



REINWARDTIA

REINWARDTIA

*A JOURNAL ON TAXONOMIC BOTANY,
PLANT SOCIOLOGY AND ECOLOGY*

Vol. 13(3): 221 — 315, April 11, 2012

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LEAF ANATOMY OF PANDANUS SPECIES (PANDANACEAE) FROM JAVA

Received August 25, 2011; accepted December 27, 2011

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ABSTRACT

RAHAYU, S. E., KARTAWINATA, K., CHIKMAWATI, T., HARTANA, A. 2012. Leaf anatomy of *Pandanus* species (*Pandanaceae*) from Java. *Reinwardtia* 13(3): 305–313. — The leaf epidermis and mesophyll of fifteen species of *Pandanus* from Java were investigated to assess the value of anatomical features in species identification and classification. Characters of diagnostic importance are epidermal cell shape, differentiation of the abaxial epidermis into costa and intercosta, adaxial anticlinal cell wall outline, occurrence of raphides in the mesophyll, distribution of cubical crystals, palisade cell shape, papillae on epidermal cells, and the stomatal complex. Leaf epidermal anatomy was found to be useful in the identification at species level.

Keywords: anatomy, *Pandanus*, *Pandanaceae*, Java.

ABSTRAK

RAHAYU, S. E., KARTAWINATA, K., CHIKMAWATI, T., HARTANA, A. 2012. Anatomi daun *Pandanus* (*Pandanaceae*) dari Jawa. *Reinwardtia* 13(3): 305–313. — Studi tentang epidermis daun dari 15 jenis *Pandanus* di Jawa dilakukan untuk menentukan kegunaan dari karakter-karakter anatomi ini dan untuk menetapkan nilai manfaatnya di dalam identifikasi jenis dan klasifikasi. Karakter-karakter diagnostik yang penting di dalam klasifikasi *Pandanus* di Jawa adalah bentuk sel epidermis, demarkasi atau diferensiasi epidermis abaksial menjadi kosta dan interkosta, dinding antiklinal sel adaksial, adanya raphid pada potongan melintang, penyebaran kristal berbentuk kubus, bentuk jaringan palisade, adanya papila pada sel epidermis, kompleksitas stomata. Hasil penelitian ini menunjukkan bahwa anatomi dari epidermis daun berguna secara taksonomi dalam identifikasi *Pandanus* pada tingkat jenis.

Kata kunci: anatomi, *Pandanus*, *Pandanaceae*, Jawa.

INSTRUCTION TO AUTHORS

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