

Notes on the Korean Higher Fungi(XII)

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韓國産 高等菌類記(XII)

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Abstract

Many higher fungi were collected at Mt.Moak Provincial Park (Chonlabuk-Do), Mt.Pangtae(Kangwon-Do) and Byunsan Peninsula National Park from April, 1995 to October, 1995. These higher fungi were identified. According to the results, these species were newly to Korea : *Laccaria ohiensis*, *Mycena clavularis*, *M.acicula*, *Marasmius ramealis*, *M.calopus*, *Strobilurus esculentus*, *Agrocybe sphaleromorpha* and *Cortinarius fasciatus*.

Keywords : *Laccaria ohiensis*, *Mycena clavularis*, *M.acicula*, *Marasmius ramealis*, *M.calopus*, *Strobilurus esculentus*, *Agrocybe sphaleromorpha* and *Cortinarius fasciatus*.

Introduction

Higher fungi have function as decomposer in ecosystem and they have been used resources of edibility, drug and forest by mankind for a long time.

The higher fungi in Korea have been studied by many mycologists which reported about 1500 species(Cho, 1996).

Many higher fungi were collected at Mt.Moak Provincial Park in Chonlabuk-Do from April, 1995 to October, 1995 and were identified.

In comprehensive scientific survey established by KACN(The Korean Association for Conservation of Nature) and KARE(Korean Association for Research of Ecosystem), they were collected at Byunsan

Peninsula National Park from 27, June to 2, July 1995. Also in comprehensive scientific survey established by KACN, they were collected at Mt.Pangtae in Kangwon-Do from 15, August 1995 to 18, August 1995. Among unidentified species of them, they were identified. According to the results, eight species were newly to Korea and were designed Korean common name.

Laccaria ohiensis (Mont.) Sing. 젓꼭지줄각버섯(신칭)

Imazeki & Hongo, Col. Ill. Mush. Jap. vol.I, 63. pl.10, fig.78, 1987.

Pileus 1.0-3.5cm broad, broad convex to plane convex, smooth, disc small papillate, scale, yellowish brown,

striate when wet. Lamellae adnate, decurrent, sparse, red yellowish brown. Stipe 3.5-6.5 x 0.3-0.5cm, concolorous with the pileus, more or less fibrous.

Spores 8.0-10 x 7.5-9.5 μ m, globose, subglobose, with echination, basidia 25-27.5 x 8.8-10 μ m, clavate, with pigment, mostly two-spored.

Habitate and habitated : Scattered on soils of broad-leaved forests.

Distributions : Korea (Mt.Moak), Japan, India, North-south America, Newzealand, Africa, Tropical-subtropical zone.

Specimens studied : CHO-3809(1995.6.14) were collected on roads at Kumsan-Temple in Mt.Moak Provincial Park of Chonlabuk-Do.

***Mycena clavularis* (Batsch. ex Fr.) Sacc.s.Kühner non Lange 자주빛애주름버섯(신칭)**

Phillips, R., Mushrooms and other fungi of Great Britain and Europe, 75, 1981.

Pileus 3.0-5.0mm broad, white to pale grey, striate. Context thin, white, taste indistinctive, odor none. Lamellae white, very sparse.

Stipe 10-15 x 1.0-2.0mm, white, fine whitish hairy, base white mycelliod like hair.

Spores 8.0(-7.0)-9.0(-10) x 4.0-5.0 μ m, elliptical, seldom with large one oil drop, basidia 22.5-27.5 x 5.0-6.3 μ m, clavate.

Habitate and habitated : Clustered or cespitose on fallen tree.

Distribution : Korea (Mt.Moak) and Europe.

Specimens studied : CHO-3825(1995.6.20) were collected at valley between Chungin-Ri and Soowang-Temple in Moak Provincial Park of Chonlabuk-Do.

***M. acicula* (Schaeff. ex Fr.) Kummer 뽕애주름버섯(신칭)**

Phillips, R., Mushrooms and other fungi of Great Britain and Europe, 75, 1991.

Pileus 0.5-1.0cm broad, hemispherical to plane convex, reddish yellow, bright orange to pallid, margin pallid, striate. Context very thin, orange. Taste mild, odor none. Lamellae adnexed, pale yellow, edge whitish. Stipe 5.0-9.0 x 0.1cm, bright yellow to pallid. Base pallid, slightly mycelloid.

Spores 6.0-7.0(-7.5) x 4.0-4.5(-5.0) μ m, bean-shaped, basidia 17.5-27.5 x 5.0-6.3 μ m, clavate, mostly two-spored, cystidia 40-50 x 10-12.5 μ m, flask-shaped.

Habitate and habitated : Solitary on soils of broadleaved forests.

Distributions : Korea (Mt.Pangtae) and Europe.

Specimens studied : CHO-4208(1995.8.18) were collected at basin of Gariwangsang-Kol in Mt.Pangtae of Kangwon-Do.

***Marasmius ramealis* (Bull.ex Fr.) Fr. 가지낙엽버섯(신칭)**

Phillips, R., Mushrooms and other fungi of Great Britain and Europe, 66-67, 1981.

Pileus 5.0-1.3cm broad, convex to plane, whitish, membranous, wrinkled. Disc depressed, whitish pink seldom. Context thin, concolorous with the surface. Lamellae distant, white, pallid pinkish.

Stipe 2.5-3.0 x 0.1-0.2cm, scurfy, concolorous with the pileus, base darkish, curved.

Spores 10-12.5(-13) x 4.5-5.5(-6.0) μ m, elliptical, seldom with one large oil drop. Basidia 40-50 x 5.0-10 μ m, clavate.

Habitate and habitated : Clustered on fallen branch of trees. Spring to autumn. Frequent. Edibility unknown.

Distribution : Korea (Mt.Moak) and Europe.

Specimens studied : CHO-3827 (1995.6.20) were collected at Mt Moak

Provincial Park of Chonlabuk-Do.

***M. calopus* (Pers.ex Fr.) Fr. 나막낙엽버섯(신칭)**

Phillips, R., Mushrooms and other fungi of Great Britain and Europe, 67, 1981.

Pileus 0.5-1.5cm broad, white, rusty brown tinge, surface uneven.

Context thin, concolorous with the surface. Lamellae distant, white to cream. Stipe 1.0-3.0 x 0.1-0.2 cm, rusty-brown, cylindrical, equal.

Spores 5.0-7.0 x 3.0(-2.5)-3.5 μ m, bean-shaped, prominent, basidia 15-16.3 x 2.5-4.5 μ m, clavate.

Habitate and habitated : Clustered on leaf litter or dead grass and other debris. Summer to autumn. Edibility unknown.

Distribution : Korea (Mt.Moak) and Europe.

Specimens studied : CHO-4249 (1995.9.24) were collected at forests in Mt.Moak Provincial Park of Chonlabuk-Do.

***Strobilurus esculentus* (Wulf.) Sing. 요리맛술방울버섯(신칭)**

Pegler, Mushrooms and Toadstools, 19, 1993.

Pileus 2.0-4.0cm broad, convex to plane convex, smooth, matt or wrinkled, dark reddish brown, tinged olivaceous, yellowish when young, drying, more or less floccose. Context pallid, taste mild, odor farinaceous. Lamellae crowded, sinuate, slightly free, slightly greyish.

Stipe 4.0-7.5 x 0.3-0.5cm, yellowish brown, twisted, equal, arising from a copious ochraceous mycelloid, base white mycelloid.

Spores 4.5-6.5 x 3.0-4.0 μ m, bean-shaped, cheilocystidia 37.5-45 x 7.5 -10 μ m, clavate, hyphae from lamellae trama 22.5-37.5 x 2.5-5.0 μ m, cylindrical, branch.

Habitate and habitated : Clustered on fallen leaves or pinecone. Spring.

Distribution : Korea (Mt.Moak) and Europe

Specimens studied : CHO-3794 (1995.6.9) were collected at Mt.Moak Provincial Park of Chonlabuk-Do.

***Agrocybe sphaleromorpha* (Bull.ex Fr.) Fayod 반구벚꽃버섯(신칭)**

Fayod, Ann.Sci.Nat.VII, 9:358, 1889.

Agaricus sphaleromorphus Bull.Champ.Fr.pl.540, f.1, 1791.

Agaricus praecox β ? sphaleromorphus Fr.Syst.Myc.1:283, 1821.

Pileus 1.5-5.0cm broad, hemisphere or convex to plane, more or less uneven, depressed, smooth, viscid when wet, yellow, pallid when dry, disc yellowish brown. Margin entire. Context thin, pallid, taste and smell

farinaceous. Lamellae adnexed, sinuate, crowded, 3.0-5.0mm wide, white to pallid greyish brown, finally dull brown, edges fine hairy. Stipe 6.5-8.5 x 0.3-0.5cm, cylindrical, annulus membranous, white, striate.

Base bulbous, yellowish brown, white mycelloid.

Spores 10-12(-15) x 5.5-7.0(-8.0) μ m, elliptical, germ pore, double wall, basidia 25-35 x 7.5-10 μ m, clavate, cheilocystidia 30-50 x 11.3- 20 μ m, flask-shaped, fusoid, pleurocystidia 50-27.5 x 20-22.5 μ m, flask-shaped, fusoid, ventricose.

Habitat and habited : Clustered on soils of vally. Spring. Edibility unknown.

Distribution : Korea (Mt.Moak), Japan and Europe.

Specimens studied : CHO-3783 (1995.5.26) were collected at valley of Dalsung-Temple in Mt.Moak Provincial Park of Chonlabuk-Do.

***Cortinarius fasciatus* (Scop.) Fr. 띠끈적버섯(신칭)**

Fries, Epic.Myc.315.1838.

Agaricus fasciatus Scop.Fl.Carm, ed, 2, 2:456, 1772.

Pileus 1.0-3.0cm broad, broad convex to plane convex, yellowish brown, floccose, darkish brown when wet, bright yellowish brown when dry. Disc small convex, reddish brown. Context thin, whitish yellow or yellowish brown, fragile. Lamellae 1.0-4.0mm wide, adante, crowded, free, seldom more or less sparse, mixed short and long, concolorous with the pileus. Edge serrate, concolorous with the side. Stipe 2.5-3.5 x 0.2-0.3cm, cylindrical, concolorous with the pileus, reclinate, apex fine white fibrous.Hollow, concolorous with the surface. Base darkish brown, seldom white.

Spores 9.0(-7.0)-11(-11.5) x 4.5(-4.0)-5.0(-5.5) μ m, elliptical, with puncutation, with warts, with two or three oil drops, basidia 22.5-30 x 5.0-6.3 μ m, more or less cylindrical, cystidia 32.5 x 8.8 μ m, flask- shaped.

Habitate and habited : Clustered on soils with fallen leaves of swamp or on soils of broadleaved forests.

Distribution : Korea (Mt.Moak), Japan, Russia and North America.

Specimens studied : CHO-3784 (1995.6.1) were collected on soils at valley in Mt.Moak Provincial Park of Chonlabuk-Do.

摘 要

많은 고등균류를 1995년 4월부터 10월까지 모악산 도립공원(전라북도), 방태산(강원도), 변산반도 국립공원에서 채집하여 동정하였다.

그 결과 젓꼭지줄각버섯(*Laccaria ohiensis*), 자주빛애주름버섯(*Mycena clavularis*), 뺨애주름버섯(*M.acicula*), 가지낙엽버섯(*Marasmius ramealis*), 나막낙엽버섯(*M.calopus*), 요리맛술방울버섯(*Strobilurus esculentus*), 반구 벗짚버섯(*Agrocybe sphaleromorpha*) 그리고 띠끈적버섯(*Cortinarius fasciatus*)은 한국산 미기록종으로 확인 되었다.

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(접수일 1996년 2월 25일)

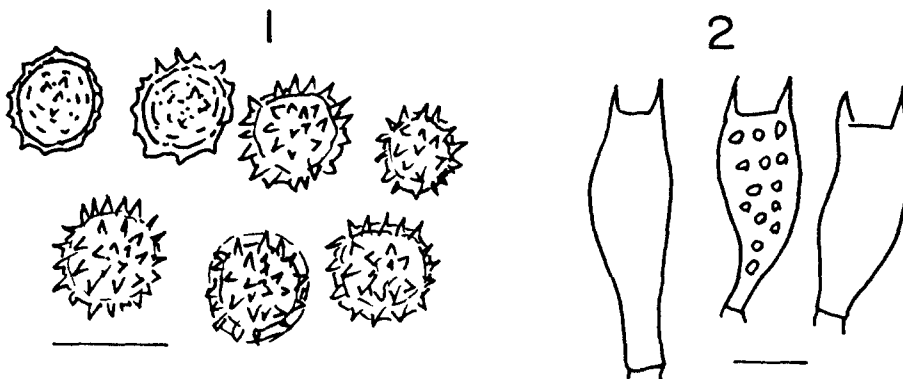


Fig.1-2. *Laccaria ohiensis* (Mont.) Sing.
1.spores, 2.basidia (bars:10 μ m).

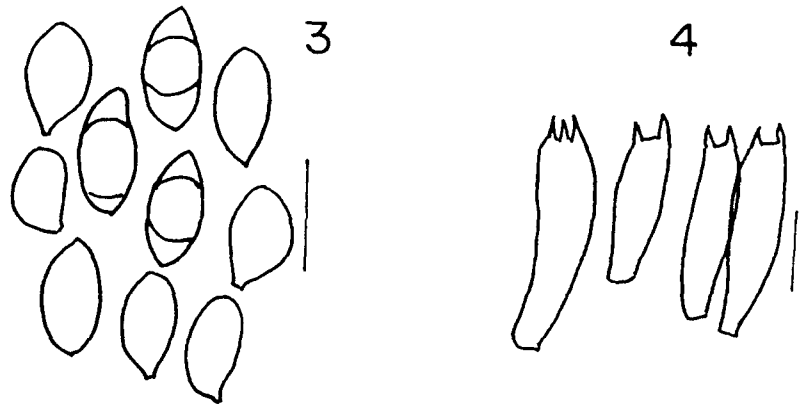


Fig.3-4. *Mycena clavularis* (Batsch. ex Fr.) Sacc.s. Kühner non Lange
3.spores, 4.basidia (bars:10 μ m).

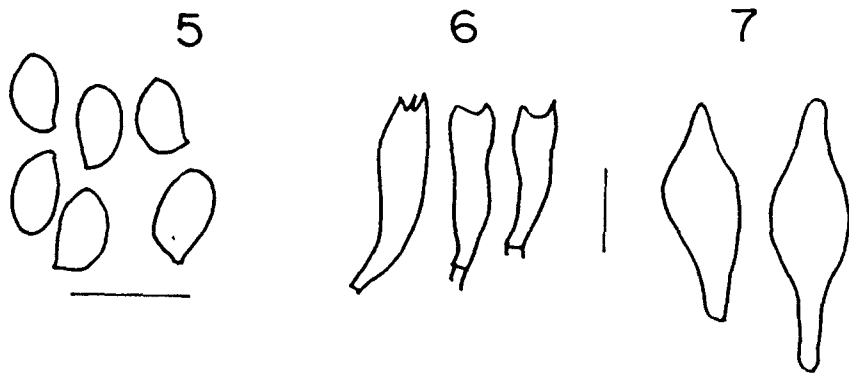


Fig.5-7. *M. acicula* (Schaeff. ex Fr.) Kummer
5.spores, 6.basidia, 7.cystidia (bars:10 μ m).

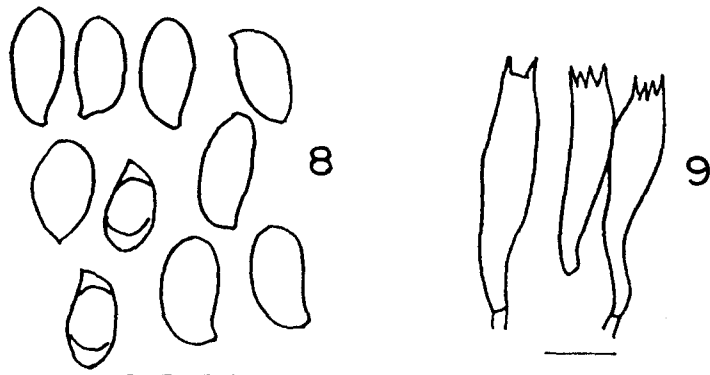


Fig.8-9. *Marasmius ramealis* (Bull.ex Fr.) Fr.
8.spores, 9.basidia (bars:10 μ m).

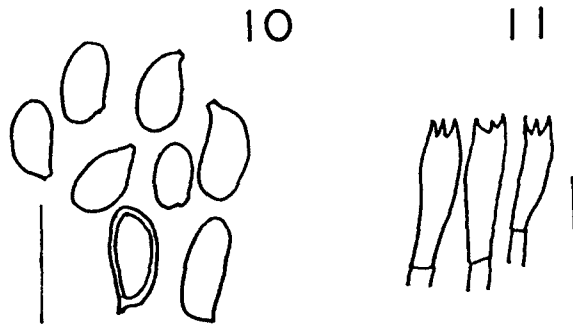


Fig.10-11. *M.calopus* (Pers.ex Fr.) Fr.
 10.spores, 11.basidia (bars:10 μ m).

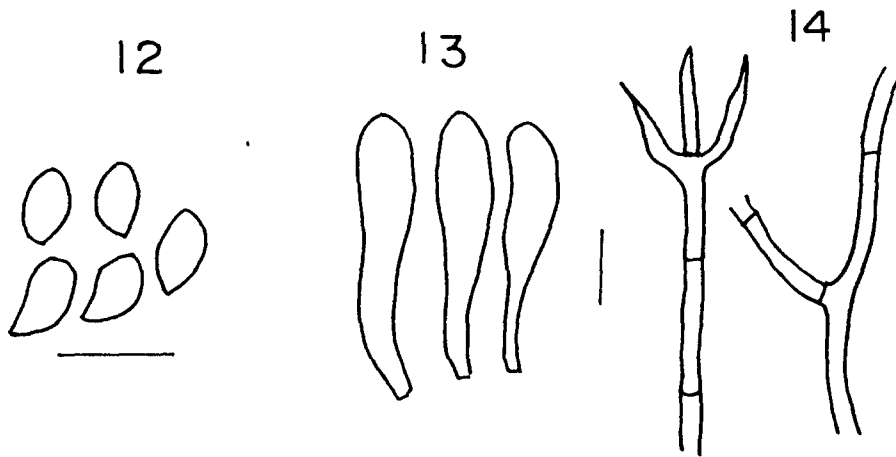


Fig.12-14. *Strobilurus esculentus* (Wulf.) Sing.
 12.spores, 13.cheilocystidia, 14.hyphae from lamellae trama (bars:10 μ m).

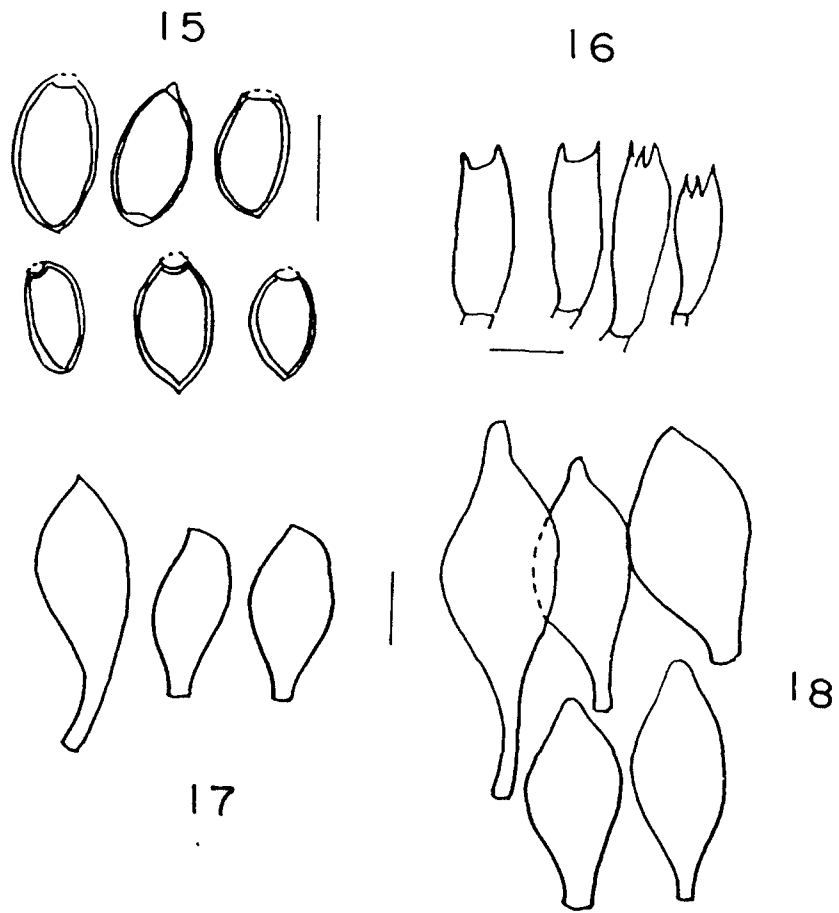


Fig.15-18. *Agrocyste sphaeromorpha* (Bull. ex Fr.) Fayod
 15.spores, 16.basidia, 17.ceilocystidia, 18.pleurocystidia (bars:10 μ m).

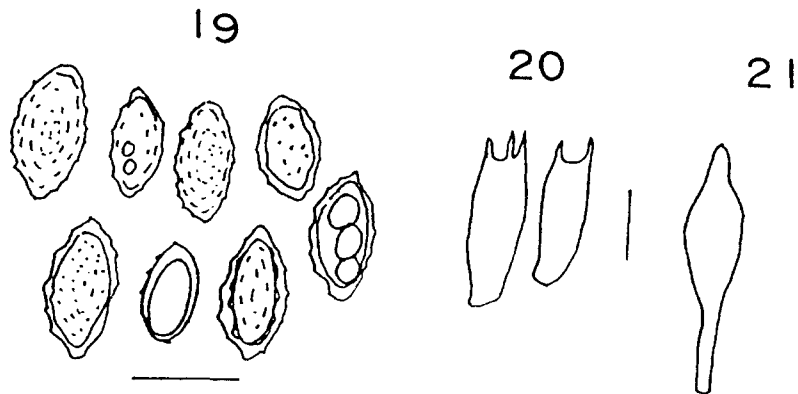


Fig.19-21. *Cortinarius fasciatus* (Scop.) Fr.
 19.spores, 20.basidia, 21.cystidia (bars:10 μ m).



Explanation of Plate : 1. *Laccaria ohiensis* x 1/3, 2. *Mycena clavularis* x 1/3,
 3. *M. acicula* x 1/3, 4. *Marasmius ramealis* x 1/3
 5. *M. calopus* x 1/3, 6. *Strobilurus esculentus* x 1/3
 7. *Agrocybe sphaleromorpha* x 1/3, 8. *Cortinarius fasciatus* x 1/3