A Possible Defense Mechanism in Scindapsus latifolius (Araceae: Monsteroideae)

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ABSTRACT

Superficial exposure of trichosclereids is reported in *Scindapsus latifolius* M. Hotta (1966).

A collection of Scindapsus latifolius from Brunei, Temburong District, Bukit Patoi, revealed an apparently overlooked phenomenon regarding the trichosclereids present in the tissues of subfam. Monsteroideae. In the collection studied (Boyce 351), the whole of the apical region of the stem together with the recently matured leaves and the emerging and newly opened inflorescences were densely covered with exposed 1-1.5 cm long, double ended needle-like trichosclereids. These had apparently been released from the disintegrating petiolar sheaths, inflorescence-subtending cataphylls, and shoot-subtending prophylls and presented a formidable deterrent to handling the plant. It is possible that the trichosclereids function in two ways: (a) forming a physical barrier and (b) if the severity of the stings inflicted is an accurate measure, in probably acting as vectors for irritant or poisonous chemicals.

Other taxa of *Scindapsus* collected, *S. crassipes* Engl., *S. longipes* Engl., *S. pictus* Hassk., and *S. rupustris* Ridley did not display this feature.

Little has been written specifically about sclereids in *Scindapsus*, apart from Rao (1954, 1964) who mainly discusses their arrangement and structure. While the presence of trichosclereids within plant tissues is generally accepted to have a deterrent effect on herbivores, their presence on exposed external surfaces has not been previously reported.

It is interesting to note that, unlike *S. latifolius*, the other taxa mentioned above do not possess swiftly disintegrating petiolar sheaths, cataphylls, and prophylls and are vegetatively fairly typical of the genus.



Fig. 1. Herbarium specimen of *Scindap-sus latifolius* M. Hotta.



Fig. 2. *Scindapsus latifolius* showing trichosclereids released from disintegrating cataphylls.

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