

**NEW RECORD OF CORTICIACEAE (BASIDIOMYCETES)  
COLLECTED FROM THE NATIONAL TAIWAN  
UNIVERSITY CAMPUS**

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**Abstract:** This is the first record of *Cerocorticium molle* (Berk. & Curt.) Jülich and *Vesiculomyces citrinus* (Pers.) Hagström from Taiwan. They were collected from the campus of National Taiwan University. The hyphidia of *Cerocorticium* species are probably young or aborted basidioles. Basidiospores of the Formosan *V. citrinus* are larger than those of Nordic and American specimens.

1. ***Cerocorticium molle*** (Berk. & Curt.) Jülich, *Persoonia* 8: 219, 1975. Fig. 1  
≡ *Corticium molle* Berk. & Curt., *J. Linn. Soc. (Bot.)* 10: 336, 1868.

Fruit body resupinate and effuse, ceraceous and separable, 160–370  $\mu\text{m}$  thick in section. Hymenial surface white at the initiation of growth, Antimony Yellow to Warm Buff (Ridgway 1912) when mature, even, not cracked; margin often determinate and in such condition usually concolorous and rolls off from the substrate, occasionally filamentous and white. Hymenium composed of gelatinized, guttulate, longitudinally arranged basidial elements, ca. 120  $\mu\text{m}$  thick. Subhymenium and medullary layer also with rather compact texture, but the latter looser near substrate. Hyphal system monomitic; subicular hyphae distinct, with clamps, 2–4  $\mu\text{m}$  in diam, with  $\pm$  thickened walls of 0.4–1.2  $\mu\text{m}$  thick. Cystidia lacking. Hyphidia-like elements distributed amongst other hymenium elements but difficult to distinguish clearly from the slender basidioles. Basidia long, clavate, flexuous, with tapering bases, 65–100 $\times$ 7.5–9  $\mu\text{m}$ , bearing four stout sterigmata. Basidiospores cylindrical or narrowly ellipsoid, thin-walled, smooth, guttulate, 10–16 $\times$ 5–6.2  $\mu\text{m}$ , non-amyloid, non-dextrinoid, acyanophilous.

**Specimen Examined:** Taipei: Campus of National Taiwan University, on living trunk of *Bischofia javanica* Bl., growing on the opposite side of road in front of graduate student residence, May 8, 1988, Wu 880508.

**Distribution:** Southern part of North America, Central America, North and South Africa, Java, New Zealand, Australia, Brazil and Taiwan.

**Remarks:** The present specimen was collected from a trunk of a living *Bischofia javanica*, May 8, 1988. The basidiocarps grew under the bark and when the bark became shedded it appeared on the surface of the sapwood. The fruit-body observed during 1988 lasted for about one month then decayed after it rained for several days. The next year, a fruitbody of the same fungus appeared on the same location and vanished after one month, also due to continuous rain.

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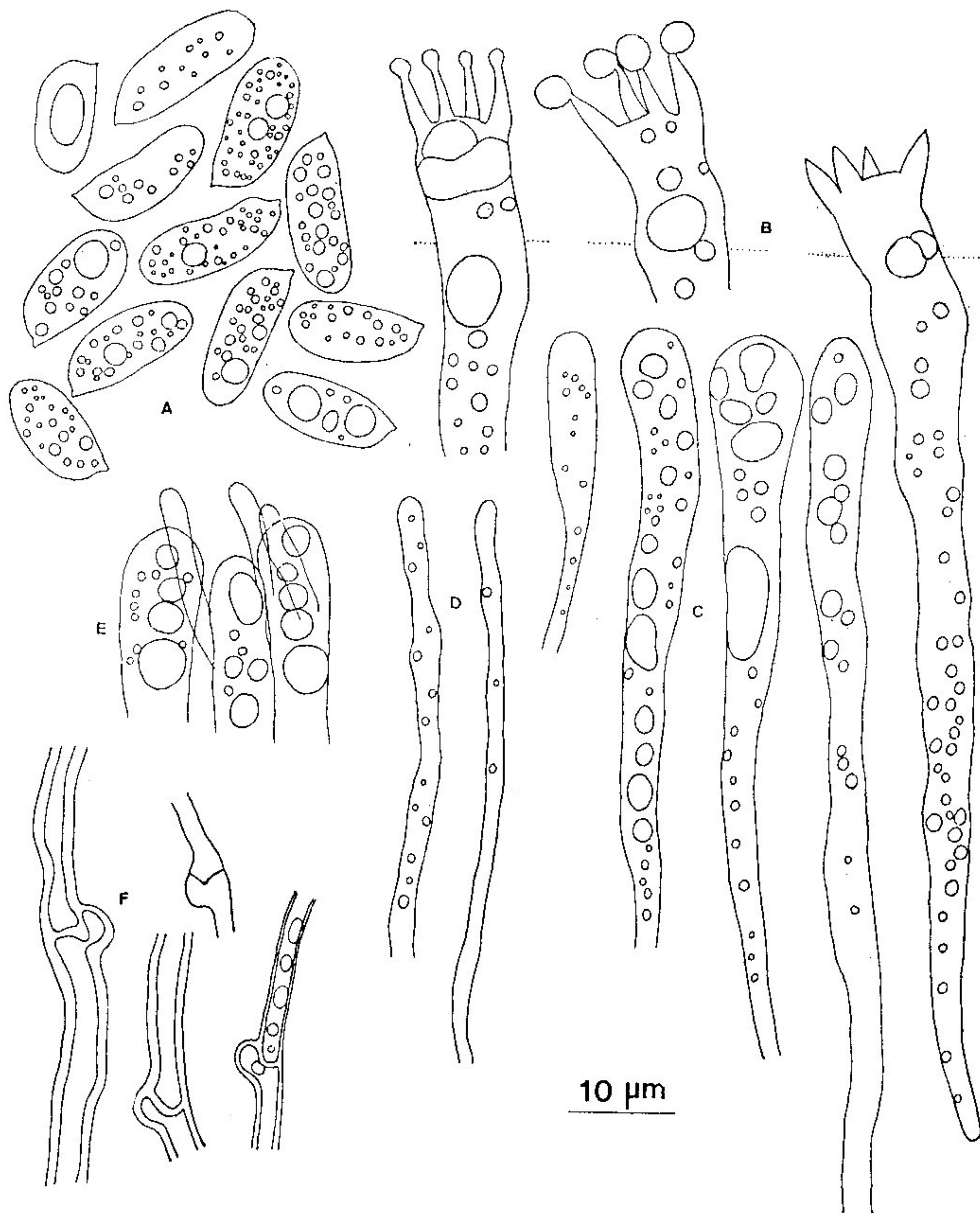


Fig. 1. *Cerocorticium molle* (Wu 880508). A. basidiospores; B. basidia; C. basidioles; D. hyphidia; E. part of hymenium; F. subicular hyphae.

This species is similar to *Vuilleminia comedens* (Nees: Fr.) Maire. However, the latter has a catahymenium and dendrohyphidia. When observed carefully in this species, the structure usually referred to as hyphidia (Jülich & Stalpers 1980), in fact can't be clearly distinguished from the slender basidioles. Both are also guttulate. This structure thus differs, from typical concept of hyphidia, which are paraphysoid hyphae, different from basidioles; we consider them as young or

aborted basidioles. This character should be regarded as important for classifying a species in the genus *Cerocorticium* P. Henn. in O. Warburg. The other important characters of this genus are clavate basidia with elongate bases, as well as large, and guttulate basidiospores.

2. *Vesiculomyces citrinus* (Pers.) Hagström, Bot. Notiser 130: 503, 1977. Fig. 2  
 ≡ *Thelephora citrinum* Pers., Mycol. europ. 1: 136, 1822.

Fruitbody resupinate and effuse, ceraceous, adnate, 50-120  $\mu\text{m}$  thick in section.

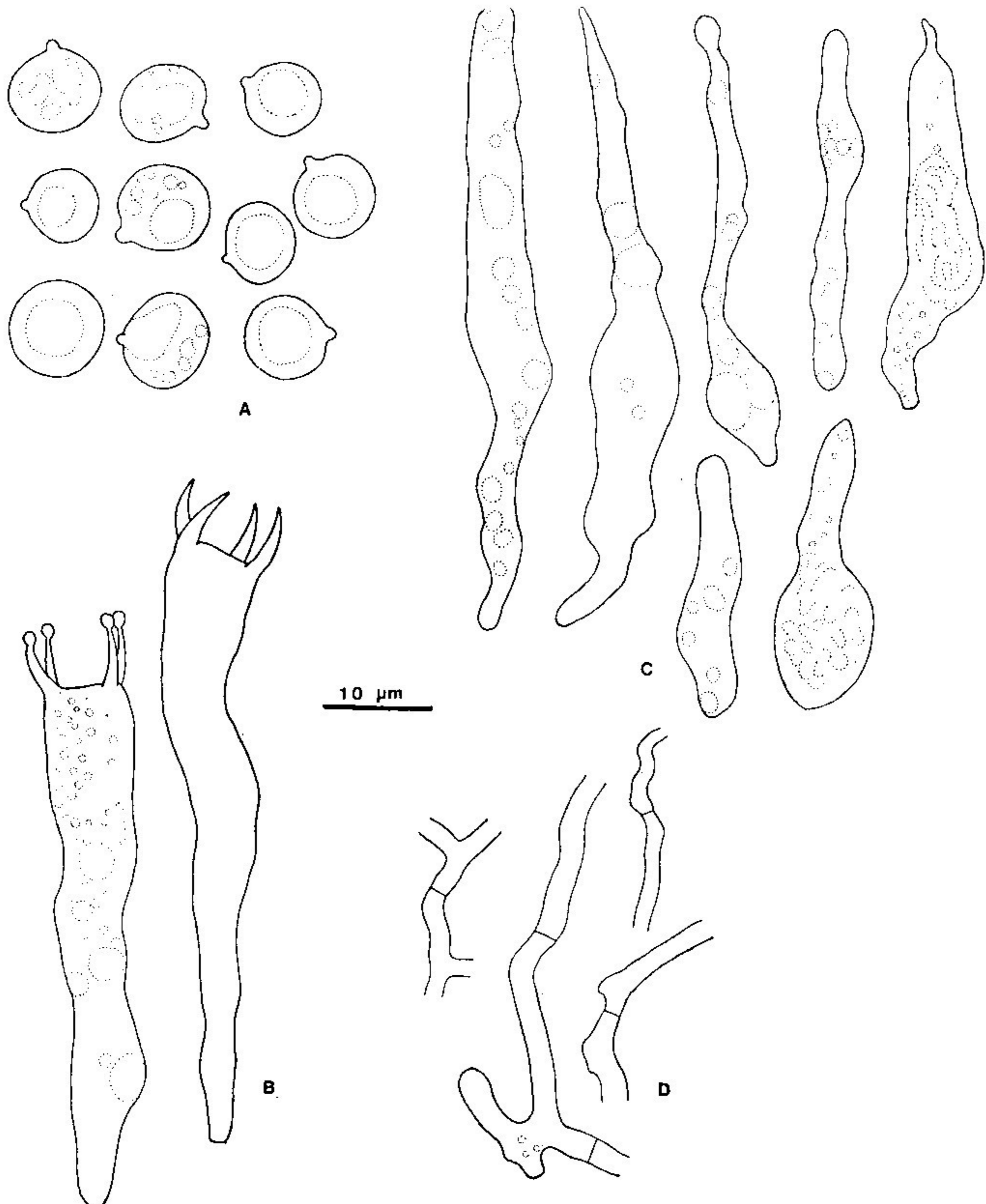


Fig. 2. *Vesiculomyces citrinus* (Wu 880507). A. basidiospores; B. basidia; C. gloeocystidia; D. subicular hyphae.



Hymenial surface Warm Buff to Light Buff, even, not cracked; margin thinning, pruinose, white. Hyphal system monomitic; hyphae compactly arranged, indistinct and without clamps, thin-walled, 1.5–2.5  $\mu\text{m}$  in diam. Gloeocystidia numerous, irregularly fusiform, basally swollen, with negative reaction in sulfoaldehyde, 20–50 $\times$ 3.5–7  $\mu\text{m}$ . Basidia narrowly clavate, guttulate, 35–55 $\times$ 7–8.5  $\mu\text{m}$ , 4-sterigmata. Basidiospores globose, guttulate, with a prominent apiculus, slightly thick-walled, 7–9.2 $\times$ 6.5–8.5  $\mu\text{m}$ , amyloid, acyanophilous.

Specimen Examined: Taipei: National Taiwan University, on fallen sheath culms of *Livistoma subglobosa* (Hassk.) Martius, May 7, 1988, Wu 880507.

Distribution: Widely distributed around the world.

Remarks: The present specimen represents a rather young basidiocarp with a thinner fruitbody which without the wide basal gloeocystidia as those described by Eriksson and Ryvardeen (1975, Fig. 169). Gloeocystidia in our specimen show a content but with negative reaction in sulfoaldehyde. The usage of genus name *Vesiculomyces* for this species in the paper is provisional. This genus was proposed because gloeocystidia of *V. citrinus* with sulfo-negative reaction (Hagström 1977), differing from the sulfo-positive reaction of the genus *Gloeocystidiellum*; while, this structure with strongly sulfo-positive reaction in culture of *V. citrinus* has been established (cf. Boidin 1983, p. 497), which means gloeocystidia of *V. citrinus* in fact is homologous with those in *Gloeocystidiellum*.

The Formosan collection has distinct larger basidiospores than those of Nordic Specimens (cf. Hagström 1977). North American Specimens have intermediate size of basidiospores between above two (cf. Gilbertson 1974).

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### LITERATURE CITED

- BOIDIN, J., and P. LANQUETIN, 1983. Basidiomycetes, Aphylophorales épithéloïdes étalés. *Mycotaxon* 16(2): 461–499.
- ERIKSSON, J. and L. RYVARDEN, 1975. The Corticiaceae of North Europe. 3: 288–546, *Fungiflora*, Oslo.
- GILBERTSON, R. L., 1974. Fungi that decay Ponderosa pine. Univ. Arizona Press, Tucson, 192 pp.
- HAGSTRÖM, E., 1977. *Vesiculomyces* Hagström gen. nov. segregated from *Gloeocystidiellum* (Corticiaceae). *Bot. Notiser* 130: 135–141.
- JÜLICH, W. and J. A. STALPERS, 1980. The resupinate non-poroid Aphylophorales of the temperate northern hemisphere. *Ver. Kon. Neder. Akad. Wet. Natuur. Tweede Reeks*, 74: 1–335.
- RIDGWAY, R., 1912. *Color Standard and Color Nomenclature*. 43 pp. Washington, D.C. Published by the author.

# 臺灣大學校園發現之伏革菌科 (擔子菌綱)臺灣新記錄種

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## 摘 要

自臺灣大學校園茄冬樹幹上及扇葉蒲葵落葉鞘上發現地黃臘伏革菌 [*Cerocorticium molle* (Berk. and Curt.) Jülich] 及橘泡囊菌 [*Vesiculomyces citrinus* (Pers.) Hagström]。皆為臺灣新記錄種。文中推測臘伏革菌屬之菌絲狀側絲 (hyphidia) 可能為年輕或發育不全之幼擔子囊 (Basidioles)。另臺灣橘泡囊菌之擔孢子較北歐及北美者稍大，值得進一步探討。