

## Materials on Latvian Diptera (Xylophagidae, Athericidae, Rhagionidae)

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**Abstract:** A review of the collections of flies stored in the Institute of Biology, University of Latvia was made for three fly families. Three species of Xylophagidae, two species of Athericidae and ten species of Rhagionidae were identified. Eleven species are listed for Latvia for the first time.

**Key words:** Diptera, Xylophagidae, Athericidae, Rhagionidae, Latvia, fauna.

### Introduction

The first records for the families Xylophagidae, Athericidae, Rhagionidae were published in the first part of the 19th century (Gimmerthal, 1842) and the next records appeared only recently (Karpa, 1997, 2000). A review of the collections of flies located in the Institute of Biology, University of Latvia was made for three fly families. Three species of Xylophagidae, two species of Athericidae and ten species of Rhagionidae were identified. Eleven species are listed for Latvia for the first time, marked with an asterisk (\*).

Xylophagidae is group of primitive flies. Earlier, they were placed in Rhagionidae (Lindner, 1925), but now are considered as a separate family. The adults are medium to large-sized flies, resembling wood-wasps because of their elongated thorax and abdomen. The larvae are associated with rotted wood while the adults seem to visit flowers (Grootaert, De Buyn, Meyer, 1991).

Athericidae is a primitive brachycerous family only recently (Stackenberg, 1973) separated from the Rhagionidae. Adults feed on nectar. Larvae live on aquatic vegetation and are known to be predaceous on Chironomid larvae and Ephemeroptera nymphs.

Rhagionids are small to medium-sized flies with adults of the recent species generally occurring in moist forest habitats in undergrowth and foliage where they prey on

other insects. Larvae live in damp soil rich in organic matter and are presumed to be predaceous on other insects.

### List of species

#### XYLOPHAGIDAE

*Xylophagus* Meigen, 1803

*Xylophagus junki* (Szilady, 1932)\*

Localities: Mazsalaca, 22.05.1990 (1 specimen) leg. V.Spuņģis; Garkalne, 20.05.1999 (1) leg. K.Vilks.

*Xylophagus cinctus* (De Geer, 1776)\*

Locality: Mazsalaca, 25.05.1991 (1) leg. V.Spuņģis.

*Xylophagus compeditus* Meigen, 1820\*

Locality: Mazsalaca, 07.05.1990 (1) leg. V.Spuņģis.

#### ATHERICIDAE

*Atherix* Meigen, 1803

*Atherix ibis* (Fabricius, 1798)

Localities: Tukums, 18.08.1981 (3) leg. Z.Spuris; Salaspils, 17.05.1990 (1) leg. V.Spuņģis; Šķervele, 03.06.1990 (3); near Korģītes river, 06.06.1991 (2); Zaķi, 07.06.1990 (1) leg. A.Karpa.

*Atherix aurichalcea* (Becker, 1921)\*

Locality: Skrīveri, 03.06.1962 (1) leg. V.Eglītis.

## RHAGIONIDAE

*Chrysopilus* Macquart, 1826

*Chrysopilus auratus* (Fabricius, 1805)\*

Localities: Lake Luknas, 09.08.1952 (1); Jaundubulti, 17.07.1956 (1) leg. Z.Spuris.

*Chrysopilus splendidus* (Meigen, 1820)\*

Localities: Jaundubulti, 17.07.1956 (2); Krievragciems, 05.07.1958 (2); Abava, 19.07.1959 (1) leg. Z.Spuris; Skrīveri, 21.06.1985 (3) leg. A.Karpa.

*Rhagio* Fabricius, 1775

*Rhagio conspicuus* Meigen, 1804

Locality: Ziluži, 17.06.1991 (1) leg. A.Karpa.

*Rhagio lineola* Fabricius, 1794

Localities: Mazsalaca, 03.07., 10.07., 17.07.1989 leg. A.Karpa, 14.08.1992 (9) leg. V.Spūņģis; Lake Engures, 08.07., 03.08.1999 (5) leg. A.Karpa.

*Rhagio funebris* Meigen, 1820\*

Localities: Bog Stompaku, 09.07.2001 (1); Taurene, 15.06.2002 (1) leg. A.Karpa

*Rhagio maculatus* (De Geer, 1776)\*

Localities: Taurene, 10.06.1999 (2); Valgums, 06.06.1999 (1); lake Engures, 08.07.2002 (1) leg. K.Vilks.

*Rhagio notatus* (Meigen, 1820)\*

Locality: Grieze, 02.06.1992, (1) leg. V.Spūņģis.

*Rhagio annulatus* (De Geer, 1776)\*

Locality: Salaspils, 31.06.1996, (1) leg. Z.Spuris

*Rhagio scolopaceus* (Linnaeus, 1758)

Localities: Salaspils, 05.06.1992 (1) leg. A.Karpa; Sēlpils, 27.05., 08.06., 09.06.1993 (9); Saulkalne, 12.06.1993 (3); Rumbula, 29.05., 16.06.1993 (3), leg. Z.Spuris; Valgums 19.06.1999 (2) leg. K.Vilks; lake Engures, 22.06.1995, 26.06.1997, 21.06.1999, 5.07., 14.08.2000, 22.06.2002 (7); Kuiviži, 10.06., 20.06.1997, 30.05.2002 (5) leg. A.Karpa.

*Rhagio tringarius* (Linnaeus, 1758)\*

Localities: Gauja, 17.07.1954 (3); Pūre, 05.07.1956 (2); Abava, 19.07.1959 (1); outlet of Loses river, 12.07.1959 (1) leg. Z.Spuris; Carnikava, 04.08.1998 (1); Ērgļi, 08.08.1998 (2) leg. K.Vilks.

*Symphoromyia* Fauensfeld, 1867

*Symphoromyia crassicornis* (Panzer, 1806)

Localities: Kūķi, 02.07.1986 (2); Skrīveri, 11.06.1992 (1); Kuiviži, 10.07.1997 (1) leg. A.Karpa; Salaca, 20.06.1991 (1) leg. V.Spūņģis.

## Kopsavilkums

Latvijas Universitātes Bioloģijas institūta kolekcijās konstatētas trīs Xylophagidae, divas Athericidae un desmit Rhagionidae dzimtu mušu sugas. No tām vienpadsmit sugas Latvijas faunai minētas pirmo reizi.

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