

Scindapsus lucens (Araceae: Monsteroideae),
a new species related to *Scindapsus pictus*

J. BOGNER* & P. C. BOYCE**

Summary. *Scindapsus lucens* is described and its relationships discussed.

The genus *Scindapsus* Schott (1832) contains about 35 species occurring from northeastern India to western Polynesia. The genus is divisible into two informal groups based on vegetative morphology. Some species, e.g. *S. altissimus* Alderw. (Alderwerelt van Rosenburgh 1922), are huge few-stemmed climbers reaching the canopy of emergent trees and commonly exceeding 60 m in height. However, most species are diffuse climbers, usually occurring on small trees or rock faces, and seldom exceeding 5 m in height. The species described here belongs to the second group. Although only known from plants cultivated in Munich and Kew, it is highly distinctive and has significant horticultural potential; therefore we believe it deserves recognition.

***Scindapsus lucens* Bogner & P. C. Boyce** sp. nov., a *S. picto* laminis foliorum nitentibus bullatis cinerascentibus usque pallide viridibus gynocilis magis depressis differt. Typus: Origin unknown; cultivated in Munich Botanical Garden, *Bogner* 2113 (holotypus M!; isotypi B!, K! (spiritus)).

Slender, sparsely branched trunk climber to c. 4 m; main stem sympodial, fertile, continuation shoot appearing terminal, developing only after flowering of shoot apex; side branches few, also eventually producing continuation shoot after flowering, overall plant architecture following Chamberlain's Model (Hallé & Oldeman, 1970; Hallé et al., 1978). *Stem*: 3–4 mm diam., terete, epidermis scabrous, green, internodes 3–8 cm long with one or two roots at the node; roots 1–2 mm diam., with spongy epidermis. *Leaf*: petiole terete, adaxial surface slightly canaliculate; 3·0–5·5 cm × 2–3 mm, smooth, greyish to light green; geniculate apically, geniculum 1·0–1·5 cm, usually visible only on older leaves when the blade has moved its position relative to light, sheath 2·0–3·3 cm, almost reaching geniculum; lamina 7–14 × 5·0–9·5 cm, ovate, bullate, coriaceous, base cordate, posterior lobes sometimes overlapping, apex cuspidate to acuminate, margin entire, narrowly hyaline, lamina glossy greyish to light green adaxially, paler and glossy abaxially; venation prominent, 5–7 primary lateral veins on each side of the middle vein, ascending towards apex, secondary and tertiary venation reticulate. *Inflorescence*: peduncle 5 cm × 4 mm diam.,

Accepted for publication January 1994.

*Botanischer Garten München, Menzinger Straße 63, D-80638, München 19, Germany.

**The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AE, U.K.

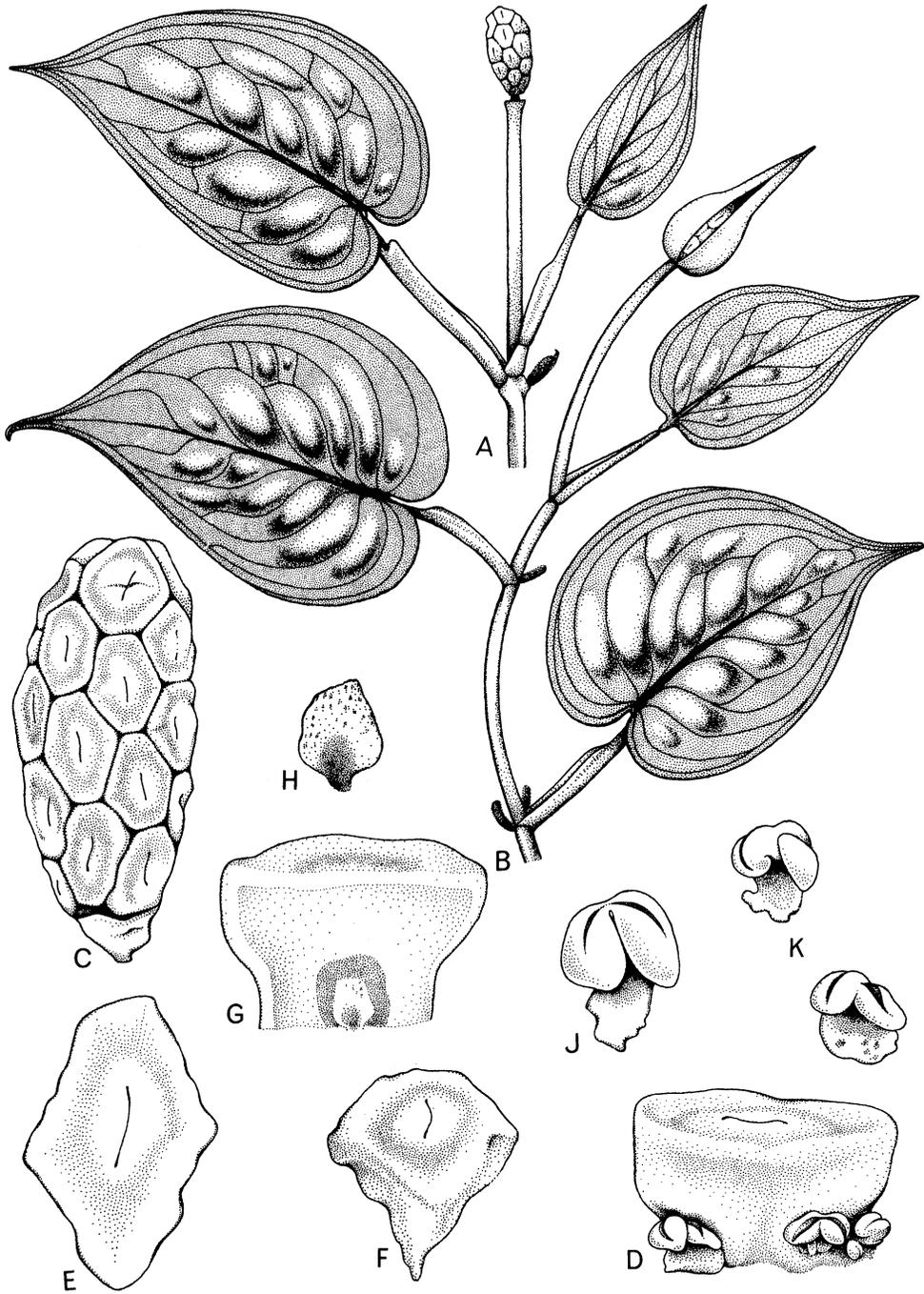


FIG. 1. *Scindapsus lucens*. A & B portions of flowering stem $\times \frac{3}{8}$; C spadix $\times 3$; D gynoecium side view $\times 8$; E gynoecium plan view $\times 8$; F gynoecium $\frac{1}{4}$ view $\times 8$; G gynoecium longitudinal section $\times 8$; H ovule $\times 14$; J anther $\times 18$; K anthers $\times 12$. Drawn by Emmanuel Papadopoulos.

terete, green; subtending cataphyll with very small lamina, c. 1.2 cm × 5 mm, otherwise resembling petiole; spathe deciduous at anthesis, 5 × 1.5 cm, coriaceous, cuspidate, exceeding spadix, somewhat constricted above spadix apex, pale yellow, apical beak c. 7 mm long, green; spadix c. 2.7 × 1.0 cm diam., oblong-ellipsoid, fusiform, pale yellow, shortly stipitate, stipe c. 2 mm long. *Flowers*: bisexual, naked, truncate; gynoecium hexagonal in plan view, 3.5–4.2 × c. 2 mm; stylar region broader than ovary, c. 1 mm thick, yellow; stigma linear, 1–1.8 mm long, brown; ovary c. 3 mm diam., unilocular, locule globular and c. 1.2 mm diam.; ovule solitary, c. 1 mm long, funicle short, placentation basal; stamens shorter than gynoecium; filaments flat, c. 1 × 1–1.2 mm; thecae ellipsoid, c. 0.8 × 0.5 mm, opening by a subapical slit; pollen oblate sphaeroid, zonosulcate, 28–32 × 13–16 μm, aperture fully zonate, exine scabrate. *Infructescence*: unknown. 2n = 60. (Fig. 1).

DISTRIBUTION. Known only from cultivated material.

HABITAT. Unknown.

Nothing is known about the original habitat of *S. lucens*. It is most similar to *S. pictus* Hassk. (Hasskarl 1842a, 1842b), which occurs from southern Thailand and northern Peninsular Malaysia through Borneo to the Phillipines. It is probable that the native range of *S. lucens* is somewhere in this area.

Scindapsus lucens and *S. pictus* are most readily separated on leaf characters. Juvenile plants of *S. lucens* have glossy, bullate, greyish to light green leaf blades while *S. pictus* has leaves with a crystalline texture and a smooth, dull grey-green lamina variously marked with jagged silver-grey blotches. Flowering plants of *S. lucens* have cordate leaves with prominent posterior lobes while *S. pictus* has falcate leaves with little or no posterior lobe development. The two species have similar inflorescences but in *S. lucens* the gynoecea are considerably more depressed (Engler & Krause 1908).

Scindapsus lucens and *S. pictus* are closely related and readily distinguished from other members of the genus on leaf characters. The adult stages of *S. officinalis* (Roxb.) Schott (1832) and *S. pictus* are remarkably similar. Although the former always lacks the leaf variegation typical of *S. pictus*, this character is sometimes lost in dried material. However, *S. pictus* and *S. officinalis* have different gynoecea and are also geographically distinct, *S. officinalis* being widespread in India, northern Thailand, Myanmar (Burma) and SW China.

ACKNOWLEDGEMENTS

We would like to express our thanks to Dr Gitte Petersen, Botanisk Institut, Københavens Universitet, Copenhagen, Denmark, for the chromosome count and to Emmanuel Papadopoulos for the plate. The second author would like to thank Dr John Dransfield, Dr Simon Mayo and Dr David Simpson for their helpful comments.

REFERENCES

Alderwerelt van Rosenburgh, C.R.W.K. van (1922), New or noteworthy Malayan *Araceae* 3. Bull. Jard. Bot. Buitenzorg sér.3 4(2): 320–347.

- Engler, A. & Krause, K. (1908). *Araceae-Monsteroideae* in A. Engler (ed.) *Das Pflanzenreich* 37 (IV.23Ba): 4-138. Berlin.
- Hallé, F., & Oldemann, R. A. A. (1970). *Essai sur l'architecture et la dynamique de croissance des arbres tropicaux*. Masson. Paris.
- , — & Tomlinson, P. B. (1978). *Tropical Trees and Forests; An Architectural Analysis*. Springer-Verlag. Berlin.
- Hasskarl, J. K. (1842a) *Plantarum rariorum vel minus cognitarum Horti Bogoriensis*. *Decades. Flora* 25(2) Beibl. 1: 1-16.
- (1842b). *Plantarum genera et species novae aut reformante javenses*. *Tijdschr. Natuurl. Gesch. Physiol.* 9: 115-180.
- Schott, H. W. (1832). *Araceae*. In H. W. Schott & S. F. L. Endlicher, *Meletemata Botanica* 16-22. Vienna.

Note added in proof.

Scindapsus lucens has now been found in the wild in Sumatra. The collecting data are: Sumatra Utara, Tampanuli district, Aek Syah village, c. 25 km north of Sipirok on the Sumatran Highway. Open secondary forest in an old abandoned rubber plantation on limestone bedrock. c. 900 m, 24 Aug. 1993, *Hettterscheid* s.n. (K!, L!).