

Calamus flabelloides Furtado in Gard. Bull. Singapore 15: 173 (1956); Dransfield, Man. Ratt. Mal. Pen. 195 (1979) and Ratt. Sabah 145 (1984). Type: Peninsular Malaysia, Johor, Sg. Kayu, Corner S 29284 (holotype SING; isotype K); **synon. nov.**

7. A new variety of *Calamus divaricatus*

Calamus divaricatus is a variable plant endemic to Borneo, occurring from the lowlands up to c. 1800 m in montane forest. Forms from lowland forest in Sabah are particularly robust whereas those from ridgetops in montane forest as in the Mulu National Park, Sarawak, are very slender. They do, however, intergrade and seem to be conspecific. They all possess leaf sheaths with finely muricate ridges, strongly divaricate leaflets and inflorescences with few partial inflorescences, the rachillae and axes covered in hispid indumentum; the pistillate partial inflorescence has a strikingly triangular outline. A population in the Mulu National Park is unusual in being acaulescent (referred to in Dransfield 1984b as *C. divaricatus* 'acaulescent taxon'); however, it seems to intergrade with more typical populations nearby. A further form was collected by P. W. Richards on the Oxford University Expedition on G. Dulit, Sarawak; this, represented by staminate (*Richards* 1916) and pistillate (*Richards* 1777) material, differs from the slender climbing form of *C. divaricatus* in the leaflets being close and diverging at an acute angle rather than distant and divaricate. The indumentum on the rachillae is slightly different in being more ferruginous and less hispid, but the inflorescences are otherwise not significantly different. Furthermore the fruit is top-shaped as in typical *C. divaricatus*. The leaflet form and arrangement is so distinctive that I believe the taxon deserves recognition as a variety of *C. divaricatus*.

***Calamus divaricatus* Becc. var. *contrarius* J. Dransf. var. nov.** a varietate typica folio multo minore, foliolis confertis non divaricatis bene distincta. Typus: Borneo, Sarawak, *Richards* 1777 (holotypus K).

Differing from the type variety in the much smaller leaf with shorter closer leaflets diverging at an acute angle rather than being divaricate. (Fig. 5).

BORNEO. Sarawak, 4th Division, G. Dulit, *Richards* 1777 (K), 1916 (K).

8. Miscellaneous new species of *Calamus*

***Calamus lambirensis* J. Dransf. sp. nov.** humilis gracilis, foliolis remotis in sectione *Macropodo* vaginis foliorum muricatis egregia, vaginis *C. muricato* et *C. zonato* sectionis *Coleospathi* superficialiter affinis sed inflorescentia areolis magnis et floribus grandibus paucis dissimillima. Typus: Borneo, Sarawak, *Awang Morshidi* S 24059 (holotypus K; isotypi BH, SAR).

Slender clustering rattan, climbing to c. 3 m only. Stem without sheaths 4 mm diam., with sheaths to c. 8 mm; internodes c. 8 cm. Sheaths drying dull brown, armed with scattered or partially whorled short, triangular, flattened, pale brown spines to 4 × 1.5 mm, interspersed with very fine and close ridges, densely tipped with minute spines, the ridges sinuous, encircling the sheath or not, grey indumentum abundant between the ridges; knee scarcely developed; ocrea membranous, short, tattering, armed with inci-



FIG. 5. *Calamus divaricatus* var. *contrarius*. **A** portion of sheathed stem and staminate inflorescence $\times \frac{2}{3}$; **B** portion of leaf $\times \frac{1}{2}$; **C** staminate rachilla $\times 4$; **D** part of pistillate rachilla $\times 4$; **E** fruit $\times 3$. **A-C** from Richards 1916, **D & E** from Richards 1777. Drawn by Heather Wood.