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ALLOSCHEMONE AND *SCINDAPSUS* (ARACEAE)

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Schott established the genus *Scindapsus* in 1832 to accommodate the Asian species which previously had been included in *Monstera*. The morphological distinction given was that *Monstera* has a bilocular ovary with two basal ovules per loculus and *Scindapsus* has a unilocular ovary with a solitary basal ovule. This distinction between the Asian and American species has proven to be reliable and constant, and coincides with additional differences in seed morphology. A single species, however, does not fit this morphological-geographic pattern.

In 1845 Poeppig described *Scindapsus occidentalis* from the Amazonian region of Brazil, specifying a unilocular ovary with a single basal ovule. Unfortunately the spadix was lost in shipment so that this critical feature is unverifiable, and the specimen now consists only of two distinctive pinnatifid leaves.

Schott (1858) transferred *Scindapsus occidentalis* to a new monotypic genus, *Alloschemone*, primarily on the basis of its geographic remoteness from the other species of *Scindapsus*, but also noting that *Alloschemone* has pinnatifid leaves and all species of *Scindapsus* have entire leaves. Koch (1856) and Bentham and Hooker (1883) included *Alloschemone* in *Monstera*. In the most recent monograph of the group Engler and Krause (1908) recognized *Alloschemone* as a *genus dubium* known only from the type collection.

One hundred years after Poeppig's initial collection of *Scindapsus occidentalis* the species was collected for the second time by B. A. Krukoff at a site about 400 km. from the type locality. The distinctively shaped leaves of this specimen, unmatched by any other aroid, agree exactly with the type. The Krukoff collection includes a flowering spadix from which the spathe had already fallen. Someone who studied this specimen previous to me appended a drawing showing several basal ovules per ovary, but unfortunately did not return the dissected flowers to the sheet. All the flowers which I dissected had a unilocular ovary with a single basal amphitropous ovule, as Poeppig had originally reported.

Because of its morphological conformity to the generic characters of *Scindapsus*, I can see no basis for maintaining *Alloschemone* as a separate genus. Including it in *Scindapsus*, however, results in a considerable disjunction in the geographic range of that genus. This disjunction of distribution (tropical South America- tropical Southeast Asia) is known in three other aroid genera — *Spathiphyllum*, *Schismatoglottis*, and *Homalomena*. An additional aroid genus, *Cyrtosperma*, has this distribution with species in Africa as well.

In the case of *Scindapsus* with about thirty species in Asia, the existence of a single American species does not necessarily imply that it must have been dispersed from the Asian center. The tribe Monstereae, to which *Scindapsus* belongs, is well represented by fossil seeds in a number of Tertiary deposits. The distribution and diversity of these suggest that the modern genera are the derivatives of a pan-tropical complex well developed by the Oligocene (Madison and Tiffany, ms.). *Scindapsus occidentalis* may well have evolved from this ancestral complex parallel to and independently

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of the Asian species of *Scindapsus*, rather than representing a truly Asian element in the Amazonian flora. But whatever its phylogeny, taxonomically *S. occidentalis* must be included in *Scindapsus* as no significant character separates it from the Asian species.

The description which follows is based in part on Poeppig's published description and in part on *Krukoff 7162* (A, NY). I wish to thank the curators of A, NY, and US for the loan of specimens.

Scindapsus occidentalis Poepp., Nov. Gen. ac Spec. Pl. 3:88. 1845.

Alloschemone poeppigiana Schott, Genera Aroid. App. 1858.
Monstera occidentalis (Poepp.) Koch ex Ender, Index Aroid. 54. 1864.
Alloschemone occidentalis (Poepp.) Engler & Krause, Das Pflanzenreich 4(23B):117. 1908.

TYPE: *BRAZIL:* AMAZONAS: Ega, *Poeppig s.n.* (P, *non vidi*, LE, *non vidi*, photo US!)

Scandent epiphyte to 5 m tall. Stem unbranched, cylindric, about 2.5 cm thick. Petiole vaginate, 50-70 cm long, about equalling the lamina; the lamina broadly ovate, the apex acuminate, the base cordate to subcordate, pinnatifid, the pinnae 4-6 per side, the lacineae extending to about 4 cm from the midrib, each pinna with a single primary vein and numerous subparallel secondary veins running about 4 mm distant one from another. Peduncle terete, about 2 cm thick, 12-15 cm long. Spathe deciduous. Flowering spadix (at anthesis) terete, 2.5-3.5 cm thick, 10-12 cm long, tapering to the base; the stamens 9-10 mm long, the filament broadly flattened, the anthers opening by slits extending about ½ their length; the ovary subprismatic, 8-9 mm long, 2.5-3.5 mm across, the stigma sessile, the ovule basal, solitary in the single loculus; the ovaries of flowers at the base of the spadix broader than the others, 4-6 mm across. Fruit unknown.

ADDITIONAL SPECIMENS EXAMINED: *BRAZIL:* AMAZONAS: Basin of Rio Madeira, Municipality Humayta, Nov. 1934, *Krukoff 7162* (A, NY).

LITERATURE CITED

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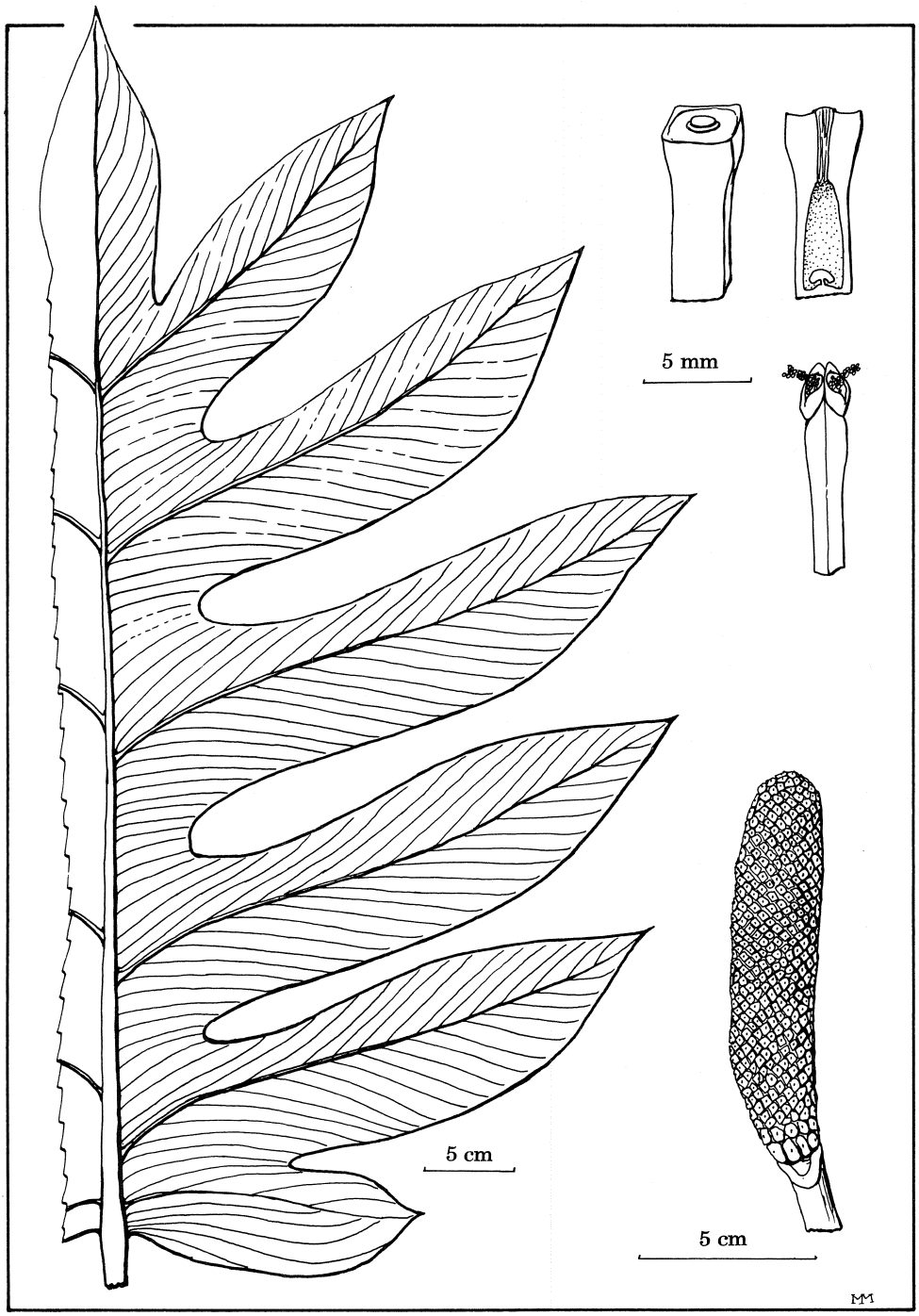

Figure 1. *Scindapsus occidentalis* Poepp.