



A JOURNAL ON TAXONOMIC BOTANY,  
PLANT SOCIOLOGY AND ECOLOGY



# REINWARDTIA

12(3)

# REINWARDTIA

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

Vol. 12(3): 205-259. 22 Desember 2006

---

## **Editors**

ELIZABETH A. WIDJAJA, MIEN A. RIFAI, SOEDARSONO RISWAN, JOHANIS P. MOGEA

Correspondence and subscriptions of the journal should be addressed to  
HERBARIUM BOGORIENSE, BIDANG BOTANI, PUSAT PENELITIAN BIOLOGI - LIP1,  
BOGOR, INDONESIA

## STACHYLIDIUM PALLIDUM DEWI SP. NOV. FROM JAVA

N. DEWI

*Herbarium Bogoriense, Botany Division, Research Center for Biology-LIPI, Bogor, Indonesia*

### ABSTRACT

DEWI, N. 2006. *Stachylidium pallidum* sp. nov. from Java. *Reinwardtia* 12(3): 215–217. — *Stachylidium pallidum* Dewi sp. nov. is described and illustrated based on a specimen collected from dead leaf of *Dendrocalamus giganteus* cultivated in Bogor Botanical Garden, West Java, Indonesia.

Key words: *Dendrocalamus giganteus*, *Hyphomycetes*, *Stachylidium*

### ABSTRAK

DEWI, N. 2006. *Stachylidium pallidum* sp. nov. dari pulau Jawa. *Reinwardtia* 12(3): 215–217. — *Stachylidium pallidum* Dewi sp. nov. dipertelakan dan digambarkan berdasarkan suatu spesimen yang dikoleksi dari daun bambu *Dendrocalamus giganteus* mati yang ditanam di Kebun Raya Bogor, Jawa Barat, Indonesia.

Kata kunci: *Dendrocalamus giganteus*, *Hyphomycetes*, *Stachylidium*

### INTRODUCTION

In making general collection of bambusicolous *Hyphomycetes* in Java, a species of *Stachylidium* was found growing on dead leaf of *Dendrocalamus giganteus* cultivated in Bogor Botanical Garden.

This species is characterized by the pale colour of the colonies, hyaline phialides and conidia, much branched conidiophores which has 4-6 whorls of lateral branches. The conidiophores are short (160-400 µm long), pale brown at the base and much paler toward to the apex. The phialides are cylindrical with conical apex, producing ellipsoid conidia, measuring 3-6 µm long and 2-3 µm in diametres.

This bambusicolous species is different from *Stachylidium bicolor* Link, the type species of the genus, because the latter possesses brown or olivaceous brown colonies, with conidiophores up to 700 µm long, their phialides smooth or minutely verruculose, hyaline or pale olivaceous, 9-20 x 3-4 µm, producing conidia 4-8 x 2-3 µm. In addition, *Stachylidium bicolor* grows on a great variety of herbaceous and woody substrata (Hughes 1951a, Ellis, Ellis & Ellis 1951, Ellis 1971). In Java this species has also been collected on *Musa paradisiaca*, *Piper bettle*, *Piper aduncum* and *Zalacca magnifica*.

The bambusicolous species also differs from *Stachylidium bicolor* var. *caespitosum* Hol.-Jech. which has verrucose conidiophores arising singly or caespitose in tufts. Its phialides are

pale yellow-brown to olive-brown, verrucose to echinulate, producing conidia which are longer, 5-10 x 1.5-2.5 µm (Holubová-Jechová 1988).

According to Holubová-Jechová (1988), there is another tuft forming or synnematosus *Stachylidium* species from Cuba, *Stachylidium cubense* Mena et Mercado which is similar to *Stachylidium bicolor* var. *caespitosum* Hol.-Jech., but its conidia are larger (10-15.5 x 3.5-5 µm) and their phialides are not regularly verticillately arranged on the conidiophores.

Since this new collection is congruent with the genus *Stachylidium* which have an oval and wide phialides in contrast to the more or less subulate and narrow phialides of *Verticillium* spp. (Hughes 1951b), but because it cannot be matched with any described taxa, it is proposed here as a new species of *Stachylidium*.

*Stachylidium pallidum* Dewi, sp. nov.— Fig. 1c,d,e

Coloniae effusae, pilosae, cinerea vel pallide brunneae. Mycelia plerumque immersa, hyalina. Conidiophora singula recta, flexuosa, 160-400 µm longa, pallide brunnea, saepe apicem versus pallidiora vel hyalina, ramosa. Phialides cylindriatae ad apicem conoidea levia, 13-18 x 2-3 µm. Conidia hyalina, ellipsoidea, 4-4.5 µm longa, 2-3 µm crassa, levia.

Colonies effuse, hairy, grey to very pale brown. Mycelium mostly embedded in the

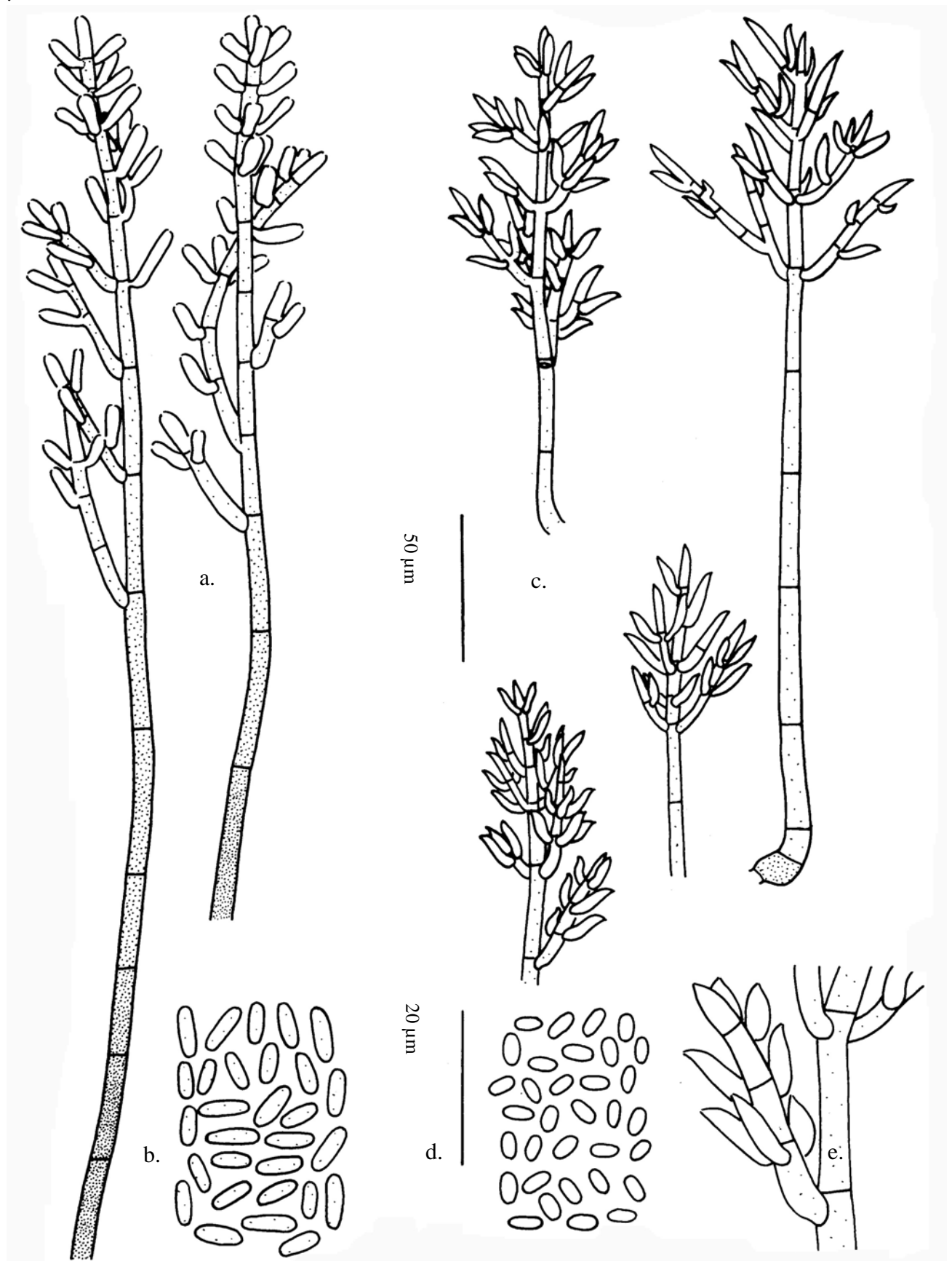


Fig.1. *Stachylidium bicolor*: a. Habit and Conidiophore; b. Conidia (based on BO22542); *Stachylidium pallidum*: c. Habit and Conidiophore; d. Conidia; e. Phialides (based on BO22541).

substratum consist of hyaline hyphae. Conidiophores erect, flexuous, pale brown at the base, much paler to hyaline toward the apex, 160-400  $\mu\text{m}$  long, singly or in groups, 10-15 septate, with 4-6 whorls of lateral branches arising in the upper part. Branches cylindrical, taper gradually to the apex, very pale brown to hyaline, 22.5-90  $\mu\text{m}$  long, 2.25-4  $\mu\text{m}$  diameter at base. Lateral branches bearing singly, in pairs or in verticils of 3 to 4 secondary branches or phialides. Phialides cylindrical, constricted at base, conoidal at the apex, with almost imperceptible minute collarete, hyaline to subhyaline, smooth, 13-18  $\mu\text{m}$  long, 2-3  $\mu\text{m}$  in diameters. Conidia formed at the tips of phialides, 3-6  $\mu\text{m}$  long, 2-3  $\mu\text{m}$  in diameters, hyaline, ellipsoidal to subovoidal, smooth. Teleomorph unknown.

SPECIMEN EXAMINED. On dead leaf of *Dendrocalamus giganteus*, Indonesia, Java, West Java, Bogor Botanical Garden, 15 February 2006, Dewi 168 (BO22541, Holotype).

#### ACKNOWLEDGEMENT

The author is grateful to Prof. Dr. Mien A. Rifai (Bogor) for his supervision and to Dr. Kartini Kramadibrata and Ms. Atik Retnowati, M.Sc (Bogor) for their helpful comment on the draft of this paper.

#### REFERENCES

- ELLIS, M.B. ELLIS, E.A. & ELLIS, J.P. 1951. Marsh and fen fungi I. *Trans. Brit. mycol. Soc.* 34: 166-167.
- ELLIS, M.B. 1971. *Dematiaceous Hyphomycetes*. Commonwealth Mycological Institute. Kew.
- HOLUBOVÁ-JECHOVÁ, V. 1988. Studies on Hyphomycetes from Cuba VII. Seven new taxa of dematiaceous *Hyphomycetes*. *Česká Mycologie* 42: 23-30.
- HUGHES, S.J. 1951a. *Stachylidium, Gonytrichum, Mesobotrys, Chaetopsis* and *Chaetopsella*. *Trans. Brit. Mycol. Soc.* 34: 551-559.
- HUGHES, S.J. 1951b. Studies on microfungi. XI. Some *Hyphomycetes* which produce phialides. *Mycological Paper* 45: 1-30.

## INSTRUCTION TO AUTHORS

Manuscripts intended for publication in *Reinwardtia* should be written either in English, French or German, and represent articles which have **not been** published in any other journal or proceedings. **Each** manuscript received will be considered and **processed** further if it is accompanied by signed **statements** given independently by two reviewers **chosen** by the author(s) attesting to its merits as well as its scientific suitability for publication in *Reinwardtia*.

Two printed copies (on A4 paper) of the manuscript of not more than 200 pages should be sent to Editors, together with an electronic copy prepared on Word Processor computer programme using Times New Romance letter type and saved as Rich Text File must be submitted.

For the style of presentation authors should follow the latest issue of *Reinwardtia* very closely. Title of the article should be followed by author's name and mailing address and a one-paragraphed abstract in English (with French or German abstract for papers in French or German) of not more than 250 words. Keywords should be given below each abstract. On a separate paper author(s) should prepare the preferred running title of the article submitted.

Taxonomic keys should be prepared using the aligned-couplet type.

Strict adherence to the *International Code of Botanical Nomenclature* is observed, so that taxonomic and nomenclatural novelties should be clearly shown, Latin description for new taxon proposed should be provided, and the herbaria where type specimens are deposited should be indicated. Synonyms should be presented in the long form [name of taxon, author's name, year of publication, abbreviated journal or book title, volume (number): [page]].

Maps, line drawing illustrations or photographs preferably should be prepared in landscape presentation to occupy two columns. Illustrations must be submitted as original art accompanying, but separate from, the manuscripts. On electronic copy, the illustrations should be saved in .jpg or .gif format. Legends for illustrations must be submitted separately at the end of the manuscript.

Bibliography, list of literature cited or references follow the Harvard System.

For each paper published author(s) will receive 25 copies of reprints free of charge. Any additional copies should be ordered in advance and the author(s) will be charged accordingly.

CONTENTS

Page

BENITO C. TAN, BOON-CHUAN HO, VIRGILIO LINK, EKA A.P. ISKANDAR, IPAH NURHASANAH, LIA DAMAYANTI, SRI MULYATI and IDA HAERIDA. Mosses of Gunung Halimun National Park, West Java, Indonesia.....	205
S. DEWI. <i>Stachylidium pallidum</i> Dewi sp. nov. from Java .....	215
W.J.J.O. DE WILDE, B.E.E. DUYFJES and R.W.J.M. VAN DER HAM. <i>Anangia</i> , a new monotypic genus of <i>Cucurbitaceae</i> from East Mollucas .....	219
TOPIK HIDAYAT, TOMOHISA YUKAWA and MOTOMIITO. Evolutionary analysis of pollinaria morphology of <i>subtribe Aeridinae (Orchidaceae)</i> .....	223
DOLLY PRIATNA, KUSWATA KARTAWINATA and ROCHADI ABDULHADI. Recovery of a lowland dipterocarp forest twenty two years after selective logging at Sekundur, Gunung Leuser National Park, North Sumatra, Indonesia .....	237
MARTHEN T. LASUT. A new species of <i>Ischaemum</i> from Sulawesi .....	257