–3.0 cm; Inflorescences 1 per axil, 3–5 per plant in flower; peduncle 8–11 cm long, 1.0–2.0 × 1.2–2 cm diam; spathe coriaceous, (8.2)12.8–18 cm long, (1.7)2.8–3.3 cm diam., dark purple-brown, sometimes paler within on tube; spadix 8.5–12.5 cm long, cream; staminate spadix (5.5)8.5–10.5 cm long; sterile portion 3.1–5.2 cm long, 1.7–2.1 cm diam at base, 1.5–1.8 cm diam at apex, sterile male flowers 6.0 mm long, 1.0 mm diam. at apex, tapered toward the base; fertile portion 4–5.5 cm long, 1.7–1.8 cm diam, 1.3 cm diam 1 cm from apex, protruding up to 1.5 cm from the spathe; pistillate spadix (2.5)3.0–3.7 cm long in front, 1.7 cm long in rear, 1.5–1.8 cm diam at apex, 1.8–2.0 cm diam midway; stigmas 1–1.5 mm diam, with one lobe for each locule, the lobes oblong, 0.6 mm long; gynoecium (6)7–8 locular, ovules 2 per locule on axile placenta, inserted in lower half of septum, 0.6 mm long.

Philodendron xanadu was introduced into the American market by an Australian nurseryman Barry M. and Veronica L. Winterbourn, P. O. Box 12, Gosnells, Australia in the spring of 1987 and was issued a patent from the United States Patent and Trademarks Office on Sept. 12, 1989 (=7030) (NAL Call No. 156.65). It was described in the patent as being a cultivar of *Philodendron. selloum* (*Philodendron bipinnatifidum*) with more and smaller leaves with a "red" spadix" [This surely refers to the spathe which is dark violet-purple in the material I have seen]. It was apparently grown from a seed found in a collection of seeds from *Philodendron bipinnatifidum* (*P. selloum*) but it appears to have no relationship with this species. It is not yet known if the seed was the result of a hybridization of *Philodendron bipinnatifidum* or if the seeds were improperly labeled. Aside from having a lobed blade it does not in any way match *P. bipinnatifidum*. In contrast to this huge and robust species which can reach more than 5 m tall, *P. xanadu* stands no more than 1.5 or rarely to 2 m tall. The species flowers at a different time where both are in cultivation in Florida, with *P. xanadu* flowering for a much shorter length of time, mostly in the spring (late March and April according to observations by J. Boos). In October *P. xanadu* was rarely found in flower whereas *P. bipinnatifidum* had many plants in flower. In addition to these phenological differences *P. xanadu* has purple inflorescences which are much smaller, less than 10.5 cm long, whereas those of *P. bipinnatifidum* have inflorescences which are solid green in color and as much as 42 cm long. In addition, the spathe of *P. xanadu* is tightly clasped around the spadix (which also protrudes from the spathe) at anthesis, whereas *P. bipinnatifidum* has the spathe broadly opened at anthesis with its spadix held within the spathe, and with the spathe closing completely over the spadix after anthesis, leaving no portion of the spadix visible. Still another difference between these two species is that the interpetiolar squamulae are conspicuous for *P. binnatifidum* whereas they are almost lacking on *P. xanadu*.

Though it bears no strong case for or against its possible hybrid origin, it has been reported that the species was not capable of being cross-pollinated with sev-

eral other species of *Philodendron* (John Banta, pers. comm.).

This species has gone by the name *Philodendron* 'Xanadu' in the horticultural trade and this therefore appears to be appropriate for the specific epithet despite the fact that we have no knowledge currently of the origin of the name. Perhaps it is based on the fabled city of Xanadu whose existence came to light to the west during the expeditions of Marco Polo (currently known as the Chinese city of Shangdu, 22 miles north of Beijing).