

## Fungal Flora in Bamboo Forest of Korea (I)

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### 韓國竹林產高等菌類

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**Abstract:** 40 specimens of higher fungi were collected at the bamboo forest of Damyang, Jyunranam-Do, and Kyungju, Kyungsangman-Do during May 6, August 17, 29 and October 23, 1976. These fungi were identified. They were composed of 3 orders, 10 families, 19 genera and 23 species. Among them, *Clitocybe castaneifloccosa* S. Ito et Imai, *Collybia matris* S. Ito et Imai, *Marasmiellus lactea* (Pers. ex Fr.), *Lepiota hetieri* Boud. and *Paxillus atrotomentosus* (Fr.) Fr. var. *bambinus* Baker et Dale were found to be new in Korea.

Yoshiko shidei reported fungi which were found at the bamboo forest of Japan(1974 and 1976). Attempts to investigate Korean bamboo forest fungi have been made by the authors. 20 specimens were collected at Damyang on August 17. And 20 specimens were collected at Kyungju on May 6, August 29 and October 3.

Bamboos of Damyang were *phyllostachys edulis* Riv. and those found in Kyungju were *phyllostachys reticulata* Koch. Fungi of Damyang were of various kinds and the dominant species of Kyungju was *Dictyophora indusiata* (Pers.) Fishch.

Comparative study of the fungi which were separately found at Damyang and Kyungju will appear in near future. Their located places will be referred to D as to Damyang and K as to Kyungju.

Basidiomycetes

담자균강

Homobasidiae	동담자균강
Hymenomycetes	균신류
Agaricales	송이목
Tricholomataceae	송이과
<i>Clitocybe castaneifloccosa</i> S. Ito et Imai(D) 꼬마갈대기버섯(신칭)	
S. Ito & Imai, Trans. Sapporo Nat. Hist. Soc. 16 : 12. 1939.	
Pileus 0.5-1cm broad, funnel-shaped, plane or depressed in center, dark, yellowish brown or grayish yellow brown. Lamellae 1mm wide, sparse, brown. Stipe 0.5-1cm long 0.6-1mm thick brown, hollow, decurrent, thick and roundish downward. Spores subglobose, 7.2-8.6×5.7-7.2 $\mu$ , white, enclosed one or some oil drops, nonamyloid, basidia four spores, 31.5-38.6×4.3-7.2 $\mu$ . Hab. Caespitose on cut bamboo.	

*C. clavipes* (Fr.) Quél. (D) 배불뚝이풀버섯  
*Tricholomopsis platyphylla* (Fr.) Sing. (D) 납  
 은주름버섯

*Collybia confluens* (Fr.) Kummer (D) 밀버섯  
*C. matris* S. Ito et Imai 황갈색밀버섯(신칭)  
 S. Ito & Imai, Trans. Sapporo Nat. Hist. Soc.  
 16 : 16, 1939.

Pileus 1.6–2.7cm broad, convex, light brown, brown at center, dark at margin when old adult. Lamellae dense, brown or dark brown. Stipe 2.5–4.2cm long, 1–3mm thick, equal, yellowish gray, adnate. Spores subcylindrical or elliptical, 7.2–8.6×4.3–5.0 $\mu$ , enclosed two or three oil drops, seldom germ pore present, light brown, amyloid. Cystida 48.6–52.9×17.2–22.9 $\mu$ , basidia four spores, 7.2–20.2×4.3–5.7 $\mu$ .

Hab. Solitary or clustered on fallen leaves of bamboo or on the soils  
*Armillariella mellea* (Fr.) Karst. (K) 뽕나루버섯  
*Oudemansiella radicata* (Fr.) Sing. (K) 진  
 푸리버섯

*Marasmiellus lactea* (Pers. ex Fr.) (D) 그마  
 흰갓주름 버섯(신칭)  
*Agaricus annus* Bull. Herb. Fr. pl. 563, f. N.o.  
 1971.

Pileus 2mm broad, white, pale orange when dry, with spherical or conic furrow. Lamellae sparse. Stipe 1cm long, 1mm thick, adnate, white hair of star-shaped distributed upward. Spores seed-shaped, white, 6.5–8.6×2.5–4 $\mu$ , nonamyloid, formed projection on the surface, basidia four spores, 17.2–21.5×5.7–7.2 $\mu$ . Cystidia clavate or flask shaped, 35.3–77.6×12.9–13.3 $\mu$ , hyphae from gill trama 4.3–5.7×7.5 $\mu$ , clamp present seldom.

Hab. Caespitose on cut bamboo.

*Marasmius siccus* (Schw.) Fr. (K) 분홍갓버섯  
 Agaricaceae 들버섯과

*Lepiota heteri* Boud. (D) 대나무우산버섯(신칭)  
 Boudier, Bull. Soc. Myc. Fr. 18 : 137. pl. 6  
 f. 1. 1902

Pileus 1–5cm broad, spherical at first then convex, plane when old adult, margin upward, farinaceous compactly, pale yellow or pale yellowish brown, flesh tough, white, thick. Lamellae

0.5–2cm wide, dense, pale yellow or pale yellowish brown. Stipe 1.5–5.5cm long, 3–16mm thick, scattered white scales and upward of annulus. Annulus upward, free, stuffed, scattered white powders on the surface. Spores subcylindrical or elliptical, 4.3–5.7×2.6–2.9 $\mu$ , white, nonamyloid, basidia four spores, subcylindrical, 17.2–18.6×4.3 $\mu$ , Cystidia clavate, 20.6×13.3 $\mu$ , hyphae from gill trama 35.8–57.2×7.2 9.2 $\mu$ , clamp absent.

Hab. Solitary or clustered on fallen leaves of bamboo or on the soils

Coprinaceae

*Coprinus friesii* Quél. (D,K) 코마버풀버섯

*Naematoloma fasciculare* (Fr.) Karst. (K) 노  
 란다발(독)

Cortinariaceae 곤적버섯과

*Inocybe imosa* (Fr.) Quél. (K,D) 팔버섯(독)

Paxillaceae 우단버섯과

*Paxillus atrotomentosus* (Fr.) Fr. var. *bambusinus* Baker et Dale (K) 대나무우단버섯(신칭)

Pileus 3–9.5cm broad, plane or depressed at center, glabrous, fanshaped, mixed pale yellow with light brown, dark brown or black when old adult, wrinkled, flesh grayish, tough, filamentous, margin incurved. Lamellae 4mm wide, curly-shaped, sparse, dull orange, then changed bluish gray or pale yellowish brown, farinaceous, yellow when young black when old adult. Stipe 4–6cm long, 0.8–2cm thick, some attached laterally, non-cylindrical, brownish velvet hair covered irregularly, stuffed, tough, flesh white, decurrent. Spores elliptical, 4.3–5.8×3.6–4.3 $\mu$ , light yellowish, pseudo-amyloid, basidia four spores, 27.2–32.9×5.7–7.2 $\mu$ , hyphae from stem trama 57.2–72.5×5.7–10 $\mu$ . Clamp present very seldom.

Hab. Solitary or clustered on rotted bamboo.

Boletaceae 그물버섯과

*Boletus rubellus* Krombh. 붉은두메그물버섯

Russulaceae 무당버섯과

*Russula cutifracta* Cocke (D) 청버섯

*R. fragilis* (Pers.) Fr. (D) 애기무당버섯

Polyporaceae 구멍장이버섯과

- Elvingia appplanata* (Pers.) Karst. (D) 진나  
비걸상
- Ganoderma lucidum* (Fr.) Karst. 불느초
- Gasteromycetes 복균류
- Sclerodermataceae 어리알버섯목
- Calostomataceae 연지버섯과
- Astraeus hygrometricus*(Pers.) Mergan (K)  
먼지버섯
- Phallales 말뚝버섯목
- Phallaceae 말뚝버섯과
- Dictyophora indusiata* (Pers.) Fisch. (K)  
방태버섯
- Mutinus caninus* (Pers.) Fr. (K) 뱀버섯
- Pseudocolus schellenbergiae* (Sumst.) Johnson (D) 새발버섯

### 적  요

1976년 5월 6일, 8월 17, 29일, 10월 3일에 담양과 경주의 죽림에서 40여개의 고등균류를 채집하여 동정한 결과 3목 10과 19속 23종을 분류하였으며 그 중에서 한국미 기록종은 다음과 같다.

*Clitocybe castaneifloccosa* S. Ito et Imai,  
*Colybria matris* S. Ito et Imai, *Marasmiellus lactea* (Pers. ex Fr.), *Lepiota hetieri* Boud.  
*Paxillus atrotomentosus* (Fr.) Fr. var. *bambusinus* Baker et Dale.

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The Explanation of plate I

- A. *Clitocybe castaneifloccossa* S. Ito et Imai  
a. carpophores  $\times 2$       b. spores  $\times 1000$   
c. basida  $\times 1000$
- B. *Collybia matris* S. Ito et Imei  
a. carpophores  $\times 2$       b. spores  $\times 1000$   
c. basidia  $\times 1000$       d. cystidia  $\times 1000$
- C. *Marasmiellus lactea* (Pers. ex Fr.)  
a. carpophores  $\times 10$       b. spores  $\times 1000$   
c. cystidia  $\times 1000$   
d. hyphae from gill trama  $\times 1000$   
e. basidia  $\times 1000$

Plate II

- A. *Lepiota hetieri* Boud.  
a. carpophores  $\times 1$       b. spores  $\times 1000$   
c. cystidia  $\times 1000$       d. basidia  $\times 1000$   
e. hyphae from gill trama  $\times 1000$
- B. *Paxillus atrotomentosus* (Fr.) Fr. var. *bambusinus* Baker et Dale  
a. carpophores  $\times 2/3$       spores  $\times 1000$   
c. basidia  $\times 1000$   
d. hyphae from stem trama  $\times 1000$

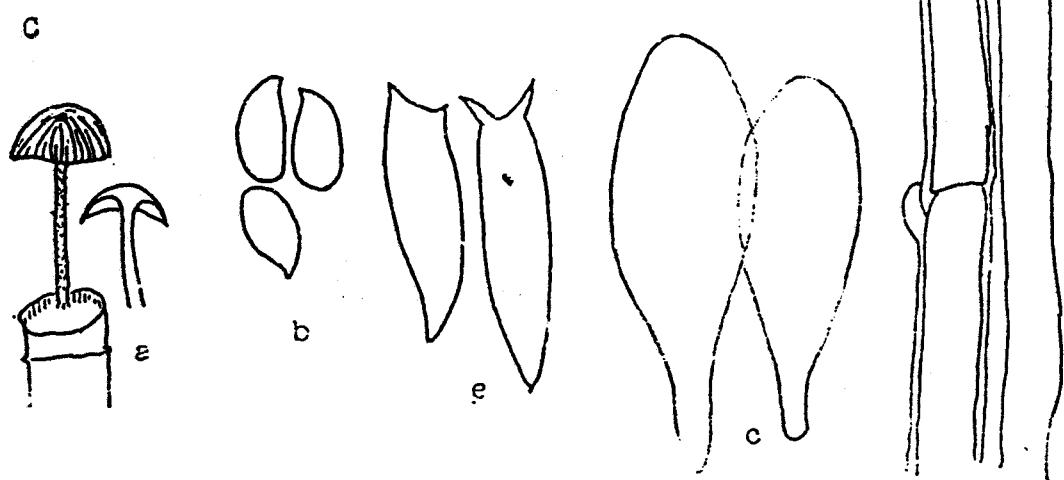
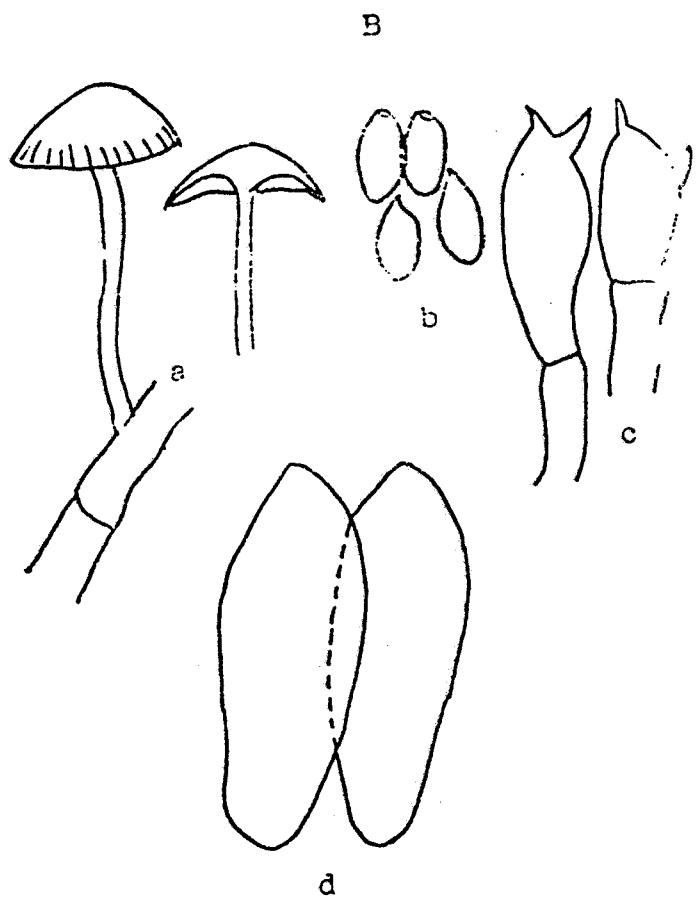
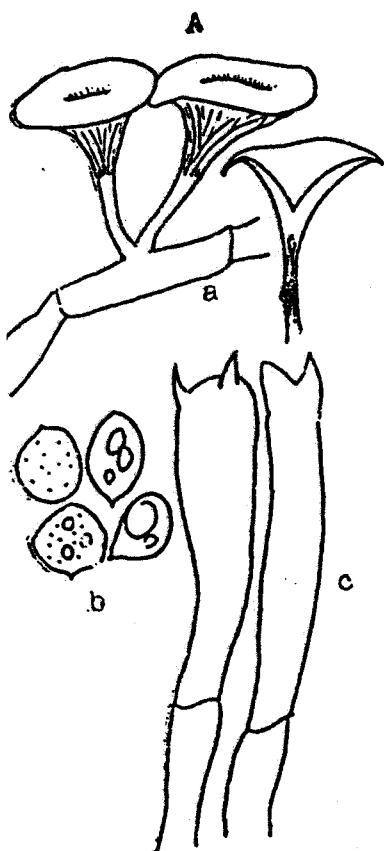


Plate II

