

## AN EXTENDED LIST OF FANNIIDAE AND MUSCIDAE (DIPTERA) OF BELARUS

E. V. Makovetskaya<sup>1</sup>, N. E. Vikhrev<sup>2</sup>✉

<sup>1</sup>The Scientific and Practical Center for Bioresources, 27 Akademicheskaya Str., 220072, Minsk, Belarus

<sup>2</sup>Zoological Museum of Moscow University, 2 Bolshaya Nikitskaya Str., Moscow 125009, Russia

### Authors

Ekateryna V. Makovetskaya  
 E-mail: [makovetskayaev@tut.by](mailto:makovetskayaev@tut.by)  
 SPIN: 8359-7990  
 Scopus Author ID: 57209513483

Nikita E. Vikhrev  
 E-mail: [nikita6510@ya.ru](mailto:nikita6510@ya.ru)  
 SPIN: 1266-1140  
 Scopus Author ID: 32467511100

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**Abstract.** This is our second article dedicated to the fauna of Fanniidae and Muscidae of Belarus. In the first article (Makovetskaya, Vikhrev 2019), we summarized the literature data and studied the materials of museum collections of Belarus and Russia. The present work is based upon material collected during the field season of 2019. Now we offer an extended list of Fanniidae and Muscidae of Belarus, which includes 175 species. 50 species are recorded for the first time in Belarus (these are 7 species of Fanniidae and 44 of Muscidae).

**Keywords:** fauna, Belarus, Fanniidae, Muscidae.

## РАСШИРЕННЫЙ СПИСОК FANNIIDAE И MUSCIDAE (DIPTERA) БЕЛАРУСИ

Е. В. Маковецкая<sup>1</sup>, Н. Е. Вихрев<sup>2</sup>✉

<sup>1</sup>ГНПО «НПЦ НАН Беларуси по биоресурсам», ул. Академическая, д. 27, 220072, Минск, Беларусь

<sup>2</sup>Зоологический музей, Московский государственный университет им. М. В. Ломоносова,  
 ул. Большая Никитская, д. 2, 125009, Москва, Россия

### Сведения об авторах

Маковецкая Екатерина Валерьевна  
 E-mail: [makovetskayaev@tut.by](mailto:makovetskayaev@tut.by)  
 SPIN-код: 8359-7990  
 Scopus Author ID: 57209513483  
 Вихрев Никита Евгеньевич  
 E-mail: [nikita6510@ya.ru](mailto:nikita6510@ya.ru)  
 SPIN-код: 1266-1140  
 Scopus Author ID: 32467511100

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**Аннотация.** Это вторая статья, посвященная фауне Fanniidae и Muscidae Беларуси. В первой статье (Makovetskaya, Vikhrev 2019) мы обобщили литературные данные и изучили материалы музейных коллекций Беларуси и России. Настоящая работа является результатом обработки материала, собранного в течение полевого сезона 2019 г. Теперь мы предлагаем расширенный список Fanniidae и Muscidae Беларуси, состоящий из 175 видов. Мы добавили к белорусской фауне 50 видов (7 видов Fanniidae и 44 вида Muscidae), впервые зарегистрированных для этой страны.

**Ключевые слова:** фауна, Беларусь, Fanniidae, Muscidae.

## INTRODUCTION

Recently we published a preliminary list of the Fanniidae and Muscidae (Diptera) of Belarus (Makovetskaya, Vikhrev 2019). In that paper we shortly described the history of exploration of the Belarusian fauna of Fanniidae and Muscidae, reviewed the sources of information on the fauna of Belarus and studied the materials of museum collections of Belarus and Russia.

In the field season of 2019, we did our best to extend the list. We tried to examine the remote Belarusian localities on North-South and West-East axes. It seems that our main omission is the absence of material from South-West of Belarus, i.e. the vicinity of Brest. Collecting sites in Belarus in 2019 are shown in Fig. 1 by red spots. We visited the city of Mozyr several times and naturally, we examined several sites near Mozyr; Fig. 2 shows these sites in small red spots. We believe that it is not necessary to list all these points separately. A broken poplar or a grazing horse nearby affects the insect fauna more than the distance of 5 kms between the extreme points. Thus, the vicinity of Mozyr is listed below as a single locality (shown as a large red spot in Fig. 2) at 52.04°N 29.32°E. The result of our exploration is 7 species of

Fanniidae and 44 of Muscidae newly recorded from Belarus (these species are marked below as “NEW”).

Besides these new country records, data on species already known from Belarus is also included in the paper. We consider that useful, because most previous records belong to the 19<sup>th</sup> or 20<sup>th</sup> centuries and have never been confirmed since, while others were taken from sources that require verification of identifications. Additionally, collecting localities on the territory of Belarus were unknown or dubious for many species.

We hope to continue working on the fauna of this beautiful country, but so far, we offer an extended list of 175 Belarusian Fanniidae (21) and Muscidae (154).

## MATERIAL AND METHODS

The classification follows that in Pont (1986) but also includes more recent changes. Synonyms are only given for names that are used in the faunistic references cited in the paper. Suprageneric taxa (subfamilies and tribes) are arranged in systematic order. Names of genera are arranged as in Pont (1986), and species are listed alphabetically within each genus.

Geographical coordinates are given in the decimal degrees.



**Figs. 1–2.** 1 — collecting localities (2019) on the map of Belarus; 2 — surveyed sites near Mozyr on a large-scale map

**Рис. 1–2.** 1 — места отлова (за 2019 г.) на карте Беларуси; 2 — обследованные участки около Мозыря на крупномасштабной карте

The specimens collected during the field season of 2019 are deposited either in Zoological Museum of Moscow University, Russia (those collected by N. Vikhrev and M. Yanbulat) or in Scientific and Practical Center for Bioresources, Minsk, Belarus (those from E. Makovetskaya and other collectors).

LIST OF THE FANNIIDAE AND MUSCIDAE  
(DIPTERA) OF BELARUS

FAMILY FANNIIDAE

1. *Fannia armata* (Meigen, 1826)  
**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, N. Vikhrev, 2♂; E. Makovetskaya, 2♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 3♂; Mogilev reg.: Byalynichy distr., Moshchanskoe env., 53.99°N 29.66°E, 29 May 2019, E. Makovetskaya, 1♂; Byalynichy env., 54.012°N 29.643°E, 29 May 2019, E. Makovetskaya, 4♂.
2. *Fannia canicularis* (Linnaeus, 1761)  
**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 6♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♂; 11–14 June 2019, E. Makovetskaya, 2♂; Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 2♂.
3. *Fannia carbonaria* (Meigen, 1826)
4. *Fannia corvina* (Verrall, 1892)  
**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, N. Vikhrev, 5♂; E. Makovetskaya, 4♂; Mogilev reg.: Byalynichy env., 54.012°N 29.643°E, 29 May 2019, E. Makovetskaya, 7♂.
5. *Fannia fuscula* (Fallen, 1825)  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂; Mytva R., 51.853°N 29.224°E, 31 July 2019, E. Makovetskaya, 2♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 4♂.
6. *Fannia incisurata* (Zetterstedt, 1838)
7. *Fannia lucidula* Zetterstedt, 1860 = *F. glaucescens* — NEW
- Material:** Brest reg.: David-Gorodok env., 52.115°N 27.272°E, 20–21 August 2019, O. Prischepchik, 1♂; Gomel reg.: Mozyr’s sewage fields, 51.946°N 29.349°E, 30 July 2019, N. Vikhrev, 1♂.
8. *Fannia lustrator* (Harris, 1780)  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♀; 11–14 June 2019, N. Vikhrev, 1♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♂; Mogilev reg.: Byalynichy distr., Kulakovka env., 53.951°N 29.207°E, 29 May 2019, E. Makovetskaya, 1♂.
9. *Fannia manicata* Meigen, 1826 — NEW  
**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 1♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♂.
10. *Fannia metallipennis* (Zetterstedt, 1838)
11. *Fannia minutipalpis* (Stein, 1895) — NEW  
**Material:** Minsk reg., Minsk, Soltysa str., 53.895°N 27.658°E, 12 May 2020, E. Makovetskaya, 14♂.
12. *Fannia monilis* Haliday, 1838 — NEW  
**Material:** Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♂.
13. *Fannia pauli* Pont, 1997 — NEW  
**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 1♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 4♂.
14. *Fannia polychaeta* (Stein, 1895)  
**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 1♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 1♂.
15. *Fannia rondanii* Strobl, 1893 — NEW  
**Material:** Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 4♂.
16. *Fannia scalaris* (Fabricius, 1794)  
**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 1♂.
17. *Fannia serena* (Fallen, 1825)  
**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, N. Vikhrev,



1♂; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 1♂.

18. *Fannia similis* (Stein, 1895)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 6♂.

19. *Fannia sociella* (Zetterstedt, 1845)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 3♂; E. Makovetskaya, 1♂.

20. *Fannia spathiophora* Malloch, 1918

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 2♂.

21. *Fannia umbrosa* Stein, 1895 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 3♂; 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, E. Makovetskaya, 1♂.

## FAMILY MUSCIDAE

### Subfamily Muscinae

1. *Muscina levida* (Harris, 1780)

2. *Muscina pasquorum* (Meigen, 1826)

3. *Muscina prolapsa* (Harris, 1780)

4. *Muscina stabulans* (Fallen, 1817)

5. *Azelia aterrima* Meigen, 1826

6. *Azelia cilipes* (Haliday, 1838)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂; M. Yanbulat, 1♂.

7. *Azelia monodactyla* Loew, 1874 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, on horse dung, 19–21 May 2019, N. Vikhrev, 1♂; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, on horse dung, 16–17 May 2019, N. Vikhrev, 3♂; E. Makovetskaya, 2♂.

8. *Azelia nebulosa* Robineau-Desvoidy, 1830 — **NEW**

**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 1♂.

9. *Azelia spinosa* Vikhrev, 2015 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, on horse dung, 19–21 May 2019, N. Vikhrev, 1♂; E. Makovetskaya, 1♂.

10. *Azelia zetterstedtii* Rondani, 1866

**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, on horse dung, 16–17 May 2019, N. Vikhrev, 7♂.

11. *Azelia triquetra* Wiedemann, 1817 — **NEW**

**Material:** Brest reg.: Lyakhovichy env., 53.029°N 26.257°E, 13 July 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, on horse dung, 16–17 May 2019, N. Vikhrev, 3♂.

12. *Thricops cunctans* (Meigen, 1826)

**Material:** Minsk reg.: Krupki distr., Somry env., 54.061°N 29.349°E, 28 May 2019, E. Makovetskaya, 1♂; Mogilev reg.: Byalynichy distr., Moshchanskoe env., 53.99°N 29.66°E, 29 May 2019, E. Makovetskaya, 1♂; Porokhovka env., 53.927°N 29.462°E, 29 May 2019, E. Makovetskaya, 2♂.

13. *Thricops diaphanus* (Wiedemann, 1817)

14. *Thricops longipes* (Zetterstedt, 1845)

15. *Thricops nigrifrons* (Robineau-Desvoidy, 1830)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 1♂; Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♀; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 3♂, 1♀.

16. *Thricops semicinereus* (Wiedemann, 1817)

**Material:** Brest reg.: David-Gorodok env., 52.115°N 27.272°E, 20 May 2019, O. Prischepchik, 3♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♂; 11–14 June 2019, E. Makovetskaya, 2♂; 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, E. Makovetskaya, 3♂; Minsk reg.: Krupki distr., Somry env., 54.061°N 29.349°E, 28 May 2019, E. Makovetskaya, 1♂; Mogilev reg.: Byalynichy distr., Kalinovka env., 53.890°N 29.703°E, 29 May 2019, E. Makovetskaya, 1♀; Kulakovka env., 53.951°N 29.207°E, 29 May 2019, E. Makovetskaya, 9♂; Moshchanskoe env., 53.99°N 29.66°E, 29 May 2019, E. Makovetskaya, 3♂, 4♀; Byalynichy env., 54.012°N 29.643°E, 29 May 2019, E. Makovetskaya, 5♂.

17. *Thricops simplex* (Wiedemann, 1817)

**Material:** Brest reg.: Lyakhovichy env., 52.975°N 26.32°E, 24 August 2019, E. Makovetskaya, 1♂; Pruzhany distr., 52.717°N 24.698°E, 16 August–19 November 2017, E. Makovetskaya, 2♂, 3♀; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♂.

18. *Drymeia hamata* (Fallen, 1823)

19. *Drymeia vicana* (Harris, 1780)

**Material:** Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♀; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, on horse pasture, 16–17 May 2019, N. Vikhrev, 2♀.

20. *Hydrotaea aenescens* (Wiedemann, 1830)

**Material:** Vitebsk reg.: Orsha env., 54.555°N 30.630°E, on dead roe deer, 10 June 2019, N. Vikhrev, 9♂, 1♀.

21. *Hydrotaea albipuncta* Zetterstedt, 1845 — **NEW**

**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 8♂; E. Makovetskaya, 4♂.

(Swarmed under apple tree near pasture at height 2 m)

22. *Hydrotaea armipes* Fallen, 1825 — **NEW**

**Material:** Gomel reg.: Mytva R., 51.853°N 29.224°E, 31 July 2019, E. Makovetskaya, 1♂; Mogilev reg.: Byalynichy env., 54.012°N 29.643°E, 29 May 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, on dead roe deer, 10 June 2019, N. Vikhrev, 1♂.

23. *Hydrotaea borussica* Stein, 1899 — **NEW**

**Material:** Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♂.

24. *Hydrotaea cyrtoneurina* (Zetterstedt, 1845)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 2♂; Minsk, Soltysa str., 53.896°N 27.657°E, 28 June 2017, E. Makovetskaya, 1♂; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 1♂.

25. *Hydrotaea dentipes* (Fabricius, 1805)

**Material:** Brest reg.: near Oranchitsy vill., 52.398°N 24.565°E, 16–29 July 2017, E. Makovetskaya, 3♂; Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, E. Makovetskaya, 1♂; Minsk reg.: Krupki distr., Somry env., 54.061°N 29.349°E, 28 May 2019, E. Makovetskaya, 3♂; Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 17♂; Mogilev reg.: Byalynichy distr., Kalinovka env., 53.890°N 29.703°E, 29 May 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Ezerische

env., 55.83°N 30.00°E, 16–17 May 2019, E. Makovetskaya, 1♂.

26. *Hydrotaea diabolus* (Harris, 1780)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, M. Yanbulat, 1♀; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 2♂, 1♀; E. Makovetskaya, 4♂.

27. *Hydrotaea floccosa* Macquart, 1835 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 2♂; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 1♂; E. Makovetskaya, 1♂.

28. *Hydrotaea ignava* (Harris, 1780)

**Material:** Brest reg.: Bereza distr., “Sporovskiy” Reserve, 52.384°N 25.185°E, 16–30 July 2017, E. Makovetskaya, 1♂; Lyakhovichy env., 53.029°N 26.257°E, 13 July 2019, E. Makovetskaya 1♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♀; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 1♂.

29. *Hydrotaea irritans* (Fallen, 1823)

**Material:** Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♂; Stowbcy env., 53.553°N 26.705°E, 16 July 2019, E. Makovetskaya, 7♂; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 2♂.

30. *Hydrotaea meridionalis* Portschinsky, 1882

31. *Hydrotaea meteorica* (Linnaeus, 1758)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 3♂; 11–14 June 2019, E. Makovetskaya, 3♂; 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 1♂.

32. *Hydrotaea militaris* Meigen, 1826 — **NEW**

**Material:** Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 3♂, 1♀; Krupki distr., Somry env., 54.061°N 29.349°E, 28 May 2019, E. Mako-

vetskaya, 2♀; Mogilev reg.: Byalynichy distr., Moshchanskoe env., 53.99°N 29.66°E, 29 May 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 1♂, 7♀.

33. *Hydrotaea palaestrica* Meigen, 1826 — **NEW**

**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, on carrion, 18 May 2019, N. Vikhrev, 4♂; E. Makovetskaya, 1♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 3♂; Mogilev reg.: Byalynichy env., 54.012°N 29.643°E, 29 May 2019, E. Makovetskaya, 3♂.

34. *Hydrotaea pandellei* Stein, 1899

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 1♂; Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♀; Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 3♂; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 9–10 June 2019, N. Vikhrev, 4♂, 1♀.

35. *Hydrotaea parva* Meade, 1889 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, on horse dung, 19–21 May 2019, N. Vikhrev, 1♂; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, on horse dung, 16–17 May 2019, N. Vikhrev, 1♂; Orsha env., horse dung, 54.58°N 30.45°E, 2 August 2019, N. Vikhrev, 2♀.

36. *Hydrotaea pellucens* Portschinsky, 1879

**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, on carrion, 18 May 2019, N. Vikhrev, 7♂; E. Makovetskaya, 1♂; Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 5♂, 2♀; E. Makovetskaya, 1♂; Minsk reg.: Krupki distr., Somry env., 54.061°N 29.349°E, 28 May 2019, E. Makovetskaya, 2♂; Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♂, 1♀. Mogilev reg.: Byalynichy distr., Kalinovka env., 53.890°N 29.703°E, 29 May 2019, E. Makovetskaya, 1♂; Klyova env., 53.990°N 29.416°E, 28 May 2019, E. Makovetskaya, 1♂; Moshchanskoe env., 53.99°N 29.66°E, 29 May 2019, E. Makovetskaya, 3♂, 1♀; Porokhovka env., 53.927°N 29.462°E, 29 May 2019, E. Makovetskaya, 1♂; Snytki env., 53.897°N 29.757°E, 29 May 2019,

A. Semionova, 1♂; Zaozerye env., 54.055°N 29.475°E, 29 May 2019, E. Makovetskaya, 2♂; Byalynichy env., 54.012°N 29.643°E, 29 May 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 9–10 June 2019, N. Vikhrev, 3♂, 2♀.

37. *Hydrotaea similis* Meade, 1887 — **NEW**

**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Berezinsky Biosphere Reserve, 54.704°N 28.294°E, 28–29 June 2018, E. Makovetskaya, 1♂.

38. *Hydrotaea unispinosa* Stein, 1898 — **NEW**

**Material:** Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 1♂, 1♀.

**Remarks.** The taxonomy of *Hydrotaea unispinosa* Stein, 1898 (= *H. silva* Hsue, 1976 = *H. gandakiana* Shinonaga, 1994) was discussed in (Vikhrev, Gomyranov 2014). The remarkably widespread distribution of this species was discussed in (Vikhrev, Sorokina 2017). *H. unispinosa* was known from 3 ecozones: Nearctic (type locality), Canada and USA from East to West between 40°N and 50°N; Oriental, foothills in the northern part of the ecozone, India, Nepal, Thailand and Vietnam; Palaearctic: Sweden; China, Liaoning region; Russia, Altai Rep. and Primorsky regions. Recently Vikhrev found that *H. unispinosa* is common in Primorsky region and Elena Erofeeva (ZMUM) collected 2 males in Europe, Moscow region (unpublished data). Thus, Belarus is the third European country from which species was reported. We collected it in a woody gully overgrown with thick herbs and with a small stream at gully bottom. According to our observations, *H. unispinosa* is attracted to the trampled grass and the human body.

39. *Hydrotaea velutina* Robineau-Desvoidy, 1830

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 1♂; Mogilev reg.: Byalynichy distr., Moshchanskoe env., 53.99°N 29.66°E, 29 May 2019, E. Makovetskaya, 1♂.

40. *Potamia littoralis* Robineau-Desvoidy, 1830



- Material:** Brest reg.: Baranovichy env., 53.123°N 26.051°E, 05 April 2019, E. Makovetskaya, 1♂, 1♀; Lyakhovichy env., 53.029°N 26.257°E, 13 July 2019, E. Makovetskaya, 15♂.
41. *Mesembrina meridiana* (Linnaeus, 1758)  
**Material:** Vitebsk reg.: Beshenkovichy distr., 55.035°N 29.336°E, 6 August–28 September 2017, E. Makovetskaya, 1♂; Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, E. Makovetskaya, 2♂, 2♀.
42. *Mesembrina mystacea* (Linnaeus, 1758)  
**Material:** Minsk reg.: Pukhovichy distr., Podberezhie env., 53.517°N 28.288°E, 5 August — 23 September 2017, E. Makovetskaya, 1♀; Vitebsk reg.: Berezinsky Biosphere reserve, 54.68°N 28.28°E, 25 August 2019, O. Prischepchik, 1♀; Dokshitsy distr., Zamostoch'e env., 54.653°N 27.9625°E, 6 August–29 September 2017, E. Makovetskaya, 1♀; Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, E. Makovetskaya, 1♀.
43. *Mesembrina resplendens* Wahlberg, 1844
44. *Polietes domitor* (Harris, 1780)  
**Material:** Vitebsk reg.: Ezerische, 55.82°N 29.98°E, horse dung, 3 August 2019, N. Vikhrev, 1♂; E. Makovetskaya, 3♂, 3♀.
45. *Polietes lardarius* (Fabricius, 1781)  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, on faeces, N. Vikhrev, 1♂, 1♀; E. Makovetskaya, 1♀; Minsk reg.: Nat. Park "Narochansky", 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♂; Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 12♂, 3♀; Mogilev reg.: Byalynichy distr., Moshchanskoe env., 53.99°N 29.66°E, 29 May 2019, E. Makovetskaya, 1♀; Byalynichy env., 54.012°N 29.643°E, 29 May 2019, E. Makovetskaya, 1♂.
46. *Musca autumnalis* De Geer, 1776
47. *Musca domestica* Linnaeus, 1758
48. *Musca larvipara* Portschiński, 1910
49. *Musca tempestiva* Fallen, 1817  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 2♂.
50. *Morellia aenescens* Robineau-Desvoidy, 1830 — NEW  
**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 2♂, 1♀; E. Makovetskaya, 2♂, 4♀.
51. *Morellia hortorum* (Fallen, 1817)  
**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, on carrion, 18 May 2019, N. Vikhrev, 1♂; E. Makovetskaya, 1♂; Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 1♀; Ptich R., 52.220°N 28.785°E, 20 May 2019, E. Makovetskaya, 1♀; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, E. Makovetskaya, 1♀.
52. *Morellia simplex* (Loew, 1857)  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♀; 11–14 June 2019, E. Makovetskaya, 1♀.
53. *Neomyia cornicina* (Fabricius, 1781)  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 4♂; Mogilev reg.: Byalynichy distr., Klyova env., 53.990°N 29.416°E, 28 May 2019, E. Makovetskaya, 1♂; Byalynichy env., 53.9845°N 29.7105°E, 29 May 2019, E. Makovetskaya, 1♀.
54. *Neomyia viridescens* (Robineau-Desvoidy, 1830)  
**Material:** Gomel reg.: Mytva R., 51.853°N 29.224°E, 31 July 2019, E. Makovetskaya, 1♀; Mogilev reg.: Byalynichy env., 53.9845°N 29.7105°E, 29 May 2019, E. Makovetskaya, 2♀; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, E. Makovetskaya, 4♀.
55. *Pyrellia rapax* (Harris, 1780)  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 2♀; Vitebsk reg.: Orsha env., horse dung, 54.58°N 30.45°E, 2 August 2019, N. Vikhrev, 1♂.
56. *Pyrellia vivida* Robineau-Desvoidy, 1830  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, on horse dung, 19–21 May 2019, N. Vikhrev, 1♂; E. Makovetskaya, 2♀; Mytva R., 51.853°N 29.224°E, 31 July 2019, E. Makovetskaya, 2♂, 1♀.
57. *Eudasyphora cyanicolor* (Zetterstedt, 1845)  
**Material:** Brest reg.: David-Gorodok env., 52.115°N 27.272°E, 20–21 August 2019, O. Prischepchik, 1♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 9♀, 1♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♂; Mogilev reg.: Byalynichy distr., Moshchanskoe env., 53.99°N 29.66°E, 29 May

2019, E. Makovetskaya, 1♀; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, E. Makovetskaya, 3♀.

58. *Stomoxys calcitrans* (Linnaeus, 1758)

59. *Haematobosca stimulans* (Meigen, 1824)

**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, on horse dung, 16–17 May 2019, N. Vikhrev, 2♀; E. Makovetskaya, 1♀.

#### Subfamily Phaoniinae

60. *Lophosceles cinereiventris* Zetterstedt, 1845 — NEW

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, on horse dung, 19–21 May 2019, N. Vikhrev, 1♂.

61. *Phaonia amabilis* Meigen, 1826 — NEW

**Material:** Minsk reg.: Krupki distr., Somry env., 54.061°N 29.349°E, 28 May 2019, A. Semionova, 1♀.

Other material examined: RUSSIA, Moscow reg., Rusa env., 55.66°N 36.05°E, E. Erofeeva, 11–20 May 2018, 1♀; 21–30 June 2019, 1♀.

**Remarks.** This female is characterized by the following: entirely dark body; yellow femora and tibiae; prealar seta long, *prst ac* absent, *dc* 2+3; arista plumose. Thus, according to the key given in Gregor et al. (2003), the choice is between 4 species: *P. amabilis* Meigen, 1826 (= *P. rufiseta* Zetterstedt, 1860 sensu Hennig (1963) and d'Assis-Fonseca (1968)); *P. mystica* Meigen, 1826 (= *P. vittifera* Zetterstedt, 1846 sensu Hennig (1963) and d'Assis-Fonseca (1968)); *P. profugax* Pandelle, 1899, and *P. villana* Robineau-Desvoidy, 1830 (= *P. mystica* Meigen, 1826 sensu Hennig (1963) and d'Assis-Fonseca (1968)). Our female from Minsk region has subshining grey mesonotum with black unpaired median vitta visible in posterior or postero-lateral view (Fig. 3). Such mesonotal pattern is unusual in *Phaonia* (typically 1 or 2 pairs of vittae are present), it fits the understanding of *P. amabilis* by previous authors (Hennig 1963; d'Assis-Fonseca 1968 and Gregor et al. 2003 in other wording). Also, the postpedicel of the Belarusian female is distinctly yellowish at base (Fig. 5). On the other hand, our specimen has 2 hairs near posterior notopleural seta, which contradicts the understanding of *P. amabilis* by

Hennig (1963); d'Assis-Fonseca (1968) and Gregor et al. (2003). We compared 2 females from Moscow region listed above and the female from Minsk region, they surely belong to the same species: apart from mesonotal pattern and yellowish base of postpedicel, they share translucent yellowish and widened palpi (less widened than in female of *P. palpata* Stein, 1897 but quite distinct). However, females from Moscow have notopleuron entirely bare, so we came to the conclusion that the presence of 1–2 or 0 hairs on notopleuron is a variable character and consequently identified the Belarusian female as *P. amabilis*.

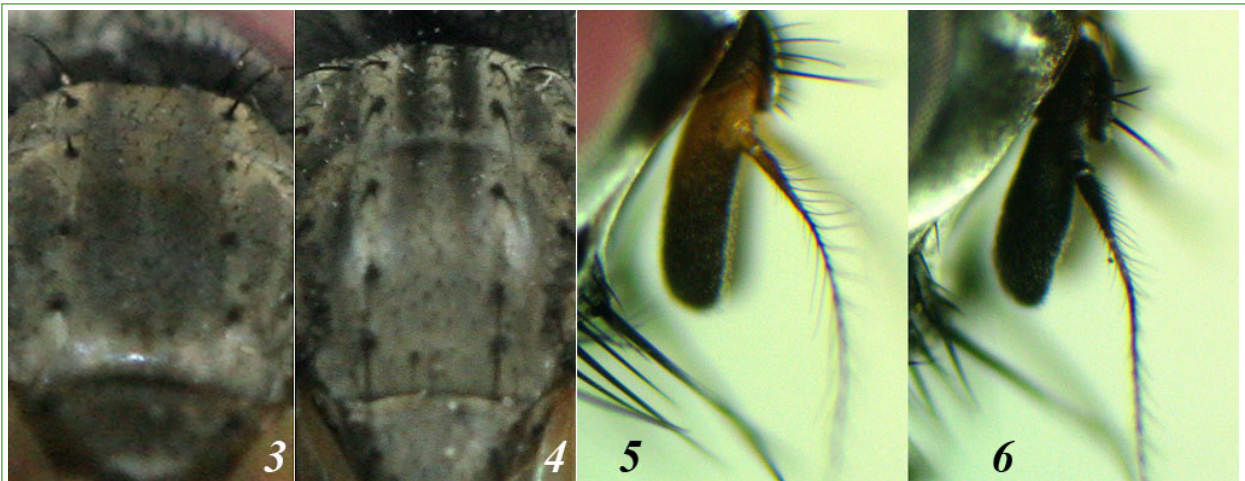
We collected 2 more females from Mozyr, which belong to the same group of 4 species. In the identification key from Gregor et al. (2003) they run to *P. mystica*, because they have notopleuron bare except for 2 strong setae. However, these females have aristal hairs barely longer than the width of postpedicel and rather short postpedicel, so these characters disagree with *P. mystica* but fit Hennig's (1963, 859) description given for 1st generation of *P. profugax*. Again, we supposed that singular hairs on notopleuron are variable and identified these females as *P. profugax*.

The studied females differ from each other as follows:

- Mesonotum subshining grey with black unpaired median vitta visible in posterior or postero-lateral views. Bases of postpedicel and arista yellow. Postpedicel longer, 3–4x as long as wide. Aristal hairs 1.5x as long as width of postpedicel. Palpi widened (less so than in female of *P. palpata* Stein, 1897 but quite distinctly); palpi translucent yellowish under grey dusting  
..... ♀ *amabilis* Meigen
- Mesonotum densely brownish-grey dusted, without any shining, with 2 pairs of black vittae. Postpedicel and arista entirely black. Postpedicel shorter, 2.5–3x as long as wide. Aristal hairs as long or shorter than width of postpedicel. Palpi black, not widened  
..... ♀ *profugax* Pandelle

We would like to emphasize that the remarks above are not intended to solve taxonomic problems in the genus *Phaonia*, since





**Figs. 3–6.** 3–4: mesonotum in posterior view: 3 — *P. amabilis*, ♀; 4 — *P. profugax*, ♀; 5–6: antenna and arista: 5 — *P. amabilis*, ♀; 6 — *P. profugax*, ♀

**Рис. 3–6.** 3–4: среднеспинка сзади: 3 — *P. amabilis*, ♀; 4 — *P. profugax*, ♀; 5–6: антенна и ариста: 5 — *P. amabilis*, ♀; 6 — *P. profugax* ♀

we are not yet able to offer a satisfactory solution. Our goal is to make it clear for our colleagues which flies we have included in the Belarusian list under the names *P. amabilis* and *P. profugax*.

62. *Phaonia angelicae* (Scopoli, 1763)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 1♂, 2♀; Mytva R., 51.853°N 29.224°E 31.7.2019, E. Makovetskaya, 1♀.

63. *Phaonia angulicornis* (Zetterstedt, 1838)

**Material:** Minsk reg.: Krupki distr., Somry env., 54.061°N 29.349°E, 28 May 2019, A. Semionova, 1♀.

64. *Phaonia cincta* Zetterstedt, 1846 — NEW

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♀.

65. *Phaonia consobrina* (Zetterstedt, 1838)

66. *Phaonia canescens* Stein, 1916 — NEW

**Material:** Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 2♂.

67. *Phaonia errans* (Meigen, 1826)

**Material:** Mogilev reg.: Kuchyn env., 53.7075°N 29.9225°E, 6 August–24 September 2017, E. Makovetskaya, 1♀; Vitebsk reg.: Berezinsky Biosphere Reserve, 54.772°N 28.303°E, 28–29 June 2018, E. Makovetskaya, 1♀; Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 7♂.

68. *Phaonia falleni* Michelsen, 1977

69. *Phaonia fuscata* (Fallen, 1825)

**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, N. Vikhrev, 1♀; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 1♂; E. Makovetskaya, 1♂.

70. *Phaonia incana* (Wiedemann, 1817)

**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 2♀; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 1♂.

71. *Phaonia kowarzii* Schnabl, 1887

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂.

72. *Phaonia laeta* (Fallen, 1823)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 28 July 2019, N. Vikhrev, 1♀.

73. *Phaonia latipalpis* Schnabl, 1911

74. *Phaonia magnicornis* Zetterstedt, 1845 — NEW

**Material:** Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 1♀; 28 July 2019, N. Vikhrev, 2♀.

75. *Phaonia meigeni* Pont, 1986

**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 2♂, 1♀.

76. *Phaonia profugax* Pandelle, 1899 — NEW

**Material:** Gomel reg.: Mozyr env., 52.04°N

29.32°E, 19–21 May 2019, N. Vikhrev, 2♀.

**Remarks.** See comments to *Phaonia amabilis*.

77. *Phaonia nymphaearum* Robineau-Desvoidy, 1830 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, M. Yanbulat, 1♀.

78. *Phaonia pallida* (Fabricius, 1787)

**Material:** Brest reg.: Nat. Park “Belovezhskaya Pushcha”, 52.587°N 23.876°E, 17 August — 6 October 2018, E. Makovetskaya, 1♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 4♂; Mogilev reg.: Kuchyn env., 53.7075°N 29.9225°E, 6 August — 24 September 2017, E. Makovetskaya, 4♀; Vitebsk reg.: Chashniki distr., Bolshaya Vedren’ env., 54.9055°N 29.305°E, 6 August — 28 September 2017, E. Makovetskaya, 3♂; Orsha env., 28 July 2019, N. Vikhrev, 1♀.

79. *Phaonia perdita* (Meigen, 1830)

80. *Phaonia pratensis* (Robineau-Desvoidy, 1830)

81. *Phaonia rufiventris* (Scopoli, 1763)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♀; Mogilev reg.: Byalynichy distr., Kulakovka env., 53.951°N 29.207°E, 29 May 2019, E. Makovetskaya, 3♀; Moshchanskoe env., 53.99°N 29.66°E, 29 May 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Ezerische, 55.82°N 29.98°E, 3 August 2019, N. Vikhrev, 1♀.

82. *Phaonia serva* (Meigen, 1826)

**Material:** Minsk reg.: Krupki distr., Somry env., 54.061°N 29.349°E, 28 May 2019, E. Makovetskaya, 2♂; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 2♂, 4♀.

83. *Phaonia siebecki* Schnabl, 1911

84. *Phaonia subventa* (Harris, 1780)

**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, on carrion, 18 May 2019, N. Vikhrev, 1♂, 1♀; Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, on faeces, N. Vikhrev, 3♂, 1♀; E. Makovetskaya, 1♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 2♀; Mogilev reg.: Byalynichy distr., Kulakovka env., 53.951°N 29.207°E, 29 May 2019, E. Makovetskaya, 1♂; Moshchanskoe env., 53.99°N

29.66°E, 29 May 2019, E. Makovetskaya, 1♀; Kuchyn env., 53.7075°N 29.9225°E, 6 August — 24 September 2017, E. Makovetskaya, 1♀.

85. *Phaonia tiefii* Schnabl, 1888 — **NEW**

**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, N. Vikhrev, 1♂; Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 1♂; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 6♂.

86. *Phaonia tuguriorum* (Scopoli, 1763)

**Material:** Brest reg.: Lyakhovichy env., 52.975°N 26.32°E, 24 August 2019, E. Makovetskaya, 1♂; Minsk, Schetovka str., 53.859°N 27.624°E, 8 February 2020, E. Dyakova, 1♀.

87. *Phaonia valida* (Harris, 1780)

**Material:** Brest reg.: Pruzhany distr., 52.717°N 24.698°E, 16 August — 19 November 2017, E. Makovetskaya, 2♀; Gomel reg.: Mytva R., 51.853°N 29.224°E, on large broken willow, 31.7.2019, N. Vikhrev, 2♂, 1♀; E. Makovetskaya, 3♂, 1♀; Vitebsk reg.: Berezinsky Biosphere Reserve, 54.772°N 28.303°E, 28 — 29 June 2018, E. Makovetskaya, 1♀; Chashniki distr., Bolshaya Vedren’ env., 54.9055°N 29.305°E, 6 August–28 September 2017, E. Makovetskaya, 2♀.

88. *Helina allotalla* (Meigen, 1830)

89. *Helina annosa* (Zetterstedt, 1838)

**Material:** Mogilev reg.: Kuchyn env., 53.7075°N 29.9225°E, 6 August–24 September 2017, E. Makovetskaya, 2♂; Vitebsk reg.: Glubokoe distr., Serech L., 55.043°N 27.5625°E, 24 September 2019, A. Semeniak, 1♂.

90. *Helina ciliatocosta* (Zetterstedt, 1845)

91. *Helina cilipes* (Schnabl, 1902)

92. *Helina confinis* Fallen, 1825 — **NEW**

**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 10♂, 1♀.

93. *Helina cothurnata* Rondani, 1866 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, M. Yanbulat, 1♂.

94. *Helina deleta* Stein, 1914 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂, 1♀.

95. *Helina depuncta* (Fallen, 1825)

**Material:** Vitebsk reg.: Ezerische, 55.82°N



29.98°E, 3 August 2019, N. Vikhrev, 1♀; Orsha env., 54.555°N 30.630°E, 28 July 2019, N. Vikhrev, 1♂.

96. *Helina evecta* Harris, 1780

**Material:** Brest reg.: Lyakhovichy env., 53.0295°E 26.2575°E, 18 November 2017, E. Makovetskaya, 1♀.

97. *Helina impuncta* (Fallen, 1825)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂.

98. *Helina latitarsis* Ringdahl, 1924

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 1♂.

99. *Helina obscurata* (Meigen, 1826)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 1♂.

100. *Helina obscuratoides* (Schnabl, 1887)

**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, M. Yanbulat, 1♂.

101. *Helina parcepilosa* (Stein, 1907) — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 29–31 July 2019, E. Makovetskaya, 1♂.

102. *Helina protuberans* (Zetterstedt, 1845)

103. *Helina quadrum* (Fabricius, 1805)

104. *Helina reversio* (Harris, 1780)

**Material:** Gomel reg.: Mytva R., 51.853°N 29.224°E, 31 July 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, E. Makovetskaya, 4♂.

105. *Helina sexmaculata* (Preyssl, 1791)

**Material:** Minsk reg.: Minsk, Osipenko str., 53.926°N 27.5575°E, 03 May 2020, E. Makovetskaya, 1♂.

106. *Helina subvittata* (Seguy, 1923)

#### Subfamily Mydaeinae

107. *Mydaea affinis* Meade, 1891 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 29–31 July 2019, N. Vikhrev, 1♀.

108. *Mydaea ancilla* (Meigen, 1826) — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 1♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♂.

**Remarks.** Our specimens run to *M. ancilla* in the keys offered by Hennig (1956) and d'Assis-Fonseca (1968). Gregor et al. (2003)

use a character newly offered for *M. ancilla* — mediotergite (metanotum) glossy black. In male from Mozyr mediotergite is dusted, so this species is listed here as *M. ancilla* sensu Hennig (1956) and d'Assis-Fonseca (1968).

109. *Mydaea corni* (Scopoli, 1763)

110. *Mydaea electa* Zetterstedt, 1860 — **NEW**

**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 1♂, 1♀; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 29–31 July 2019, E. Makovetskaya, 1♀.

111. *Mydaea humeralis* Robineau-Desvoidy, 1830

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 2♂.

112. *Mydaea nebulosa* Stein, 1893 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 1♂; 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, E. Makovetskaya, 3♀; Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♂, 1♀.

113. *Mydaea setifemur* Ringdahl, 1924 — **NEW**

**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 3 August 2019, N. Vikhrev, 1♂.

114. *Mydaea urbana* (Meigen, 1826)

**Material:** Brest reg.: Lyakhovichy env., 52.975°N 26.32°E, 24 August 2019, E. Makovetskaya, 1♀; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂; 11–14 June 2019, E. Makovetskaya, 6♀; 29–31 July 2019, N. Vikhrev, 3♀; Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♂, 4♀; Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♀; Mogilev reg.: Bialynichy distr., Zaozerye env., 54.055°N 29.475°E, 29 May 2019, E. Makovetskaya, 1♂; Bialynichy env., 54.012°N 29.643°E, 29 May 2019, E. Makovetskaya, 1♀; Vitebsk reg.: Orsha env., 54.555°N 30.630°E, 10 June 2019, N. Vikhrev, 1♂, 3♀.

115. *Myospila bimaculata* (Macquart, 1834) — **NEW**

**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, E. Makovetskaya, 1♀.



116. *Myospila mediatubunda* (Fabricius, 1781)  
**Material:** Gomel reg.: Mytva R., 51.853°N 29.224°E, 31 July 2019, E. Makovetskaya, 1♀; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♂, 1♀; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, E. Makovetskaya, 1♂, 1♀.
117. *Hebecnema nigra* Robineau-Desvoidy, 1830 — **NEW**  
**Material:** Brest reg.: David-Gorodok env., 52.115°N 27.272°E, 15 September 2019, O. Prischepchik, 1♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 3♂.
118. *Hebecnema umbratica* (Meigen, 1826)  
**Material:** Brest reg.: Lyakhovichy env., 52.975°N 26.32°E, 24 August 2019, E. Makovetskaya, 1♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 2♂; Mogilev reg.: Byalynichy distr., Klyova env., 53.990°N 29.416°E, 28 May 2019, E. Makovetskaya, 1♂; Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, on horse dung, 16–17 May 2019, N. Vikhrev, 1♂, 2♀; E. Makovetskaya, 5♂.
119. *Hebecnema vespertina* (Fallen, 1823)  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 1♂.
120. *Gymnodia humilis* Zetterstedt, 1860 — **NEW**  
**Material:** Gomel reg.: El'sk, 51.82°N 29.11°E, horse dung, 31 July 2019, N. Vikhrev, 1♀; Vitebsk reg.: Ezerische, 55.82°N 29.98°E, horse dung, 3 August 2019, N. Vikhrev, 3♀.
121. *Graphomya maculata* (Scopoli, 1763)  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 1♀; Mozyr's sewage fields, 51.946°N 29.349°E, 30 July 2019, E. Makovetskaya, 1♂; Mogilev reg.: Byalynichy env., 54.012°N 29.643°E, 29 May 2019, E. Makovetskaya, 3♀.
- Subfamily Coenosiniinae**
122. *Spilogona dispar* (Fallen, 1823)
123. *Spilogona surda* Zetterstedt, 1845 — **NEW**  
**Material:** Gomel reg.: Mytva R., 51.853°N 29.224°E, 31.7.2019, N. Vikhrev, 3♂.
124. *Limnophora pollinifrons* Stein, 1916 — **NEW**  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 4♂, 2♀; E. Makovetskaya, 4♂, 1♀.
125. *Limnophora tigrina* Am Stein, 1860 — **NEW**  
**Material:** Brest reg.: David-Gorodok env., 52.115°N 27.272°E, 2 August 2019, O. Prischepchik, 5♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂, 1♀; E. Makovetskaya, 5♂, 2♀; Mozyr's sewage fields, 51.946°N 29.349°E, 30 July 2019, E. Makovetskaya, 1♂; Ptich R., 52.220°N 28.785°E, 20 May 2019, E. Makovetskaya, 3♂, 1♀; Minsk reg.: Nat. Park "Narochansky", 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 3♀.
126. *Limnophora triangula* Fallen, 1825 — **NEW**  
**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 1♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♂; Ptich R., 52.220°N 28.785°E, 20 May 2019, E. Makovetskaya, 1♂, 1♀; Mytva R., 51.853°N 29.224°E, 31 July 2019, E. Makovetskaya, 1♂; Minsk reg.: Nat. Park "Narochansky", 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♂, 1♀; Vitebsk reg.: Orsha env., 28 July 2019, N. Vikhrev, 2♂.
127. *Lispe consanguinea* Loew, 1858  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 12♂, 7♀; 29–31 July 2019, E. Makovetskaya, 7♂, 7♀; 29–30 July 2019, E. Makovetskaya, 2♀; Minsk reg.: Nat. Park "Narochansky", 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♀; Vitebsk reg.: Braslaw env. (Nat. Park "Braslavskie Oзера"), 55.635°N 27.033°E, 3 August 2019, E. Makovetskaya, 1♀.
128. *Lispe longicollis* Meigen, 1826  
**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 29–31 July 2019, E. Makovetskaya, 2♂; Mozyr's sewage fields, 51.946°N 29.349°E, 30 July 2019, E. Makovetskaya, 3♂, 2♀.
129. *Lispe melaleuca* Loew, 1847  
**Material:** Brest reg.: David-Gorodok env., 52.115°N 27.272°E, 18 July 2019, O. Prischepchik,

chik, 3♂; 2 August 2019, O. Prischepchik, 6♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 29–31 July 2019, M. Yanbulat, 1♀; Mozyr's sewage fields, 51.946°N 29.349°E, 30 July 2019, E. Makovetskaya, 1♂.

130. *Lispe nana* Macquart, 1835

**Material:** Brest reg.: David-Gorodok env., 52.115°N 27.272°E, 18 July 2019, O. Prischepchik, 2♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 1♀.

131. *Lispe parcespinosa bohemica* Becker, 1904 = *L. frigida* sensu Gregor et al. 2002 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, E. Makovetskaya, 1♀.

**Remarks.** All ZMUM specimens of this rare European *Lispe* were collected on floodplains of large (Oka and Sura) rivers on dry sand in 5–10 m from shore line (Vikhrev 2015). We hoped to find it on the Pripyat River (Fig. 7) and had actually found it there. Taking this opportunity, we would like to suggest what the localities where *L. p. bohemica* was collected have in common. In all cases, there are no dams and reservoirs upstream, and spring floods are not regulated and not weakened.

132. *Lispe pygmaea* Fallen, 1825

**Material:** Brest reg.: David-Gorodok env., 52.115°N 27.272°E, 18 July 2019, O. Prischep-

chik, 11♂; 2 August 2019, O. Prischepchik, 6♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 5♂, 2♀; 11–14 June 2019, E. Makovetskaya, 2♀; 29–31 July 2019, E. Makovetskaya, 5♂, 3♀; Mozyr's sewage fields, 51.946°N 29.349°E, 30 July 2019, E. Makovetskaya, 2♂, 1♀; Vitebsk reg.: Orsha env., 54.58°N 30.45°E, 2 August 2019, N. Vikhrev, 1♂, 1♀.

133. *Lispe superciliosa* Loew, 1861

**Material:** Gomel reg.: Mozyr's sewage fields, 51.946°N 29.349°E, 30 July 2019, N. Vikhrev, 6♂, 4♀; E. Makovetskaya, 3♂.

134. *Lispe tentaculata* (De Geer, 1776)

**Material:** Brest reg.: Lyakhovichy env., 53.024°N 26.242°E, 13 July 2019, E. Makovetskaya, 1♂, 1♀; Gomel reg.: Mozyr's sewage fields, 51.946°N 29.349°E, 30 July 2019, E. Makovetskaya, 5♂, 9♀; Minsk reg.: Nat. Park "Narochansky", 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 2♂, 1♀.

135. *Lispe uliginosa* Fallen, 1825

136. *Lispocephala alma* Meigen, 1826 — **NEW**

**Material:** Vitebsk reg.: Ezerische env., 55.83°N 30.00°E, 16–17 May 2019, N. Vikhrev, 1♀.

137. *Lispocephala erythrocerata* Robineau-Desvoidy, 1830 — **NEW**

**Material:** Brest reg.: David-Gorodok env.,



Fig. 7. Pripyat River near Mozyr (photo: tata3581, Saint Petersburg)

Рис. 7. Река Припять в окрестностях Мозыря (фото: tata3581, Санкт-Петербург)



52.115°N 27.272°E, 20–21 August 2019, O. Prischepchik, 1♂; 15 September 2019, O. Prischepchik, 2♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 2♂, 2♀; 29–31 July 2019, N. Vikhrev, 1♂; Ptich R., 52.220°N 28.785°E, 20 May 2019, N. Vikhrev, 1♂.

138. *Schoenomyza litorella* (Fallen, 1823)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂; E. Makovetskaya, 1♂.

139. *Coenosia agromyzina* (Fallen, 1825)

**Material:** Gomel reg.: 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, N. Vikhrev, 1♂; E. Makovetskaya, 1♂.

140. *Coenosia albicornis* Meigen, 1826

141. *Coenosia bilineella* (Zetterstedt, 1838)

142. *Coenosia campestris* (Robineau-Desvoidy, 1830)

143. *Coenosia femoralis* (Robineau-Desvoidy, 1830)

144. *Coenosia intermedia* (Fallen, 1825)

145. *Coenosia nigridigita* Rondani, 1866 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂.

146. *Coenosia mollicula* (Fallen, 1825)

**Material:** Minsk reg.: Nat. Park “Narochansky”, 54.963°N 26.366°E, 20 July 2019, E. Makovetskaya, 1♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, N. Vikhrev, 1♂.

147. *Coenosia pedella* (Fallen, 1825)

**Material:** Gomel reg.: Ptich R., 52.220°N 28.785°E, 20 May 2019, N. Vikhrev, 1♂.

148. *Coenosia pudorosa* Collin, 1953

149. *Coenosia pulicaria* (Zetterstedt, 1845)

150. *Coenosia pumila* (Fallen, 1825)

**Material:** Brest reg.: David-Gorodok env., 52.115°N 27.272°E, 15 September 2019,

O. Prischepchik, 4♂; Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♂; 52.05°N 29.31°E, 11–14 June 2019, N. Vikhrev, 4♂, 2♀; E. Makovetskaya, 8♂; Novaya Rudnya env., 51.66°N 29.10°E, 30 July 2019, E. Makovetskaya, 1♂.

151. *Coenosia rufipalpis* Meigen, 1826 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 11–14 June 2019, N. Vikhrev, 1♂; 35 km E of Mozyr, 52.173°N 29.790°E, 18 May 2019, E. Makovetskaya, 1♂; Minsk reg.: Krupki distr., Somry env., 54.061°N 29.349°E, 28 May 2019, E. Makovetskaya, 1♂.

152. *Coenosia strigipes* Stein, 1916 — **NEW**

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 29–31 July 2019, M. Yanbulat, 1♀.

153. *Coenosia testacea* (Robineau-Desvoidy, 1830)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♂; Minsk reg.: Stowbcy env., 53.553°N 26.705°E, 16 June 2019, E. Makovetskaya, 1♂.

154. *Coenosia tigrina* (Fabricius, 1775)

**Material:** Gomel reg.: Mozyr env., 52.04°N 29.32°E, 19–21 May 2019, E. Makovetskaya, 1♂, 1♀.

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