

A NEW SPECIES OF XANTHOSOMA FROM ECUADOR

MICHAEL MADISON

The Marie Selby Botanical Gardens, 800 S. Palm Ave., Sarasota, Fla. 33577

The genus *Xanthosoma* Schott includes about 45 species of terrestrial herbs native to the wet tropical regions of the new world. The huge sagittate leaves of many species have earned them the common name of 'elephant ears,' which is also applied to the related old-world genera *Colocasia* and *Alocasia*.

Several species of *Xanthosoma* are widely cultivated as food plants in tropical regions, either for their starchy edible tubers or for the young leaves, which are used as greens. Several other species, such as *X. lindenii* (André) Engler, are horticulturally desirable ornamentals but are not widely grown.

During a recent visit to the Miami nursery of aroid grower Ron Weeks, I was given a plant of *Xanthosoma* he had collected in Ecuador, and which proves to be an undescribed species.

Xanthosoma weeksii Madison, sp. nov.

Species foliis glabris ovatis haud cordatis a congeneribus diversa.

Herba terrestris ad 60 cm alta. Caudex hypogaeus, carnosus, 3-4 cm crassus, erectus. Petiolus folii 30-40 cm longus, 6-20 mm crassus, vagina 15-25 cm longa instructus. Lamina ovata, apice acuta, basi truncata, nec cordata nec sagittata, glabra, supra viridis impolita, subtus pallida, nervis lateribus primariis utrinque 6, in nervum collectivum a margine 4-8 mm remotum conjunctis. Inflorescentia monochasialis spadicibus (2-4) composita. Pedunculus viridis, 4-8 mm crassus, 3-6 cm longus. Spatha 8-10 cm longa, extus ebernea, tubo intus atropurpureo. Spadix suaveolens, pars carpellata eburnea, 8 mm crassa,

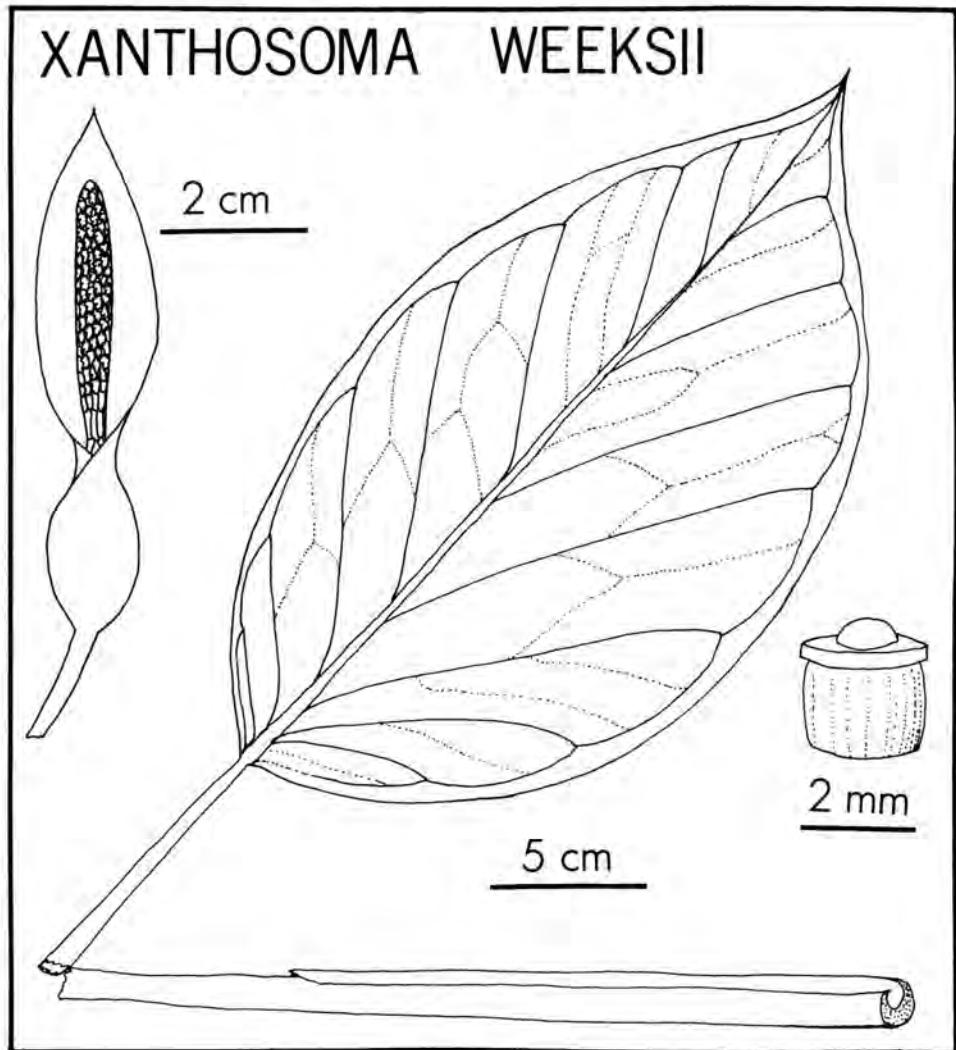
12 mm longa; pars sterilis candida, 3 mm crassa, 1 cm longa; pars staminata candida, 4-6 mm crassa, 3 cm longa.

TYPE: Ecuador, Prov. Pastaza, vicinity of Puyo, collected 1977 by Ron Weeks, cultivated at his nursery in Miami, Florida, flowered in cultivation March 1978, *Madison 4216* (SEL, isotype to be distributed MO).

ETYMOLOGY: The name honors Ron Weeks, aroid grower of Miami, Florida and founding member of the International Aroid Society, who collected the species.

The selective forces leading to evolutionary diversification in *Xanthosoma* are not well understood. The species apparently share an un-specialized pollination syndrome involving ruteline scarab beetles as pollinators. Fruits, though hardly known, are evidently also similar from one species to the next, consisting of a mass of pulpy orange berries containing minute seeds which are dispersed by a variety of birds, mammals, and insects. One apparent area of ecological specialization is in the habitat preferences of the species; some are weedy species of open pastures or disturbed areas, others are understory herbs of climax forest, and still others are riparian or montane species.

Obviously an understanding of the relationships of the species of *Xanthosoma* can only result from a thorough study of the plants in their native habitats. Such a study is now under way and the results of Sue



Thompson's researches on *Xanthosoma* are eagerly anticipated. In the meantime names are still needed for the species, especially those in cultivation, even if their relationships are not well understood.

In the past species of *Xanthosoma* have been distinguished on the basis of leaf shape, pubescence, and the relative sizes of the parts of the spadix. In terms of these fea-

tures *Xanthosoma weeksii* is clearly a distinct species. The glabrous ovate leaves which are rounded to truncate at the base and not at all cordate, and the short peduncles, readily distinguish it from the other species of the genus. *Xanthosoma weeksii* suckers freely from the base, so that an old and well-grown plant makes a full and handsome horticultural specimen.