

A NEW SPECIES OF FREYCNETIA (PANDANACEAE) FROM JAMBI, SUMATRA, INDONESIA

Received December 7, 2008; accepted December 16, 2008.

ELIZABETH A. WIDJAJA

Herbarium Bogoriense, Botany Division, Research Centre for Biology – LIPI, Jl. Raya Bogor Jakarta Km. 46, Cibinong 16911, Indonesia. Email. ewidjaja@indo.net.id

NURSAHARA PASARIBU

Post Graduate School, Bogor Agricultural University, Bogor, Indonesia; Biology Department, Faculty of Life Science and Mathematics, University of North Sumatra, Medan, Indonesia (permanent address)

ARIEF HIDAYAT

Herbarium Bogoriense, Botany Division, Research Centre for Biology – LIPI, Jl. Raya Bogor Jakarta Km. 46, Cibinong 16911, Indonesia.

ABSTRACT

WIDJAJA, E.A., PASARIBU, N., HIDAYAT, A. 2009. A new species *Freycinetia* (*Pandanaceae*) from Jambi, Sumatra, Indonesia. *Reinwardtia* 12 (5): 441–442. — *Freycinetia berbakensis* Widjaja, Pasaribu & Hidayat is proposed as a new species.

Keywords: Jambi, *Freycinetia*, *Pandanaceae*

ABSTRAK

WIDJAJA, E.A., PASARIBU, N., HIDAYAT, A. 2009. Sebuah jenis baru *Freycinetia* (*Pandanaceae*) dari Jambi, Sumatera, Indonesia. *Reinwardtia* 12 (5):441–442. — *Freycinetia berbakensis* Widjaja, Pasaribu & Hidayat diusulkan sebagai jenis baru.

Kata kunci: Jambi, *Freycinetia*, *Pandanaceae*

INTRODUCTION

Stone (1970) recorded 10 species of climbing pandans, *Freycinetia* Gaudich. (*Pandanaceae*) for Sumatra, but none from the Jambi Province. It is well known that the species rich island of Sumatra is very much under collected and this is another example. Subsequently, Widjaja & Hidayat (2007) reported that 8 species occurred in the Berbak Nature Reserve, Jambi, based on specimens kept in BO, L, and SING. One of these could not be matched with any known species, and is here described as new.

Freycinetia berbakensis Widjaja, Pasaribu & Hidayat, *spec. nov.* — Fig. 1.

Freycinetia confusa auriculis gracillissimis apice parum rotundato contracto dense fimbriato basin versus gradtim minus spinoso, pedicellis intus distaliter scabris angulis glabris, stigmatis 2 vel 3 (–7) differt.— Type. Jambi, Berbak National Park, *Elizabeth A. Widjaja* EAW 7629 (Holotype –BO, Isotype –K, L).

Climber, climbing up to 7 meter high, internodes 5–7 mm long, 2–5 mm in diameter.

Leaves tristichous, not very closely crowded, narrowly linear, 14–30 x 0.2–4 mm, chartaceous, basal leaves amplexicaul, margin entire, apex attenuate, minutely serrate, sometimes revolute when dry, longitudinal veins invisible on the adaxial and prominent on the abaxial surface. Auricle persistent, very slender, *ca.* 22 x 2 mm, apex tapered to slightly rounded, densely fimbriate at apex and gradually less spinose toward the base, horizontal septa absent. Inflorescences terminal, peduncle terete, 18–23 x 2–3 mm in diameter, pedicels quadrangular, 14–15 x 1–2 mm, pedicels inside distally scabrous, glabrous along the angles, brown, bracts 7 or 8, dark green purplish. Syncarp 1 (or 2), 10–32 x 5–7 mm in diameter, orange when mature and dark green when young, berry 1–2 mm in diam., pentagonal, stigmas 2 or 3 (–7).

Distribution. Sumatra, Jambi, Berbak National Park, only known from the type.

Habitat. swampy area, 50 m above sea level.

Notes. This species differs from *F. confusa* by the very slender auricle, apex slightly rounded and

tapering, densely fimbriate and gradually less spinose toward the base, its innersides pedicels scabrous at apex, glabrous along the angle, and the number of stigma 2–3 (7).

Specimens examined. **Jambi:** Berbak National Park, *Elizabeth A. Widjaja* EAW 7629 (BO, K, L), 8072 (BO, L), *Arief Hidayat* AH 987 (BO).

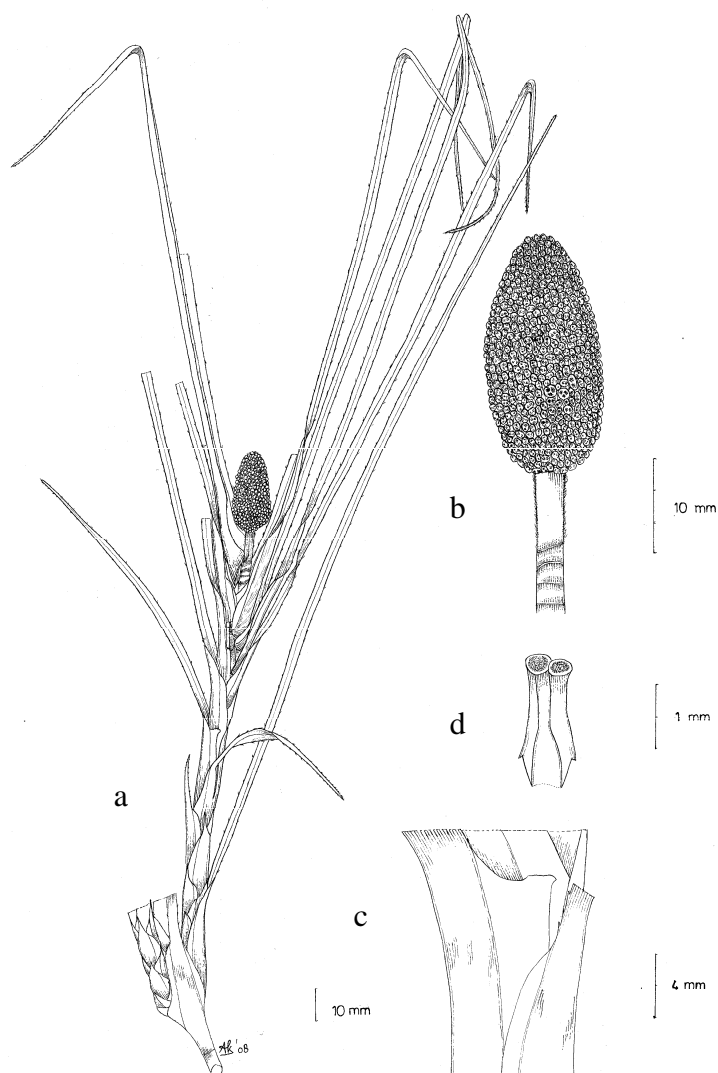


Fig. 1. *Freycinetia berbakensis* Widjaja, Pasaribu & Hidayat. (a. Leaf, b. Syncarp, c. Auricle of leaf sheath, d. Stigma).

ACKNOWLEDGEMENTS

We would like to thank to the keepers of the BO, L, SING herbaria for the opportunity to use their specimens for this study. The first author is grateful to the Director of the Singapore Botanical Garden, for funding her 3 weeks stay in Singapore in 2005 for a study of *Enicosanthum* Becc. (*Annonaceae*), during which study there was also an opportunity to study *Freycinetia*. The heads of the Berbak National Park, Bukit Dua Belas National Park, Bukit Sari Botanical Gardens and their staffs, are appreciated for all their helps during the field work. We would like to thank Anne Kusumawaty who make the illustration of this new species. We would like also to thank to Dr. Mien

A. Rifai and Dr. J. F. Veldkamp (L) for kindly reviewing the first draft of this paper and for helping with the Latin description.

REFERENCES

- STONE, B.C. 1970. Materials for a monograph of *Freycinetia* Gaud. (*Pandanaceae*) V. Singapore, Malaya and Thailand. *Gard. Bull. Sing.* 25 (2): 187–207.
- WIDJAJA, E.A. & HIDAYAT, A. 2007. The *Pandanaceae* of Jambi Province, Sumatra, Indonesia. *Seventh Intern. Fl. Males. Symp.* :64. Flora Malesiana Symposium VII, Leiden.