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Cover images : *Begonia hooveriana* Wiriad.. s*pec. nov.*

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A NEW SPECIES OF FREYCINETIA GAUDICH. (PANDANACEAE; FREYCINETOIDEAE) FROM TIDORE ISLAND, MOLUCCAS, INDONESIA.

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ABSTRACT
KEIM, A. P. 2013. — A new species of *Freycinetia* Gaudich. (*Pandanaceae*; *Freycinetoideae*) from Tidore Island, Moluccas, Indonesia. *Reinwardtia* 13(5): 441–444. *Freycinetia tidorensis* A.P. Keim is newly described from Tidore Island, Moluccas. This new species is morphologically similar to *F. devriesei* Solms but differs in the number of stigmatic remains. In *F. devriesei* the number is 3 to 6, never less than 3; whereas in *Freycinetia tidorensis* 1 to 2, never more than 2.

Key words: *Freycinetia*, *Freycinetoideae*, Moluccas, *Pandanaceae*, Tidore.

ABSTRAK
KEIM, A. P. 2013. — Jenis baru *Freycinetia* Gaudich. (Pandanaceae; Freycinetoideae) dari Pulau Tidore, Maluku, Indonesia. *Reinwardtia* 13(5): 441–444. Jenis baru *Freycinetia tidorensis* A.P. Keim dari Pulau Tidore, Maluku dipertelakan. Jenis baru ini mirip secara morfologi dengan *F. devriesei* Solms, namun berbeda pada jumlah tinggalan kepala putiknya. Pada *F. devriesei* jumlahnya 3 hingga 6, tidak pernah kurang dari 3; sementara pada *F. tidorensis* 1 hingga 2, tidak pernah lebih dari 2.

Kata kunci: *Freycinetia*, *Freycinetoideae*, Maluku, *Pandanaceae*, Tidore.

INTRODUCTION

Freycinetia is a genus of approximately 300 species. The genus has its profound diversity in the Malesiana floristic region with about 160 species currently recognised (Stone, 1982; 1983), in which about 10 species are found in the Moluccas especially the Halmahera Island as shown by the collections made by Teysmann and de Vriese during their exploration to the archipelago from 1859 to 1860 (Teysmann, 1861a; 1861b; 1877a; 1877b). Beccari also made some collections during his three explorations to the islands, especially Seram Island in 1873, 1876, and 1878 (Beccari, 1924; Solms, 1878). Warburg (1900) started the systematic studies on the pandan flora of the Moluccas followed by Martelli (1910; 1913) and Stone (1962; 1970). The latest work was made by Keim *et al*. (2008) and Callmander (2013, pers. comm.). However, despite the explorations, fairly large collections and those previous studies, the pandan flora of the Moluccas is still largely unknown particularly for Tidore Island as there has been no addition to the pandan flora of the island since the first mention by Rumphius (1743). This current study is aimed to unveil the pandan flora of this long botanically forgotten island and started by the discovery of a new species proposed here as *Freycinetia tidorensis* A.P. Keim.

SPECIES ENUMERATION

Freycinetia tidorensis A. P . Keim *spec. nov.* — Figs. 1–3.

Moderate climbing pandan; infructescence terminal; berries rostrate, very similar to *Freycinetia devriesei* but different in number of stigmas, in which the number of stigma in *F. tidorensis* varies from 1 to 2, whereas in *F. devriesei* 3 to 6. — Type: *H.J. Lam 3763* (L! holo; BO! iso.), Indonesia, Moluccas, North Moluccas, Tidore, above Gorrabanga (now Gorabunga), 9 Jul. 1926.

Fairly moderate climbing pandan. *Stem* triangle shaped, glabrous, 0.8 cm in diameter, internodes 1–1.8 cm. *Leaf* elongate ellipsoidal, 14–15.5 cm long, 2.9–3.4 cm wide, acute apex, minute spines ½ proximally; adaxial surface glabrous; abaxial surface glabrous; leafsheath 1 cm long; auricle not observed –apparently tapered. *Staminate inflorescence* not observed. *Pistillate inflorescence* not observed. *Staminate flower* not observed. *Pistillate flower* not observed. *Infructescence* terminal, quaternate, 6.5–7 cm long; peduncle short, 1 cm long; pedicel 1.8–2 cm long. *Cephalium* globose, 4 cm long, green when young turns to dark red when mature. *Berry*

Fig. 1. *Freycinetia tidorensis* A.P. Keim. General habit of the isotype (*H.J. Lam* 3763 kept at BO). Unfortunately, the specimen is fairly destroyed, particularly the cephalium. Nevertheless it shows the terminal triad infructescence. In this current publication the cephalium is thus observed through the photos taken from the holotype kept at L. (Source: A.P. Keim).

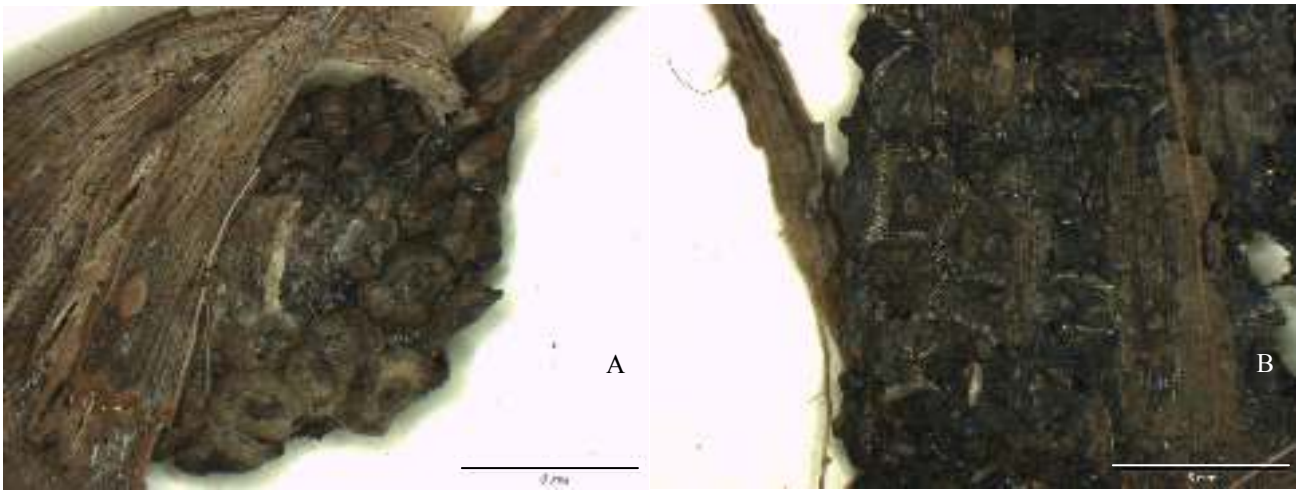

Fig. 2. A. Infructescence from the holotype (*H.J. Lam* 3763, L) shows cephalium composed of rostrate berries, in which each berry mostly with 1 stigmatic remains; B. Fragment of cephalium from the holotype (*H.J. Lam* 3763, L) shows the apical part of berries with mostly 1 to 2 stigmatic remains. Scale bar = 5 mm. (Source of Figs. 2A & B: J.F. Veldkamp, used here with permission).

Fig. 3. *Freycinetia tidorensis* A.P. Keim. The elongate light creamy white seeds. Scale bar = 5 mm. (Source: J.F. Veldkamp, used here with permission).

rostrate; stigmatic remains 1–2; seed elongate, 1.2 mm long, 0.2 mm wide, light creamy white.

Distribution. Endemic.

Habitat. Lowland tropical rainforest at around 700 m altitude.

Etymology. The epithet refers to Tidore, the island where the type was collected.

Vernacular name. 'Gufoa' (Tidore).

Uses. Not recorded.

Notes. The type of *F. devriesei* was collected from Halmahera Island in the Moluccas (Solms, 1878; Warburg, 1900) and since that it was the only species with rostrate berries known in the Moluccas. The two other species with rostrate berries are *F. micrura* (Stone, 1983), which is in Sulawesi, and the Philippine *F. rostrata*, which has been placed into synonym of *F. devriesei* by Stone (1969, the placement of *F. rostrata* into synonymy is beyond the scope of this paper; thus will not described further). The result of this current study indicates that there is another taxon from Tidore Island with rostrate berries. Despite outstandingly similarity in general appearances, nevertheless the taxon from Tidore Island straightforwardly differs from *F. devriesei* in the number of stigmas. The number of stigmas in *F. devriesei* varies from 3 to 6, never less than 3; whereas in the taxon from Tidore the number varies from 1 to 2, never more than 2 (Figures 2 & 3). Thus the taxon from Tidore is proposed here as a new distinct species, *F. tidorensis*.

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