

Aroid Profile No. 11: *Syngonium steyermarkii* Croat

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Syngonium steyermarkii Croat, Ann. Missouri Bot. Gard. 68: 605, Figs. 31, 37-39 (1981).

Hemiepiphytic appressed climber with milky sap; stems 1-3 cm diam., with internodes 1.5-2.5 cm long on adult stems; petioles 25-60 cm long, subterete, sheathed to beyond the middle to upper $\frac{2}{3}$, sharply ribbed near the apex of the sheath; blades incised-lobate, ovate in outline, 20-43 cm long, 17-36 cm wide, firmly membranaceous, medium green above, paler beneath; anterior lobe with 5-6 segments, 2-5 cm wide, narrowly rounded at apex; posterior lobes about half as long as anterior lobe, the segments partly confluent; major veins sunken above, raised and U-shaped beneath; tertiary veins distinctly visible beneath; inflorescences 1-7 per axil, peduncles terete, erect to spreading, straight when young to increasingly curved in age, 7-13 cm long; spathes 4.5-7 cm long, held erect, somewhat fleshy, narrowly ovoid, acuminate, tightly inrolled and curved forward at apex, scarcely to weakly constricted near the middle, opening from the apex to the base and not reclosing, the entire spathe persisting; spathe tube green, glaucous, greyish or whitish green, 2-2.6 cm long, 2 cm diam., the blade green, scarcely or not all flared open; spadix 3-5.5 cm long; pistillate portion of spadix 1.8-3 cm long, 1-2 cm diam., broader than the staminate portion, the pistillate flowers pale green, 4-5 mm diam., the stigma sessile, 1.5-2 mm diam., orange-yellow; staminate portion of spadix 1.5-2.5 cm long, 0.4-1.3 cm diam., deciduous; staminate flowers creamy-white. Fruiting spathe open; infructescence 5-7 cm long, ca. 4.0 cm diam., the berries initially somewhat free from one another, later united into a syncarp.

Syngonium steyermarkii is endemic to the Pacific slope of Guatemala and Southern Mexico at elevations above 1100 m. It was first collected by Dr. Julian Steyermark (Missouri Botanical Garden), who made three sterile collections of the species in three different Departments of Guatemala (Quezaltenango, San Marcos,



Fig. 5. *Syngonium steyermarkii* Croat; young infructescence X 3/4

and Suchitepequez) while collecting for the Field Museum in 1941 and 1942. It is the most remarkable species in the genus and the only species in a new Section *Pinnatilobum* Croat, placed there because of its pinnately lobed blades. All other species either have entire leaves, or they are pedatisect (palmately lobed). It is also unusual in being the only species in the genus with spathe tubes which open to the base and remain open after anthesis. In addition, it is unusual in having the pistillate spadix swollen to fill the entire cavity of the spathe tube. Because of the nature of the spadix and spathe, we would predict a method of pollination by organisms other than by the large ruteline scarab beetles that are common pollinators among other species which have been studied. *Syngonium steyermarkii* lacks the typical cup-like enclosure around the spadix, and there is little or no room inside the spathe for the entrance of such large beetles.

Syngonium steyermarkii is relatively easy to grow and is an attractive ornamental plant. The first known live material of the species was introduced by the first author in July of 1977 to the Missouri Botanical Garden, and soon after to the Botanical Garden in Munich as well, where it has subsequently flowered.



Fig. 1. *Syngonium steyermarkii* Croat; juvenile plant. Photo J. Bogner X 1/4

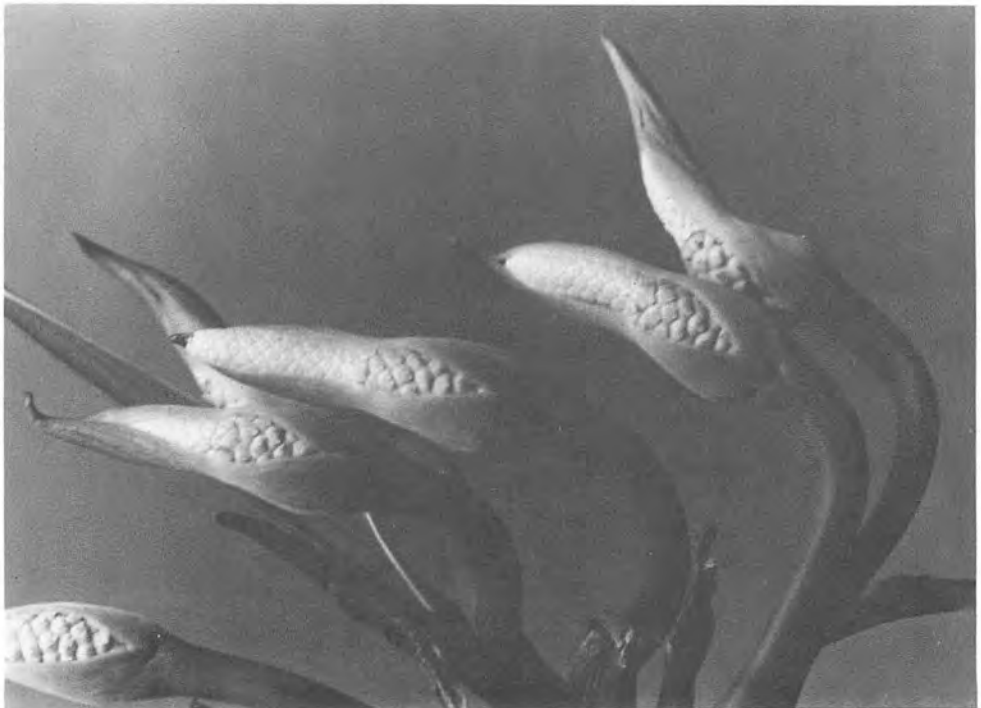


Fig. 4. *Syngonium steyermarkii* Croat; inflorescence X 3/4