

Notes on the Korean Higher Fungi (XIII)

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韓國產 高等菌類記(XIII)

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ABSTRACT

Many higher fungi were collected at Mt. Moak Provincial Park, Mt. Yonsuk in Wangju-Kun from May to October 1995. They were identified and according to the results, one genus and eight species were newly to Korea. Genus *Stereopsis* was newly to Korea. *Hygrophorus arbustivus*, *Tricholoma imbricatum*, *Mycena fragillima*, *Cortinarius spilomeus*, *C. saturninus*, *Dermocybe semisanguinea*, *Stereopsis burtianum* and *Jansia borneensis* were newly to Korea.

Key words : *Stereopsis*, *Hygrophorus arbustivus*, *Tricholoma imbricatum*, *Mycena fragillima*, *C. saturninus*, *Cortinarius spilomeus*, *Dermocybe semisanguinea*, *Stereopsis burtianum*, *Jansia borneensis*.

Mt. Moak which is Chonlabuk-Do Provincial Park is located in Chonju city and Kimje-Kun. Mt. Yonsuk is located in Wanju-Kun of Chonlabuk-Do. Two mountains were mixed broadleaves and needle leaves. A lot of higher fungi are developed all the year and they were collected during 1995 by the author. Among them eight species were identified newly to Korea. *Hygrophorus arbustivus*, *Mycena fragillima*, *Cortinarius spilomeus*, *C. saturninus*, *Stereopsis burtianum* and *Jansia borneensis* were collected at Mt. Moak and *Tricholoma imbricatum*, *C. saturninus*, *Dermocybe semisanguinea* were collected at Mt. Yonsuk. These species will be added list of fungi in Korea.

Hygrophorus arbustivus Fr. 포도벚꽃버섯

(신칭) (Plate, 1. Fig. 1)

Fries, Epicr. Myc. 323, 1838.

Agaricales 주름버섯목, Hygrophoraceae 벚꽃버섯과.

Limacinum arbustivum P.Henn. in Engler & Prantl, Nat. Pfl.-fam. 1. 213. 1900.

Pileus 3-7cm broad, convex to plane with umbo in the center, viscid when wet, fibrillose, the center

reddish brown, margine pallid. Context white, more or less brown under the pileus. Lamellae adnate, or slightly decurrent, white, crowded. Stipe 5-10 long, 3-7mm thick, white, viciid when wet, apex powdery. Spores 7-9 x 4-5 μ m, elliptical, rarely with punctuation, basidia 32.5-40 x 5-7.5 μ m, clavate.

Hab. : Clustered on soils in broadleaves. Autumn. Edibility. Distr. : Korea(Mt.Moak), Japan, Russia (The far east), China, Europe, and Africa.

Specimens studied : CHO-4276 (1995.9.30) were collected between around Kumsun-Am at Mt. Moak.

Tricholoma imbricatum (Fr.:Fr.) Kummer 붉은송이 (신칭)(Plate, 2. Fig. 2)

Agaricus imbricatus Fr. Obs. Myc. 1:27, 1815.

Agaricales 주름버섯목, Tricholomataceae 송이버섯과.

Pileus 5-12cm broad, convex to plane with umbo in the center, reddish brown with gray, none viciid, fibrillose or scales, margin incurved at first, downy but vanished. Context white to brown. Lamellae sinuate, crowded, more or less sparse, white to reddish brown with spots. Stipe 6.5-10cm long, 0.7-1.7cm thick, cylindrical, slender at base, apex whitish, powdery, fibrillose, concolorous

with the pileus, solid. Spore 5.5-8.0 x 3.5-5.5 μ m, elliptical, smooth, basidia 27.5-35 x 5.0-6.3 μ m, clavate, clamp connection present at base.

Hab. : Clustered on the soils in the Pine trees. Autumn. Edibility.

Distr. : Korea (Mt. Yonsuk), Japan, Europe and North America.

Specimens studied : CHO-4222 (1995.9.17) were collected at Mt. Yonsuk.

Mycena fragillima Smith 여린애주름버섯

(신칭)(Plate, 3. Fig. 3)

Phillips, Mushrooms, 82-83, 1991.

Agaricales 주름버섯목, Tricholomataceae 송이버섯과.

Pileus 1.0-3.5cm broad, conex or broadly bell-shaped to plane, darkish gray to paler and slightly brownish, striate when wet, faint bloom to polished. margin irregularly, then often flaring in maturity. Context thin, easily fragile, pale gray or fawn to white. Odor Lamellae adnate, close, whitish, narrow, edge pale whitish gray. Stipe 3-7cm long, 2-3mm thick, yellowish brown, slightly whitish, pale gray, very variable, easily fragile, fawn with downy hairs at first to polished, base stiff, white hairs, slightly enlarged.

Spores 6.0-9.0 x 3.5-4.5 μ m, suodvoid, broad elliptical, amyloid, rarely with punctuate, epicutis from pileus trama 30-42.5 x 27.5-35 μ m, subglobose, spore print white.

Hab. : Gregarious around clumps of ferns or debris. Odor and taste not distinctive.

Autumn. Edibility not known.

Distr. : Korea (Mt. Moak), and North America.

Specimens studied : CHO-3924 (1995.7.9.) were collected around Kumsun-Am at Mt. Moak.

Cortinarius saturninus (Fr.) Fr. 납끈적버섯

(신칭)(Plate, 4. Fig. 4)

Imazeki & Hongo, Col. III. Mush. Jap. vol. I, 237-238, pl. 60, fig. 432, 1987.

Agaricales 주름버섯목, Cortinariaceae 끈적버섯과

Pileus 4-7cm broad, convex to plane with umbo in he center, darkish brown when wet, yellowish brown when lry. Margin whitish cottony of universa veil. Lamellae 3-5mm wide, adnate or subadnext, purple with yellowish

brown to cinnamon or reddish brown. Stipe 4-5cm long, 4-9mm thick, cylindrical or clavate, apex pale purple, white at base, finally dirty clay color or brown. Anulus traced but vanished. Spores 7.5-10 x 5.0-6.5 μ m, elliptical, almond-shaped, with warts, with one or two oil drops, nonamyloid, basidia 32.5-35 x 7.5-8.8 μ m, fusiform or clavate, sterigmata 3.8-5.0 μ m high.

Hab. : Scatered on the soils in broadleaves. Autumn.

Distr. : Korea (Mt. Yonsuk), Japan, Russia, europe and North America.

Specimens studied : CHO-4220 (1995.9.17.) were collected at Mt. Yonsuk.

Cortinarius spilomeus (Fr.:Fr.) Fr. 붉은끈적버섯

(신칭)(Plate, 5. Fig. 5)

Imazeki & Hongo, Col. III. Mush. Jap. vol. I, 233, pl. 58, fig. 414, 1987.

Agaricales 주름버섯목, Cortinariaceae 끈적버섯과

Pileus 4-5cm broad, convex to plane with umbo, none viciid, grayish brown with purple, rufescent, clay color, margin sometimes lilac, scales reddish brown but vanished. Lamellae subadnexed or emarginate, slightly crowded, pale grayish purple to cinnamon. Stipe 5-8cm long, 3-7mm thick, cylindrical, tawny sacles on the surface, apex purple, base brown, bulbose. Cortina white, fibrillose. Spores 7.5-9.0 x 4.5-5.5 μ m, subglobose, broad oval, elliptical, with warts or punctuation, basidia 25-30 x 5.0-7.5 μ m, fusiform or clavate.

Hab. : Clustered on the soils in broadleaves. Autumn.

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

Specimens studied : CHO-4252 (1995.9.24.) were collected around Kumkok-Sa at Mt. Moak.

Dermocybe semisanguinea (Fr.) Moser in Gams

전나무끈적버섯아재비(신칭)(Plate, 6. Fig. 6)

Imazeki & Hongo, Col. III. Mush. Jap. vol. I, 241, pl. 62, fig. 443, 1987.

Agaricales 주름버섯목, Cortinariaceae 끈적버섯과

Pileus 2.5-4cm broad, convex to plane with small umbo, viscid none, silk-shaped, ochreous or yellowish brown with olive color. Context pale dchreous. Lamellae adnexed, or sinuate, reddish with cinnamon, 3-4mm wide, slightly crowded or slightly sparse. Stipe 5-7cm long, 4-5mm thick,

cylindrical, fibrillose, yellowish brown. Spores 6.5-7.5 x 4-5 μm , elliptical, with small warts, basidia 30-37.5 x 5.0-6.3 μm , clavate.

Hab. : Clustered on the soils with mixed forests. Summer to autumn.

Distr. : Korea (Mt. Yonsuk), Japan, Russia, Europe and North America.

Specimens studied : CHO-4227 (1995.9.17.) were collected at Mt. Yonsuk.

Stereopsis 민꽃버섯속(신칭)

Aphylophorales 미주름버섯목,

Podoscyphaceae 배꽃버섯과.

Funnel-shaped, stipe present, hymenium smooth or wrinkled, original hyphae clamp connection, spores globose or elliptical, nonamyloid, habitation soils or fallen branch of trees.

Stereopsis burtianum (Peck) Reid 자루민꽃버섯(신칭)(Plate.7. Fig. 7)

Imazeki & Hongo, Col. Ill. Mush. Jap. vol.II, 108, pl.100, fig.702, 1989.

Aphylophorales 미주름버섯목, Podoscyphaceae 배꽃버섯과.

Pileus 1.0-2.5cm broad, slightly funnel-shaped, sometimes adherent, thin, tough, margin teeth, pale yellow or pale brown, shiny, radial fibrillose, central circle-shaped. Context white, thin. Pore smooth, radial wrinkled, pale yellow or pale brown. Stipe 1.5-2.0cm long, 2-3mm thick, adherent, central or eccentric, cylindrical, tough. Spores 3(-4)-4(-5) μm , subglobose, smooth, basidia 42.5-57.5 x 6.3-7.5 μm , long clavate, clamp connection present at base, hyphae from lamelle trama 62.5-92.5 x 2.5-3.8 μm , cylindrical.

Hab. : Clustered on the soils in the forests. Common.

Distr. : Korea (Mt. Moak), Japan, Taiwan, South and North America.

Specimens studied : CHO-4232 (1995.9.21) were collected around Suwang-Sa at Mt. Moak.

Jansia borneensis (Cesati) Fisch 빨강머리말뚝버섯(신칭)(Plate. 8. Fig. 8)

Imazeki & Hongo, Col. Ill. Mush. Jap. vol.II, 220, pl.136, fig.905, 1989.

Phallales 말뚝버섯목, Phallaceae 말뚝버섯과.

Fruit 5.5-8.0cm high, head double tissue, orange, scarlet, reddish brown, apophysis of net, apex with small pore, with gleba. Gleba with mucous of greenish brown, badly smell. Stipe cylindrical, white, yellowish white, cracked, hollow, volva white. Spores 4-5 x 2.0-2.5 μm , short cylindrical, rarely with one oil drop, white to slightly greenish in Melzer fluid, epicutis from stipe trama 20-50 x 15-40 μm , globose or subglobose, hyphae from volva trama 3.8 μm wide, cylindrical, cystidia from volva trama 40-47.5 x 20 μm , often with many small oil drops.

Hab. : Clustered on soils near rotten wood of needle forests.

Distr. : Korea (Mt. Moak), Japan and Borneo.

Specimens studied : CHO-4275 (1995.9.30) were collected around Kumsan-Sa at Mt. Moak.

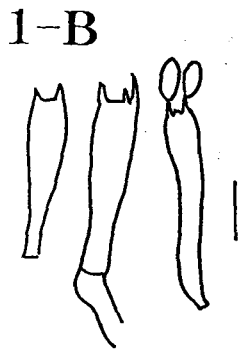
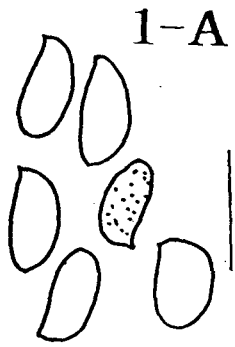
要約

많은 고등균류가 1995년 5월부터 10월까지 모악산도립공원과 완주군의 연석산에서 채집하였다. 그들을 동정한 결과 미기록속은 민꽃버섯속(*Stereopsis*) 이고 미기록종은 포도빛꽃버섯(*Hygrophorus arbustivus*), 붉은송이(*Tricholoma imbricatum*), 여린애주름버섯(*Mycena fragillima*), 납근적버섯(*Cortinarius spilomeus*), 붉은근적버섯(*C. saturninus*), 전나무근적버섯 아재비(*Dermocybe semisanguinea*), 자루민꽃버섯(*Stereopsis burtianum*), 빨강머리말뚝버섯(*Jansia borneensis*) 등 8종류였다. 이들 각각의 미기록속과 종에 대하여 한국 보통명을 신칭하였다.

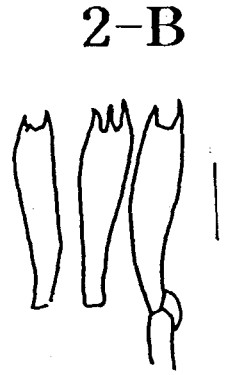
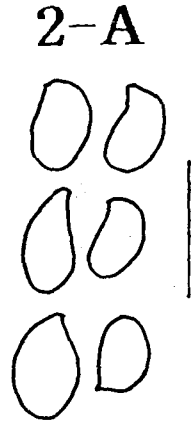
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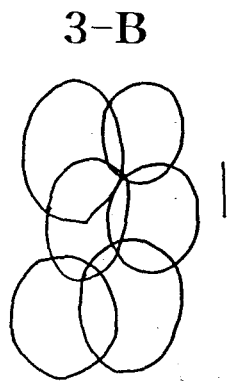
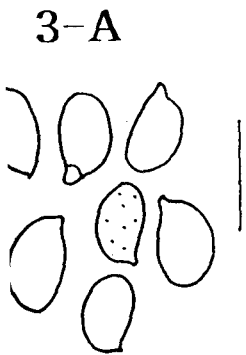
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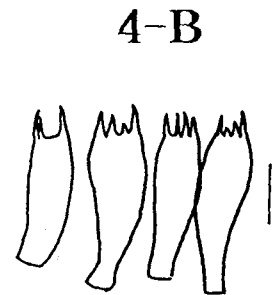
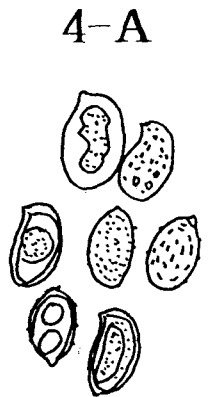
1. *Hygrophorus arbustus*
1-A, spores. 1-B, basidia. bars:10 μ m.



2. *Tricholoma imbricatum*
2-A, spores. 2-B, basidia. bars:10 μ m.

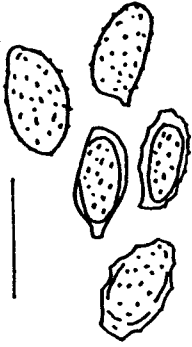


3. *Mycena fragillima*
3-A, spores. 3-B, epicutis from pileus. bars:10 μ m.

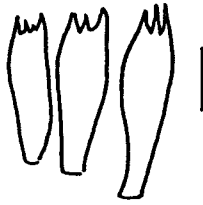


4. *Cortinarius saturinus*
4-A, spores. 4-B, basidia. bars:10 μ m.

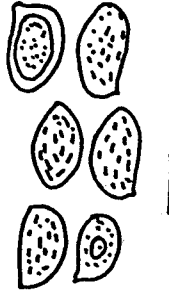
5-A



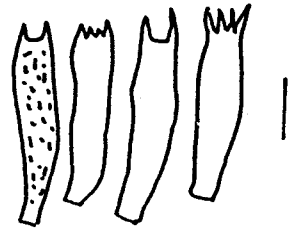
5-B



6-A



6-B



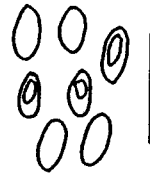
5. *Cortinarius spilmeus*

5-A, spores. 5-B, basidia. bars:10 μ m.

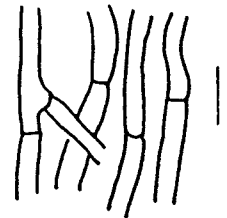
6. *Dermocybe semisanguinea*

6-A, spores. 6-B, basidia. bars:10 μ m.

8-A



8-B



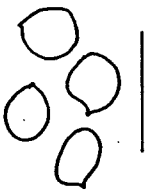
7-B



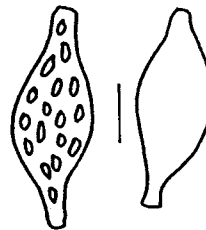
7-C



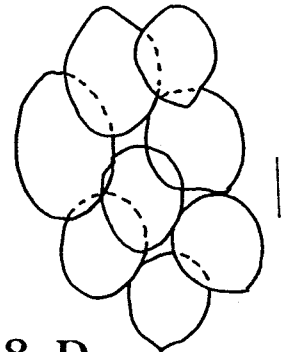
7-A



8-C



8-D



7. *Stereopsis burtianum*

7-A, spores. 7-B, basidia. 7-C, hyphae from lamellae trama. bars:10 μ m.

8. *Jansia borneensis*

8-A, spores. 8-B, cystidia from volva trama.

8-C, hyphae from volva trama.

8-D, epicutis from stipe trama. bars:10 μ m.



The Explanation of Plate

- | | |
|--|---|
| 1. <i>Hygrophorus arbustivus</i> x 1/3 | 2. <i>Tricholoma imbricatum</i> x 1/3 |
| 3. <i>Mycena fragillima</i> x 1/3 | 4. <i>Cortinarius. saturninus</i> x 1/3 |
| 5. <i>Cortinarius spilomeus</i> x 1/3 | 6. <i>Dermocybe semisanguinea</i> x 1/3 |
| 7. <i>Stereopsis burtianum</i> x 1/3 | 8. <i>Jansia borneensis.</i> x 1/3 |