

Taxonomic Revision of the Family Strongylophthalmyiidae (Diptera: Nerioidae) from Korea

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Introduction

The family Strongylophthalmyiidae, called “hardwood flies”, is a small taxon with about 87 recorded species worldwide mainly occurred in the Oriental and Australasian regions. This family includes two genera, the monotypic Southeast Asian genus *Nartshukia* Shatalkin, 1993 and *Strongylophthalmyia* Heller, 1902 (Lonsdale, 2020). Adults are mainly found in forests on foliage, fallen tree trunks, and stumps. Larvae of some species have been reported to have been reared under the bark of aspen in various parts of Russia (Roháček, 2016). This family is not well known in Korea, and only one species, *S. ustulata* (Zetterstedt, 1847), has been recorded in Mts. Baekdusan, North Korea. In the course of taxonomic survey on this family in Korean peninsula, the authors have found three unrecorded species, *S. crinita* Hennig, 1940, *S. raricornis* Shatalk, 1981, and *S. vikhrevi* Galinskaya & Shatalkin, 2018. All the newly found species were described, and a key to the Korean species of the family Strongylophthalmyiidae were provided in this study.

Taxonomic accounts

Order Diptera Linnaeus, 1758
Superfamily Nerioidae Westwood, 1840
Family Strongylophthalmyiidae Hendel, 1917

Strongylophthalmyia crinita Hennig, 1940
Strongylophthalmyia crinita Hennig, 1940: 311.
Materials examined. 1♂ GW, Jeongseon-gun, Mahyangchi, 23.V.2021, SJ Suh Coll.; 4♂ JN, Jangheung-gun, Mt. Gajisan, 7.IV.2022, SJ Suh Coll.
Distribution. Korea (South, new record), Japan, Taiwan, Myanma, Vietnam.

Strongylophthalmyia raricornis Shatalkin, 1981
Strongylophthalmyia raricornis Shatalkin, 1981: 792.
Materials examined. 2♂ DG, Dalseo-gu, Daegok-dong, Salpilbong, 29.V.2021, SJ Suh Coll.; 2♂ GW, Pyeongchang-gun, Mt. Barwang-san, 2.VII.2021, SJ Suh Coll.
Distribution. Korea (South, new record), Russia (Khabarovsk).

Strongylophthalmyia vikhrevi Galinskaya & Shatalkin, 2018
Strongylophthalmyia vikhrevi Galinskaya & Shatalkin, 2018: 128.
Materials examined. 3♂ DG, Nam-gu Mt. Apsan, 23.V.2021, SJ Suh Coll.; 5♂ JN, Gwangju-si, Mt. Mudeungsan, 31.V.2022, SJ Suh Coll.
Distribution. Korea (South, new record), Russia (Primorsky).

Strongylophthalmyia ustulata (Zetterstedt, 1847)
Chyliza ustulata Zetterstedt, 1847: 2427.
Strongylophthalmyia ustulata: Heller: 226; Krivosheina, 1984: 28; Iwasa, 1995: 58.
Material examined. 1♂ GW, Taebaek-si, Hyeol-dong, Mt. Hambaeksan, 24.VII.2018, SJ Suh Coll.
Distribution. Korea (North, record), Japan, Russia (Primorsky), Europe (Sweden, Andorra, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Poland, Romania, Slovakia, Switzerland, UK).

Key to the Korean Strongylophthalmyia species

- 1. Postpedicel apically bifurcate *raricornis* Shatalk
- Postpedicel not bifurcate 2
- 2. Wing with light brown markings *vikhrevi* Galinskaya & Shatalkin
- Wing hyaline, without markings 3
- 3. Palpus yellow *crinita* Hennig
- Palpus black *ustulata* (Zetterstedt)

Korean species of the genus Strongylophthalmyia



Figure 1 *Strongylophthalmyia crinita* Hennig, 1940, male.



Figure 2 *Strongylophthalmyia raricornis* Shatalkin, 1981, male.



Figure 3 *Strongylophthalmyia vikhrevi* Galinskaya & Shatalkin, 2018, male.



Figure 4 *Strongylophthalmyia ustulata* (Zetterstedt, 1847), male.