

## Notes on the Korean Higher Fungi (X)

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## 韓國產高等菌類記 (X)

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### Abstract

Many higher fungi were collected at Mt. Manduck, Samnye-up, Mt. Mudeung and Youngmun temple near Chonju city. These species were identified. According to the results, *Psathyrella obtusata*, *Marasmius leveilleanus*, *Omphalina epichysium*, *Lyphollum gibberosum*, *Tricholomopsis sasae* and *Multiclavula clara* are newly to Korea.

Keywords : *Psathyrella obtusata*, *Marasmius leveilleanus*, *Omphalina epichysium*, *Lyphollum gibberosum*, *Tricholomopsis sasae* and *Multiclavula clara*.

*Psathyrella obtusata* (Fr.) A.H.Smith 둔눈물버섯 (신칭)

Imazeki & Hongo, Coll. III. Mush. Jap. vol. I, 175, pl. 45, fig. 312, 1987.

Pileus 1.0~3.0cm broad, broad bell-shaped to plane, disc small convex, darkish brown, disc deep yellowish brown, striate when wet, whitish yellow striate when dry. Lamellae adnate, rarely decurrent, grayish brown with darkish purple, finally brown, sparse. Stipe 3.0~8.5cm long, 2.0~3.5mm thick, cylindrical, white, hollow.

Spore 6.0~8.0 × 5.0~6.0 μm, broad elliptical, with fine farinas. Basidia 25~35 × 5.0~8.0 μm, clavate. Cystidia 27.5~82.5 × 12.5~22.5 μm, flask-shaped, ventricose.

Habit. and habitat : Cespitose or clustered on rotten wood in the soil from spring to autumn.

Distribution : Mt. Manduck (Korea)

Specimens studied : CHO-2174 collected at Mt. Manduck near Chonju city on the 4th July of 1991.

*Marasmius leveilleanus* (Berk.) Pat. 주름낙엽버섯(신칭)

Imazeki & Hongo, Coll. III. Mush. Jap. vol. I, 101, pl.12, fig.158, 1987.

Pileus 1.0~3.0cm broad, broad convex to plane, disc small convex, darkish red brown, radial striate from margin to disc. Context thin, white. Lamellae free, white, whitish yellow, sparse. Stipe 3.5~8.0cm long, 0.5~1.0mm thick, cylindrical, darkish brown, downwards slender, hollow, tough.

Spore 6.0~7.0 × 3.8~4.5 μm, elliptical. Basidia 20~25 × 2.5~3.8 μm, clamp

connection present at base. Hyphae from lamellae trama 2.5~5.0 μm, wide, clamp connection present

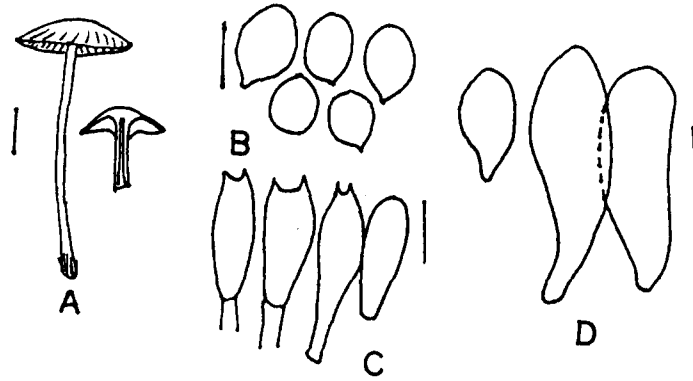


Fig 1. *Psathyrella obtusata*

A, carpophores. (bar:1cm). B, spores. C, basidia.  
D, cystidia. (B-D, bar : 10 $\mu$ M)

Habit. and habitat : Clustered on fallen leaves, branches and rotten woods.

Distribution : Mt. Manduck (Korea)

Specimens studied : CHO-2593 collected at Mt. Manduck near Chonju city on the 30th June of 1992.

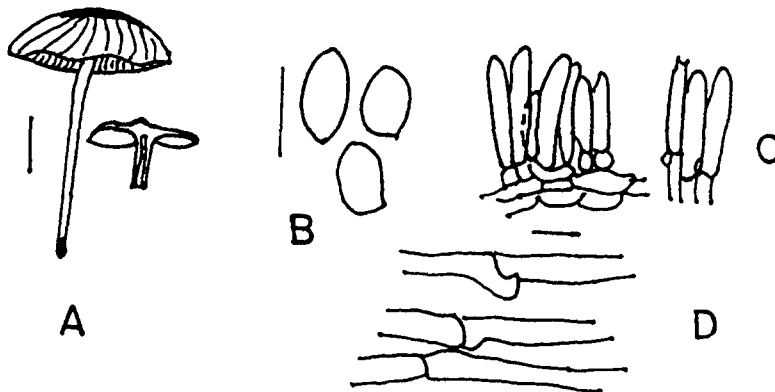


Fig 2. *Marasmius leveilleanus*

A, carpophores. (bar : 1cm). B, spores. C, basidia.  
D, hyphae from lamella trama. (B-D, bar : 10 $\mu$ M)

*Omphalina epichysium* (Pers. : Fr.) Quel. 요리술발버섯 (신칭)

Quel, Enchir. Fung. 43. 1886

*Agaricus epichysium* Pers. Syn. Meth. Fung. 462, 1801.

Fries, Syst. Myc. 1:169, 1821.

Pileus 1.0-4.0cm broad, broad convex to plane, disc depressed, fan-shaped, darkish gray, grayish brown, whitish when dry, disc floccose, glabrous with age, Margine incurved, striate when wet, wave-shaped. Context the concolorous with the pileus, thin, soft. Odor and taste none. Lamellae decurrent, whitish gray, sparse narrow. Stipe 1.5-3.0cm long, 0.15-0.4cm thick, cylindrical, the concolorous with the pileus, solid to hollow, whitish myceloid at base.

Spore  $7.5\sim 8.5 \times 4.0\sim 5.0\mu\text{m}$ , broad elliptical, nonamyloid, often with one oil drop. Basidia  $22.5\sim 30 \times 5.0\sim 6.3\mu\text{m}$ , clavate, clamp connection present at base. Hypahe from lamellae trama  $3.0\sim 4.0\mu\text{m}$  wide, clamp connection present.

Habit. and habitat : Solitary or clustered on rotten wood of forests from summer to autumn.

Distribution : Samnye—up (Korea)

Specimens studied : CHO—2265 collected at Samnye up, Wanju—Kun on the 24th July of 1991.

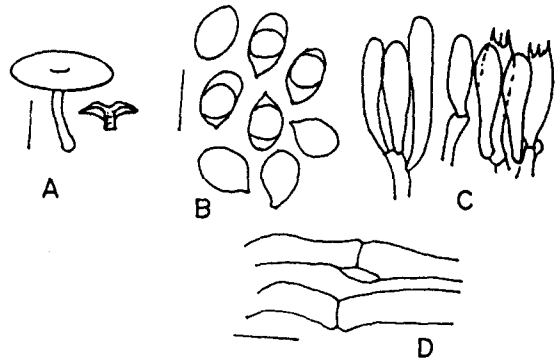


Fig. 3. *Omphallina epichysium*

A, carpophores. (bar:1cm). B, spores. C, basidia.  
D, hyphae from lamella trama. (bar, B-D :  $10\mu\text{M}$ )

*Lyophyllum gibberosum* (Schaeff.) M.Lange 꾀추만가닥버섯(신칭)

Imazeki & Hongo, Coll. Ill. Mush. Jap. vol. I, pl.9, fig. 68, 1987.

Pileus  $0.6\sim 1.5\text{cm}$  broad, broad bell-shaped to plane, grayish brown, darkish brown, striate when wet. Lamellae subfree, pallid white, grayish. Stipe  $2.0\sim 5.0\text{cm}$  long,  $1.0\sim 3.0\text{mm}$  thick, light grayish brown, floccose, darkish sclerotium present.

Spore  $5.0\sim 6.0 \times 3.0\sim 3.5\mu\text{m}$ , elliptical. Basidia  $12\sim 15 \times 4.0\sim 5.0\mu\text{m}$ , clavate.

Habit. and habitat : Clustered on soils in forests during autumn.

Distribution : Mt. Manduck (Korea)

Specimens studied : CHO—2559 collected at Mt. Manduck near Chonju city on the 7th October of 1990.

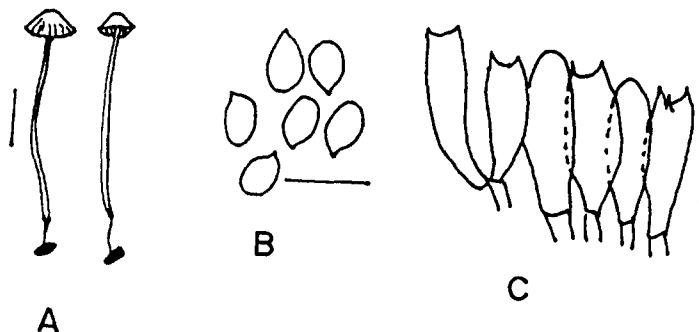


Fig. 4. *Lyophyllum gibberosum*

A, carpophores. (bar : 1cm). B, spores. C, basidia.(B-C, bar: $10\mu\text{M}$ )

*Tricholomopsis sasae* Hongo 대술버섯(신칭)

Imazeki & Hongo, Coll. Ill. Mush. Jap. vol.I, 71, pl.13, fig. 95, 1987.

Pileus 1.0~4.5cm broad, broad convex to plane, yellowish brown, small scale of light reddish brown with yellowish brown, disc compact. Context thin, yellow, Lamellae sinuate, adnate, crowded, white to yellow, edge white farinaceous. Stipe 1.5~3.5cm long, 3.0~5.0mm thick, light yellowish brown, hollow.

Spore 6.0~7.0×4.5~5.0 $\mu$ m, elliptical, prominent, with one oil drop. Basidia 20~32.5×5.0~6.3 $\mu$ m, clavate.

Habit. and habitat : Clustered or cespitose on soils of weeds from summer to autumn.

Distributions : Mt. Mudeung (Korea).

Specimen studied : CHO-2489 collected at Mt. Mudeung in Kwanju on the 25th August of 1991.

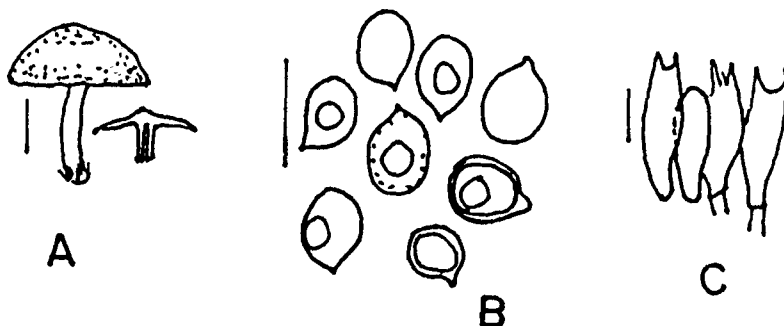


Fig. 5. *Tricholomopsis sasae*

A. car (caryophores. (bar : 1cm). B. spores. C. basidia.(B-C, bar:10 $\mu$ M)

*Multiclavula clara* (Berk. et Curt.) Peterson 빛더듬이버섯 (신칭)

Imazeki & Hongo, Coll. Ill. Mush. Jap. vol. I, pl.93, fig. 661, 1989.

Caryophores 3.0~5.0cm high, clavate, slender, olive color when fresh, orange color with red when dry.

Spores 7.5~10×3.5~4.0(-4.5) $\mu$ m, white, elliptical, pellicle, rarely with one oil drop. Basidia 22~23 x 3.0~5.0 $\mu$ m, clavate, clamp connection present at base.

Habit. and habitat : Clustered on soils with of small cliff from summer to autumn.

Distribution : Youngmun-sa temple (Korea).

Specimens studied : CHO-2069 collected at Youngmun-Sa temple near Chonju city on the 19th June of 1911.

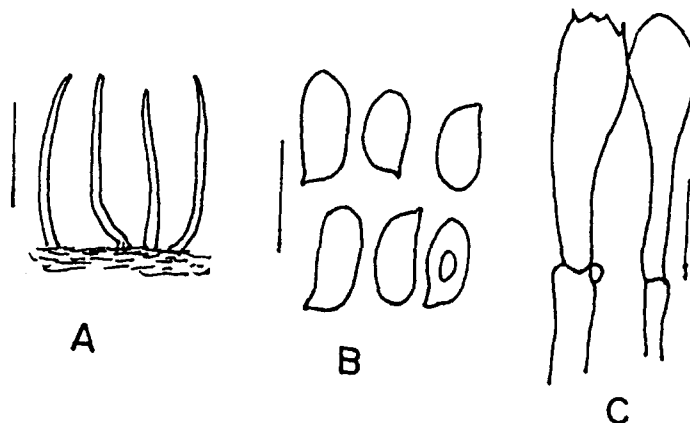


Fig. 6. *Multiclavula clara*

A. caryophores. (bar : 1cm). B. spores. C. basidia.(bar, B-C : 10 $\mu$ M)

## 概 要

1990년부터 1992년까지 전주근교의 만덕산, 용문사, 완주군의 삼례읍, 광주의 무등산에서 많은 고등균류를 채집하여 동정하였다. 그 결과 둔눈물버섯 (*Psathyrella obtusata*), 주름낙엽버섯(*Marasmius leveilleanus*), 요리술발버섯(*Omphalina epichysium*), 푼추만가닥버섯(*Lyphollum gibberosum*), 대술버섯(*Tricholomopsis sasae*) 그리고 빛더듬이버섯 (*Multiclavula clara*)은 한국 미기록종으로 확인 되었다.

## References

- Breitenbach, J. and Kranzlin, F. (1986) : Fungi of Switzerland vol. 2, Nongilled fungi, Verlag Mykologia, Switzerland, 411pp.
- Cetto, B. (1987) : Enzyklopadie, band 1~4, Blv Verlagsgesellschaft, Munchen Wien Zurich.
- Cho, D.H. (1993) : The Mycoflora of Higher Fungi in Mt. Chiri Areas, The Report of the KACN, 31:229~240.
- Cho, D.H. (1991) : Notes on Korean Higher Fungi (VIII), J. of Chonju Woosuk Univ. vol. 13:127~136.
- Cho, D.H. (1991) : The Mycoflora of Higher Fungi in Wanju Areas, J. of Chonju Woosuk Univ. vol. 13:127~136.
- Cho, D.H. (1985) : Notes on Korean Higher Fungi(VII), J. of Kwangju Health Junior College. vol. X:93~100.
- Dahncke, R.M. (1993) : 1200 Pilze, At Verlag, Aarau. Stuttgart.
- Imazeki, R. and T. Hongo, (1987) : Colored Illustrations of Mushrooms of Japan. Vol. I, Hoikusha, Osaka, japan.
- Imazeki, R. and T. Hongo (1989) : ibid, Vol. II.
- Imazeki, R., T.Otani and T.Hongo (1988) : Fungi of Japan, Yamakei Publishers Co. Ltd.
- Ito, S. (1955) : Myc. Fl. Japan 2(4), Yokendo.
- Ito, S. (1957) : Myc. Fl. Japan 2(5), Yokendo.
- Korean Society of Mycol. (1987) : Proposition for the unification of Korean name of Mushrooms, Kor. J. Mycol. 2(1) : 43~55.
- Lange, M. and Hora, F.B. (1985) : Collins guide to mushrooms and toadstools, 257pp., William Collins Co., U.K.
- Lee, J. Y. (1988) : Coloured Korean Mushrooms, Academic Press, Seoul, Korea.
- Lee, T.S. (1990) : The Full List of Recorded Mushrooms in Korea, Kor. J. Mycol. 18(4) : 233~259.
- Lincoff, G.H. (1981) : The Audubon Society field Guide to North American Mushrooms, Alfred A. Knopf, New York.
- Phillips, R. (1981) : Mushrooms and othe fungi of Great Britain & Europe, Ward Lock Ltd., London, U.K.
- Phillips, R. (1991) : Mushrooms of North America, Little, Brown and Company.
- Singert, R. (1986) : The agaricales in modern Taxonomy, Ganther Verlag, Kg. J. Cramer, pp.962..

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