NEW SPECIES OF PANDANUS (PANDANACEAE) FROM KABAENA ISLAND, SOUTH EAST SULAWESI, INDONESIA

Received February 26, 2009; accepted June 16, 2009

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ABSTRACT

Keywords: Austrokeura, Kabaena, Pandanus, Pandanaceae, Sulawesi.

INTRODUCTION
Kabaena Island (5.25° S, 121.94° E) is in the Bone Bay of South East Sulawesi Province, Indonesia. The island has an area of 873 km² and rises to 1560 m at its highest point. Despite previous botanical explorations made in Kabaena by Beccari in 1874, Weber van Bosse in 1899, Elbert in 1909, de Boer in ca. 1922 (van Steenis, 1950), Herbarium Bogoriense (BO) and Harvard University Herbaria in 1993 (Ismail, 2005 pers. comm.), and BO in 2006 (Rugayah, 2006), the pandan flora of the island remains largely unknown. This paper describes a new species, Pandanus kabaenaensis, from herbarium specimens collected by the most recent expeditions to the island.

Pandanus kabaenaensis A.P. Keim spec. nov. — Figs. 1.

Pandan mediocris; infructescitia terminalis, solitaria; cephalium globosum; phalanges a profundus sulcus separatus; phalange 4 – 6 drupa constans; stigmata aspicientia extrinsecus. — Typus: Indonesia, South East Sulawesi, Kabaena Island, Gunung Katopi, 18 km northwest of Tangkeno, 05° 12’ S 121° 25’ E, 7 Aug. 1993, Mc Donald & Ismail 4183 (Holotypus–BO; Isotypus–A).

Field characters. Common short tree, 5 m tall, branching sparingly above and below, stems more than 4 cm diameter; inflorescence 20 cm long, secondary staminate branches cylindrical, 5 cm long, 2 cm diameter; branches elliptical of equal size; fruit immature, subrotundate, ca. 7 cm diameter.

Distribution. Known only from type locality.

Habitat & ecology. Occurring in open savannah on serpentine soil, at 250 to 500 m altitude.

Etymology. Named after the type locality.
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sembles an immature form of *P. odoratissimus* L. f. However, unlike the latter species, most of the phalanges in *P. kabaenaensis* are separated by deep furrows, such that each phalange can be easily separated in the manner characteristic of section *Astrokeura* Stone (1974). The outwardly-facing stigmas of the new species are also opposite to the in-trorsely-turned stigmas of *P. odoratissimus*. Within section *Astrokeura*, *Pandanus kabaenaensis* is most similar to *P. brassii* Martelli of New Guinea. The phalanges in the latter species are also separated by deep furrows, but the cephalia are much larger (40×35 cm; see Martelli, 1929). The number of drupes (6–10) in a phalange are also more numerous than for *P. kabaenaensis*. The section *Astrokeura* was previously known only from the savannahs of New Guinea and northern Australia. The discovery of a new representative from Sulawesi supports the possibility of a strong floristic link between Sulawesi and the eastern parts of Malesia (see Lam, 1945a; b).

ACKNOWLEDGEMENTS

I am grateful to Drs. Rugayah and Laode Alhamd (BO) for information on Kabaena Island. My deepest gratitude also extended to Mr. Ismail (BO) for valuable information on the type collection and habitat where the new pandan was collected. Prof. N. Fukuoka (JICA) and Dr. Wayne Takeuchi (A) made some preliminary suggestions on the manuscript.

REFERENCES


Conservation status. Although the species is common on Kabaena Island, it has not been reported elsewhere and can thus be regarded as vulnerable (VU).

Notes. Based on the structure of the cephalium, this species is undoubtedly a member of subgenus *Pandanus* (see infrageneric classification in Stone, 1974). In overall appearance, *P. kabaenaensis* re-

Fig. 1. *Pandanus kabaenaensis* A.P. Keim (A. Lanceolate–longate leaf, B. Leaf margin with obvious spines, C. Medium–sized habit and slender stem, D. Solitary cephalium, half part of cephalium consists of phalanges separated each other by deep furrows, E. A phalange with 5 drupes with outwardly–facing stigmas, which is a distinctive character for the section *Astrokeura*). Drawn from the holotype (*Mc Donald & Ismail 4183*, BO!) by Wahyudi Santoso.