

Notes on the Korean Ascomycetes (VI)

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ABSTRACT

Many higher fungi of ascomycetes were collected at Mt.Odae, Mt.Moak, Mt.Jiri, Mt.Hanla, Mt.Manduck and Mt.Yonsuk from 1996 to 1997. They were identified and according to the result, the genera of *Lachnellula*, *Encoelia* and *Hymenoscyphus* and the species of *Peziza praetervisa*, *Lachnellula pseudofarinacea*, *Dasyscyphus acutipilus*, *Encoelia furfuracea*, *Hymenoscyphus equisetinus*, *Hypocera pulvinata*, *Nectria coryli* and *Nectria ellisii* are newly to Korea. Korean common names of them were designed by author.

Key words: *Lachnellula*, *Encoelia*, *Hymenoscyphus*, *Peziza praetervisa*, *Lachnellula pseudofarinacea*, *Dasyscyphus acutipilus*, *Encoelia furfuracea*, *Hymenoscyphus equisetinus*, *Hypocera pulvinata*, *Nectria coryli*, *Nectria ellisii*

The work on ascomycetes in Korea has been studied from long ago, however, it remains behind compared with that basidiomycetes. Recently the work on ascomycetes has been studied by many scientists from 1990 to 1997. During the period, one species was reported by Cho and Ryoo (1991) ; one species by Cho (1993) ; two genera and nine species by Cho (1995) ; one genus and three species by Cho and Kim (1995) ; three genera and eight species by Cho and Yoon (1996) ; eight species by Cho (1996a) ; five genera and seven species by Cho (1996b) ; four genera and eight species by Cho (1997a) ; six genera and seven species by Cho (1997b) ; three genera and eight species by Cho, Kang and Park (1997) ; four species by Cho (1997c).

This time they were collected two species at Mt.Odae ; three species at Mt. Moak; same one species at Mt.Jiri and Mt.Hanla ; one species at Mt.Manduck and Mt.Yonsuk respectively.

The purpose on this work was made to confirm biodiversity of fungi. They were designed Korean common names by author and are added to the list of the Korean fungi.

Family Pezizaceae 주발버섯과

Peziza praetervisa Bres. 가루주발버섯(신칭)

Bresadola, Malph. 11:266, 1987.

Breit. & Kran. Fung.Switzer. vilo.1, 76. f.49, 1984.

Dennis, Brit. Ascomycet. 21, Pl.VI, f.B, 1981.

Fruiting body 10-60mm across, cup-shaped or saucer-shaped to expanded, irregularly deformed, brownish violet, sometimes with brownish tints, hymenium smooth, outer surface pale violaceous, finely furfuraceous, resting stalkless on the substrate. Context thin, mauve, fargil.

Spores 10-12 × 5-5-7µm, elliptical, ornamentaion, operculater, with fine warts, with small one or two oil drops. Asci 400-550 × 25-27.5µm, eight-spored, ascospores uniseriate, clavate. Paraphyses 3.8-5 m wide, with one septum.

Hab. : Solitary or clustered on burnt soils in woods. April to autumn.

Distr. : Korea (Mt.Odae) and Europe.

Specimens studied : CHO-5237 (August 12, 1997) collected at Mt.Odae National Park.

Family Hyaloscyphaceae 거미줄종지버섯과

Genus *Lachnellula* 털종지버섯속(신칭)

Apothecia more or less stalked cup-shaped, paraphyses cylindrical or moniliform, disc orange, surrounded by dense

shaggy hairs, on the bark of conifers.

Lachnellula pseudofarinacea (Crouan) Dennis 가루
털종지버섯(신칭)

Dennis, op. cit. : 184, 1962.

Dennis, Brit. Ascomycet. 173, 1981.

Fruiting body up to 3mm across, erumpent sessile,
at first globose to cup-shaped, disc concave or almost
flat, orange, roughly with finely shaggy hairs.

Spores 64-73 × 1.3-2.5µm, long needle-shaped, filamentous,
seldom with two septate. Asci 105-110 × 7.5-8.8µm,
ascospores parallel, clavate. Paraphyses 2.5µm wide, slender,
with three septate, longer than asci. Hairs 22-43 × 1.8-
2µm, wall thickened, with fine warts.

Hab.: Clustered on rotting wood.

Distr. : Korea (Mt. Moak) and Europe.

Specimens studied : CHO-4927 (May 15, 1997) collected
at Moak Provincial Park of Chonlabuk-do.

Family Dermataceae 살갓버섯과

Dasyscyphus acutipilus (Karst.) Sacc. 뽕족털컵버
섯(신칭)

Saccardo, Syll. Fung. 8:447, 1889.

Breit. & Kran. Fung. Switzer. vol.1, 182. f.210,
1984.

Dennis, Brit. Ascomycet. 171, f.4D, 1981.

Fruiting body 0.5-1mm across, globose to cup-
shaped, disc concave, white or cream-colored, hymenium
ochre-whitish, smooth, outer surface and margin thick, hairs
tufted white. Stalk short.

Spores 10.5-12 × 1.5-2µm, narrowly fusiform,
smooth, hyaline. Asci 32.5-45 × 3.8µm, clavate, ascospores
biseriate. Paraphyses 95-102.5 × 5-6.5µm, lanceolate. Hairs
100-200 × 2.5-3µm, with multi-septate, from septum to
septum 12-25 × 2.5-3.8µm long, gradually tapering to
fine point.

Hab.: Clustered on dead stalk of rotten wood or grasses.
Summer.

Distr. : Korea (Mt. Jiri and Mt. Hanla) and Europe.

Specimens studied : CHO-4517 (July 16, 1996) and 5043
(July 13, 1997) collected at Mt. Jiri and Mt. Hanla

National Parks.

Family Sclerotiniaceae 균핵버섯과

Genus *Encoelia* (Fr.) Karst. 쨌진버섯속(신칭)

Apothecia erumpent from bark, leathery, medium to
large, cup-shaped, brown scurfy, disc convex, asci 8-spored,
ascospores narrowly elliptical, nonseptate.

Encoelia furfuracea (Roth:Pers.) Karst. 비듬쨌진버섯
(신칭)

Breit. & Kran. Fung. Switzer. vol.1, 178. f.204,
1984.

Dennis, Brit. Ascomycet. 154, 1981.

Fruiting bodies 5-15mm across, sessile, cup-shaped,
hymenium smooth, cinnamon to darkish brown, outer surface
lighter, strongly furfuraceous-scurfy with flakes, wiped off
in age. Stalk short.

Spores 7-10 × 2µm, fusiform, often with one oil or
two oil drops at end. Asci 60-72.5 × 5µm, clavate, ascospores
uniseriate or irregularly biseriata. Paraphyses 65-67.5 ×
2-2.5µm, slender, branched, seldom with one septum.

Hab.: Clustered on dead trunks or branches of hazel and
alder.

Distr. : Korea (Mt. Manduck) and Europe.

Specimens studied : CHO-4893 (June 16, 1997) collected
at Mt Manduck near Chonju city.

Family Sclerotiniaceae 균핵버섯과

Hymenoscyphus S.F.Gray 꺾질버섯속(신칭)

Apothecia small or medium, short stipe, saprophytic,
spores narrowly elliptical, seldom 1-septum, paraphyses
cylindrical.

Hymenoscyphus eguisetinus (Vel.) Dennis 말꼬리꺾
질버섯(신칭)

Dennis, Brit. Ascomycet. 138-139, 1981

Septatium eguisetinus Velenovsky Monographia
Discomycetum Bohemiae 212, 1934. (Pl. XII K.)

Breit. & Kran. Fung. Switzer. vilo.1, 166-167, f.184,
1984.

Fruiting body 0.5-2mm across, saucer-shaped, depressed

in the center, smooth, hymenium pale pink with grayish yellow, outer surface concolorous with the hymenium. Stalk short.

Spores 10.5-14 × 3-4 μ m, fusiform or bent fusiform, with one septum in the center. Asci 74-78 × 6-7 μ m, eight-spored, clavate, ascospores biseriate. Paraphyses 137.5 × 3.8 μ m, filiform.

Hab.: Clustered on rotting wood. Summer.

Distr. : Korea(Mt.Odae) and Europe.

Specimens studied : CHO-5205 (August 11, 1997) collected at Mt.Odae National Park.

Family Hypoceraceae 육좌균과

Hypocera pulvinata Fuckel 가루집버섯(신칭)

Fuckel, Jahrb Nass. Vereins f.Naturkunde, 23-24:185, 1870.

Breit. & Kran. Fung.Switzer. vilo.1, 254. f.318, 1984.

Dennis, Brit.Ascomycet. 262, 1981.

Fruiting body 2-20(30)mm across, round to irregularly oval, cushion-like, deep ochre-yellow to beeswax-colored, surface with pinprick-like dots.

Spores 3-5 × 2.5-3.5 μ m, subglobose. Asci 68 × 3.5 μ m, 16-spored, ascospores uniseriate, cylindrical.

Hab. : Clustered or scattered on pinedone. Summer. Not common.

Distr. : Korea (Mt.Moak) and Europe.

Specimens studied : CHO-5346 (October 5, 1997) at Mt.Moak Provincial Park of Chonlabuk-do.

Family Hypoceraceae 육좌균과

Nectria coryli Fuckel 술잔알보리수버섯(신칭)

Funckel, Fung. Rhen. Exs., Suppl. 1, No.1582, 1865.

Breit. & Kran. Fung. Switzer. vol.1, 260. f.326, 1984.

Dennis, Brit. Ascomycet. 269, 1981.

Fruiting body 0.2-0.3mm across, spherical when fresh, with collapsed top when dry, surface roughish with distinct papilla, light wine-red or reddish brown, the conidia developing before the formation of the perithecia.

Spores 10-12 × 2.5-4 μ m, irregularly fusiform, smooth, hyaline, with one septum, constrictive at center when secondary spores in the ascus, seldom with appendage at end, ascoconidia 2-4 × 1-1.2 μ m, cylindrical-allantoid, smooth. Asci 50-70 × 8 μ m, eight-spored when immature, ascospores irregularly biseriate, mature ascus 75 × 10 μ m, with multi-ascoconidia.

Hab. : Solitary to clustered on dead branched of various broadleaved trees still with bark. Spring. Rare.

Distr. : Korea (Mt.Yonsuk) and Europe.

Specimens studied : CHO-4850 (May 28, 1997) at Mt.Yonsuk near Chonju city.

Family Hypoceraceae 육좌균과

Nectria ellisii Boot 타원알보리수버섯(신칭)

Boot, op. cit. : 101, 1959.

Dennis, Brit. Ascomycet. 276, Pl.XXXIV, f.G. 1981.

Fruiting body 0.25mm across, globose, yellow, cream-colored, covered with downy white hairs.

Spores 10-13 × 4-5 μ m, with one septum, wall thickened, more or less constrictive at center. Asci 35-55 × 6-8 μ m, irregularly biseriate, hyphae from tissue trama 25-27.5 × 2 μ m, cylindrical.

Hab. : Scattered or clustered on dead herbaceous stems. Spring to autumn.

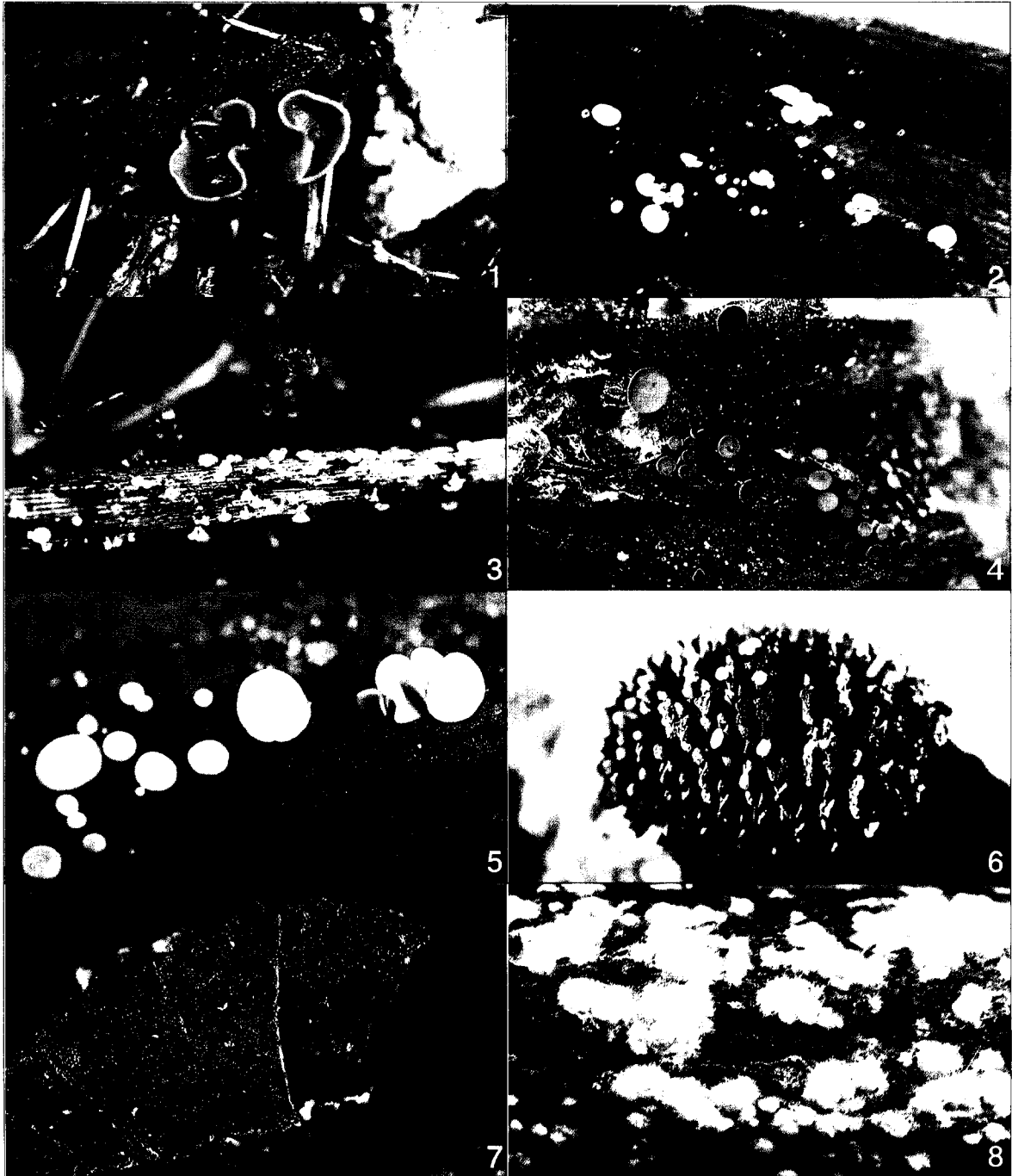
Distr. : Korea (Mt.Moak) and Europe.

Specimens studied : CHO-4832 (May 15, 1997) collected at Mt.Moak Provincial Park of Chonlabuk-do.

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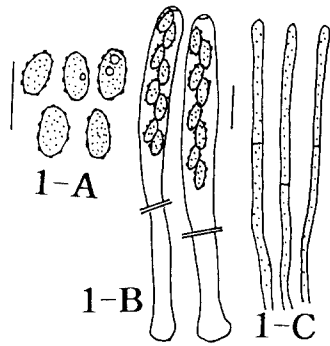
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of Higher Fungi of the Northern Slope Area of Mt.Pangtae.
The Report of the KACN. 35 : 223-258.



The Explanation of Plate

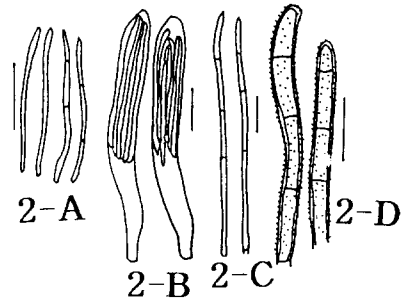
1. *Peziza praetervisa*
3. *Dasyscyphus acutipilus*
5. *Hymenoscyphus equisetinus*
7. *Nectria coryli*

2. *Lachnellula pseudofarinacea*
4. *Encoelia furfuracea*
6. *Hypocera pulvinata*
8. *Nectria ellisii*



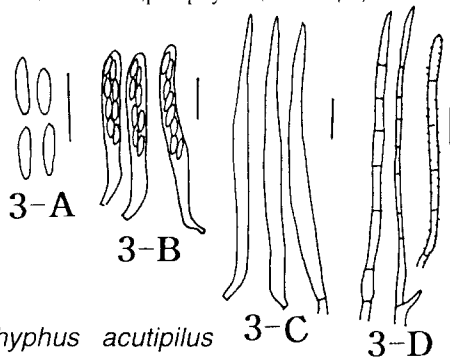
1. *Peziza praetervisa*

1-A, spores. 1-B, asci. 1-C, paraphyses. (bars: 10 μm)



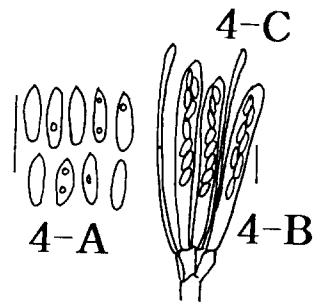
2. *Lachnellula pseudofarinacea*

2-A, spores. 2-B, asci. 2-C, paraphyses. 2-D, hair. (bars: 10 μm)



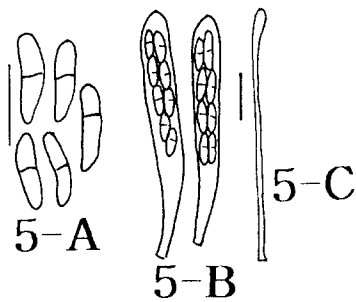
3. *Dasyschyphus acutipilus*

3-A, spores. 3-B, asci. 3-C, paraphyses. 3-D, hair. (bars: 10 μm)



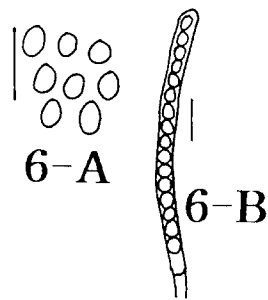
4. *Encoelia furfuracea*

4-A, spores. 4-B, asci. 4-C, paraphyses. (bars: 10 μm)



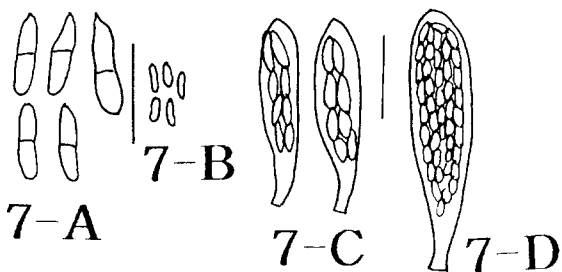
5. *Hymenoscyphus equisetinus*

5-A, spores. 5-B, asci. 5-C, paraphyses. (bars: 10 μm)



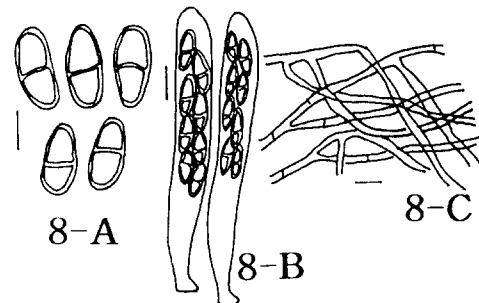
6. *Hypocera pulvinata*

6-A, spores. 6-B, ascus. (bars: 10 μm)



7. *Nectria coryli*

7-A, spores. 7-B, ascocomicidia. 7-C, asci. 7-D, mature ascus. (bars: 10 μm)



8. *Nectria ellisii*

8-A, spores. 8-B, asci. 8-C, hyphae from tissue trama. (bars: 10 μm)