

Proposal of Korean names for newly updated *Collybiopsis* species

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The classification system of *Collybiopsis* has been updated to contain some species of *Collybiopsis*, *Gymnopus* sect. *Vestipedes*, and *Marasmiellus*. Recently, we conducted the taxonomic study of Korean *Collybiopsis* to reflect the current classification system and confirmed 16 species. We propose their Korean names in this research note.

Keywords: *Collybiopsis*, *Gymnopus*, *Marasmiellus*, Omphalotaceae

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INTRODUCTION

Collybiopsis Earle (1909) is a collybioid/marasmioid fungus degrading deciduous leaves or branches in tropical and temperate climates (Singer, 1973). This genus has relatively small and dull colored basidiomata, so it has been confused with mushrooms belonging to other genera like *Gymnopus* and *Marasmius*. Recently, phylogenetic studies have been actively conducted on the family Omphalotaceae, and the classification system has changed (Mata, 2002; Mata *et al.*, 2004; Dutta *et al.*, 2015; Oliveira *et al.*, 2019; Petersen and Hughes, 2021). Currently, the re-established *Collybiopsis* includes species of *Collybiopsis* (abbreviation = *Co.*), *Gymnopus* sect. *Vestipedes*, and *Marasmiellus sensu stricto* (Mata *et al.*, 2004; Oliveira *et al.*, 2019; Petersen and Hughes, 2021).

Recently, the molecular taxonomic study of *Collybiopsis* in Korea was conducted, and 16 *Collybiopsis* species were confirmed (Kim *et al.*, 2022). The report included seven recorded species (*Co. biformis*, *Co. confluence*, *Co. koreana*, *Co. luxurians*, *Co. menehune*, *Co. polygramma*, and *Co. ramealis*) (NIBR, 2020), two unrecorded species (*Co. dichroa* and *Co. nonnulla*), and seven new species (*Co. albicantipes*, *Co. clavicystidiata*, *Co. fulva*, *Co. orientisubnuda*, *Co. subumbilicata*, *Co. undulata*, and *Co. vellerea*). *Collybiopsis peronata* (= *Gymnopus peronatus*) and *Co. subnuda* (= *G. subnudus*), which were widely known to be distributed in Korea, were not confirmed in Korea (Kim *et al.*, 2022).

In this research note, the Korean names for the genus *Collybiopsis* and 16 *Collybiopsis* species identified in Korea are proposed according to the Principles of the

Mycological Terminology Review Committee of the Korean Society of Mycology (2012) (Table 1). Previously, the seven reported species were recorded as previous scientific names when they belonged to *Gymnopus* (*G.*) or *Marasmiellus* (*Ma.*). Korean names for these species have already been proposed for these previous scientific names at that time (NIBR, 2020). Therefore, the Korean names of the seven recorded species in Korea are suggested to maintain prefixes of previous Korean names to avoid confusion. Each Korean name primarily reflected the etymology of each species. However, in the case of *Co. clavicystidiata*, we propose a Korean name based on the color of the pileus surface instead of the meaning of etymology. For easy understanding of the etymology of Korean names, photographs of 16 *Collybiopsis* basidiomata are presented together (Fig. 1). Furthermore, we provide a taxonomic key in Korean to help people easily identify *Collybiopsis* morphologically in the field. Characteristics, which were not officially named in 'Mycological Terms', published by The Korean Society of Mycology, were used as English terms.

Collybiopsis (J. Schröt.) Earle, Bull. New York Bot. Gard. 5: 415 (1909)

Type species: *Collybiopsis ramealis* (Bull.) Millsp., West Virginia Geol. Surv., Ser. A 5 (1): 127 (1913)

Synonym: ≡ *Agaricus ramealis* (Bull.) Millsp., West Virginia Geol. Surv., Ser. A 5 (1): 127 (1913)

Korean name: 낙하산버섯속

Etymology for Korean name: The idea was based on the common name 'parachute mushroom' for the genus *Marasmiellus* as the shape of the collybioid/marasmioid basidiomata resembles a parachute.



Fig. 1. Basidiomata of 16 *Collybiopsis* species in Korea. A, *Co. albicantipes* (SFC20180704-86); B, *Co. bififormis* (SFC20180704-36); C, *Co. clavicystidiata* (SFC20180705-26); D, *Co. confluens* (SFC20190731-48); E, *Co. dichroa* (SFC20180712-16); F, *Co. fulva* (KA15-0210); G, *Co. koreana* (SFC20120821-84); H, *Co. luxurians* (SFC20190731-18); I, *Co. menhune* (SFC20180905-33); J, *Co. nonnulla* (KA15-0129); K, *Co. orientisubnuda* (SFC20180830-29); L, *Co. polygramma* (SFC20170807-35); M, *Co. ramealis* (NIBRFG0000508888); N, *Co. subumbilicata* (SFC20140701-03); O, *Co. undulata* (SFC20120821-04); P, *Co. vellerea* (SFC20140821-29).

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Table 1. Proposal for the Korean names of 16 *Collybiopsis* species

Scientific name	Korean name	Etymology
<i>Co. albicantipes</i>	흰대낙하산버섯*	Described the character that only the bottom part of the stipe is white
<i>Co. biformis</i>	이형낙하산버섯	Preservation of the prefix for <i>G. biformis</i> (syn.) 이형꽃애기버섯
<i>Co. clavicystidiata</i>	황갈색낙하산버섯	Described the light brown to yellowish brown color of pileus surface
<i>Co. confluens</i>	밀낙하산버섯	Preservation of the prefix for <i>G. confluens</i> (syn.) 밀꽃애기버섯
<i>Co. dichroa</i>	적갈색낙하산버섯*	Described the reddish-brown color of pileus surface
<i>Co. fulva</i>	여우색낙하산버섯*	Described the fox-color of pileus surface
<i>Co. koreana</i>	갈색낙하산버섯	Preservation of the prefix for <i>Ma. koreana</i> (syn.) 갈색선녀버섯
<i>Co. luxurians</i>	다발낙하산버섯	Preservation of the prefix for <i>G. luxurians</i> (syn.) 다발꽃애기버섯
<i>Co. menehune</i>	요정낙하산버섯	Preservation of the prefix for <i>G. menehune</i> (syn.) 요정꽃애기버섯
<i>Co. nonnulla</i>	애기낙하산버섯*	Described a small size of basidiomata
<i>Co. orientisubnuda</i>	담갈색낙하산버섯*	Described the light brown color of pileus surface
<i>Co. polygramma</i>	대줄무늬낙하산버섯	Preservation of the prefix for <i>G. polygrammus</i> (syn.) 대줄무늬꽃애기버섯
<i>Co. ramealis</i>	낙하산버섯*	Named after the genus name since it's a type species
<i>Co. subumbilicata</i>	배꼽낙하산버섯*	Described a slightly depressed center in pileus
<i>Co. undulata</i>	물결낙하산버섯*	Described the wavy margin of the pileus
<i>Co. vellerea</i>	털낙하산버섯*	Described the velvety texture of stipe

* = for the new Korean name

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