

한국산 낙엽버섯류의 새로운 한국어 일반명

1. 낙엽버섯속

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Note on the New Korean Common Names of Marasmioid Fungi. 1. The Genus *Marasmius*

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ABSTRACT: 47 species was reported in the genus *Marasmius* in Republic of Korea up to now. 26 of total 47 species previously recorded from Korea were made up a list. Korean common names of 10 new species and 11 species newly recorded in Korea were introduced in study with synoptic key. These names were followed by the Romanization rule to express Korean common name.

KEYWORDS : Korean common name, *Marasmius*, Synoptic key

낙엽버섯과(Marasmiaceae)에 속하는 낙엽버섯속(*Marasmius*)에는 약 700여종과 1,900여 개의 종소명이 발표되었다(<http://www.indexfungorum.org>). 한국에서는 2007년 이전까지 26종의 낙엽버섯이 기록되었고 이 종들의 목록을 표 1에 제시하였다(Ryoo and Shin, 2007). 위의 저자들은 2007년부터 2010년까지 한국-체코 공동연구를 통해 낙엽버섯 10종의 신종과 11종의 미기록종을 발표하였고, 6종의 형태적 특징을 재기재하였을 뿐만 아니라 그들의 계통학적 분석도 추가하여 분류학적 특징을 발표하였다(Antonín *et al.*, 2010a; 2010b; 2011; 2012; 2013).

“낙엽버섯속”이라는 한국어 일반명은 낙엽분해균인 *Marasmius*을 생태적 특징에 따라 한국산균류목록(Lee and Lee, 1957)에서 처음으로 기록하였다. 이 문헌은 *Marasmius androsaceus*와 *M. siccus*을 연잎낙엽버섯과 애기낙엽버섯이라 지칭하고 간단한 형태적 특징과 함께 기록하였다. 그 후 한국의 여러 균류학자들에 의해 발표되었던 26종의 낙엽버섯을 표 1에 발표된 문헌과 함께 제시하였다. 2007년 이후 새롭게 발표된 종과 기존에 발표되었던 종들을 그들의 형태적 특징에 따라 분류기로 요약하여 제시하였다. 형태적 특징에 의해 *Marasmius*속으로 분류되었다가 DNA 분자 분석과 계통 분석에 의하여 *Gymnopus*속으로 이동한 *Androsacei*절 1종, *Mycetina*속으로 독립한 *Alliacei*절 4종과 *Physalacriaceae*과로 이동한 *Epiphylli*절 1종, *Leveilleani*절 1종은 분류기에서 제외하였다(Antonín and Norrdeloos, 2010). 이 논문의 목적은 현재까지 한국어 일반명이 명명되지 않은 21종의 낙엽버섯에 대한 새로운 일반명을 제시하기 위함이다.

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Key to sections and species of the genus *Marasmius* in Korea

1 Lamellae attached to a distinct collarium; stipe always filiform (sect. *Marasmius*) 2

Table 1. List of *Marasmius* species previously recorded from Korea

Section	Species	Korean Common Name	Reference
Androsacei	<i>Marasmius androsaceus</i> (L.) Fr.	연잎낙엽버섯	Lee and Lee (1957)
	<i>M. buxi</i> Fr.	카다리낙엽버섯	Cho (2002)
Hygrometrici	<i>M. hudsoni</i> (Pers.) Fr.	주름낙엽버섯	Cho (2002)
	<i>M. minutus</i> Peck (as <i>M. capillipes</i> Sacc.)	털낙엽버섯	Lee <i>et al.</i> (1994)
Leveilleani	<i>M. leveilleanus</i> (Berk.) Sacc.	주름낙엽버섯 중복, 참고 <i>M. hudsoni</i>	Cho (1995)
Epiphylli	<i>M. epiphylloides</i> (Rea) Sacc. & Trotter	표피낙엽버섯	Cho (2002)
	<i>M. bulliardii</i> Quél.	살낙엽버섯	Lee <i>et al.</i> (1987)
Marasmius	<i>M. crinis-equi</i> F. Muell. ex Kalchbr.	말총낙엽버섯	Park and Lee (1991)
	<i>M. graminum</i> (Lib.) Berk.	풀잎낙엽버섯	Lee (1975)
	<i>M. limosus</i> Boud. & Quél.	진흙낙엽버섯	Cho and Cho (2001)
	<i>M. rotula</i> (Scop.) Fr.	나사낙엽버섯	Cho and Kim (1995)
	<i>M. wettsteinii</i> Sacc. & P. Syd.	물낙엽버섯	Cho and Yoo (1999)
Sicci	<i>M. cohaerens</i> (Alb. & Schwein.) Cooke & Quél.	동백낙엽버섯	Kim <i>et al.</i> (1986)
	<i>M. delectans</i> Morgan	환희낙엽버섯	Cho and Kim (1995)
	<i>M. pulcherripes</i> Peck	앵두낙엽버섯	Seok <i>et al.</i> (1991)
	<i>M. siccus</i> (Schwein.) Fr.	애기낙엽버섯	Lee and Lee (1957)
Alliacei	<i>M. torquescens</i> Quél.	목걸이낙엽버섯	Cho (1998)
	<i>M. calopus</i> (Pers.) Fr.	오목낙엽버섯	Lee <i>et al.</i> (1995)
	<i>M. epidryas</i> Kühner	애기선녀버섯	Lee <i>et al.</i> (1994)
	<i>M. scorodonius</i> (Fr.) Fr.	마늘낙엽버섯	Lee <i>et al.</i> (1987)
Globulares	<i>M. prasioismus</i> (Fr.) Fr.	환낙엽버섯	Lee and Cho (1975)
	<i>M. aurantioferrugineus</i> Hongo	황소낙엽버섯	Kim <i>et al.</i> (1990)
	<i>M. maximus</i> Hongo	큰낙엽버섯	Hong and Jung (1975)
	<i>M. oreades</i> (Bolton) Fr.	선녀낙엽버섯	Lee and Lee (1957)
	<i>M. prasioismus</i> (Fr.) Fr.	환낙엽버섯	Lee and Cho (1975)
	<i>M. purpureostriatus</i> Hongo	줄무늬낙엽버섯	Cho and Lee (1981)
	<i>M. wynneae</i> Berk. & Broome	보라낙엽버섯	Kim <i>et al.</i> (1996)

1* Lamellae not attached to a distinct collarium; stipe basal mycelium or not 11
 2 Cheilocystidia and pileipellis broom cells in the form of Siccus-type (**subsect. Sicciformes**) 3
 2* Cheilocystidia and pileipellis broom cells in the form of Rotalis-type (**subsect. Marasmius**) 4
 3 Lamellar edge concolorous with sides; growing on dead twigs *M. ruforotula*
 3* Lamaellar edge coloured; growing on dead leaf
 *M. crinis-equi*
 4 Basidiospores 7.0-10 × 3.75-5.0 μm, ellipsoid to ellipsoid-fusoid *M. wisteriae*
 4* Basidiospores 12-13.5(-14) × 2.5-3.25 μm, fusoid, narrowly lacrimoid 5
 5 Pileus up to 5 mm broad; lamellae distant (L=(4) 6-8) *M. graminum*

5* Only few lamellae present (L=6-9) 6
 6 Basidia 2-spored, oblong-ellipsoid to slightly amygdaliform *M. limosus*
 6* With more lamellae present (L>10) 7
 7 Pileus white to cream-coloured when fresh with greyish centre (papilla), 4-14 mm, with 17-21 lamellae; on dead wood (sticks, branches, bark) *M. rotula*
 7* Pileus beige-brown when fresh, or when white or whitish, then with distinctly delimited, darker, brown or blackish central papilla 8
 8 Pileus white when fresh with grey to grey-brown papilla; L=(12) 13-17 (19), projections of broom cells in pileipellis 1.0-2.0 (3.5) μm long; on needs and litter of coniferous trees *M. wettsteinii*
 8* Pileus biege-brown to pale brown-orange 9
 9 Pileus ochraceous brown except for whitish centre;

lamellae moderately distant (L=15-17); basidiospores 8.5 × 5.5 μm; pileipellis cells 20-35(-45) × 17-25 μm
 *M. cf. bulliardii*
 9* Pileus pale greyish or light brown to brownish orange; basidiospores 2.5-4.5 μm 10
 10 Pileus light brown to brownish orange; lamellae distant (L=6-7); basidiospores (7.0-)8.0-10 × 3.75-4.5 μm, on twigs *M. tubulatus*
 10* Pileus pale greyish; lamellae more close (L=13-16); basidiospores 7.5-9.0 × 4.5-5.0 μm; on dead leaves *M. rotalis*
 11 Pileipellis composed of smooth cells; carpophores larger; stipe basal mycelium; context hyphae dextrinoid; thick-walled setae absent (**sect. Globulares**) 12
 11* Pileipellis composed of broom-cells with numerous digitate projections 19
 12 Pileus distinctly sulcate, striped, centre and striae violet brown, sulcae whitish; lamellae distant (L=12); basidiospores large, 21-25 × 5.0-6.5 μm; pleurocystidia absent; caulocystidia absent *M. purpureostriatus*
 12* Pileus sulcate or not, but never striate, colour different; lamellae closer (L>16); basidiospores distinctly smaller, less than 15 μm long; pleuro- and caulocystidia absent or present 13
 13 Pleurocystidia present 14
 13* Pleurocystidia absent 15
 14 Stipe long and slender, up to 110 × 3 mm; basidiospores 8.5-10 × 3.5-4.0 μm; cheilocystidia 12-23 × 5.0-12 μm; pleurocystidia fusoid, sometimes pedicellate; caulocystidia absent *M. fusicystidiosus*
 14* Stipe shorter and more robust, 30-60 × 2.5-6 mm; basidiospores 6.0-8.0 × 3.0-4.0 μm; cheilocystidia 21-42 × 7.0-10(-14) μm; pleurocystidia fusoid, subcylindrical, sublageniform; caulocystidia present, numerous *M. brunneospermus*
 15 Pileus orange-ferruginous; basidiospores 11.5-15 × (4.0-)4.5-6.0 μm *M. aurantioferrugineus*
 15* Pileus differently coloured, never orange-ferruginous; basidiospores smaller, never over 10 μm long 16
 16 Pileus pale ochraceous, cream-coloured, strongly pallescent to almost white; stipe concolorous with pileus, tomentose, rather elastic; spores (7.0) 8.0-10.5 (11.5) × 4.0-6.0 μm; cheilocystidia absent *M. oreades*
 16* Basidiocarps (less) robust; basidiospores 6.5-8.0 × 3.7-5.0 μm; caulocystidia not forming a compact layer
 17
 17 Basidiocarps robust, basidiospores 7.0-9.5(-10) × 4.5-6.0 μm; caulocystidia numerous, forming a compact layer

of interwoven, cylindrical, narrowly clavate, subfusoid, narrowly cylindrical, often irregular or branched, up to 10 μm wide cells *M. maximus*
 17* Pileus and stipe differently coloured; cheilocystidia present; spore smaller 18
 18 Pileus white-off, whitish to yellowish white or pale yellow with brownish or greyish tinge at centre, never violaceous tinged; lamellae distinctly anastomosed already when young, white, pale yellow, greyish cream or pale cream; basal tomentum forming a solid mycelial mat around stipe base *M. nivicola*
 18* Pileus white or grey-ochraceous when young, then milky white, grey, or grey-violaceous; lamellae not intervenose or only when old, white to cream or grey, sometimes with violaceous tinge; basal tomentum never forming a solid mycelial mat around stipe base .. *M. wynneae*
 19 Pileipellis composed of broom-cells of the Rotalis-type; stipe filiform; trama hyphae non-dextrinoid (**sect. Hygrometrici**) 20
 19* Pileipellis composed of broom-cells of Siccus-type (**sect. Sicci**) 24
 20 Pileocystidia and Caulocystidia present 21
 20* Pileocystidia present and Caulocystidia absent .. 22
 21 Lamellae well-developed (L=(0)3-9); spores 6.0-9.5 × 2.0-5.0 μm *M. minutus*
 21* Pileocystidia 21-25 × 5.0-6.5 μm; pileus greyish orange; basidiospores (7.0-)8.0-9.5 × (4.2-)4.5-5.0 μm; stipitipellis mostly smooth *M. junipericolus* ad interim
 22 Pileocystidia (12-)15-25(-30) × 4.0-8.0 μm; pileus in various shades of brown; caulocystidia absent; stipe longer, 20-65 mm; basidiospores 6.0-9.0 × 3.0-4.5 μm; stipitipellis divertisulate ... *M. aucubae* (= *M. crescentiae* s. Antonín *et al.*, 2012)
 22* Cheilocystidia of lageniform type 23
 23 Cheilocystidia of one type: lageniform or tibiiform; pleurocystidia absent; on leaves of *Buxus* *M. buxi*
 23* Cheilocystidia of type: lageniform to lecithiform; pleurocystidia absent; on dead leaves of *Ilex* *M. hudsonii*
 24 Setae on pileus and stipe surface present (**ser. Spinulosi**) 25
 24* Setae absent 27
 25 Pileipellis of smooth cell with well-developed setoid broom cells and setae and present caulosetae *M. orientalis*
 25* Pileipellis with broom cells of the Siccus-type ... 26
 26 Basidiocarps with pale whitish, yellowish, cream, becoming somewhat wrinkled at surface; Lamellae with

dextrinoid cystidia *M. delectans*
 26* Basidiocarps with brownish 27
 27 Lamellae pale yellow to yellow-brown with conspicuous brown setiform cystidia on pileus lamellae and stipe; pileipellis with broom cells of the Siccus-type, Stipe, lamellae, and pileus with brown, thick-walled *M. cohaerens*
 27* Hyphae of context dextrinoid, Thick-walled setiform cystidia present on pileus and stipe; cheilo- and pleurocystidia present *M. torquescens*
 28 Caulocystidia present (**ser. *Atrorubentes***) *M. strobiluriformis*
 28* Caulocystidia always absent 29
 29 Pleurocystidia absent (**ser. *Leonini***) 30
 29* Pleurocystidia present (**ser. *Haematocephali***) 33
 30 Basidiospores small, 7.0-8.5 × 3.5-4.5 μm; lamellae moderately close (L=25) with lamellulae (l=2-3) *M. occultatiformis*
 30* Basidiospores larger, 12-15 μm long; lamellae with or without lamellulae 31
 31 Basidiospores 12-15 × 4.0-5.5(6.0) μm; lamellae with lamellulae (l=2-3) *M. occultatus*
 31* Basidiospores 3.0-4.75 μm wide; lamellulae absent or scattered (l=0-1(2)) 32
 32 Pileus small, 4-10 mm broad, in various shade of brown, brownish orange to reddish brown; lamellulae absent or scattered; basidiospores 12-15 × 3.0-4.75 μm .. *M. graminicola*
 32* Pileus larger, 13-33 mm broad, brownish orange or reddish orange; lamellulae present (l=1-2); basidiospores 11-14.5 × 3.25-4.5 μm *M. koreanus*
 33 Basidiocarps with purple tinge 34
 33* Basidiocarps without purple tinge 35
 34 Lamellae 10-14; pleurocystidia 35-42 × 5.0-7.0 μm; on needles of *Pinus strobus* *M. rhodopurpureus*
 34* Lamellae 16-20; pleurocystidia 37-55 × 7.0-12 μm; on fallen leaves and twigs of broadleaved trees *M. pulcherripes*
 35 Pileus large, 15-65 mm large, never sulcate or striate-sulcate; stipe (1)3-4(5) mm; basidiospores 10-14 × 4.5-5.7 μm *M. confertus* var. *tenuicystidiatus*
 35* Pileus smaller, up to 25 mm broad, always sulcate or striate-sulcate; stipe narrower, up to 2 mm wide; Basidiospores shorter than 20 μm 36
 36 Basidiospores 14-20 × 4.0-5.5 μm *M. ferrugineus*
 36* Basidiospores longer than 20 μm 37
 37 Basidiospores up to 16 μm long 38
 37* Lamellae and stipe never with purplish tinge; basi-

diols 15-26(31) × 3.0-8.0 μm; pleurocystidia 32-41 × 7.0-10 μm *M. subtangerinus*
 38 Pileus 3-10 mm; stipe very long, up to 200 mm; basidiospores very large, 22-27 × (3.0)3.5-5.0 μm; pleurocystidia 7.0-15(19) μm *M. crinipes*
 38* Pileus 10-25 mm broad; stipe shorter, up to 95 mm long; basidiospores smaller, (15)18-25 × 3.5-5.0 μm; pleurocystidia 5.0-12(15) μm wide *M. siccus*
 *굵은 글씨체는 새로운 한국어 일반명을 명명한 종

한국어 일반명이 새롭게 제시된 낙엽버섯

한국어 일반명은 ICBN 명명법을 준수하여 형태적 특징(M), 특이적인 기주(H), 최초 발견 지역(L)을 기준으로 하여 명명하였다. 또한 어원의 이해도를 높이기 위해 명명 기준을 한국어 이름 뒤에 함께 기록하였다. 낙엽버섯 종들은 화려한 색깔이 분류 기준이 되기 때문에 한국어 명명에도 이들의 갓 색깔을 주요하게 반영하였다. 새롭게 명명된 한국어 일반명의 명확한 설명을 위하여 그림 1을 덧붙였다.

sect. *Marasmius* (Antonín *et al.*, 2013)

subsect. *Marasmius*

Marasmius cf. *bulliardii* Quél., Bull. Soc. bot. Fr. 24: 323, 1878

Korean common name; 쪽빛가락지낙엽버섯 (M)

Marasmius rotalis Berk. & Broome, J. Linn. Soc., Bot. 14: 40, 1873.

Korean common name; 은빛가락지낙엽버섯 (M)

Marasmius tubulatus Petch, Tr. Brit. Mycol. Soc. 31: 42, 1947.

Korean common name; 늦쇠빛가락지낙엽버섯 (M)

Marasmius wisteriae Antonín, R. Ryoo & H. D. Shin, sp. nov., ined.

Korean common name; 등나무가락지낙엽버섯 (H, M)

subsect. *Sicciformis*

Marasmius ruforotula Singer, Sydowia 2(1-6): 34, 1948.

Korean common name; 호박꿀낙엽버섯 (M)

sect. *Hygrometrici* (Antonín *et al.*, 2012)

Marasmius aucubae Neda, in Neda & Doi, Mem. Natn Sci. Mus, Tokyo 31: 92, 1998 (= *M. crescentiae* s. Antonín *et al.*, 2012)

Korean common name; 무더기낙엽버섯 (M)

Marasmius junipericola ad interim

Korean common name; 향잎위낙엽버섯 (H)

sect. *Sicci*

ser. *Spinulosi* (Antonín *et al.*, 2012b)



Fig. 1. Photos of basidiocarps of the genus *Marasmius*. sect. *Marasmius*; A, *Marasmius bulliardii* (쭈빛가락지낙엽버섯); B, *M. rotalis* (은빛가락지낙엽버섯); C, *M. tubulatus* (뚝쇠빛가락지낙엽버섯); D, *M. wisteriae* (등나무가락지낙엽버섯); E, *M. ruforotula* (호박풀낙엽버섯); sect. *Hygrometrici*; F, *M. aucubae* (무더기낙엽버섯); sect. *Sicci*; G, *M. orientalis* (밤색털낙엽버섯); H, *M. strobiluriformis* (솔잎위낙엽버섯); I, *M. crinipes* (키다리낙엽버섯); J, *M. occultatus* (민주름낙엽버섯); K-a, *M. occultatiformis* (주홍빛민주름낙엽버섯); K-b, 주홍빛민주름낙엽버섯의 갓 표면; L-a, *M. graminicola* (벽돌빛주름살낙엽버섯); L-b, 벽돌빛주름살낙엽버섯의 주름살; M, *M. confertus* var. *tenuicystidiatus* (얇은낭상체낙엽버섯); N, *M. ferrugineus* (단풍빛낙엽버섯); O, *M. koreanus* (살구빛낙엽버섯); P, *M. rhodopurpureus* (흑자주빛낙엽버섯); Q, *M. subtangerinus* (감귤빛머리낙엽버섯); sect. *Globulares*; R, *M. brunneospermus* (홍릉낙엽버섯); S, *M. nivicola* (눈빛낙엽버섯).

Marasmius orientalis Antonín, R. Ryoo & H. D. Shin, Mycotaxon 111: 370, 2010.

Korean common name; 밤색털낙엽버섯 (M)

ser. *Atrorubentes* (Antonín *et al.*, 2012b)

Marasmius strobiluriformis Antonín, R. Ryoo & H. D. Shin, Mycotaxon 111: 373, 2010.

Korean common name; 솔잎위낙엽버섯 (H)

ser. *Leonini* (Antonín *et al.*, 2011)

Marasmius graminicola Speg., Anal. Mus. nac. Hist. nat. B. Aires 6(1898): 111, [1899].

Korean common name; 벽돌빛주름살낙엽버섯 (M)

Marasmius koreanus Antonín, R. Ryoo & H. D. Shin, Mycol. Progress 11: 623, 2012.

Korean common name; 살구빛낙엽버섯 (M)

Marasmius occultatus Har. Takah., Mycoscience 41(4): 316, 2000.

Korean common name; 민주름낙엽버섯 (M)

Marasmius occultatiformis Antonín, R. Ryoo & H. D. Shin, Mycol. Progress 11: 616, 2012.

Korean common name; 주홍빛민주름낙엽버섯 (M)

ser. *Haematocephali* (Antonín *et al.*, 2011)

Marasmius crinipes Antonín, R. Ryoo & H. D. Shin, Mycol. Progress 11: 632, 2012.

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적 요

낙엽버섯속 47종이 현재까지 한국에서 보고되었다. 47종 중 26종이 기존에 보고되었고, 10종의 신종과 새롭게 기록된 11종의 일반명이 이 연구에서 분류키와 함께 보고하였다. 일반명은 로마자표기법에 따랐다.

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