for botanists to exchange travellers' tales with Roberto on the verandah of his house and talk plants as he guided his visitors around the estate. His hospitality was legendary and the famous Sunday lunches brought together the most diverse assemblages of friends and colleagues. Botanical excursions to the aroid collections were usually followed by an impromptu recital given by the host. Roberto had a fine singing voice and a pianist was usually at hand. Happy are those who can treasure the memory of such romantic Sunday afternoons, when the onset of dusk was accompanied by the cadences of a Schumann *Lied*, amid agreeable company and polymath conversations. Roberto had an enormous zest for life and his energy created one of the world's most remarkable aroid collections. It would be a fine thing to see this collection continue to grow and thrive in the service of science and art and in memory of the remarkable man who brought it about. I urge aroid botanists everywhere to lend their support and goodwill to the strenuous efforts of the staff of the Roberto Burle Marx Foundation to ensure its future.

For those interested in making contact, the Foundation's address is: Fundaçao Sitio Roberto Burle Marx, Estrada da Barra de Guaratiba 2019, CEP 23020, Rio de Janeiro, RJ, Brazil. Fax (021)410–1171.

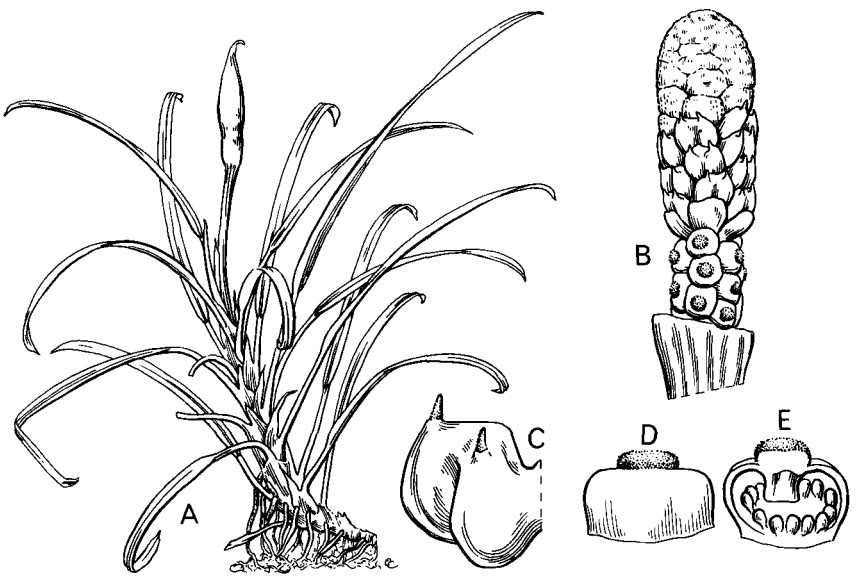
BUCEPHALANDRA CATHERINEAE, A NEW SPECIES FROM KALIMANTAN

Peter Boyce, Josef Bogner and Simon Mayo

During the preparation of plates for the forthcoming *Genera of Araceae* (Mayo, Bogner & Boyce, in prep.) it became apparent that an undescribed species of *Bucephalandra* Schott had been collected by Ed de Vogel of the Rijksherbarium, Leiden and Phillip Cribb of the Herbarium, Kew during an expedition to Kalimantan in 1991.

Bucephalandra (Schott, 1858) is a small genus of rheophytic herbs restricted to the island of Borneo. Two species are currently recognized, *B. motleyana* Schott (Schott, 1858; see also this volume, page 131 and Plate 272) and *B. gigantea* Bogner (1984). The species described here, *B. catherineae* P. C. Boyce, Bogner & Mayo, is most similar to *B. motleyana*, differing in the much denser, tufted habit, the very narrow, considerably more coriaceous leaves, the narrower,

more pointed spadix appendix and the upwardly-directed, narrower, compressed-ellipsoid anthers. The single collection available to us, consisting of dried material in Leiden and a complete plant preserved in alcohol at Kew (Kew spirit collection no. 57575), is superficially similar to *Aridarum caulescens* M. Hotta var. *angustifolium* Bogner & Nicolson (Bogner, 1979) but differs in appearance in having a tufted, not creeping-rhizomatous, habit. However, inspection of the inflorescence reveals the presence of shield-like staminodes separating the fertile male and female flower zones, and stamens without an excavated connective, thus placing the plant in *Bucephalandra*.



Bucephalandra catherinae. A, whole plant, × 1; B, spadix, × 6; C, stamen, × 24; D, ovary, × 24; E, ovary, longitudinal section, × 24. Drawn by Eleanor Catherine.

Two of the *Bucephalandra* species, *B. gigantea* Bogner and *B. catherineae*, are restricted to Kalimantan while the third, *B. motleyana*, is widespread and common throughout the river systems of Borneo. The species may be identified as follows:

Key to species of *Bucephalandra*

1. Plant robust, more than 20 cm in total height; leaves 10–25 cm long, petioles 15–18 cm long..... *B. gigantea*

1. Plant minute to small, less than 10 cm in total height; leaves 1–8 cm long, petioles 0.5–8 cm long 2
2. Leaves elliptic, elliptic-oblong, oblanceolate to obovate, lamina coriaceous; stamens spreading, ovate, spadix appendix globular to ellipsoid ..... *B. motleyana*
2. Leaves linear, margins recurved, lamina very coriaceous; stamens upwardly directed, compressed-ellipsoid, spadix appendix subconic ..... *B. catherineae*

To date, *B. catherineae* is known only from the type collection cited above. The diminutive size, coupled with the relatively large, white inflorescences, suggests that this species would make a desirable addition to a living collection of tropical aroids.

We take great pleasure in describing this new species for the botanical artist Eleanor Catherine in recognition of the painstaking illustration work she has undertaken for *The Genera of Araceae* project.

Bucephalandra catherineae P.C. Boyce, Bogner & Mayo, **sp. nov.** a *B. motleyana* coniunctione characterum sequentium differt: habitus densius caespitosus; folia multo angustiora et crassiora; appendix spadicis subconica neque globosa; antherae sursum spectantes angustiores, compresse ellipsoideae. *B. gigantea* species statura maiore atque lamina folii elliptica distincta est. Typus: Kalimantan, Gunung Sungai Pendan, 14 Oct. 1991, *de Vogel & Cribb* 9210 (holotypus L!; isotypus K! spiritus 57575).

Description. *Diminutive tufted rheophytic herb to 4 cm. Stem* c. 2 cm long, 1–2 mm diam., consisting of a creeping leafy rhizome, oldest parts naked, apical portion usually erect, internodes very congested. *Roots* 0.5–1 mm diam., stiff, produced along the entire length of the naked stem. *Leaves* many, 3–5 cm long, 1.5–3 mm wide, linear, strongly coriaceous, apex with a 0.5–2.5 mm tubule, base acute, margins recurved, plane. *Petioles* 0.5–1.5 cm long, 1–2 mm diam., subterete, very slightly canaliculate above, rounded beneath; petiolar sheath 3–10 mm long, most of the length a free ligule, this soon drying and deciduous. *Inflorescence* solitary; peduncle 1.5–2 cm long, 0.5–1 mm diam., terete. *Spathe* c. 1.7 cm long, 0.6–1 cm wide, not constricted, upper portion deciduous at anthesis, white, lower portion funnel-shaped, persistent into fruiting, pale green. *Spadix* c. 0.6 long, 2 mm wide; female flower zone c. 2 mm long, 1.3 mm diam., consisting of c. 3 rows of flowers; sterile flower zone comprised of 1 row of flat, obovate, shield-like staminodes, 0.6–0.95 mm long, 0.4–7 mm wide; male flower zone c. 2 mm long, 2.5 mm diam., consisting of c. 4 rows of flowers; appendix subconic, c. 2 mm long, 2 mm diam. *Flowers* unisexual, naked. *Stamens* c. 0.5 mm long, 1-androus, compressed-ellipsoid, filament flat, thecae ellipsoid, horned, horn c. 0.1 mm long, dehiscing apically;

appendix staminodes 0.5–0.75 mm long, 0.4–6 mm wide, obpyramidal, upper surface papillose, all but the lowermost staminodes ± connate. *Gynoecium* 0.5–0.53 mm diam., depressed globular, 1-locular; ovules numerous on a basal placenta; stigma c. 0.2 mm diam., sessile, disc-like, papillose. *Infructescence* unknown.

DISTRIBUTION. Kalimantan.

HABITAT. Rheophyte; 0–50 m.

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THE ACOLYTES OF THE ARACEAE

Simon Mayo, Josef Bogner and Peter Boyce

The history of human involvement with the Araceae can be traced back over three millennia. At least three aroids were known to the Pharonic Egyptians and are depicted in the 'Temple of Flowers' at Karnak (Beaux, pers. comm.). Theophrastus recorded Araceae in his treatise (see Prime, 1960), and Hernandez (1651) described a number of tropical aroids and their uses by the Aztec people. European Araceae were described in detail by herbalists such as Fuchs (1542) and Ray (1682) and the uses in folk medicine for the starchy tubers of various *Arum* species are so well established and widespread throughout Europe and Asia Minor that they clearly date from a very early age. Dodoens (1574) included all Araceae then known to him in one group, suggesting that even 400 years ago the aroids were recognized as being an homogeneous assemblage.

Tournefort (1700) created a 'class' without a name in which he grouped three European genera (*Arum, Dracunculus* and *Arisarum*), characterized by the possession of a 'monopetalous flower'. This concept of the aroid inflorescence as a flower with a single petal also influenced Linnaeus, who classified the species known to him according to his artificial sexual system (Linnaeus, 1753). However, Jussieu (1789) recognized the 'flower' as an inflorescence comprised of a spike (spadix) of tiny flowers surrounded by an often colourful bract (spathe).