



UDC 595.773

Emilia NARTSHUK*

ON *OPOMYZIDAE* (DIPTERA, *CYCLORRHAPHA*) OF THE BALTIC COUNTRIES WITH A REVISION OF SINTENIS' COLLECTION

Abstract. Fourteen species of *Opomyzidae* are recorded from the Baltic countries (ten in Estonia, five in Latvia and seven in Lithuania). A new material is mostly deposited in the collections of the Institute of Zoology and Botany, in Tartu, and the Zoological Institute, in St. Petersburg. The *Opomyzidae* of Sintenis' collection, in Tartu, have been revised. Lectotype for *Opomyza henselli* Sintenis, 1892 (= *O. lineatopunctata* von Roser, 1840) is designated. A new species, *Geomyza elbergi* sp. n. is described, types from the Leningrad Region of Russia, and Estonia. The distribution of some species is briefly discussed.

The *Opomyzidae* are a small family of *Cyclorrhapha* with three genera in the Holarctic. They spread mainly in the temperate zone of the Holarctic Region and only four species occur in mountains and also in the Cape Province in Africa. The flies have a narrow elongated body 2.5—6 mm in length, yellow, brown or black in colour. Wings usually with dark clouds or spots, at least in the apical part. Postocellar bristles usually absent, sometimes (*Anomatochaeta* Frey) divergent. True vibrissae are lacking although sometimes one or several strong peristomal bristles are present at some distance behind the front margin of peristoma. Frons with one pair reclinate orbital bristles. Arista usually with long hairs above or pubescent. Strong dorsocentral bristles 1+2-3. One strong bristle and hairs on anepisternum, some hairs and sometimes one bristle below the hind thoracal stigma. Wings often long and narrow, squamae reduced. Costal vein with one break. Second basal and anal cells small. Tibia without dorsal praeapical bristle, middle tibia with a ventral spur. Male genitalia: surstyli seem to be fused with epandrium. Lower part of epandrium has specific form in *Geomyza* and is armed with short black spines on the margin. This is a rather good diagnostic feature. Aedeagus has a very complicated structure and is strongly sclerotised. Females have two sclerotised spermathecae.

Opomyzidae occur chiefly in meadows or in the herb layer of forests. The larvae are phytophagous like most of the *Chloropidae*. They feed on *Poaceae* including cereals and pasture grasses. The damage is similar to that caused by *Chloropidae* — the larvae feed inside the grasses and kill the central shoot, which becomes yellow. Eggs are laid on the plants near the ground level or on the seedlings. Pupation takes place inside the host plant near the ground. *Opomyzidae* are generally of minor economic importance.

* Зоологический институт Российской Академии наук (Zoological Institute, Russian Academy of Sciences). Университетская наб. 1, 199034 Санкт-Петербург, Россия.

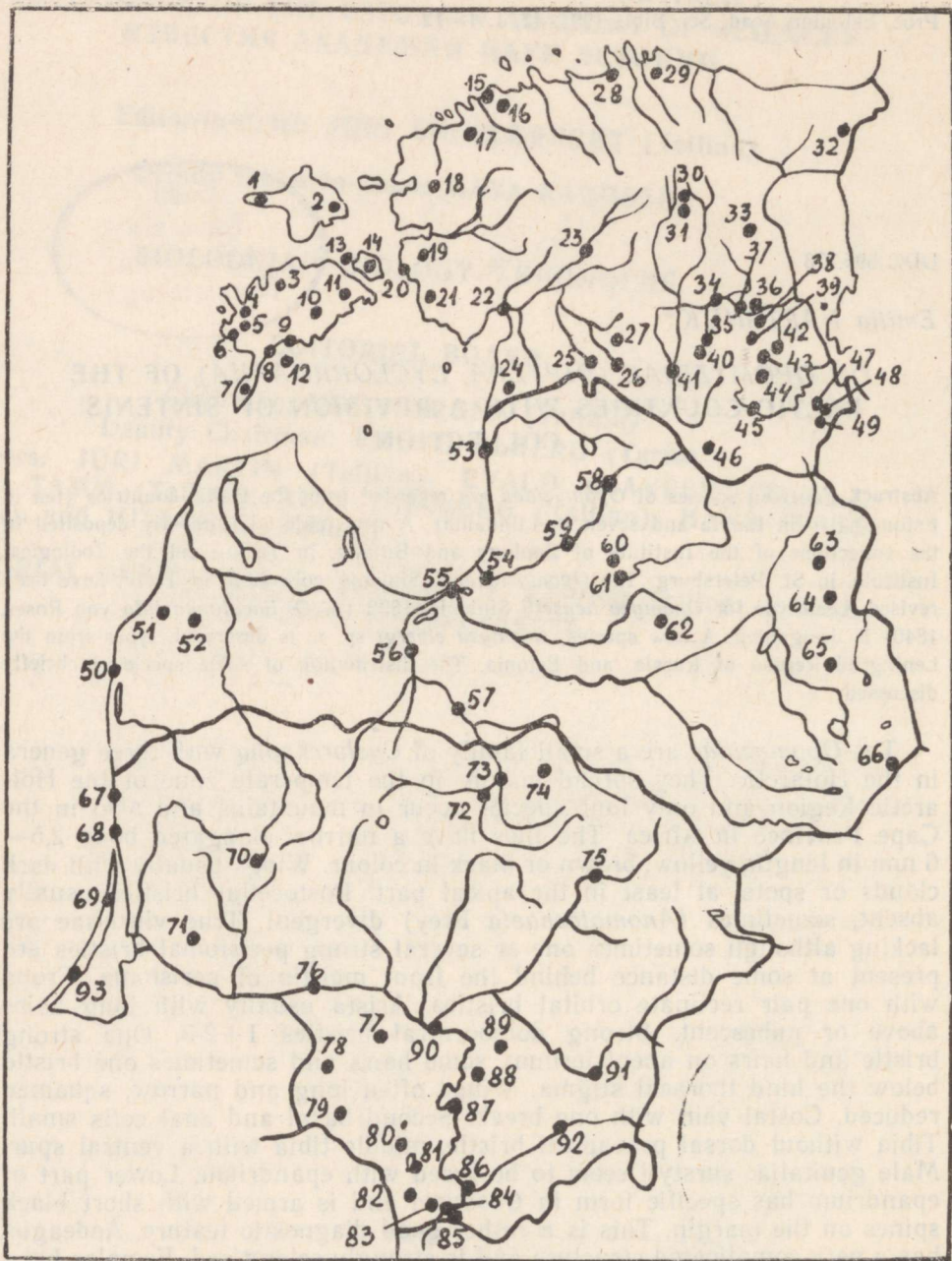


Fig. 1. Collecting localities of *Opomyzidae*.

Estonia: Island Abruca — 12, Ala-Hanikase — 47, Elva — 40, Hilleste — 2, Hüüru — 16, Lake Järise — 3, Järve — 8, Kaali — 10, Lake Kaasikjärv — 31, Kabina — 36, Lake Kariste — 25, Karksi — 26, Kingli — 11, Koorvere — 43, Kuressaare — 9, Islet Kõinastu — 13, Kõpu — 1, Kärevere — 34, Lake Lavatsi — 39, Liiva — 14, Lüllemäe — 46, River Mustjõgi — 30, Nigula State Nature Reserve — 24, Odalätsi — 4, Obinita —

The *Opomyzidae* of the Baltic countries are poorly known. Some species have been listed by A. Gimmerthal (1842, 1847) from Courland (Latvia), by F. Sintenis (1891, 1892a, 1892b, 1895, 1901) usually without geographical localities, and by K. Elberg (Эльберг, 1969, 1971) from Estonia. Also, F. Sintenis (1892b) has described a new species from Pärnu (Estonia).

In neighbouring territories, the *Opomyzidae* are well known in Finland (Hackman, 1958, 1980), Leningrad Region in Russia (Штакельберг, 1958, 1965; Нартчук, 1984; Nartshuk, 1991). Poland (Trojan, 1962), and partly in Sweden (Andersson, 1962) and Norway (Greve, 1981).

Through the kindness of K. Elberg I have had an opportunity to examine the old collection of F. Sintenis and a new collection of *Opomyzidae* from Estonia, Latvia and Lithuania at the Institute of Zoology and Botany, Estonian Academy of Sciences. The material had been collected by K. Elberg (E.)**, E. Remm (R.) and J. Vilbaste (V.). I have added several specimens collected by A. Karps (K.), N. Kuznetzova (NK.) and S. Kuznetzov in Latvia and some material from the collection of the Zoological Institute, Russian Academy of Sciences in St. Petersburg as well. The material of the Zoological Institute has been collected by A. Stackelberg in Estonia, P. Winogradov-Nikitin (W-N.) in Lithuania, and myself (N.) in Estonia and Lithuania.

All the localities of the collection are mapped (Fig. 1). In the following list of species only the places for common species are listed; more exact label data are given for rare species. In the list of species the following abbreviations are used for the countries: **E** — Estonia, **La** — Latvia and **Li** — Lithuania.

I wish to express my sincere gratitude to K. Elberg, Cand. Biol., Institute of Zoology and Botany, Tartu, for interesting material and to Dr. V. Martinek, Forestry and Game Research Institute, Prague, for the specimens of *Geomyza annae* Mart., for comparison.

** The letter in the parentheses is an abbreviation of the name of the collector in the list of species.

-
- 49, Palivere — 18, Palmse — 29, Pikasilla — 41, Pilguse — 6, Piusa — 48, Peedu — 35, Poruni — 32, Puidisoo — 28, Puhtu — 20, Pärnu — 22, Roela — 33, Samliku — 23, Sooviku — 27, Sulbi — 45, Peninsula Sörve — 7, Taevaskoja — 42, Tartu — 37, Tuudi — 19, Vana-Kastre — 38, Varbla — 21, Varbuse — 44, Vasalemma — 17, Viidumäe State Nature Reserve (incl. Centre Audaku) and the village of Viidu — 5, Vääna-Viti — 15.
- Latvia:** Adaži — 54, Apriki — 51, Balvi — 63, Banuži — 60, Barbele — 57, Berzgale — 65, Gaizinkalns — 62, Kalnciems — 56, Liepaja — 50, Ligatne — 59, Lode — 61, Rīga — 55, Tilza — 64, Salacgrīva — 53, Skaune — 66, Valmiera — 58, Lake Vilgales — 52.
- Lithuania:** Andrioniškis — 75, Ažuolu-Buda — 77, Baltašiske — 83, Biržai — 74, Buda — 88, Degučiai — 71, Druskininkai — 84, Lake Grutas — 85, Jurbarkas — 76, Kalvarija — 79, Kaunas — 90, Lake Luksta — 70, Meteliai — 81, Merkine — 86, Neringa — 69, Palanga — 68, Papivesiai — 73, Pasvalys — 72, Pirčupis — 92, Punia — 87, Simnas — 80, Sventoji — 67, Vilkaviškis — 78, Vilnius — 91, Veisiejai — 82, Ziežmariai — 89.
- Russian Federation:** Rybachi — 93.

Revision of Sintenis' collection

There are 34 specimens of *Opomyzidae* in Sintenis' collection in Tartu. Most of the specimens have only labels with dates according to the Julian calendar without any names of collecting localities.

1. *Opomyza florum* Fallén: 4 ♂♂, 2 ♀♀ and a specimen without abdomen. All specimens belong to the species. Data: 1, 27. vii. 1883, 17. vii. 1894, 17. vii. 1898. Two specimens with labels: 1 ♀, Lodenhof (= Lode, Latvia), 9. vii. 1852 (leg. G. Flor); 1 ♀, Salis Wolmar (= Salacgriva, Latvia), 27. vi.—1. vii. 1850 (leg. G. Flor).

2. *O. germinationis* L.: 2 ♂♂, 8 ♀♀. Data: 6—14. vi. 1897. All specimens belong to the species.

3. *O. henselli* Sintenis: one specimen without abdomen, with date 14. vi. 1897 is *O. florum* Fll. According to the date, the specimen is not from the syntype series. Another specimen is male. 11. viii. 1892, and, according to the date, belongs among syntypes. It has no geographical label, but in the original description (Sintenis, 1892b) the type-locality is mentioned as "Pernau" (Pärnu, Estonia). The specimen is covered with mould but the features (median dark stripe on thorax and dark spots on wing) are distinct.

The usual synonymy with *O. lineatopunctata* von Röser, 1840 is correct. I have seen the type-specimen of *O. lineatopunctata* von Röser in the Naturkunde Museum in Stuttgart as well. Sintenis described the species twice, in 1892 and 1895. On 11. viii. 1892 he had collected 33 specimens. I do not know where the other syntypes are. Perhaps in the Zoological Institute in Warsaw, where a part of Sintenis' collection is preserved. I have not seen any other syntypes, and to preserve the stability of synonymy the specimen in question from Sintenis' collection in Tartu is designated here as the lectotype.

4. *O. nataliae* Egger: 1 ♀ without data label is *O. florum* Fll.; 1 ♂, Arensburg (= Kuressaare, Island of Saaremaa, Estonia) is *O. punctella* Fll.

5. *O. nigriventris* Loew; 1 ♂, 1 ♀ 2. viii. 1903 without geographical labels. The specimens belong to the species.

6. *O. punctella* Fallén: 1 ♂, 2. vii. 1892; 1 ♂, 19. vii. 1892, both without geographical labels; 1 ♂, Arensburg (= Kuressaare, Island of Saaremaa, Estonia), without date. The specimens belong to the species.

7. *Geomyza combinata* L.: 1 ♀, Aahof (= ?Adaži, Latvia), end of June, 1861. The identification is doubtful as there are several sibling species distinguished only by male genitalia in the group "*combinata*".

8. *G. tripunctata* Fallén: 1 ♂, Lodenhof (= Lode, Latvia), 8. viii. 1851 (leg. G. Flor); 1 ♂, 1 ♀, Salis Wolmar (= Salacgriva, Latvia), end of June, 1850; 1 ♀, Kudling (= ?Banuži, Latvia), 5. xi. 1851 (leg. G. Flor). The specimens belong to the species.

9. *G. marginella* Fallén: 1 ♂, Oesel, Sworbe (= Sõrve Peninsula, Island of Saaremaa, Estonia), 20. vii. 1851. The specimen is *Trixoscelis marginella* Fallén (*Trixoscelidae*).

The list of species

1. *Opomyza florum* (Fabricius, 1794)

E: Pudisoo, Palmse, Taevaskoja. — **La:** Apriki, Kalnciems, Valmiera, Gaizinkalns, Tilza, Berzgale. — **Li:** Neringa, Pasvalys, Papivesiai, Biržai, Andrioniškis, Jurbarkas, Vilkaviškis, Kalvarija, Simnas, Meteliai, Veisiejai, Druskininkai, Lake Grutas, Merkinė, Punia, Žiežmariai, Vilnius. — 73 ex.

Adults may be caught from the end of June to September. Euro-Caucasian species. The commonest species of the genus. Larvae live in the shoots of many grasses including cereals (winter wheat and oats). Only one generation per annum. The species overwinters in the egg stage, larvae hatch in the following spring. Adults appear in June and have a summer diapause. Females begin to lay eggs on the soil near the shoots of grasses only in autumn.

2. *Opomyza germinationis* (Linnaeus, 1761)

E: Kõpu, Lake Järise, Viidumäe State Nature Reserve (incl. Audaku), Pilguse, Järve, Kaali, Abruka Island, Kõinastu Islet, Liiva, Vasalemma, Hүүru, Puhtu, Varbla, Nigula State Nature Reserve, Taevaskoja, Obinitsa. — **La:** Liepaja, Vilgales, Riga, Kalnciems, Gaizinkalns. — **Li:** Sventoji, Palanga, Lake Luksta, Kaltinenai, Ažuolu-Buda, Meteliai, Druskininkai, Vilnius, Pirćupis. — 122 ex.

Adults may be caught from June to August. The collecting sites in Estonia are the northernmost for the species. It has been found in western Estonia (incl. islands) and also in south-eastern Estonia (Taevaskoja and Obinitsa). In Finland this species has been found only on the Islands of Åland (Hackman, 1958). It has not been recorded in the Leningrad Region in Russia. Immigrant in North America (Vockeroth, 1961).

Larvae develop in the shoots of the grasses *Festuca*, *Lolium*, *Poa*, *Agrostis*, *Phleum*, *Alopecurus*, *Phalaris*, *Holcus* (Nye, 1958). The species overwinters as third instar larvae inside shoots. Only one generation per annum. Adults emerge in June and live until October.

3. *Opomyza lineatopunctata* von Roser, 1840

E: Island of Hiiumaa. Hilleste, 25. vii. 1968 (E.), 1 ♂; Lake Kaasikjärv, 1. viii. 1960 (E.), 1 ♀; River Mustjõgi, 30. viii. 1968 (E.), 1 ♂; — **La:** Riga, 15. x. 1988 (NK.), 1 ♀.

A European species. Bionomics unknown.

4. *Opomyza nigriventris* Loew, 1865

E: Pudisoo, 8. ix. 1975 (E.), 2 ♂ ♂; Palmse, 27. vii. 1975 (R.), 1 ♀.

The species occurs in north-eastern Europe and Siberia. The collecting localities in Estonia are the most southwestern ones for the species. It has been found only in the coastal area of northern Estonia. Bionomics unknown.

5. *Opomyza petrei* Mesnil, 1934

Li: Palanga, 6—18. viii. 1988 (N.), 10 ♂ ♂, 7 ♀ ♀; Degučiai, 18. vi. 1968 (E.), 1 ♀.

A European nemoral species.

A female of the species was found on Courish Spit (Rybachy, Kaliningrad Region, Russian Federation), 3. ix. 1972 (leg. K. Gorodkov) as well.

The neighbouring finds are known from Poland: Szczecin in Slupsk (Trojan, 1962). The species has not been found in Finland or Leningrad Region, but it is known in south-western Norway (Greve, 1981) and southern Sweden (Andersson, 1962). Immigrant in North America (Vockeroth, 1961). Larvae feed in the grasses *Anthoxanthum* and *Holcus* (Nye, 1958).

6. *Opomyza punctata* Haliday, 1833

E: Palivere, 4. ix. 1968 (E.), 1 ♀; Vääna-Viti, 3. viii. 1969 (E.), 1 ♀; Pudi-soo, 8. ix. 1975 (E.), 6 ♂♂, 2 ♀♀.

A rare European species, occurring in North and Middle Europe. Flies are usually caught in swamps. The species has been found only in the northern part of the territory in question. Bionomics unknown.

7. *Opomyza punctella* Fallén, 1820

E: Pudi-soo, 8. ix. 1975 (E.), 1 ♂; Vana-Kastre, 3. ix. 1972 (E.), 1 ♀; Elva, 6. ix. 1967 (E.), 2 ♂♂; Sulbi, 8. vii. 1973 (E.), 1 ♀; Ala-Hanikase, 15. vii. 1985 (R.), 1 ♀.

A rare boreoalpine species occurring in northern Europe (Finland, Sweden, Scotland) and more southern only in mountains. Bionomics unknown.

8. *Opomyza thalhammeri* Strobl, 1900

Li: Jurbarkas (on labels "Georgenburg"), 1. vii.—5. ix. 1903 (W-N.), 23 ex.

A Euro-Caucasian species, occurring mostly in southern Europe. The species was described on the basis of a male from Travnik in Yugoslavia (Strobl, 1900). The next finds were made after sixty years in Slovenia (Coe, 1960) and in Albania (Zuska, 1966). Martinek (1978a, 1978b) collected this species in Bohemia. He considers the species to be a thermophilous South-European faunistic element. Its host plant seems to be *Bromopsis inermis*. The collecting site in Lithuania is situated 5° north of the collecting locality in Bohemia (Fig. 2).

9. *Geomyza combinata* (Linnaeus, 1767)

There are several sibling species of similar appearance and with differences in male genitalia. The situation is complicated because the specimen with the label *G. combinata* in the Linnaean Cabinet in the British Museum (Natural History) in London does not belong to the genus *Geomyza* according to B. Cogan (Cogan, Dear, 1975). In addition to *G. combinata* L., three closely related species have been described in the group: *G. balachowskyi* Mesnil, 1934, *G. annae* Martinek, 1978 and *G. hackman* Nartshuk, 1984.

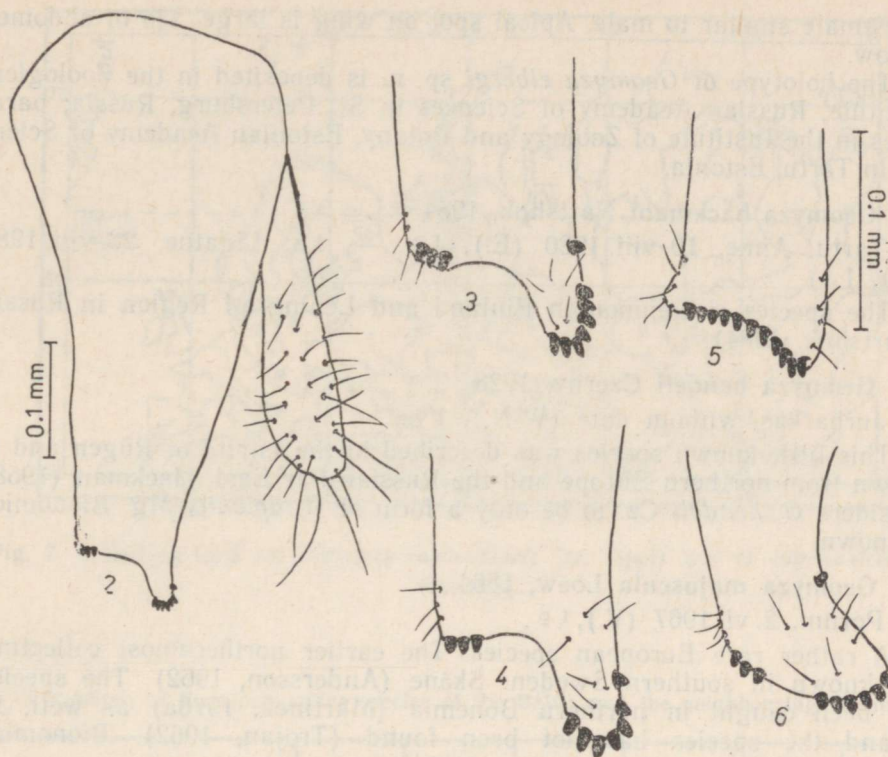
There are four males and 18 females in the Baltic material, three of the males having different genitalia. I consider one of them to be *G. combinata* L. This specimen has male genitalia like those given by Martinek (1978b) and Trojan (1962) and rather similar to the drawing by Czerny (1928).

Li: Jurbarkas, 1. ix. 1903 (W-N.), 1 ♂.

The females of *G. combinata* s. l. were collected in the following localities:

E: Samliku, Pudi-soo, Poruni, Peedu, Taevaskoja, Koorvere, Lüllemäe, Piusa, Obinitsa. — La: Barbele. — Li: Palanga, Lake Luksta, Biržai, Baltašiske, Druskininkai. — 17 ex.

The second male has been determined as *G. hackmani* Nartshuk. The third male with the same label as one of the females as well as a male from the Leningrad Region in Russia are described here as a new species.



Figs. 2—6. Male genitalia of *Geomyza* spp.: 2—4 — *Geomyza elbergi* sp. n.: 2 — lateral view, paratype, 3 — lower end of epandrium, paratype, 4 — the same, holotype; 5 — *G. hackmani* Nartshuk, lower end of epandrium; 6 — *G. annae* Martinek, the same.

10. *Geomyza elbergi* Nartshuk sp. n. (Fig. 2—4)

Holotype: 1 ♂, Russia, Leningrad Region, Yashchera near Tolmachovo, 6. vii. 1963 (leg. A. Stackelberg).

Paratypes: 1 ♂, 1 ♀, Estonia, Obinitsa, 16. and 17. vii. 1980 (leg. K. Elberg).

Differential diagnosis. The species belongs to the group *combinata*, distinguished by male genitalia. The form of the lower margin of epandrium is similar to that of *G. annae* Mart. The new species differs by a longer finger-like process on the lower margin of epandrium and a row of short black spines divided into two groups as against the continuous row in *G. annae* Mart. (Fig. 6). I was able to compare the new species with the specimens of *G. annae* Mart. received from V. Martinek.

Description. Male. Head and thorax reddish yellow. Arista with 10—12 relatively long hairs on upper side. Cheeks more narrow than the width of the third segment of antenna. One strong peristomal bristle and some hairs on cheeks. Dorsocentral bristles 1+3, the second one being a little shorter than the first and third ones. Pteropleura only with hairs without bristle. Other bristles on head and thorax as common for the genus. Legs yellow. Wings with apical spot reaching the middle of cell r_{4+5} and clouds on both transversal veins. Abdomen black except for yellow base.

Genitalia. Epandrium has a finger-like process on the lower margin along the outer edge and two groups of short black spines on the process and another on the inside corner. Cerci narrow.

Length of body 3.5 mm.

Female similar to male. Apical spot on wing is large. Tip of abdomen yellow.

The holotype of *Geomyza elbergi* sp. n. is deposited in the Zoological Institute, Russian Academy of Sciences in St. Petersburg, Russia; paratypes in the Institute of Zoology and Botany, Estonian Academy of Sciences in Tartu, Estonia.

11. *Geomyza hackmani* Nartshuk, 1984

E: Tartu, Anne, 10. viii. 1980 (E.), 1 ♂. — La: Ligatne, 28. viii. 1980 (K.), 1 ♂.

The species is common in Finland and Leningrad Region in Russia (Nartshuk, 1984).

12. *Geomyza hendeli* Czerny, 1928

Li: Jurbarkas, without date (W-N.), 1 ♀.

This little-known species was described in the Island of Rügen and is known from northern Europe and the Russian Far East. Hackman (1958) considers *G. hendeli* Cz. to be only a form of *G. apicalis* Mg. Bionomics unknown.

13. *Geomyza majuscula* Loew, 1864

E: Poruni, 2. vi. 1967 (V.), 1 ♀.

A rather rare European species. The earlier northernmost collecting site known in southern Sweden: Skåne (Andersson, 1962). The species has been caught in northern Bohemia (Martinek, 1978a) as well. In Poland the species has not been found (Trojan, 1962). Bionomics unknown.

There is only one female among the available material, but the specimen is larger than *G. tripunctata* Fll., has no strong bristles below the hind thoracal stigma and no dark cloud in the base of wing. Dark spots on transverse veins are a little smaller than the corresponding spots in *G. tripunctata* Fll.

14. *Geomyza tripunctata* Fallén, 1823

E: Viidumäe State Nature Reserve and the village of Viidu, Tuudi, Puhtu, Varbla, Nigula State Nature Reserve, Palmse, Lake Kariste, Karksi, Sooviku, Palmse, Roela, Kärevere, Tartu, Kabina, Vana-Kastre, Lake Lavatsi, Peedu, Elva, Pikasilla, Varbuse, Sulbi, Obinitsa. — La: Valmiera, Banuži, Lode, Balvi, Skaune. — Li: Sventoji, Palanga, Jurbarkas, Druskininkai, Lake Grutas, Buda, Kaunas.

Period of activity of flies from April to October. A Palearctic species. One of the commonest species of the genus. Its main larval host plant is *Lolium* (in Western Europe), also wheat is attacked. The species overwinters mainly as third-instar larvae, has two generations per annum.

Some remarks on the distribution of the listed species

There are 14 species in the available collection. They are listed in Table together with data on the adjacent territories. The species of the genus *Opomyza* are fairly well known in the Baltic countries. Eight species known from the adjacent territories have been found here. As concerns the genus *Geomyza* more material is needed on it, seeing that only six species of the 14 have been found here.

The territory of the Baltic countries appears to be very interesting as the borders of the ranges of some species seem to pass through these countries.

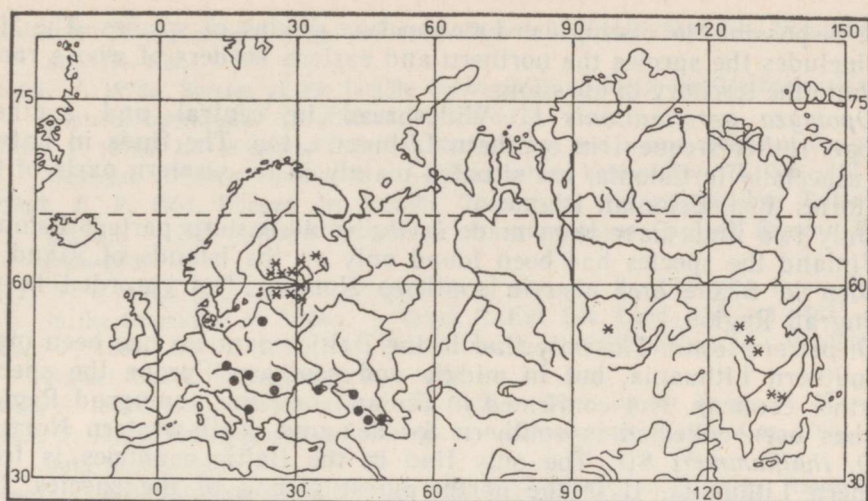


Fig. 7. Collecting sites for *Opomyza thalhammeri* Str. (spot) and *O. nigriventris* Lw. (asterisk).

Comparison of the *Opomyzidae* species of the Baltic and the neighbouring countries

Species	Finland	Lenin-grad Region, Russia	Estonia	Latvia	Lithuania	Poland
<i>Anomalochaeta guttipennis</i>	+	+	—	—	—	—
<i>Opomyza florum</i>	+	+	+	+	+	+
<i>O. germinationis</i>	+	—	+	+	+	+
<i>O. lineatopunctata</i>	—	+	+	+	—	+
<i>O. nigriventris</i>	+	+	+	—	—	—
<i>O. petrei</i>	—	—	—	—	+	+
<i>O. punctata</i>	+	+	+	—	—	+
<i>O. punctella</i>	+	+	+	—	—	+
<i>O. thalhammeri</i>	—	—	—	—	+	—
<i>Geomyza angustipennis</i>	+	+	—	—	—	—
<i>G. apicalis</i>	+	+	—	—	—	+
<i>G. breviforceps</i>	+	+	—	—	—	—
<i>G. breviseta</i>	—	—	—	—	—	+
<i>G. combinata</i>	—	—	—	—	+	+
<i>G. consobrina</i>	+	—	—	—	—	—
<i>G. elbergi</i>	—	+	+	—	—	—
<i>G. hackmani</i>	+	+	+	+	—	—
<i>G. hendeli</i>	+	+	—	—	+	—
<i>G. majuscula</i>	—	—	+	—	—	—
<i>G. pilosula</i>	+	+	—	—	—	—
<i>G. paganettii</i>	—	—	—	—	—	+
<i>G. tripunctata</i>	+	+	+	+	+	+
<i>G. venusta</i>	—	+	—	—	—	+
Number of species	14	15	10	5	7	12

It is possible to distinguish between two groups of species. The first one includes the species the northern and eastern borders of whose range fall onto the territory in question.

Opomyza germinationis L. Widespread in central and southern Europe, rather frequent in southern Lithuania, too. The finds in Latvia, and especially in Estonia, are situated mainly in the western parts of the territories, incl. Estonian islands.

Only two finds have been made in the south-eastern part of Estonia. In Finland the species has been found only on the islands of Åland, in Sweden in Skåne and also in southern Norway. Not recorded in the Leningrad Region.

O. petrei Mesnil. The only find in the Baltic countries has been made in southern Lithuania, but in middle and southern Europe the species is rather common. Not confirmed in Finland and the Leningrad Region, but has been collected in southern Sweden and south-western Norway.

O. thalhammeri Str. The only find in the Baltic countries is from southern Lithuania. It is the northernmost record of the species. Not found on adjacent territories. Known in central and south-eastern Europe.

Geomyza majuscula Lw. The collecting site in Estonia (Poruni) is situated rather far from the known border of its range in southern Sweden and northern Bohemia. Not known in Poland (Trojan, 1962).

G. breviseta Cz. and *G. paganetti* Str. are known from northern Poland (Trojan, 1962), but they are absent in the available material. They may be expected in southern Lithuania.

The second group of the species has the southern and/or western borders of its range on the investigated territory.

Opomyza nigriventris Lw. has been recorded in Finland, the Leningrad Region and northern Estonia but not in Latvia, Lithuania or Scandinavia. The species is known in Siberia. Hackman (1958) considered this species to be of eastern origin.

The other three northern species *Anomalochaeta guttipennis* Ztt., *Geomyza angustipennis* Ztt., and *G. breviforceps* Hack. have not yet been found in the Baltic countries but are known in Finland and the two former also in the Leningrad Region, northern Sweden (Lapland and Norrbotten) and Siberia. Those species may also occur in Estonia.

REFERENCES

- Andersson, H. 1962. Sällsynta eller för Sverige nya travingar (*Diptera*). — Opusc. ent., 27, 62—64.
- Coe, R. L. 1960. A further collection of *Diptera* from Yugoslavia, with localities and notes. — Bull. Mus. Hist. Nat., Belgrade, ser. B, 16, 43—67.
- Cogan, B. N., Dear, J. P. 1975. Additions and corrections to the British *Acalyprate* *Diptera*. — Ent. Mon. Mag., 110, 173—181.
- Czerney, L. 1928. 54 c. *Opomyzidae*. In: E. Lindner. Die Fliegen der palaearktischen Region, Bd. VI, Lief. 28, 1—15.
- Gimmerthal, A. 1842. Uebersicht der Zweiflüegler (*Diptera*) Lief- und Kurlands. — Bull. Soc. Nat. Moscow, 15, 1—21.
- Gimmerthal, A. 1847. Vierter Beitrag zur Dipterologie Russlands. — Bull. Soc. Nat. Moscou, 20, 140—208.
- Greve, L. 1981. The genus *Opomyza* (Fallén) (*Diptera*, *Opomyzidae*) in Norway. — Fauna Norv., ser. B, 28, 96—99.
- Hackman, W. 1958. The *Opomyzidae* (*Diptera*) of Eastern Fennoscandia. — Notulae Ent., 38, 114—126.

- Hackman, W. 1980. A check list of the Finnish *Diptera* II. *Cyclorrhapha*. — Notulae Ent., 60, 117—162.
- Martinek, V. 1978a. Species of the familie *Opomyzidae* (*Diptera*) in Czechoslovakia. — Dipterol. bohemoslov. (Bratislava), 1, 155—173.
- Martinek, V. 1978b. The female of *Opomyza thalhammeri* and a new species of the genus *Geomyza* (*Diptera, Opomyzidae*). — Acta entom. bohemoslov., 75, 336—343.
- Nartshuk, E. P. 1991. Fliegen der Familie *Opomyzidae* des europäischen Teiles der UdSSR. — XII Междунар. симпозиум по энтомофауне Средней Европы. Киев, 559—563.
- Nye, T. W. B. 1958. The external morphology of some of the Dipterous larvae living in the *Gramineae* of Britain. — Trans. R. Ent. Soc. Lond., 110, 411—487.
- Sintenis, F. 1891. Die livländischen Geomyzinen und Ochthiphilinen. — Sitzungsber. Naturf.-Ges. Univ. Dorpat., 9, 477—481.
- Sintenis, F. 1892a. Ueber *Opomyza punctella* Fall. — Wien. Entom. Zeitg., 11, 177—180.
- Sintenis, F. 1892b. On *Opomyza henselli* sp. n. — Sitzungsber. Naturf.-Ges. Univ. Dorpat., 18, 87—94.
- Sintenis, F. 1895. *Opomyza henselli* n. sp. eine neue *Diptera*. — Festschr. Naturf.-Ver., Riga, 263—266.
- Sintenis, F. 1901. Entomologischer Bericht über die Jahre 1899—1901. — Sitzungsber. Naturf.-Ges. Univ. Dorpat., Jurjew, 13, 1—10.
- Strobl, G. 1900. Dipterenfauna von Bosnien, Herzegovina und Dalmatien. — Wiss. Mitt. Bosn. Herzeg., 7, 552—670.
- Trojan, P. 1962. *Opomyzidae*. — Klucze do oznaczania Owadow Polski. Muchowki — *Diptera*. Warszawa. Cz. 28, Zesz. 57, 43—60.
- Vockeroth, J. R. 1961. The North American species of the family *Opomyzidae* (*Diptera, Acalyptatae*). — Can. entom., 43, 503—522.
- Zuska, J. 1966. Ergebnisse der Albanien-Expedition 1961 des Deutschen Entomologischen Instituts. 59. Beitrag. *Diptera: Chloropidae* und *Opomyzidae*. — Beitr. Entom., 16, 537—545.
- Нарчук Э. П. 1984. Двукрылые Большого Березового острова, связанные со злаками, с описанием нового вида семейства *Opomyzidae* (*Diptera*). — Материалы по фауне Выборгского заказника. Тр. Зоол. ин-та АН СССР, 123, 51—59.
- Штакельберг А. А. 1958. Материалы по фауне двукрылых Ленинградской области *Diptera, Acalyptata*. Ч. I. — Тр. Зоол. ин-та АН СССР, 24, 103—191.
- Штакельберг А. А. 1965. Новые данные по фауне двукрылых (*Diptera*) Ленинградской области. — Latvijas Entomol., 10, 61—71.
- Эльберг К. 1969. О миграциях мух (*Diptera, Brachycera*) на верховых болотах. — Изв. АН Эст. ССР. Биология, 18, 3, 269—275.
- Эльберг К. 1971. Фауна мух *Acalyptata* (*Diptera, Brachycera*) болот Эстонии. — Автореф. канд. биол. н. Тарту, 1—22.

Presented by K. Elberg

Received
May 25, 1992

Emilia NARTSUK

OPOMYZIDAE (DIPTERA, CYCLORRHAPHA) BALTIMAADES JA SENTINISE KOLLEKTSIOONI REVISJON

Baltimaadest on leitud sugukonna *Opomyzidae* 14 liiki, seejuures 10 liiki Eestist, 5 Lätist ja 7 Leedust. Uus materjal paikneb peamiselt Zooloogia ja Botaanika Instituudis Tartus ning Zooloogia Instituudis Sankt-Peterburgis. Uuesti määrati ka isendid Sintenis kolektsioonis Tartus. Märgistati *Opomyza henselli* Sintenis, 1892 lektotüüp. Artiklis on kirjeldatud uus liik *Geomyza elbergi* sp. n. Eestist ja Leningradi oblastist Venemaalt. Lühidalt on käsitletud mõnede liikide geograafilist levikut.

ОБ *OPOMYZIDAE* (DIPTERA, CYCLORRHAPHA) ИЗ ПРИБАЛТИКИ И РЕВИЗИЯ КОЛЛЕКЦИИ ЗИНТЕНИСА

В Прибалтике найдено 14 видов семейства *Opomyzidae*, в том числе 10 видов из Эстонии, 5 видов из Латвии и 7 видов из Литвы. Новый материал хранится главным образом в коллекциях Института зоологии и ботаники АН Эстонии (Тарту) и в Зоологическом институте (Санкт-Петербург). При ревизии коллекции Зинтениса (Тарту) был выбран лектотип для *Opomyza henselli* Sintenis, 1892. Описывается новый вид *Geomyza elbergi* sp. n., найденный в Эстонии и Ленинградской области России. Рассматривается географическое распространение некоторых видов.