

Notes on Korean Higher Fungi(V)

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韓國高等菌類記(V)

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Abstract : Several higher fungi were collected at Andong during the summer and fall of 1976. About 100 higher fungi were collected at Mt. Sobaek and Youngju during the same period in 1978.

These higher fungi were identified. As the results, *Macrocystidia* proved to be new genus in Korea. And the following are also newly-found species in Korea: *Hygrocybe turunda* (Fr.) Karst., *Hygrophorus lucorum* Kalchbr., *Macrocystidia cucumis* (Fr.) Heim var. *latifolia* (Lange) Imazeki et Hongo, *Agaricus subrufescens* Peck, *Psathyrella hydrophila* (Bull. ex Fr.) A.H. Smith, *Stropharia rugosannulata* Farlow f. *lutea* Hongo, *Inocybe bresadolae* Mass., *Inocybe multicoronata* A.H. Smith, *Russula farinipes* Romell and *Lactarius sakamotoi* Imai.

Basidiomycetes 담자균강

Homobasidiidae 동담자균 아강

Hymenomycetes 균실류

Agaricales 주름버섯목

Hygrophoraceae 빛꽃버섯과

Hygrocybe turunda (Fr.) Karst. 애비늘빛꽃버섯
(新稱)

Hygrocybe turunda(Fr.) Karsten, Hattsv. 1:235.
1879.

Ito, S., Myc. Fl. Japan 2(4):78. 1955.

Hygrophorus turunda Fr. Epicr. Myc. 330. 1838;;
Monogr. Hymen. Suec. 2:139; Hymen. Eur. 418.
1874.

Agaricus turundus Fr. Syst. Myc. 1:106. 1821.

Imazeki and Hongo, Coll. Ill. Fung. Jap. 9.
1965.

Singer, Agaricales, 209. 1975.

Pileus 7-12mm broad, round-shaped or subplane at center, red, fulvous at centre, scales of protuberance distributed on surface, surged at edge, flesh thin, subfulvous. Lamellae 2mm wide, sparse, pale yellow or pale yellowish brown, decurrent. Stipe 2~3.5cm long, 1~2mm thick, subcylindrical but upward thick, same colored with the cap but downward yellow orange, shrinking when touch with hands, solid. Spores 8.0~12.0×5.3~8.0μm broad elliptical, white, rough, nonamyloid, basidia 43.9~50.5×9.3~10.6μm, clavate.

Hab.: Solitary or clustered on soils with grasses.

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

Hygrophorus lucorum Kalchbr. 노란털빛꽃버섯
(新稱)

Kalchbre nner, Icon. Hymen. Hung. 35, pl.19, f.

4, 1874-Fries Hymen. Eur. 409, 1874.

Limacium lucorum P. Henn. in Engler & Prantl Nat. pfl-fam. 1, 1:213, 1900.

Ito, S., Myc. Fl. Japan 2(4):60, 1955.

Imazeki and Hongo Coll. III. Fung. Jap. vol. II. 6, 10. pl. 1, f. 1, 1965.

Singer Agaricales, 199, 1975.

Pileus 2.4~3.5cm broad, at first round to subplane, depressed at center or down curved at margin, tomentose of yellow distributed on surface, flexy at margin, reddish yellow to yellowish orange, reddish yellow at margin, flesh thin, odor none. Lamellae 2.4~4mm wide, sparse, white to lightyellow, decurrent. Stipe 3.5~7cm long, 2.5~5.5mm thick, subcylindrical or some bent, reddish yellow or light yellow, tube subwhite, hollow. Spores 8.1~10.3×5.2~7.4μm, broad elliptical or sweet potato-shaped, rough, nonamyloid, basidia 29.4~44.1×7.4~10.3μm, clavate, hyphae from gill trama 101.4~128.7×7.8~13.7μm, clamp connection absent.

Hab. Clustered on fallen leaves and solis in fall.

Distr. Korea (Mt. Sobaek), Japan and Europe.

Tricholomataceae 송이과

Macrocyttidia 큰낭상체 버섯속(新稱)

M. cucumis(Fr.) Heim var. *latifolia* (Lange) Imazeki et Hongo, 큰낭상체버섯아재비(新稱)

Hongo, Bull. Facul. Lib Arts. Educ. Shiga Univ. 7:42, f. 1, d-e. 1957.

Naucoria cucumis (Fr.) Gill. var. *latolia* Lange

Ito, S., Myc. Fl. Japan 2(4); 191, 1955.

Imazeki and Hongo Coll. Fung. Jap. 36. pl. 14, f. 76. 1957.

Pileus 1.4~3cm broad, campanulate, reddish orange and deep reddish orange at center, tinged at margin, furrowed radially when wet, surface rough, flesh thin, white. Lamellae 1~2mm wide, white to flesh colored, subfree or subsinuate, lesser crowded. Stipe 2~3.5cm long, 1~1.1mm thick, subcylindrical bent, upward white and fine downy, downward darkish red and deep darkishred at base, hollow. Spores 6.0~7.1×2.8~4.3μm, pale green under the microscope, elliptical, globose or subglobose when young, nonamyloid. Hymenium layer 21.0~25.2×4.2~5.6μm, club-shaped.

Hab.: Clustered on fallen leaves in fall.

Distr. Korea (Mt. Sobaek), Japan and Europe.

Agaricaceae 주름버섯과

Agaricus subrufescens Peck 붉은갓주름버섯(新稱)

Peck, Rep. st. Mus. 46:25, 1893: 48: 138, pl. 7. 1895-Saccardo, Syll. Fung, 11:70, 1895-Hotson & Stuntz, Mycologia, 30:223, f. 7, 1938.

Fungus subrufescens O. Kuntze, Rev. Gen. pl. 3 (2) :480, 1898.

Psalliota subrufescens Kauffm. Agr. Mich. 239, pl. 48-49, 1918-Gussow & Odell, Mushr. Toadst. 164. pl. 82, 1927.

Ito, S., Myc. Fl. Japan 2(4):291, 1955.

Imazeki and Hongo, Coll. III. Fung. Jap. vol. II, 52, 1965.

Pileus 14~15cm broad, round to plane but convex at center, smooth, white but light red at margin, flesh white, color changed, odor present. Lamellae narrowed, crowded, deep brown or darkish brown subfree. Stipe 16~17cm long, 1.3~1.8cm thick, bent here and there, annulus downward, white to gary or gray mixed blue, color changed, thick and bulb toward base, solid.

Spores 6.6~7.4×3.7~4.4μm, kidney-shaped, subglobose or elliptical, darkish yellow or purple in mass, nonamyloid, membrane thick, enclosed one or two oil drops. Hyphae from cap trama 32.3~51.5×4.4~10.3μm, clamp connection absent.

Hab. Solitary on fallen leaves in fall.

Distr. Korea (Mt. Sobaek), Japan and North America.

Coprinaceae 먹물버섯과

Psathyrella hydrophila (Bull. ex. Fr.) A.H. Smith 다람쥐눈물버섯(新稱)

A.H. Smith, Contr. Univ. Mich. Herb. 5:53, 1941-Konrad & Maublanc, Agaricales, 1:125, 1948-Singer, Agaricales, 468, 1949-Singer, Agaricales, 502, 503, 1975.

Agaricus hydrophilus Bull. Herb. Fr. pl. 511, 1791-Fries Epicr. Myc. 225, 1838: Monogr. Hymen. Suce. 1:427, 1857.

Agaricus stipatus, hydrophilus Fr. Syst. Myc. 1: 296, 1821.

Hypholoma hydrophilum Quél. Champ. Jura Vosg. 1:146, 1872.

Bolbitius hydrophilum Fr. Hymen. Eur. 333, 1874 -Gillet, Champ. Fr. 594, c.i.c. 1974.

Drosophila hydrophila Quél. Enchir, Fung. 116. 1886-Romagnesi, Not. v, Atl. Champ. pl. 51, B. 1956.

Hyphloma appendiculata Auct. nonnul.

Drosophila appendiculata Quél. Enchir. Fung. 116, 1886-Hein, Champ. Eur. 2:477, f. 81(8), 1957 Ito, S., Myc. Fl. Japan 2(4): 308-309, 1955.

Imazeki and Hongo Coll. Ill. Fung. Jap. 56, pl. 25, f. 138, 1957.

Imazeki, Hongo and Tubaki, Common Fungi of Japan in Color, 91, pl. 46, f. 3, 1970.

Pileus 3.2~5.2cm broad, conic-shaped to convex of plane, scams distributed on surface, tomentose, radially, furrowed when wet, whitish yellow or a little darkish brown, irregular at margin, margin torn when adult, flesh thin, white, odor none. Lamellae 2~3mm wide, crowded, whitish, yellowish white to dull orange or brown, black when touched, adnate.

Stipe 3.5~10cm long, 1~4mm thick, subcylindrical, yellowish white, bulbed toward base, powdery scales distributed on surface, hyphae at base hollow. Spores 5.7~8.6×3.6~5.7 μ m, elliptical, dull orange or light brown, enclosed one or three oil drops, germ pores present, cuticula cell of cap 5.7~7.2 μ m, subglobose.

Hab. Clustered or caespitose on decay trees of broadleaved trees. Edible.

Distr. Korea(Andong), Japan, Europe, and North America.

Strophariaceae 독청버섯과

Stropharia rugosannulata Farlow f. *lutea* Hongo 독청버섯아재비(新稱)

Imazeki and Hongo, Coll. Ill. Fung. Jap. vol. 11, 68, pl. 20, f. 124, 1965.

Pileus 1.8~2.7cm broad, at first round mountain-shaped to plane but convex, viscid when wet, darkish yellow or some light darkish yellow pale yellow or whitish yellow at margin, stains of yellowish brown scattered here and there on surface, flesh thin, whitish yellow. Lamellae 4~5mm wide, crowded,

dull orange, free. Stipe 3.5~6cm long, 0.2~0.5cm thick, subcylindrical or flat, powdery of brown or white distributed on the surface, upward whitish yellow, downward darkish yellow, hollow.

Spores 8.8~13.2×5.9~7.4 μ m, broad elliptical, pale purple, nonamyloid.

Hab. Solitary on soils of grasses. Summer to fall.

Distr. Korea (Youngju) and Japan.

Inocybe bresadolae Mass 두메담버섯(新稱)

Singer Agaricales, 574, 1975.

Pileus 1.5~2.5 (3.3)cm broad, convex to plane, pinnacled at center, tomentose of yellowish brown mixed brown or whitish yellow distributed on the surface roughly, flesh thin, white, very splattered when adult. Lamellae 3~5mm wide, concolorous with cap when wet, crowded, whitish yellow, subfree. Stipe 3~5.5cm long, 1~2mm thick, bent concolorous with cap, powders of white scattered on surface, thick and bulbed toward base, solid.

Spores 5.1~8.8×4.4~5.8 μ m, multiangular, echinate-stellate on surface, darkish yellow, nonamyloid. Cystidia 45~58.8×11.8~14.7 μ m, clavate or flask-shaped.

Hab. Gregarious on humus. Summer to fall.

Distr. Korea(Youngju) and North America.

Inocybe multicoronata A.H. Smith 노란꼭지 담버섯(新稱)

Singer, Agricales, 575, 1975.

Pileus 12~20mm broad, wimpled-shaped, practically pinnacle-shaped at center, furrowed, yellowish brown, pale yellow on pinnacle, flesh pale yellow, Lamellae 2~3mm wide, crowded, concolorous with cap or brown. Stipe 5~6cm long, 0.8~1.1mm thick, subcylindrical, bent toward base, thick at base, powders of white distributed on surface, concolorous with cap, hollow.

Spores 7.5~11.7 μ m, corona-shaped, darkish yellow, nonamyloid.

Hab. Gregarious on sandy-soils under broad leaved trees and coniferous trees in summer.

Distr. Korea(Youngju) and north America.

Russulaceae 무당버섯과

Russula farinipes Romell 깔대기무당버섯(新稱)

In Britzelmayr, Hymen. Sudbay. 8:12, f. 54,

1893-F. Schaeffer, Ann. Myc. 31 : 428, 1933-Singer, Agaricales, 706, 1949.

Russula subfoetens W.G. Smith, Jour. Bot. 11 : 337, 1873; Brit. Basid. 228, 1908.

Russula foetens var. *subfoetens* Mass. Brit. Fung. Fl. 3 : 70, 1893-Singer, Beih. Bot. Center. 49, Abt. 2 : 321, 1932.

Russula fella Bres, Icon. Myc. 9: pl. 427, 1929. Ito. S., Myc. Fl. 2(4):457-458, 1955.

Imazeki and Hongo, Coll. Ill. Fung. Jap. 93, 1957.

Imzeki and Hongo, Coll. Ill. Fung. Jap. vol. 11, 103, 1965.

Pileus 4~9cm broad, plane, some depressed but upward at margin funnel-shaped, irregular at margin, rough, not viscid but viscid when wet, dirt brown, some darkish brown at margin, flesh thick, white, very broken. Lamellae 4~8mm wide, thick, sparse, dull orange or dull orange mixed whitish yellow, very broken, adnate or decurrent. Stipe 4~6cm long, 1.2~1.8cm thick, dirt white, a little thick at middle, solid.

Spores 7.3 (5.1)~8.8×5.1~5.9μm, subglobose, white, amyloid, spiny on surface. Basidia 54.4~55.9×5.9~7.4μm, bat-shaped.

Hab. Gregarious or caespitose on fertilized soils under coniferous trees and broad-leaved trees. Summer to fall.

Distr. Korea (Youngju), Japan and Europe.

***Lactarius sakamotoi* Imai** 애기젖버섯(아재비(新稱))

Imai, Bot. Mag. Tokyo, 49:609, 1935; Jour. Facul. Agr. Hokaido Imp. Univ. 43:323, 1938.

Ito, S., Myc. Fl. 2(4):491-492, 1955.

Imazeki and Hong, Coll. Ill. Fung. Jap. vol. II, III, 1965

Pileus 2.3~4.2cm broad, plane, depressed, incurved at margin, rough at center, viscid when rubbed, pale orange mixed light yellow, fade out, color various, flesh thick, yellowish white. Lamellae 1~1.8mm wide, milk white, viscid when touched, crowded, yellowish white, brown at margin, decurrent. Stipe 1.2~2.5cm long, 0.6~1cm thick, bulbous or flat, bent, upward slender, blubed and thick toward base, concolorous with cap, some spots of brown distr-

ibuted on surface, solid, hollow when adult.

Spores 5.9~8.9×5.6~8.1μm, subglobose, spiny on surface, amyloid. Hymenium layer 32.3~55.9×7.4~9.8μm, clavate.

Hab. Gregarious on coniferous trees and broad-leaved trees. Summer to fall.

Distr. Korea (Youngju) and Japan.

摘 要

1978年 여름부터 가을까지小白山 및 榮州地方에서 採集된 高等菌類와 1976年 安東에서 採集된 것중 未同定이 었든 것을 이번에 同定하였다.

그 結果 *Macrocyttidia*의 韓國 未記錄屬과 10個의 未記錄種을 다음과 같이 確認하였다.

Hygrocybe turunda (Fr.) Karst., *Hygrophorus lucorum* Kalchbr., *Macrocyttidia cucumisi* (Fr.) Heim var. *latifolia* (Lange) Imazeki et Hongo, *Agaricus subrufescens* Peck, *Psathyrella hydrophila* (Bull. ex Fr.) A.H. Smith, *Stropharia rugosannulata* Farlow f. *lutea* Hongo, *Inocybe bresadolae* Mass., *I. multicoronata* A. H. Smith, *Russula farinipes* Romell 과 *Lactarius sakamotoi* Imai.

The Explanations of Plates

The Plate I

A. *Hygrocybe turunda* (Fr.) Karst.

A-1, carpophores A-2, spores ×1000 A-3, basidia ×1000

B. *Hygrophorus lucorum* Kalchbr.

B-1, carpophores ×2/3 B-2, spores ×1000 B-3, basidia ×1000 B-4, hyphae from gill trama 1000

C. *Macrocyttidia cucumisi* (Fr.) Heim var. *latifolia* (Lange) Imazeki et Hongo

D-1, carpophores ×1 D-2, spores ×1000 D-3, hymenium layer ×1000

The Plate II

A-1, *Agaricus subrufescens* Peck A-1, carpophores ×1/4 A-2, spores ×1000 A-3, hyphae from cap trama ×400

B. *Psathyrella hydrophila* (Bull. ex Fr.) A.H. Smith B-1, carpophores ×1/2 B-2, spores ×1000 B-3, cuticular cell from cap ×1000

C. *Stropharia rugosannulate* Farlow f. *lutea* Hongo

C-1, carpophores $\times 2/3$ C-2, spores $\times 1000$

D. *Inocybe bresadolae* Mass.

D-1, carpophores $\times 1$ D-2, spores $\times 1000$ D-3, cystidia $\times 1000$

The Plate III

A. *Inocybe multicoronata* A.H. Smith

A-1, carpophores $\times 1$ A-2, spores $\times 1000$

B. *Russula farinipes* Romell B-1, carpophores $\times 1/2$

B-2, spores $\times 1000$ B-3, basidia $\times 1000$

C. *Lactarius sakamotoi* Imai

C-1, carpophores $\times 1$ C-2, spores $\times 1000$ C-3, hymenium layer $\times 1000$

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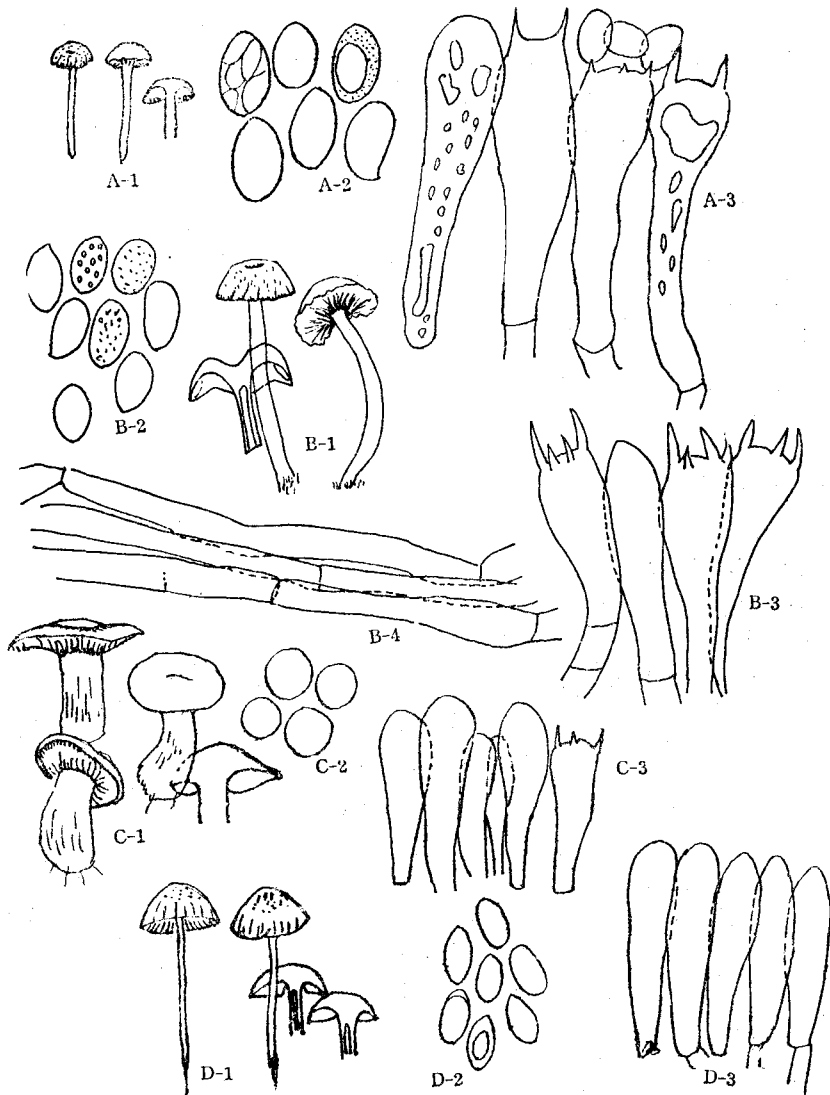
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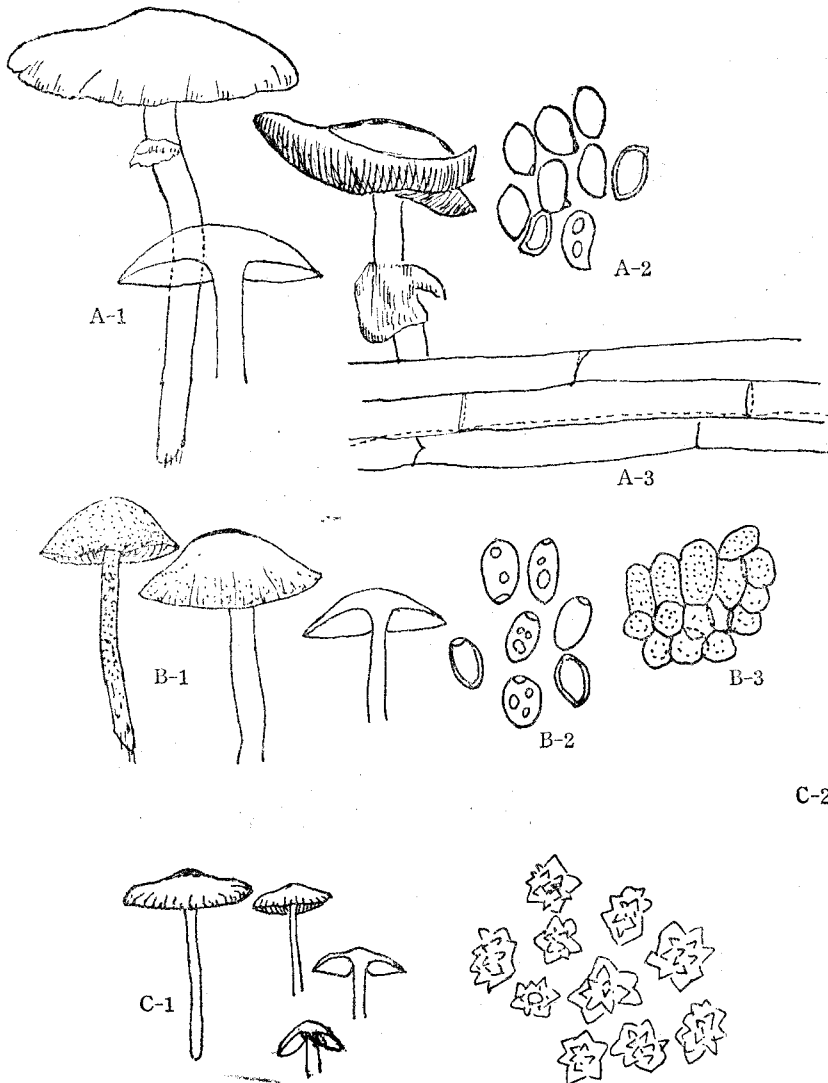
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The Plate I



The Plate II



The Plate III

