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Records of Muscidae (Diptera) collected in Poland fifty years ago

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Abstract

The study of the Muscidae of the Institute of Biodiversity and Ecosystem Research, Sofia, Bulgaria revealed 1.279 Muscidae collected in the 1960s in different regions of Poland. The material was examined between 2014 and 2019 and 99 species belonging to 25 genera and five subfamilies of the family Muscidae were identified and the sites of collecting were documented. Although the muscid fauna of Poland is well studied, two species, *Myospila alpina* Hendel, 1901 and *Spilogona tatrlica* Gregor & Rozkosny, 2007 are reported for the first time from the country. Both species originate from the mountains in Southern Poland, close to neighbouring Slovakia. The number of Muscidae known from the country is raised herewith to 293.

Keywords: Palaearctic region, Poland, Muscidae, records, species new for Poland

Introduction

The entomological collection of the Institute of Biodiversity and Ecosystem Research (IBER), Sofia, Bulgaria contains also a large number of Muscidae from Poland. The Diptera were almost exclusively collected and prepared by the late Valentin Lavčiev in 1968 and 1969. Apart from a few specimens, species affiliation was not studied since then. However, when reworking the Muscidae of the entomological collection^[1-4] in the period from 2014 to 2019, the species from Poland were also identified. In total 99 species originating from the country were found, belonging to 25 genera of five subfamilies of the family Muscidae. Flies of the subfamily Azeliinae were most common among the investigated material. They were more than twice as specimens and species represented than each of the other two major subfamilies Muscinae and Mydaeinae.

The findings of species are very much in line with a compilation on the distribution of Central European Muscidae published by Gregor *et al.* in 2016^[5]. This list also considers the muscid species known from Poland but does not provide further information such as sites and time of collecting, for example. Although the vast majority of the species found in the collection of IBER is also mentioned in the compilation from Poland, two species from the mountains of Southern Poland have been identified which so far were not known from the country.

Materials and Methods

According to the dates on the locality labels, flies were collected at five days between 9-19 August 1968 and seven days between 20. July till 22. September 1969. Flies were collected at 15 sites in different regions of Poland. Gdynia, Gdansk, Gdansk-Oliwa, Misdzydroje and Swinoujscie (all sites spelled as on the labels) are located at the coast of the Baltic Sea. Mikolajki, Warniak jez. (= lake) and Kanal Talty are situated in the Masurian Lake District. Koscielisko meadow, Koscielisko suburb, Javorki – Pieniny, Tatry Kuznica, and Tatry Zakapone are locations in the mountains of southern Poland close to the border to Slovakia. Berezki is a settlement within Vieszczody (= Bieszczady) County and the National Park in the border triangle of the very South East of Poland, close to the borders to Ukraine and Slovakia. One specimen only originates from Lesko distr. in South East Poland.

In total 1279 specimens have been assigned to muscid species. For identification primarily the keys to the Muscidae of the Palaearctic Region^[6], the keys to the Muscidae of Central Europe^[5, 7] and additionally keys provided for the genera *Azelia*^[8] and *Thricops*^[9, 10] were used. External morphological features of the specimens were examined using a Zeiss Stemi stereomicroscope.

For the classification of the Muscidae and synonyms, this contribution follows Gregor *et al.*^[5].

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Genera and their species are listed alphabetically, and the sites of collection chronologically. Where pertinent the findings are commented. All Muscidae except one female of *Spilogona denigrata* (Meigen, 1826) were collected by the late Valentin Lavčiev. He is therefore no longer named at the finds listed below. The majority of the muscids were identified in the frame of the reworking and only few specimens had been determined previously by Lavčiev, they are marked in the compilation as “det. V. L.”. All specimens listed below are housed in the collection of IBER.

Results

Subfamily Azeliinae

Azelia cilipes (Haliday, 1838): Material examined: 6 ♀, Mikolajki, 12.08.1968; 3 ♀, jez. Warniak, 13.08.1968; 2 ♀, Tatry, Zakopane, 22.09.1969.

Azelia nebulosa Robineau-Desvoidy, 1830: Material examined: 3 ♀, Mikolajki, 12.08.1968.

Azelia triquetra (Wiedemann, 1817): Material examined: 1 ♀, Mikolajki, 12.08.1968.

Drymeia brumalis (Rondani, 1866): Material examined: 1 ♀, Kanal Talty, 13.08.1968.

Hydrotaea albipuncta (Zetterstedt, 1845): Material examined: 1 ♂, Kanal Talty, 13.08.1968; 1 ♂, Koscielisko suburb, 22.07.1969.

Hydrotaea armipes (Fallén, 1825): Material examined: 2 ♀, Mikolajki, 12.08.1968.

Hydrotaea basdeni Collin, 1939: Material examined: 1 ♀, Tatry, Zakopane, 20.-22.09.1969.

Hydrotaea cyrtoneurina (Zetterstedt, 1845): Material examined: 1 ♂ 2 ♀, jez. Warniak, 13.08.1968.

Hydrotaea dentipes (Fabricius, 1805): Material examined: 1 ♂ 3 ♀, Mikolajki, 12.08.1968; 3 ♀, Mikolajki, 12.08.1968, det. V. L.; 1 ♂, jez. Warniak, 13.08.1968; 3 ♀, Vieszczody, Berezki, 19.08.1968, det. V. L.; 1 ♂ 1 ♀, Koscielisko, meadow, 20.07.1969; 7 ♀, Pieniny, Javorki, 23.07.1969; 2 ♀, Tatry, Kuznica, 23.07.1969; 1 ♀, Swinoujscie, 26.07.1969; 4 ♀, Tatry, Zakopane, 20.-22.09.1969.

Hydrotaea ignava (Harris, 1870): Material examined: 1 ♂, Swinoujscie, 26.07.1969.

Hydrotaea irritans (Fallén, 1823): Material examined: 1 ♂ 6 ♀, Mikolajki, 12.08.1968; 4 ♀, Kanal Talty, 13.08.1968; 1 ♂ 3 ♀, jez. Warniak, 13.08.1968; 3 ♂ 46 ♀, Vieszczody, Berezki, 19.08.1968, det. V. L.; 1 ♀, Vieszczody, Berezki, 19.08.1968.

Hydrotaea meridionalis Portschinsky, 1882: Material examined: 5 ♀, Vieszczody, Berezki, 19.08.1968, det. V. L.

Hydrotaea meteorica (Linnaeus, 1758): Material examined: 1 ♂ 1 ♀, Kanal Talty, 13.08.1968.

Hydrotaea militaris (Meigen, 1826): Material examined: 1 ♀, Mikolajki, 12.08.1968; 1 ♀, jez. Warniak, 13.08.1968.

Hydrotaea palaestrica (Meigen, 1826): Material examined: 1 ♀, jez. Warniak, 13.08.1968.

Hydrotaea pandellei Stein, 1899: Material examined: 1 ♂ 1 ♀, jez. Warniak, 13.08.1968.

Hydrotaea similis Meade, 1887: Material examined: 2 ♂ 2 ♀, Mikolajki, 12.08.1968.

Muscina levida (Harris, 1780): Material examined: 1 ♀, Gdynia, 10.08.1968; 5 ♂ 7 ♀, Mikolajki, 12.08.1968; 1 ♀, Vieszczody, Berezki, 19.08.1968, determined by V. L. as *Muscina assimilis* Fallén, 1823; 2 ♂, Pieniny, Javorki, 23.07.1969; 8 ♂, Misdzydroje, 27.07.1969.

Muscina prolapsa (Harris, 1780): Material examined: 1 ♀, Gdynia, 10.08.1968; 1 ♀, Pieniny, Javorki, 23.07.1969; 2 ♀,

Misdzydroje, 27.07.1969.

Muscina stabulans (Fallén, 1817): Material examined: 1 ♂ 1 ♀, Gdansk, 09.08.1969; 3 ♂, Gdansk Oliwa, 10.08.1968; 1 ♀, Gdynia, 10.08.1968; 1 ♂, Koscielisko, meadow, 20.07.1969; 1 ♀, Pieniny, Javorki, 23.07.1969; 1 ♂ 2 ♀, Misdzydroje, 27.07.1969.

Potamia littoralis Robineau-Desvoidy, 1830: Material examined: 5 ♀, Misdzydroje, 27.07.1969.

Thricops aculeipes (Zetterstedt, 1838): Material examined: 2 ♀, Tatry, Zakopane, 20.-22.09.1969.

Thricops cunctans (Meigen, 1826): Material examined: 1 ♂ 5 ♀, Mikolajki, 12.08.1968.

Thricops diaphanus (Wiedemann, 1817): Material examined: 1 ♀, Tatry, Kuznica, 22.07.1969.

Thricops genarum (Zetterstedt, 1838): Material examined: 1 ♂, jez. Warniak, 13.08.1968.

Thricops innocuus (Zetterstedt, 1838): Material examined: 1 ♀, Mikolajki, 12.08.1968.

Thricops longipes (Zetterstedt, 1845): Material examined: 1 ♀, Mikolajki, 12.08.1968; 22 ♂, 60 ♀, jez. Warniak, 13.08.1968; 4 ♂ 2 ♀, Koscielisko, meadow, 20.07.1969; 4 ♂ 5 ♀, Koscielisko, suburb, 20.07.1969; 2 ♀, Pieniny, Javorki, 23.07.1969; 4 ♂ 24 ♀ Tatry, Zakopane, 20.-22.09.1969. One of the two females collected in Javorki had instead of four only three postsutural dorsocentral setae. All other taxonomic features including size of body and long-plumose arista were typical for *T. longipes*.

Thricops nigrifrons (Robineau-Desvoidy, 1830): Material examined: 7 ♀, Mikolajki, 12.08.1968; 10 ♂ 26 ♀, jez. Warniak, 13.08.1968; 1 ♂, Koscielisko, suburb, 20.07.1969; 4 ♂ 3 ♀ Tatry, Zakopane, 20.-22.09.1969.

Thricops nigrifrons (Zetterstedt, 1838): Material examined: 1 ♀, Mikolajki, 12.08.1968.

Thricops semicinerus (Wiedemann, 1817): Material examined: 1 ♂ 4 ♀, Mikolajki, 12.08.1968; 1 ♂, Tatry, Zakopane, 20.-22.09.1969.

Thricops simplex (Wiedemann, 1817): Material examined: 13 ♂ 37 ♀, Mikolajki, 12.08.1968; 19 ♂ 56 ♀, jez. Warniak, 13.08.1968; 1 ♂, Kanal Talty, 13.08.1968; 15 ♂ 28 ♀, Vieszczody, Berezki, 19.08.1968, determined by V. L. as *Alleostylus simplex* Wiedemann, 1817; 2 ♀, Pieniny, Javorki, 23.07.1969.

Thricops sudeticus (Schnabl, 1888): Material examined: 21 ♂ 22 ♀, Vieszczody, Berezki, 19.08.1968, determined by V. L. as *Alleostylus sudeticus* Schnabl, 1888; 1 ♀, Zakopane, 20.-22.09.1969.

Subfamily Muscinae

Dasyphora penicillata (Egger, 1865): Material examined: 12 ♂ 8 ♀, Vieszczody, Berezki, 19.08.1968, determined by V. L. as *Dasyphora versicolor* Meigen, 1826.

Dasyphora pratorum (Meigen, 1826): Material examined: 24 ♀, Vieszczody, Berezki, 19.08.1968, det. V. L.; 7 ♀, Pieniny, Javorki, 23.07.1969.

Eudasyphora cyanicolor (Zetterstedt, 1845): Material examined: 1 ♂ 9 ♀, Mikolajki, 12.08.1968; 4 ♂ 3 ♀, Vieszczody, Berezki, 19.08.1968, det. V. L.; 2 ♀ Pieniny, Javorki, 23.07.1969.

Haematobia irritans (Linnaeus, 1758): Material examined: 8 ♂ 5 ♀, jez. Warniak, 13.08.1968.

Haematobosca stimulans (Meigen, 1824): Material examined: 2 ♀, jez. Warniak, 13.08.1968; 1 ♂, Pieniny, Javorki, 23.07.1969.

Mesembrina mystacea (Linnaeus, 1758): Material examined:

1 ♀, Pieniny, Javorki, 23.07.1969.

Morellia aenescens Robineau-Desvoidy, 1830: Material examined: 1 ♂, Mikolajki, 12.08.1968; 2 ♂ 2 ♀, Kanal Talty, 13.08.1968.

Morellia hortorum (Fallén, 1817): Material examined: 12 ♀, Mikolajki, 12.08.1968; 2 ♂ 2 ♀, Kanal Talty, 13.08.1968; 5 ♀, Vieszczyzody, Berezki, 19.08.1968, det. V. L.; 1 ♂, Koscielisko, suburb, 20.07.1969; 15 ♂ 47 ♀, Pieniny, Javorki, 23.07.1969.

Morellia podagrica (Loew, 1857): Material examined: 1 ♂, Pieniny, Javorki, 23.07.1969.

Musca autumnalis De Geer, 1776: Material examined: 1 ♂ 1 ♀, Gdansk Oliwa, 10.08.1968; 7 ♂ 4 ♀, Kanal Talty, 13.08.1968; 4 ♂ 2 ♀, jez. Warniak, 13.08.1968; 4 ♂ 10 ♀, Vieszczyzody, Berezki, 19.08.1968, det. L. V.; 2 ♂ 3 ♀, Pieniny, Javorki, 23.07.1969; 1 ♂ 1 ♀, Misdzyzdroje, 27.07.1969.

Musca domestica Linnaeus, 1758: Material examined: 2 ♂ 2 ♀, Pieniny, Javorki, 23.07.1969.

Neomyia cornicina (Fabricius, 1781): Material examined: 1 ♀, Pieniny, Javorki, 23.07.1969.

Neomyia viridescens (Robineau-Desvoidy, 1830): 2 ♀, Kanal Talty, 13.08.1968.

Polietes domitor (Harris, 1780): Material examined: 1 ♂ 9 ♀, Mikolajki, 12.08.1968; 1 ♂ 2 ♀, Vieszczyzody, Berezki, 19.08.1968, determined by V. L. as *Polietes albolineata* Fallén, 1823.

Polietes lardarius (Fabricius, 1781): Material examined: 3 ♂ 9 ♀, Mikolajki, 12.08.1968; 2 ♀, jez. Warniak, 13.08.1968; 4 ♂ 19 ♀, Zakopane, Koscielisko, 20.07.1969; 1 ♀, Koscielisko, meadow, 20.07.1969; 1 ♂, Tatry, Kuznica, 22.07.1969; 1 ♂, Pieniny, Javorki, 23.07.1969; 1 ♀, Tatry, Zakopane, 20.-22.09.1969.

Pyrellia rapax (Harris, 1780): Material examined: 1 ♀, Kanal Talty, 13.08.1968.

Pyrellia vivida Robineau-Desvoidy, 1830: Material examined: 3 ♀, Mikolajki, 12.08.1968; 1 ♀, Pieniny, Javorki, 23.07.1969.

Subfamily Phaoniinae

Helina allotalla (Meigen, 1830): Material examined: 1 ♀, jez. Warniak, 13.08.1968.

Helina annosa (Zetterstedt, 1838): Material examined: 1 ♀, Vieszczyzody, Berezki, 19.08.1968, det. V. L.; 1 ♀, Mikolajki, 12.08.1968.

Helina calceata (Rondani, 1866): Material examined: 1 ♂, Pieniny, Javorki, 23.07.1969.

Helina confinis (Fallén, 1825): Material examined: 2 ♂, Gdansk Oliwa, 10.08.1968; 1 ♂ 1 ♀, Mikolajki, 12.08.1968; 1 ♂ 3 ♀, Kanal Talty, 13.08.1968; 1 ♀, jez. Warniak, 13.08.1968.

Helina depuncta (Fallén, 1825): Material examined: 1 ♂ 3 ♀, Mikolajki, 12.08.1968; 2 ♀, jez. Warniak, 13.08.1968.

Helina evecta (Harris, 1780): Material examined: 2 ♂ 1 ♀, Kanal Talty, 13.08.1968; 3 ♂, jez. Warniak, 13.08.1968; 1 ♀, Vieszczyzody, Berezki, 19.08.1968, determined by V. L. as *Helina laetifica* Robineau-Desvoidy, 1830; 1 ♀, Swinoujscie, 26.07.1969.

Helina impuncta (Fallén, 1825): Material examined: 1 ♀, Mikolajki, 12.08.1968; 1 ♀, jez. Warniak, 13.08.1968; 7 ♀, Kanal Talty, 13.08.1968; 1 ♀, Vieszczyzody, Berezki, 19.08.1968.

Helina latitarsis Ringdahl, 1924: Material examined: 4 ♀, jez. Warniak, 13.08.1968; 2 ♀, Pieniny, Javorki, 23.07.1969.

Helina laxifrons (Zetterstedt, 1860): Material examined: 1 ♀, jez. Warniak, 13.08.1968; 1 ♀, Pieniny, Javorki, 23.07.1969.

Helina maculipennis (Zetterstedt, 1845): Material examined: 1 ♀, jez. Warniak, 13.08.1968.

Helina moedlingensis (Schnabl, 1911): Material examined: 1 ♀, Pieniny, Javorki, 23.07.1969.

Helina obscurata (Meigen, 1826): Material examined: 3 ♂ 1 ♀, jez. Warniak, 13.08.1968.

Helina quadrum (Fabricius, 1805): Material examined: 2 ♀, Gdynia, 10.08.1968; 2 ♀, Mikolajki, 12.08.1968.

Helina reversio (Harris, 1780): Material examined: 2 ♀, jez. Warniak, 13.08.1968; 2 ♂, Kanal Talty, 13.08.1968.

Phaonia angelicae (Scopoli, 1763): Material examined: 14 ♀, Mikolajki, 12.08.1968; 1 ♂ 7 ♀, jez. Warniak, 13.08.1968; 2 ♀, Vieszczyzody, Berezki, 19.08.1968, determined by V. L. as *Phaonia basalis* Zetterstedt, 1838; 1 ♂, Koscielisko, meadow, 20.07.1969; 1 ♂ 1 ♀, Koscielisko, suburb, 20.07.1969; 2 ♂ 1 ♀, Pieniny, Javorki, 23.07.1969.

Phaonia atriceps (Loew, 1858): Material examined: 1 ♂, Koscielisko, meadow, 20.07.1969.

Phaonia errans (Meigen, 1826): Material examined: 1 ♀, Vieszczyzody, Berezki, 19.08.1968, det. V. L.

Phaonia hybrida (Schnabl, 1888): Material examined: 3 ♀, jez. Warniak, 13.08.1968.

Phaonia incana (Wiedemann, 1817): Material examined: 1 ♀, Kanal Talty, 13.08.1968.

Phaonia meigeni Pont, 1986: Material examined: 1 ♀, jez. Warniak, 13.08.1968.

Phaonia subventa (Harris, 1780): Material examined: 1 ♀, Tatry, Kuznica, 22.07.1969.

Phaonia tiefii (Schnabl, 1888): Material examined: 1 ♀, Vieszczyzody, Berezki, 19.08.1968, det. V. L.

Phaonia valida (Harris, 1780): Material examined: 1 ♀, Mikolajki, 12.08.1968.

Phaonia zugmayeriae (Schnabl, 1888): Material examined: 1 ♀, jez. Warniak, 13.08.1968.

Subfamily Mydaeinae

Graphomyia maculata (Scopoli, 1763): Material examined: 1 ♂ 2 ♀, Vieszczyzody, Berezki, 19.08.1968, det V. L.

Hebecnema fumosa (Meigen, 1826): Material examined: 1 ♀, Mikolajki, 12.08.1968.

Hebecnema umbratica (Meigen, 1826): Material examined: 3 ♀, Mikolajki, 12.08.1968; 2 ♂ 1 ♀, jez. Warniak, 13.08.1968; 1 ♂, Koscielisko, suburb, 20.07.1969; 3 ♂ 14 ♀, Pieniny, Javorki, 23.07.1969.

Hebecnema vespertina (Fallén, 1823): Material examined: 1 ♀, Kanal Talty, 13.08.1968; 1 ♂, Pieniny, Javorki, 23.07.1969.

Mydaea ancilla (Meigen, 1826): Material examined: 2 ♀, Mikolajki, 12.08.1968; 1 ♀, Swinoujscie, 26.07.1969.

Mydaea corni (Scopoli, 1763): Material examined: 1 ♀, Mikolajki, 12.08.1968; 1 ♂ 4 ♀, jez. Warniak, 13.08.1968; 1 ♀, Koscielisko, meadow, 20.07.1969; 2 ♂, Tatry, Kuznica, 22.07.1969; 2 ♂ 2 ♀, Tatry, Kuznica, 23.07.1969; 1 ♀, Pieniny, Javorki, 23.07.1969; 3 ♀, Tatry, Zakopane, 20.-22.09.1969.

Mydaea detrita (Zetterstedt, 1845): Material examined: 1 ♀, Mikolajki, 12.08.1968; 1 ♀, Pieniny, Javorki, 23.07.1969.

Mydaea humeralis Robineau-Desvoidy, 1830: Material examined: 2 ♀, jez. Warniak, 13.08.1968; 1 ♂, Koscielisko, meadow, 20.07.1969.

Mydaea nebulosa (Stein, 1893): Material examined: 3 ♀, Mikolajki, 12.08.1968.

Mydaea orthonevra (Macquart, 1835): Material examined: 1 ♀, Mikolajki, 12.08.1968; 1 ♂ 1 ♀, Tatry, Zakopane, 20.-22.09.1969.

Mydaea urbana (Meigen, 1826): Material examined: 2 ♂ 72 ♀, Mikolajki, 12.08.1968; 7 ♀, jez. Warniak, 13.08.1968; 1 ♀, Vieszczychody, Berezki, 19.08.1968, det. V. L.; 1 ♀, Koscielisko, meadow, 20.07.1969; 1 ♀, Koscielisko, suburb, 20.07.1969; 1 ♀, Pieniny, Javorki, 23.07.1969; 1 ♂ 3 ♀, Swinoujscie, 26.07.1969.

Myospila alpina Hendel, 1901: Material examined: 1 ♂, Tatry, Zakopane, 20.-22.09.1969. New record for Poland. *M. alpina* was found in the mountains of Central and South Europe and is reported from Austria, France, Germany, Italy, Montenegro, Slovakia and Switzerland [5]. The male mentioned above was collected in Zakopane in the Tatra Mountains, very close to Slovakia, from where *M. alpina* is already known.

Myospila bimaculata (Macquart, 1834): Material examined: 3 ♀, Mikolajki, 12.08.1968; 1 ♀, Pieniny, Javorki, 23.07.1969.

Myospila mediatubunda (Fabricius, 1781): Material examined: 3 ♀, Gdynia, 10.08.1968; 2 ♂ 4 ♀, jez. Warniak, 13.08.1968; 2 ♀, Vieszczychody, Berezki, 19.08.1968, det. V. L.; 1 ♂ 1 ♀, Koscielisko, meadow, 20.07.1969; 1 ♂ 1 ♀, Koscielisko, suburb, 20.07.1969; 5 ♀, Tatry, Kuznica, 23.07.1969; 12 ♂ 21 ♀, Pieniny, Javorki, 23.07.1969; 2 ♀, Misdzyzdroje, 27.07.1969; 1 ♂ 3 ♀, Tatry, Zakopane, 20.-22.09.1969.

Subfamily Coenosiinae

Coenosia intermedia (Fallén, 1825): Material examined: 1 ♀, jez. Warniak, 13.08.1968.

Coenosia means Meigen, 1826: Material examined: 3 ♀, Mikolajki, 12.08.1968; 1 ♀, Tatry, Zakopane, 20.-22.09.1969.

Coenosia mollicula (Fallén, 1825): Material examined: 1 ♂ 10 ♀, Mikolajki, 12.08.1968.

Coenosia pumila (Fallén, 1825): Material examined: 2 ♀, jez. Warniak, 13.08.1968.

Coenosia tigrina (Fabricius, 1775): Material examined: 1 ♀, Mikolajki, 12.08.1968; 6 ♂ 13 ♀, jez. Warniak, 13.08.1968; 13 ♂ 28 ♀, Kanal Talty, 13.08.1968; 1 ♀, Pieniny, Javorki, 23.07.1969.

Coenosia sp. near *alpicola* (Pokorny, 1893): Material examined: 1 ♀, jez. Warniak, 13.08.1968. The female specimen with short lower calypter, dark thorax, abdomen, palpi and antennae, but with yellow legs with the posterodorsal surface of fore femur brownish clouded, runs in the latest key to *Coenosia* species [5] directly to *Coenosia alpicola*. This species was originally synonymized with *Coenosia mollicula* (Fallen) [6] and this status was confirmed by Pont & Werner [11] in 2006. However, after having studied several specimens of this synonymized species Pont [12] resurrected in 2008 *Coenosia alpicola* (Pokorny, 1893) from synonymy and designated a syntype of *Hoplogaster alpicola* Pokorny as lectotype of this species. Although several taxonomic features support the assignment of the present specimen to *C. alpicola*, there are still some doubts. So far, *C. alpicola* has been found in mountainous regions, but the specimen from Poland was collected in the lowlands of the Masurian Lake District at the Warniak Lake. And more importantly, the antennae of this specimen are significantly longer than the antennae of *C. mollicula*. However, none of the authors [5, 6, 11, 12] mentioned differences of the antenna-length between the two species, although the observed difference between the female from Poland and the *mollicula*-females is very obvious.

Limnophora tigrina (Am Stein, 1860): Material examined: 2 ♂ 1 ♀, Kanal Talty, 13.08.1968.

Spilogona carbonella (Zetterstedt, 1845): Material examined: 1 ♀, jez. Warniak, 13.08.1968.

Spilogona denigrata (Meigen, 1826): Material examined: 1 ♀, Lesko distr., Biossosdy, Okragtik, 06.08.1966, leg. J. Wotzerovi; 1 ♂ 1 ♀, Koscielisko, suburb, 20.07.1969; 1 ♀, Pieniny, Javorki, 23.07.1969; 1 ♀, Tatry, Zakopane, 20.-22.09.1969.

Spilogona dispar (Fallén, 1823): Material examined: 1 ♀, Tatry, Zakopane, 20.-22.09.1969.

Spilogona kuntzei (Schnabl, 1911): Material examined: 1 ♂, Pieniny, Javorki, 23.07.1969.

Spilogona meadei (Schnabl, 1915): Material examined: 1 ♂, Pieniny, Javorki, 23.07.1969; 1 ♂ 2 ♀, Tatry, Zakopane, 20.-22.09.1969.

Spilogona tatrlica Gregor & Rozkošny, 2007: Material examined: 1 ♂, Pieniny, Javorki, 23.07.1969. New record for Poland.

The species was described [13] in 2007 based on one male collected in 1985 in Slovakia in the Javorova valley of the Tatra Mountains, close to the Polish border. Similar to some other newly described species, *S. tatrlica* is not listed in the latest updated version of the website of Fauna Europaea [14], even twelve years after its description. However, the fact that Gregor *et al.* [5] still refer in 2016 to this single find of the species only, support the assumption that the holotype so far is the only representative of the species.

The *Spilogona* male mentioned above was collected already in 1969 in Javorki in the Pieniny Mountains in southern Poland, at a maximum distance of 30 km from the Javorova valley in Slovakia. Since it matches quite well the description of *Spilogona tatrlica* and since the sites of collecting for both specimens are relatively close to each other, the male was assigned to *S. tatrlica*, although some differences were noted. For example, the eyes of the holotype are described as bare, while the eyes of this specimen are very sparsely, but clearly discernible short haired. The frontal triangle of the holotype is "relatively short, hardly reaching middle of frons", the frontal triangle of the specimen examined is poorly structured and about as large as the ocellar tubercle. The thorax of the holotype is "black, and grey dusted", while the thorax of the present specimen is primarily whitish-grey and suggests a dark base colour only in certain angle of light. Unfortunately, there is no description of the abdomen of the holotype since it was "dissected and preserved in glycerine, abdominal pattern thus not visible". Therefore, a comparison with the whitish-grey abdomen and the dark patterns of the tergites of the male from Poland is not feasible. Assuming that the male from Poland is in fact a *Spilogona tatrlica*, there are now two specimens available of this species. Moreover, the species is now also known from two countries, Slovakia and Poland, although the two sites of capturing are less than 30 km apart.

Comments

It is noteworthy that Lavčiev caught almost 1280 Muscidae within a few days, belonging to 99 different species and 25 genera of Muscidae. This is just over a third of the species known so far from Poland.

Species with more than 50 specimens collected were *Thricops simplex* (171 specimens), *T. longipes* (128), *Mydaea urbana* (89), *Morellia hortorum* (84), *Hydrotaea irritans* (65) *Coenosia tigrina* (61), *Myospila mediatubunda* (59) and *Thricops nigrifrons* (51). More than 20 specimens per species

were found from nine species of the following genera: *Thricops* (2), *Hydrotaea* (1), *Muscina* (1); *Dasyphora* (1), *Musca* (1), *Polietes* (1); *Phaonia* (1); *Hebecnema* (1). Of all the other listed species considerably fewer specimens were found. The subfamily of the Azeliinae is obviously represented with the most specimens (585) and also with the largest number (32) of species, followed with great difference by the subfamily of Muscinae with 282 specimens of 16 species. Almost equally represented as the Muscinae is the subfamily of Mydaeinae with 220 specimens and 14 species. Although 24 species were detected of the Phaoniinae - clearly more than from Muscinae or Mydaeinae-, only 101 muscids of this genus were found. A large number of *Phaonia* species were represented by one specimen only. The weakest group are the Coenosiinae. Unfortunately, it is not known which collecting methods were applied. However, if traps loaded with human faeces have been used, the large numbers of synanthropic fly species and the modest results of the predominantly prey hunting Coenosiinae are readily explained.

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