A NEW ARIDARUM SPECIES (ARACEAE) FROM SARAWAK

J. BOGNER

Menzinger Strasse 63, D-8000 München 19, Federal Republic of Germany

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 staminalibus non singulis sed binis, thecis non geminatis vicinisque sed apud unamquanque 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

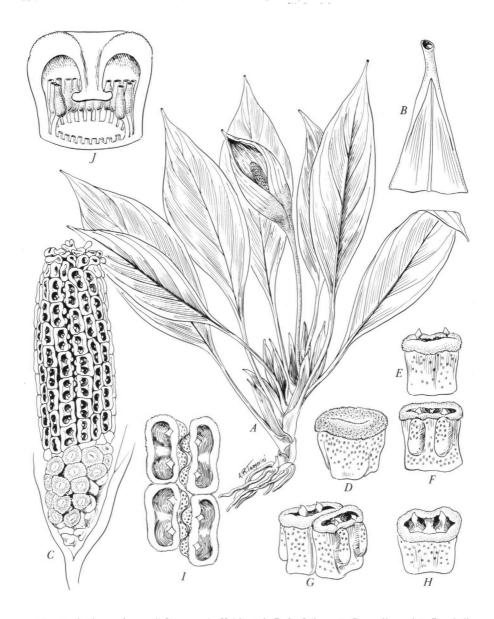


Fig. 1. Aridarum hansenii Bogner. A. Habit, x 1, B. leaf tip, x 5, C. spadix, x 4.5, D. pistil, side view, x 12, E. back view of a stamen, x 12, F. front view of a stamen, x 12, G. two stamens from two male flowers, back to back, x 12, H. semi-top view of a stamen showing two horns inside the cavities, 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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