

## Checklist of Sapro-mycophagous Cecidomyiids (Diptera: Cecidomyiidae) from Korea

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### Abstract

A revised checklist of the Korean sapro-mycophagous cecidomyiids is provided. *Anaretella defecta* (Winnertz), *Lestremia cinerea* Macquart, *Lestremia leucophaea* (Meigen), *Coccopsilis marginata* (Meijere), *Divellepidosis rotundata* (Yukawa), *Divellepidosis separata* (Yukawa), and *Stomatocolpodia decussata* (Yukawa) are added to the Korean sapro-mycophagous cecidomyiid fauna and *Peromyia spinosa* Jaschhof is moved to the subfamily Micromyinae from Lestremiinae.

**Key words:** checklist, Korean sapro-mycophagous cecidomyiids

### Introduction

Members of the gall midge family Cecidomyiidae are tiny and fragile midges, ranging 0.5–3 mm in body length, rarely larger than 8 mm (Oosterbroek & Hurkmans 2006). They can be divided into three groups, phytophagous, predaceous, and sapro-mycophagous gall midges, based on feeding habits of larvae (Yukawa 1971, Harris 2004a). The family Cecidomyiidae presently contains 6,590 known species in 812 genera and 6 subfamilies (Cecidomyiinae, Catotrichinae, Lestremiinae, Micromyinae, Winnertziinae, and Porricondyliinae) (Gagné & Jaschhof 2017). The larvae of Cecidomyiinae are mainly phytophagous, but some of them are predaceous on mites, scale insects, and other invertebrates and rarely are sapro-mycophagous. Other subfamilies except cecidomyiinae are sapro-mycophagous inhabiting litter, soil, rotten leaves, barks or trunks. The sapro-mycophagous cecidomyiids contain approximately 1,500 known species in Cecidomyiidae (Gagné & Jaschhof 2017).

Recently, the group of sapro-mycophagous cecidomyiids was re-established by Jaschhof based on morphological characters. Lestremiinae was divided into Catotrichinae, Lestremiinae, and Micromyinae by Jaschhof (2001a) and Jaschhof & Jaschhof (2009). The subfamily Winnertziinae was previously treated as the tribe Winnertziini of the subfamily Porricondyliinae (Panellius 1965), but Jaschhof & Jaschhof (2013) raised this taxon to the subfamily level with tribes Heteropezini and Diallactiini.

This Korean sapro-mycophagous cecidomyiid checklist is

based on previous taxonomic studies and checklists of Korean sapro-mycophagous cecidomyiids (ESK & KSAE 1994, Lee & Kim 2003, Paek *et al.* 2010, Shin *et al.* 2011, Ham & Bae 2016a, 2016b). Twelve species of Korean sapro-mycophagous cecidomyiids belonging to 8 genera and 3 subfamilies are listed in this study. Further taxonomic studies are needed not only to add Korean sapro-mycophagous cecidomyiid fauna but also to verify these known species.

### Checklist of Taxa

Order Diptera Linnaeus, 1758 파리목  
Family Cecidomyiidae Newman, 1834 흑파리과  
Subfamily Lestremiinae Rondani, 1840 마혹파리아과  
Genus *Anaretella* (Winnertz), 1870 둥근날개혹파리속

**1. *Anaretella defecta* (Winnertz, 1870)** 둥근날개혹파리  
*Lestremia defecta* - Winnertz, 1870: 33.  
*Lestremia (Anaretella) defecta* - Edwards, 1938: 27.  
*Anaretella defecta* - Pritchard, 1951: 249.  
Korean record: Ham and Bae, 2016b: 172.

Genus *Lestremia* Macquart, 1826 마혹파리속

**2. *Lestremia cinerea* Macquart, 1826** 잿빛혹파리  
*Lestremia cinerea* - Macquart, 1826: 173.  
Korean record: Ham & Bae, 2016b: 173.

**3. *Lestremia leucophaea* (Meigen, 1818)** 흰혹파리  
*Sciara leucophaea* - Meigen, 1818: 288.  
*Lestremia leucophaea* - Edwards, 1938: 27.  
Korean record: Ham & Bae, 2016b: 173.

**4. *Lestremia yasukunii* Shinji, 1944** 마혹파리  
*Lestremia yasukunii* - Shinji, 1944: 315.  
Korean records: ESK & KSAE, 1994, Paek *et al.*, 2010.  
Remarks. This species was treated as *nomen dubium* (Gagné & Jaschhof, 2017).

Subfamily Micromyinae Rondani, 1856 애혹파리아과  
Genus *Mycophila* Felt, 1911 [국명미정]

**5. *Mycophila speyeri* (Barnes, 1926)** 버섯혹파리  
*Pezomyia speyeri* - Barnes, 1926: 89.  
*Mycophila speyeri* - Barnes, 1929: 138.  
Korean record: Lee & Kim, 2003: 35.

Genus *Peromyia* Kieffer, 1894 어리아혹파리속

**6. *Peromyia spinosa* Jaschhof, 2001** 어리아혹파리  
*Peromyia spinosa* - Jaschhof, 2001b: 75.  
Korean record: Ham & Bae, 2016b: 174.

Subfamily Porricondylineae Kieffer, 1913 곤은혹파리아과  
Genus *Camptomyia* Kieffer, 1894 [국명미정]

**7. *Camptomyia corticalis* (Loew, 1851)** [국명미정]  
*Cecidomyia corticalis* - Loew, 1851: 377.  
*Camptomyia corticalis* - Panellius, 1965: 96.  
Korean record: Shin *et al.*, 2011: 388.

**8. *Camptomyia heterobia* Mamaev, 1961** [국명미정]  
*Camptomyia heterobia* - Mamaev, 1961: 1689.  
Korean record: Shin *et al.*, 2011: 399.

Genus *Coccopsilis* Harris, 2004 알혹파리속

**9. *Coccopsilis marginata* (Meijere, 1901)** 알혹파리  
*Coccopsilis marginata* - Meijere, 1901: 1.  
*Coccopsilis marginata* - Harris, 2004b: 40 (n. name for generic name *Coccopsilis* de Meijere, 1901, preocc. Reichenbach, 1850).

Korean record: Ham & Bae, 2016b: 170.

Genus *Divellepidosis* Fedotova & Sidorenko, 2007  
파로혹파리속

**10. *Divellepidosis rotundata* (Yukawa, 1971)** 파로혹파리  
*Porricondyla rotundata* - Yukawa, 1971: 73.  
*Divellepidosis rotundata* - Fedotova & Sidorenko, 2007: 17.  
Korean record: Ham & Bae, 2016b: 171.

**11. *Divellepidosis separata* (Yukawa, 1971)** 두발톱혹파리  
*Porricondyla separata* - Yukawa, 1971: 72.  
*Divellepidosis separata* - Fedotova & Sidorenko, 2007: 17.  
Korean record: Ham & Bae, 2016b: 172.

Genus *Stomatocolpodia* Mamaev, 1990 구명혹파리속

**12. *Stomatocolpodia decussata* (Yukawa, 1971)** 꼬인혹파리  
*Porricondyla decussata* - Yukawa, 1971: 67.  
*Stomatocolpodia decussata* - Jaschhof & Jaschhof, 2013: 295.  
Korean record: Ham & Bae, 2016a: 168.

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