

A NEW ARIDARUM SPECIES (ARACEAE) FROM SARAWAK

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SUMMARY

A new species of the genus *Aridarum* (Araceae), *A. hansenii* Bogner, is described. It differs from the closely related *A. caulescens* M. Hotta by its longer, more ellipsoid-oblong stamens, which also have deep cavities, but the two thecae are separated by a wall in the middle, therefore two cavities in one stamen can be distinguished.

In the year 1978 Carlo Hansen has discovered another new *Aridarum* species in Sarawak, when he accompanied the Royal Geographical Society Mulu Expedition.

Aridarum hansenii Bogner, *sp. nov.* – Fig. 1.

Ob thecas in caveis apicalibus staminum marginales *Aridarum caulescens* similis, differt *Aridarum hansenii* ab ista specie staminibus desuper visis non subrotundis sed oblongis, caveis staminibus non singulis sed binis, thecis non geminatis vicinisque sed apud unamquaque caveam singulis. – Holotypus: *C. Hansen 451* (K).

Stem 4–6 cm long and 0.4–0.5 cm in diameter; roots stiff. *Petiole* 4–8 cm long and 1–1.8 mm in diameter; sheath membranaceous with a long free ligule up to 5 cm and soon drying brown, only connate for 0.5–0.7 cm at the base of the petiole (deciduous and therefore lacking on older leaves). *Leaf blade* elliptic, 6–12 cm long and 2–4 cm wide, green; apex cuspidate to acuminate (to 1 cm long), ending in a tubule c. 2 mm long; venation parallel, middle vein very strong, prominent and different coloured at least underneath (on dried herbarium specimens brownish), all lateral veins nearly of the same thickness, with a somewhat thicker marginal vein; leaf blade underneath very slightly punctate. *Peduncle* 5–8 cm long and c. 1.5 mm in diameter, green. *Spathe* not constricted, 4–5.5 cm long; upper part 2.5–4 cm long, white with a greenish tip, shedding at anthesis; lower part funnel-shaped, persistent, 1–1.5 cm long, light green. *Spadix* 1.8–2.5 cm long and 0.3–0.4 cm in diameter; female part at the base with some yellow sterile flowers, c. 0.8 cm long and obliquely adnate to the spathe, with 10–18 ♀ flowers; male part 1–1.7 cm long, apex blunt. All *flowers* unisexual, naked. *Male flower* consisting of two stamens; the stamens always in straight rows; stamen ellipsoid-oblong (in view from above), 1.2–1.5 mm long and 0.6–0.9



Fig. 1. *Aridarum hansenii* Bogner. A. Habit, x 1, B. leaf tip, x 5, C. spadix, x 4.5, D. pistil, side view, x 12, E. back view of a stamen, x 12, F. front view of a stamen, x 12, G. two stamens from two male flowers, back to back, x 12, H. semi-top view of a stamen showing two horns inside the cavities, x 12, I. top view of two male flowers, with two stamens each, x 12, J. cross-section of pistil, x 20. All drawn from *C. Hansen 451* (K) by Alice Tangerini.

mm wide, deeply excavated, the two thecae attached inside on one side or more or less in the margin, the central cavity divided by a wall between the two thecae, so that two cavities can be distinguished; theca ellipsoid, very short (c. 0.8 mm long) and horned, horn conical, thecae lighter coloured than the other parts of the stamen; sometimes the lowest (a few only) ♂ flowers sterile, lacking the thecae. *Ovary* subglobose, 1.2–1.3 mm in diameter; placentation basal; with several (10–22) orthotropous, 0.7–0.8 mm long ovules; stigma sessile, disc-like, 1.4–1.5 mm in diameter, greenish, slightly papillose and depressed in the center. Fruits unknown.

Distribution. Sarawak, Gunong Mulu National Park, 4°05'N 114°54'E, camp 3, 1350 m, 14.3.1978. Moss forest in lower montane rain forest; in moss on stones in dry stream bed. Basal third of spathe green, the rest white: *Carlo Hansen no. 451* (holotype K, isotypes C, M, SAR) [Royal Geographical Society Mulu Expedition 1977–1978].

Relationship. *Aridarum hansenii* belongs to the sect. *Caulescentia* M. Hotta and is closely related to *A. caulescens* M. Hotta. It differs from the latter by its longer, more ellipsoid stamens, which also have deep cavities; since the two thecae are separated by a wall in the middle, two cavities can be distinguished in one stamen; the thecae are also attached inside of the cavity or more or less in its margin (see fig. 1, E–I).

Ecology. According to the habit and the collector's note, *Aridarum hansenii* seems to be a rheophyte.

Etymology. This new species is named after its discoverer Carlo Hansen, Copenhagen.

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