274. CULCASIA SERETII

Peter Boyce

The aroid flora of Africa is species-poor compared with that of tropical America and South-east Asia. Nevertheless, Africa supports a considerable number of small endemic genera: *Anchomanes* Schott, *Anubias* Schott, *Callopsis* Engl., *Cercestis* Schott, *Culcasia* Schott, *Pseudohydrosme* Engl., Schott, *Stylochaeton* Lepr. and *Zantedeschia* Spreng.

Culcasia seretii De Wild., the plant depicted here, is one of about 30 species of robust to slender creeping, climbing or hemi-epiphytic herbs restricted to the wetter parts of tropical Africa. *Culcasia* seems to be most closely related to another African climbing genus, *Cercestis*, but the relationship between these two genera and the rest of the Araceae is not clear. Engler (1905) included *Culcasia* in the subfamily *Pothoideae*, placing it in the monotypic tribe *Culcaseae* next to the tropical American tribe *Anthureae* whereas he (Engler, 1911) placed *Cercestis* in subfamily *Lasioideae* in the tribe *Nephthytideae*, suggesting a close relationship to other primarily African genera, for example *Nephthytis*. *Culcasia seretii* was described by de Wildeman (1922) from specimens collected in Zaïre and is one of six species in a group related to *C. scandens* P. Beauv. Hepper (1967) provided a detailed account of this group and discussed the confusion surrounding the supposedly variable *C. scandens*.

Culcasia seretii is an attractive species but is rarely seen in cultivation, although experience with the plant at Kew suggests that it is easy to grow in warm, humid conditions. The newly emerged leaves are copper-tinted and glossy and stand out very well against the lustrous deep green mature leaves. It flowers abundantly even when young, an unusual trait in climbing aroids. Several greenish bronze inflorescences per stem are produced and they are usually followed by few-fruited clusters of large, angular, dull orange berries which persist for several months when ripe.

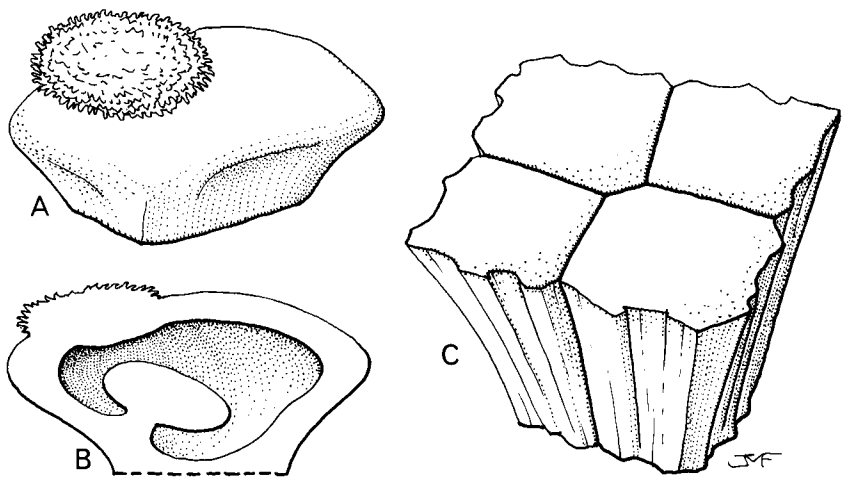
CULTIVATION. *Culcasia seretii* was received at Kew from Marianne Knecht who had collected it in the Tai forest reserve in Côte d'Ivoire. The few unrooted stems were placed in a warm propagator on damp sphagnum moss where they soon re-rooted and began to grow quickly. Once established, the plants were potted into a humus, bark chip and grit compost and trained on to a moss-covered cork slab, on to which the stems rooted. It is cultivated in the same glasshouse as *Begonia* and the lowland *Nepenthes* species. The house is

Culcasia seretii

ANN FARRER

maintained at a minimum temperature of 20°C with atmospheric humidity at approximately 70 per cent; in hot weather temperatures are allowed to rise to 30°C with a correspondingly higher atmospheric humidity. The plant is kept heavily shaded since exposure to sun or even bright light can bleach or scorch the thin-textured leaves and slow down growth. The largest plant at Kew fruits prolifically and a small stock of seedlings and juvenile plants has been built up from the seeds gathered.

Culcasia seretii de Wild., Pl. Bequaert. 1: 172 (1922); Hepper, Kew Bull. 21: 322, t. 2, 4–6 (1967); Hepper in Hutch. & Dalziel (eds.) F.W.T.A. ed. 2, 3: 126 (1968). Type: Zaïre, route de Zobia à Buta, May 1907, *Seret* 861 (holotype BR).



Culcasia seretii. A, ovary, × 20; B, ovary, longitudinal section, × 20; C, stamen, three quarter view, × 20. Drawn by Mark Fothergill.

DESCRIPTION. *Slender, diffuse, climbing herb* to 2 m. *Stem* 2–4 mm diam., internodes 2–6 cm long, rooting from the nodes. *Roots* 1–2 mm diam., tough, brown, strongly adhering to substrate. *Leaves* 15–28 cm long, 2.2–7 cm wide, oblong to oblong-elliptic or elliptic-lanceolate, apex long-acuminate, base cuneate; lamina thin, tough, deep glossy green adaxially, very slightly paler abaxially, new leaves soft, copper-tinted, glossy. *Petioles* 7.5–10 mm long, mid-green, petiolar sheath 3.5–5 cm long. *Inflorescence* solitary to several arising together. *Peduncle* 8–13 cm long, 2–2.5 mm diam., greenish bronze. *Spathe* 2.5–4 cm long, 8–14 mm wide, basal 2.5 cm

convolute, limb gaping apically at anthesis, marcescent, deciduous at fruit maturity, deep bronze green externally, slightly paler internally. *Spadix* 2.5–3.5 cm long, cylindrical, slightly clavate apically, exceeding the spathe at anthesis, cream-coloured, stipitate, stipe c. 7 mm long. *Flowers* unisexual, naked. *Stamens* 1–1.9 mm long, 1.1–3 mm wide, 2–4-androus, polygonal, thecae dehiscing via a short apical slit, cream. *Gynoecium* 2–3 mm high, 1.5–2 mm wide, depressed-globose, ovary 2–3-locuate, locules 1-ovulate on a basal-lateral placenta, anatropous; stigma sessile, discoid, weakly 2–4-lobed, c. 1 mm in diameter. *Infructescence* comprised of 1–4 berries. *Berries* 1.3–2.2 cm long, 1–1.5 cm wide, dull orange, ellipsoid; seed ellipsoid, c. 1 cm long, 1 cm wide, pale greenish brown, testa thin, smooth.

DISTRIBUTION. Guinea Bissau, Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Zaïre.

HABITAT. Primary or disturbed rain-forest, occasionally in riverine or swamp forest; 150–800 m.

REFERENCES

Engler, A. (1905). Culcasia P. Beauv. In Engler, A. (ed.), *Das Pflanzenreich* 21(IV.23B): 295–304. Berlin.

Engler, A. (1911). Cercestis Schott & Rhektophyllum N.E. Br. In Engler, A. (ed.), *Das Pflanzenreich* 48(IV.23C): 114–121. Berlin.

Hepper, F.N. (1967). Culcasia scandens P. Beauv. (Araceae) and allied species in West Africa. *Kew Bulletin* 21: 315–326.

Wildeman, É. de (1922). Araceae. In *Plantae Bequaertianae* 1: 167–181. Gand & Paris.