

PRELIMINARY SURVEY OF THE GROUND-DWELLING ARTHROPODS OF THE FLOOD-PLAIN MEADOWS IN THE SOUTHEAST OF POLTAVA REGION (UKRAINE)

N. Zhuravel, N. Polchaninova, I. Lezhenina, O. Drovalenko, A. Putchkov

V.N. Karazin Kharkiv National University

Email: scentris@ukr.net, polchaninova@mail.ru, muha57@mail.ru, triplaxxx@ukr.net, cicindelini@yandex.ru

A total number of 35 spider species and more than 170 insect species from five orders were recorded from the southeast of Poltava Region through the pitfall-trapping in the floodplain meadows. Six spider species, eight true bug species, and five beetle species are new for Poltava Region; one spider species (*Pardosa maisa*) and one fly species (*Aphanotrigonum brachypterum*) are new for Ukraine. For *A. brachypterum*, it is the first record from the East European Plain. Spider assemblages were the most abundant in the terms of species and individuals in a saline meadow while the beetles preferred mesic non-saline meadows. A checklist of collected species is given, and the geographic distribution of the rare species is discussed.

Key words: Aranei, Insecta, species composition, floodplain meadows, Poltava Region

Citation:

N. Zhuravel, N. Polchaninova, I. Lezhenina, O. Drovalenko, A. Putchkov (2016). Preliminary survey of the ground-dwelling arthropods of the flood-plain meadows in the southeast of Poltava region (Ukraine).

Biological Bulletin of Bogdan Chmelnytskyi Melitopol State Pedagogical University, 6 (3), 5–17.

Поступило в редакцію / Submitted: 12.08.2016

Принято к публикации / Accepted: 21.09.2016

crossref <http://dx.doi.org/10.15421/201664>

© Zhuravel, Polchaninova, Lezhenina, Drovalenko, Putchkov, 2016

Users are permitted to copy, use, distribute, transmit, and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship.



This work is licensed under a Creative Commons Attribution 3.0. License

INTRODUCTION

The arthropod fauna of Poltava Region has been quite poorly studied. By the beginning of 2013, a regional checklist of spiders had included 183 species (Polchaninova & Prokopenko, 2013); in 2014, it was enlarged to 197 species (Singaevsky, 2014). For comparison, the araneofauna of the neighbouring Kharkiv Region includes 406 species (Polchaninova & Slutsky, 2013). There are no checklists of beetles, true bugs or dipterans of Poltava Region, and the information about their fauna is scattered in various papers. In particular, the data about the true bugs of the Region is in the common list of Hemiptera in Ukraine (Putshkov V. & Putshkov P., 1996), while the data on beetles are in a number of publications (Angelini & Perkovsky, 1998; Bartenev, 2009; Putchkov, 2008; Trikhleb, 2003; Zhantiev, 1976). Among the dipterans of Poltava region, the species of medical and/or parasitic importance have been studied best of all (Lebedeva & Kovban, 1971; Gritsai, 1973).

The aim of this work is to supplement the lists of spiders and insects of Poltava Region, identify rare species and specify their geographic distribution.

MATERIALS AND METHODS

The material was collected in the vicinity of Nekhvotoshcha Vil. (49°09'N 34°43'E) and Svitlivshchyna Vil. (49°12'N 34°33'E) in Novi Sanzhary District of Poltava Region. A mesic saline meadow (further in the list – saline mead.), mesic non-saline meadow (mesic mead.), and wet non-saline meadow in the relief depression near the former riverbed (wet mead.) were investigated. The arthropods were collected through pitfall-trapping with the help of 250 ml plastic caps. In each studied meadow, the traps were established in one line, eight caps at a distance of 10 m from each other. A 4% solution of formalin was applied as a preserving liquid. The exposition was for 37 days in the spring-summer period (7 May – 13 June 2014) and 36 days in the summer-autumn period (4 August – 9 September 2014). The traps were emptied approximately once a fortnight. A total number of 625 spiders, 39 orthopterans, 51 true bugs, 4174 beetles, more than 2000 hymenopterans, and 120 dipterans were collected.

In the annotated checklist, each species is provided with a number of specimens, date, habitat, and a collecting locality. New species for Poltava Region are marked with an exclamation point (!), the new ones

for Ukraine with two exclamation points (!!). All the collected spiders and insects have been given in the list despite the fact that some of them are not typical ground-dwellers and have fallen in the traps occasionally (marked with an asterisk *). The material was identified by the following authors: Aranei – N. Polchaninova, Hemiptera, Coleoptera (except Carabidae), and Hymenoptera (Mutillidae) – A. Drogvalenko, Carabidae – A. Putchkov, Diptera – I. Lezhenina. The spiders are deposited in N. Polchaninova's private collection; the insects are in the Museum of Nature of the V.N. Karazin Kharkiv National University (curator A.N. Drogvalenko).

ANNOTATED CHECKLIST

Order ARANEI

Family Tetragnathidae

1. *Pachygnatha degeeri* Sundevall, 1830: 3 specimens, 7–28.05.2014, saline mead.; 1 specimens, 7–28.05.2014, mesic mead., Nekhvoroshcha; 1 specimens, 28.05–13.06.2014, mesic mead.; 3 specimens, 28.05–13.06.2014, wet mead., Svitlivshchyna.
2. *Pachygnatha listeri* Sundevall, 1830: 14 specimens, 7–28. 05.2014, saline mead., Nekhvoroshcha; 5 specimens, 7–28.05.2014, wet mead., Svitlivshchyna.

Family Lycosidae

3. *Alopecosa aculeata* (Clerck, 1757): 6 specimens, 7–28.05.2014, saline mead.; 2 specimens, 7–28.05.2014, mesic mead., Nekhvoroshcha; 6 specimens, 7–28.05.2014, mesic mead., Svitlivshchyna.
4. *Alopecosa kovblyuki* Nadolny & Ponomarev, 2012: 3 specimens, 7–28.05.2014; 1 specimen, 28.05–13.06.2014, saline mead., Nekhvoroshcha.
5. *Alopecosa pulverulenta* (Clerck, 1757): 7 specimens, 7–28. 05.2014, saline mead.; 1 specimen, 28.05–13.06, same habitat; 8 specimens, 7–28.05.2014, mesic mead., Nekhvoroshcha; 9 specimens, 7–28.05.2014, mesic mead.; 7 specimens, 28.05–13.06.2014, same habitat; 2 specimens, 7–28.05.2014, wet mead., Svitlivshchyna.
6. *Arctosa leopardus* (Sundevall, 1833): 3 specimens, 7–28. 05.2014, saline mead., Nekhvoroshcha; 1 specimen, 7–28.05.2014, wet mead.; 3 specimens, 28.05–13.06.2014, same habitat, Svitlivshchyna.
7. *Pardosa agrestis* (Westring, 1861): 58 specimens, 7–28. 05.2014, saline mead.; 7 specimens, 7–28.05.2014, mesic mead., Nekhvoroshcha.
8. *!!Pardosa maisa* Hippa & Mannila, 1982: 3 specimens, 7–28.05.2014, wet mead., Svitlivshchyna.
9. *Pardosa palustris* (Linnaeus, 1758): 2 specimens, 7–28.05.2014, saline mead.; 9 specimens, 7–28.05.2014, mesic mead., Nekhvoroshcha.
10. *Pardosa prativaga* (L. Koch, 1870): 12 specimens, 7–28.05.2014, saline mead.; 1 specimen, 28.05–13.06, same habitat; 5 specimens, 7–28.05.2014, mesic mead., Nekhvoroshcha; 3 specimens, 7–28.05.2014, mesic mead.; 2 specimens, 28.05–13.06, same habitat; 26 specimens, 7–28.05.2014, wet mead.; 53 specimens, 28.05–13.06, same habitat, Svitlivshchyna.
11. *Pirata piraticus* (Clerck, 1757): 3 specimens, 7–28.05.2014, wet mead.; 1 specimen, 28.05–13.06, same habitat, Svitlivshchyna.
12. *Trochosa ruficollis* (De Geer, 1778): 43 specimens, 7–28. 05.2014, saline mead.; 5 specimens, 28.05–13.06, same habitat; 2 specimens, 7–28.05.2014, mesic mead., Nekhvoroshcha; 7 specimens, 7–28.05.2014, mesic mead.; 3 specimens, 28.05–13.06, same habitat; 4 specimens, 7–28.05.2014, wet mead.; 12 specimens, 28.05–13.06, same habitat, Svitlivshchyna.
13. *Xerolycosa miniata* (C.L. Koch, 1834): 55 specimens, 7–28. 05.2014, saline mead.; 25 specimens, 28.05–13.06, same habitat, Nekhvoroshcha; 4 specimens, 7–28.05.2014, mesic mead.; 7 specimens, 28.05–13.06, same habitat, Svitlivshchyna.

Family Pisauridae

14. *Pisaura mirabilis* (Clerck, 1757): 1 specimen, 7–28. 05.2014, saline mead., Nekhvoroshcha

Family Miturgidae

15. *Zora armillata* Simon, 1878: 1 specimen, 7–28. 05.2014, mesic mead., Svitlivshchyna.

Family Hahniidae

16. *!Antistea elegans* (Blackwall, 1841): 1 specimen (det. E. Prokopenko, Donetsk), 28.05–13.06, wet mead., Svitlivshchyna.

Family Eutrichuridae

17. *Cheiracanthium virescens* (Sundevall, 1832): 2 specimens, 7–28. 05.2014, saline mead., Nekhvoroshcha.

Family Gnaphosidae

18. *Drassodes pubescens* (Thorell, 1856): 1 specimen, 28.05–13.06, saline mead., Nekhvoroshcha.
 19. *Drassyllus lutetianus* (L. Koch, 1866): 1 specimen, 7–28.05.2014, saline mead., Nekhvoroshcha; 8 specimens, 7–28.05.2014, wet mead.; 12 specimens, 28.05–13.06, same habitat, Svitlivshchyna.
 20. *Drassyllus praeficus* (L. Koch, 1866): 1 specimen, 28.05–13.06, saline mead., Nekhvoroshcha; 4 specimens, 7–28.05.2014, mesic mead.; 1 specimen, 28.05–13.06, wet mead., Svitlivshchyna.
 21. *Drassyllus pusillus* (C. L. Koch, 1833): 10 specimens, 7–28.05.2014, saline mead.; 7–28.05.2014, 5 specimens, mesic mead., Nekhvoroshcha; 1 specimen, 7–28.05.2014, mesic mead.; 2 specimens, 28.05–13.06, same habitat, Svitlivshchyna.
 22. *Haplodrassus bohemicus* Miller & Buchar, 1977: 3 specimens, 7–28. 05.2014, saline mead., 15 specimens, 28.05–13.06. 2014, same habitat, Nekhvoroshcha.
 23. *!Haplodrassus minor* (O. Pickard-Cambridge, 1879): 3 specimens, 7–28.05.2014, saline mead., Nekhvoroshcha.
 24. *Haplodrassus signifer* (C.L.Koch, 1839): 3 specimens, 7–28.05.2014, mesic mead., Nekhvoroshcha; 6 specimens, 7–28.05.2014, mesic mead.; 1 specimen, 28.05–13.06.2014, same habitat, Svitlivshchyna.
 25. *Zelotes electus* (C. L. Koch, 1839): 3 specimens, 7–28. 05.2014, saline mead.; 1 specimen, 7–28.05.2014, mesic mead., Nekhvoroshcha; 1 specimen, 7–28.05.2014, mesic mead., Svitlivshchyna.
 26. *!Zelotes latreillei* (Simon, 1878): 3 specimens, 7–28.05.2014, mesic mead.; 4 specimens, 7–28.05.2014, wet mead.; 3 specimens, 28.05–13.06.2014, same habitat, Svitlivshchyna.
 27. *Zelotes longipes* (L. Koch, 1866): 3 specimens, 28.08-9.09.2014, saline mead., Nekhvoroshcha.

Family Philodromidae

28. *Thanatus arenarius* L. Koch, 1872: 22 specimens, 7–28.05.2014, saline mead.; 5 specimens, 28.05–13.06.2014, same habitat; 8 specimens, 7–28.05.2014, mesic mead., Nekhvoroshcha; 5 specimens, 7–28.05.2014, mesic mead.; 2 specimens, 28.05–13.06.2014, same habitat, Svitlivshchyna.

Family Thomisidae

29. *Ozyptila trux* (Blackwall, 1846): 7 specimens, 28.05–13.06.2014, wet mead., Svitlivshchyna.
 30. *Xysticus cristatus* (Clerck, 1758): 1 specimen, 7–28. 05.2014, saline mead., Nekhvoroshcha.
 31. *Xysticus kochi* Thorell, 1872: 6 specimens, 7–28. 05.2014, saline mead., Nekhvoroshcha.
 32. **Xysticus striatipes* L. Koch, 1870: 2 specimens, 4–28.08.2014; saline mead.; 4 specimens, 28.08–9.09.2014, same habitat; 3 specimens, 28.08–9.09.2014, mesic mead., Nekhvoroshcha; 5 specimens, 28.08–9.09.2014, mesic mead., Svitlivshchyna.
 33. **Xysticus ulmi* (Hahn, 1831): 1 specimen, 7–28.05.2014, mesic mead., Nekhvoroshcha; 2 specimens, 28.05–13.06.2014, wet mead., Svitlivshchyna.

Family Salticidae

34. **Heliophanus flavipes* (Hahn, 1832): 1 specimen, 28.05–13.06, saline mead., Nekhvoroshcha.
 35. *!*Salticus zebraneus* (C.L. Koch, 1837): 1 specimen, 28.05–13.06, saline mead., Nekhvoroshcha.

Order ORTHOPTERA

Family Gryllidae

1. *Gryllus campestris* Linnaeus, 1758: 4 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
 2. *Melanogryllus desertus* (Pallas, 1771): 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna; 12 specimens, 7.05–13.06.2014, saline mead.; 14 specimens, 4.08–9.09.2014, same habitat; 3 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.

Family Gryllotalpidae

3. *Gryllotalpa gryllotalpa* (Linnaeus, 1758): 1 specimen, 4.08–9.09.2014, mesic mead.; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna; 1 specimen, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.

Order HEMIPTERA, HETEROPTERA

Family Berytidae

1. **Berytinus minor* (Herrich-Schäffer, 1835): 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Cydnidae

2. *!Canthophorus impressus* (Horváth, 1881): 3 specimens, 4.08–9.09.2014, saline mead., Nekhvoroshcha.
3. *Canthophorus mixtus* Asanova, 1964: 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.

Family Hebridae

4. *!Hebrus ruficeps* Thomson, 1871: 2 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Lygaeidae

5. **Dimorphopterus doriae* (Ferrari, 1874): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
6. **Dimorphopterus spinolae* (Signoret, 1857): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
7. *Embletis griseus* (Wolff, 1802): 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
8. *Geocoris ater* (Fabricius, 1787): 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
9. *Graptopeltus lynceus* (Fabricius, 1775): 7 specimens, 7.05–13.06.2014, saline mead.; 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
10. *!Megalonotus antennatus* (Schilling, 1829): 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.
11. *Megalonotus chiragra* (Fabricius, 1794): 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna; 4 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
12. *Plinthisus pusillus* (Schaltz, 1847): 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
13. *Pterotmetus staphylinoides* (Schilling, 1829): 1 specimen, 4.08–9.09.2014, mesic mead., Nekhvoroshcha.
14. *Scolopostethus pilosus* Reuter, 1875: 1 specimen, 4.08–9.09.2014, wet mead., Svitlivshchyna.
15. *Stygnocoris rusticus* (Fallén, 1807): 1 specimen, 4.08–9.09.2014, wet mead., Svitlivshchyna.
16. *Xanthochilus quadratus* (Fabricius, 1798): 1 specimen, 4.08–9.09.2014, saline mead., Nekhvoroshcha.

Family Pentatomidae

17. *!Podops inunctus* (Fabricius, 1775): 1 specimen, 7.05–13.06.2014, mesic mead.; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.
18. *!Podops rectidens* Horváth, 1883: 1 specimen, 4.08–9.09.2014, wet mead., Svitlivshchyna.
19. *Sciocoris cursitans* (Fabricius, 1794): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
20. *Sciocoris distinctus* Fieber, 1851: 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Saldidae

21. *!Chartoscirta elegantula* (Fallén, 1807): 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
22. *!Salda muelleri* (Gmelin, 1790): 2 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family *Tingidae

23. *Acalypta marginata* (Wolff, 1804): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
24. *Agramma confusum* (Puton, 1879): 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
25. *!Agramma fallax* (Horvath, 1906): 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.
26. *Kalama tricornis* (Schranck, 1801): 1 specimen, 7.05–13.06.2014, mesic mead.; 1 specimen, 7.05–13.06.2014, saline mead.; 1 specimen, 4.08–9.09.2014, same habitat, Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Order COLEOPTERA**Family Aderidae**

1. *Cobosia pruinosa* (Kiesenwetter, 1861): 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Anthicidae

2. *Anthelephila pedestris* (Rossi, 1790): 10 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead.; 2 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
3. *Hirticomus hispidus* (Rossi, 1792): 2 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family *Buprestidae

4. *Cylindromorphus filum* (Gyllenhal, 1817): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
5. *Habroloma breiti* (Obenberger, 1918): 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Cantharidae

6. *Cantharis annularis* Ménériés, 1836: 2 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family Carabidae

7. *Acupalpus flavicollis* (Sturm, 1825): 15 specimens, 7.05–13.06.2014, mesic mead.; 13 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
8. *Acupalpus luteatus* (Duftschmid, 1812): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 1 specimen, 4.08–9.09.2014, mesic mead., Svitlivshchyna.
9. *Agonum viduum* (Panzer, 1796): 19 specimens, 7.05–13.06.2014, mesic mead.; 33 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
10. *Amara aenea* De Geer, 1774: 12 specimens, 7.05–13.06.2014, saline mead.; 20 specimens, 4.08–9.09.2014, same habitat, 5 specimens, 7.05–13.06.2014, mesic mead.; 1 specimen, 4.08–9.09.2014, same habitat, Nekhvoroshcha; 2 specimens, 7.05–13.06.2014, mesic mead.; 15 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
11. *Amara communis* (Panzer, 1797): 13 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 16 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
12. *Amara convexior* Stephens, 1828: 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
13. *Amara equestris* (Duftschmid, 1812): 7 specimens, 7.05–13.06.2014, saline mead.; 4 specimens, 7.05–13.06.2014, v Nekhvoroshcha; 14 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
14. *Amara familiaris* (Duftschmid, 1812): 16 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 23 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
15. *Amara lucida* (Duftschmid, 1812): 16 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
16. *Amara tibialis* (Paykull, 1798): 17 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 2 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
17. *Anisodactylus signatus* (Panzer, 1796): 14 specimens, 7.05–13.06.2014, mesic mead.; 7 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
18. *Badister bullatus* (Schrank, 1798): 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
19. *Bembidion inoptatum* Schaum, 1857: 9 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 14 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
20. *Bembidion properans* (Stephens, 1828): 8 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 2 specimens, 7.05–13.06.2014, mesic mead.; 4 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
21. *Brachinus psophia* Audinet-Serville, 1821: 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
22. *Calathus ambiguus* (Paykull, 1790): 1 specimen, 4.08–9.09.2014, saline mead., Nekhvoroshcha; 12 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.

23. *Calathus fuscipes* (Goeze, 1777): 13 specimens, 7.05–13.06.2014, saline mead.; 121 specimens, 4.08–9.09.2014, same habitat; 7 specimens, 7.05–13.06.2014, mesic mead.; 4 specimens, 4.08–9.09.2014, same habitat, Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
24. *Calathus melanocephalus* (Linnaeus, 1758): 1 specimen, 4.08–9.09.2014, saline mead.; 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 5 specimens, 4.08–9.09.2014, mesic mead.;
9 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
25. *Callistus lunatus* (Fabricius, 1775): 1 specimen, 7.05–13.06.2014, saline mead.; 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
26. *Calosoma auropunctatum* (Herbst, 1784): 12 specimens, 7.05–13.06.2014, mesic mead.; 5 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
27. *Carabus cancellatus* Illiger, 1798: 3 specimens, 7.05–13.06.2014, mesic mead.; 1 specimen, 4.08–9.09.2014, same habitat; 27 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
28. *Carabus clathratus* Linnaeus, 1761: 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
29. *Carabus granulatus* Linnaeus, 1758: 1 specimen, 7.05–13.06.2014, mesic mead.; 16 specimens, 4.08–9.09.2014, same habitat, Svitlivshchyna.
30. *Curtonotus aulicus* (Panzer, 1796): 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 21 specimens, 7.05–13.06.2014, mesic mead.; 18 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
31. *Dyschirius globosus* (Herbst, 1784): 1 specimen, 7.05–13.06.2014, mesic mead.; 1 specimen, 4.08–9.09.2014, wet mead., Svitlivshchyna.
32. *Harpalus affinis* Schrank, 1781: 13 specimens, 7.05–13.06.2014, mesic mead.; 17 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
33. *Harpalus anxius* Duftschmid, 1812: 6 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 16 specimens, 7.05–13.06.2014, mesic mead.; 7 specimens, wet mead., 7.05–13.06.2014, Svitlivshchyna.
34. *Harpalus distinguendus* (Duftschmid, 1812): 15 specimens, 7.05–13.06.2014, saline mead.; 12 specimens, 7.05–13.06.2014, meadow, Nekhvoroshcha; 19 specimens, 7.05–13.06.2014, mesic mead.; 24 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
35. *Harpalus luteicornis* (Duftschmid, 1812): 16 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 11 specimens, 7.05–13.06.2014, mesic mead.; 8 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
36. *Harpalus pumilus* Sturm, 1818: 20 specimens, 7.05–13.06.2014, saline mead.; 3 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 9 specimens, 7.05–13.06.2014, mesic mead.; 9 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
37. *Harpalus rubripes* (Duftschmid, 1812): 11 specimens, 7.05–13.06.2014, saline mead.; 6 specimens, 4.08–9.09.2014, same habitat; 6 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 7 specimens, 7.05–13.06.2014, mesic mead.; 5 specimens, 4.08–9.09.2014, same habitat; 13 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
38. *Harpalus rufipes* (DeGeer, 1774): 14 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 4.08–9.09.2014, same habitat; 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 15 specimens, 7.05–13.06.2014, mesic mead.; 85 specimens, 4.08–9.09.2014, same habitat; 21 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
39. *Harpalus subcylindricus* Dejean, 1829: 7 specimens, 7.05–13.06.2014, saline mead.; 16 specimens, 4.08–9.09.2014, same habitat; 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 11 specimens, 7.05–13.06.2014, mesic mead.; 10 specimens, 4.08–9.09.2014, same habitat; 24 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
40. *Lebia cruxminor* (Linnaeus, 1758): 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
41. *Microlestes maurus* (Sturm, 1827): 2 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
42. *Microlestes minutulus* Goeze, 1777: 5 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 2 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

43. *Oodes gracilis* A.Villa & G.B.Villa, 1833: 13 specimens, 7.05–13.06.2014, mesic mead.; 4 specimens, 4.08–9.09.2014, same habitat; 27 specimens, 7.05–13.06.2014, wet mead.; 1 specimen, 4.08–9.09.2014, same habitat, Svitlivshchyna.
44. *Ophonus puncticollis* (Paykull, 1798): 7 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 3 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
45. *Poecilus cupreus* (Linnaeus, 1758): 2 specimens, 7.05–13.06.2014, mesic mead.; 4 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna;
46. *Poecilus punctulatus* (Schaller, 1783): 6 specimens, saline mead., 7.05–13.06.2014, Nekhvoroshcha; 3 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
47. *Poecilus versicolor* (Sturm, 1824): 15 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 23 specimens, 7.05–13.06.2014, mesic mead.; 5 specimens, 4.08–9.09.2014, same habitat; 39 specimens, 7.05–13.06.2014, wet mead.; 3 specimens, 4.08–9.09.2014, same habitat, Svitlivshchyna.
48. *Pterostichus anthracinus* (Illiger, 1798): 12 specimens, saline mead., 7.05–13.06.2014; 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 30 specimens, 7.05–13.06.2014, mesic mead.; 45 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
49. *Pterostichus diligens* (Sturm, 1824): 8 specimens, 7.05–13.06.2014, mesic mead.; 15 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
50. *Pterostichus gracilis* (Dejean, 1828): 8 specimens, 7.05–13.06.2014, meadow; 22 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
51. *Pterostichus macer* (Marshall, 1802): 9 specimens, 7.05–13.06.2014, mesic mead.; 13 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
52. *Pterostichus melanarius* (Illiger, 1798): 15 specimens, 7.05–13.06.2014, mesic mead.; 11 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
53. *Pterostichus nigrita* (Paykull, 1790): 4 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 7 specimens, 7.05–13.06.2014, mesic mead.; 23 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
54. *Pterostichus vernalis* (Panzer, 1796): 29 specimens, 7.05–13.06.2014, mesic mead.; 35 specimens, 4.08–9.09.2014, same habitat; 14 specimens, 7.05–13.06.2014, wet mead.; 12 specimens, 4.08–9.09.2014, same habitat, Svitlivshchyna.
55. *Stenolophus proximus* Dejean, 1829: 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 24 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
56. *Stenolophus skrimshiranus* Stephens, 1828: 6 specimens, 7.05–13.06.2014, mesic mead.; 14 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
57. *Syntomus pallipes* (Dejean, 1825): 13 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
58. *Tachys bistratus* (Duftschmid, 1812): 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
59. *Trechus quadristriatus* (Schrank, 1781): 7 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Cerambycidae

60. *Dorcadion holosericeum* Krynicki, 1834: 30 specimens, 7.05–13.06.2014, saline mead.; 10 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 31 specimens, 7.05–13.06.2014, mesic mead., 3 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family *Chrysomelidae

61. *Cassida* sp.: 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
62. *Galeruca pomonae* (Scopoli, 1763): 2 3 specimens, 7.05–13.06.2014, saline mead.; 3 specimens, 4.08–9.09.2014, same habitat; specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
63. *Galeruca tanacetii* (Linnaeus, 1758): 4 specimens, 7.05–13.06.2014, saline mead.; 1 specimen, 4.08–9.09.2014, same habitat; 1 specimen, 7.05–13.06.2014, mesic mead.; 1 specimen, 4.08–9.09.2014, same habitat, Nekhvoroshcha.
64. Alticinae gen. sp.: 4 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 1 specimen, 4.08–9.09.2014, mesic mead.; 2 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
65. *Longitarsus* sp.: 1 specimen, 7.05–13.06.2014, saline mead.; 2 specimens, 4.08–9.09.2014, same habitat, Nekhvoroshcha; 2 specimens, 4.08–9.09.2014, mesic mead.; 11 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
66. *Pachnophorus villosus* (Duftschmid, 1825): 12 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha.

Family *Coccinellidae

67. *Coccinella septempunctata* Linnaeus, 1758: 1 specimen, 4.08–9.09.2014, mesic mead., Svitlivshchyna.
 68. *Nephus bipunctatus* (Kugelann, 1794): 2 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
 69. *Platynaspis luteorubra* (Goeze, 1777): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
 70. *Scymnus frontalis* (Fabricius, 1787): 4 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
 71. *Tytthaspis sedecimpunctata* (Linnaeus, 1761): 1 specimen, 4.08–9.09.2014, wet mead., Svitlivshchyna.

Family Corylophidae

72. *Sericoderus lateralis* (Gyllenhal, 1827): 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.

Family Curculionidae

73. *Bothynoderes affinis* (Schrank, 1781): 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.
 74. *Cathormiocerus aristatus* (Gyllenhal, 1827): 2 specimens, 7.05–13.06.2014, saline mead.; 1 specimen, 4.08–9.09.2014, same habitat, Nekhvoroshcha.
 75. *Cleonis pigra* (Scopoli, 1763): 2 specimens, 7.05–13.06.2014, mesic mead.; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.
 76. **Coryssomerus capucinus* (Beck, 1817): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
 77. *Cyphocleonus dealbatus* (Gmelin, 1790): 2 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
 78. **Eusomus ovulum* Germar, 1824: 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
 79. *Graptus triguttatus* (Fabricius, 1775): 15 specimens, 7.05–13.06.2014, saline mead.; 1 specimen, 4.08–9.09.2014, same habitat; 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
 80. **Gymnetron* sp.: 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
 81. **Hylobius abietis* (Linnaeus, 1758): 2 specimens, 4.08–9.09.2014, mesic mead., Svitlivshchyna.
 82. **Hypera arator* (Linnaeus, 1758): 1 specimen, 4.08–9.09.2014, saline mead., Nekhvoroshcha.
 83. **Hypera meles* (Fabricius, 1792): 2 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
 84. **Hypera plantaginis* (DeGeer, 1775): 1 specimen, 7.05–13.06.2014, meadow, Svitlivshchyna.
 85. **Lepyrus capucinus* (Schaller, 1783): 3 specimens, 7.05–13.06.2014, saline mead.; 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 3 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
 86. **Liophloeus tessulatus* (Müller O.F., 1776): 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
 87. *Omius murinus* (Boheman, 1843): 2 specimens, 7.05–13.06.2014, saline mead.; 12 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
 88. *Otiorhynchus conspersus* (Herbst, 1795): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
 89. *Otiorhynchus velutinus* Germar, 1824: 1 specimen, 7.05–13.06.2014, mesic mead.; 15 specimens, 4.08–9.09.2014, same habitat, Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, saline mead.; 41 specimens, 4.08–9.09.2014, same habitat.
 90. **Pelletierius albosignatus* (Boheman, 1839): 4 specimens, 7.05–13.06.2014, saline mead.; 13 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
 91. **Peritelus familiaris* Boheman, 1834: 2 specimens, saline mead.; 5 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
 92. **Phyllobius brevis* Gyllenhal, 1834: 3 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
 93. **Polydrusus inustus* Germar, 1824: 4 specimens, 7.05–13.06.2014, mesic mead.; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.
 94. *Pseudocleonus cinereus* (Schrank, 1781): 3 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
 95. **Rhinoncus* sp.: 7 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha

96. **Sitona* sp.: 2 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 4.08–9.09.2014, same habitat, Nekhvoroshcha.
97. **Tanymecus palliatus* (Fabricius, 1787): 9 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead.; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.
98. **Trichosirocalus troglodites* (Fabricius, 1787): 4 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.

Family Dermestidae

99. *Dermestes kaszabi* Kalik, 1950: 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 37 specimens, 7.05–13.06.2014, mesic mead.; 8 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
100. *Dermestes lanarius* Illiger, 1801: 398 specimens, 7.05–13.06.2014, saline mead.; 95 specimens, 4.08–9.09.2014, same habitat, 422 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 101 specimens, 7.05–13.06.2014, mesic mead.; 2 specimens, 4.08–9.09.2014, same habitat; 26 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family Dryophthoridae

101. *Sphenophorus striatopunctata* (Goeze, 1777): 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family Elateridae

102. *Agriotes lineatus* (Linnaeus, 1767): 28 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 5 specimens, 7.05–13.06.2014, mesic mead.; 9 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
103. *Agriotes sputator* (Linnaeus, 1758): 39 specimens, 7.05–13.06.2014, saline mead., 3 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead.; 2 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
104. *Agrypnus murinus* (Linnaeus, 1758): 3 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 2 specimens, 7.05–13.06.2014, mesic mead.; 3 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna;
105. *Athous jejunus* Kiesenwetter, 1858: 2 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha.

Family Endomychidae

106. *Lycoperdina succincta* (Linnaeus, 1767): 4 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 4.08–9.09.2014, same habitat, Nekhvoroshch 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Histeridae

107. *Eudiplister planulus* (Ménétriés, 1849): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
108. *Hister quadrimaculatus* Linnaeus, 1758: 51 specimens, 7.05–13.06.2014, saline mead., 4 specimens, 4.08–9.09.2014, same habitat; 16 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 6 specimens, 7.05–13.06.2014, mesic mead.; 2 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
109. *Hister unicolor* Linnaeus, 1758: 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
110. *Hypocacculus rufipes* (Kugelann, 1792): 3 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshch; 2 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
111. *Margarinotus obscurus* (Kugelann, 1792): 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
112. *Margarinotus purpurascens* (Herbst, 1792): 2 specimens, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 6 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Latridiidae

113. *Corticarina truncatella* (Mannerheim, 1844): 4 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 5 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
114. *Enicmus* sp.: 1 specimen ♀, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Leiodidae

115. *Agathidium marginatum* Sturm, 1807: 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
 116. *Catops morio* (Fabricius, 1787): 10 specimens, 4.08–9.09.2014, wet mead., Svitlivshchyna.
 117. *Colon serripes* (Sahlberg C.R., 1822): 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
 118. *Leiodes badia* (Sturm, 1807): 2 specimens, 4.08–9.09.2014, mesic mead.; 4 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family Meloidae

119. *Meloe scabriusculus* Brandt et Erichson, 1832: 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.

Family Nanophyidae

120. **Dieckmanniellus nitidulus* (Gyllenhal, 1838): 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family *Nitidulidae

121. *Cybocephalus politus* Gyllenhal, 1813: 1 specimen, 7.05–13.06.2014; 2 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
 122. *Meligethes* sp.: 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family Phalacridae

123. **Olibrus bimaculatus* Küster, 1848: 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.

Family Ptiliidae

124. *Ptilium* sp.: 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family Scarabaeidae

125. **Maladera holosericea* (Scopoli, 1772): 11 specimens, 7.05–13.06.2014, saline mead.; 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
 126. **Miltotrogus vernus* (Germar, 1823): 2 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
 127. *Onthophagus ovatus* (Linnaeus, 1758): 2 specimens, 7.05–13.06.2014, saline mead.; 1 specimen, 4.08–9.09.2014, same habitat; 6 specimens, 7.05–13.06.2014, mesic mead.; 1 specimen, 4.08–9.09.2014, same habitat, Nekhvoroshcha; 2 specimens, 7.05–13.06.2014, mesic mead.; 1 specimen, 4.08–9.09.2014, same habitat, Svitlivshchyna.
 128. *Pentodon idiota* (Herbst, 1789): 5 specimens, 7.05–13.06.2014; saline mead.; 2 specimens, 4.08–9.09.2014, same habitat; 10 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
 129. *Pleurophorus caesus* Creutzer, 1796: 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha; 2 specimens, 7.05–13.06.2014, mesic mead.; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family Silphidae

130. *Necrophorus antennatus* (Reitter, 1885): 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.
 131. *Necrophorus vespillo* (Linnaeus, 1758): 1 specimen, 4.08–9.09.2014, mesic mead.; 1 specimen, 7.05–13.06.2014, wet mead., 1 specimen, 4.08–9.09.2014, same habitat, Svitlivshchyna.
 132. *Silpha obscura* Linnaeus, 1758: 5 specimens, 7.05–13.06.2014, saline mead.; 6 specimens, .05–13.06.2014, mesic mead., Nekhvoroshcha; 6 specimens, 7.05–13.06.2014, mesic mead.; 2 specimens, 4.08–9.09.2014, same habitat; 4 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
 133. *Silpha tristis* Illiger, 1798: 1 specimen, 7.05–13.06.2014, saline mead., 1 specimen, 4.08–9.09.2014, same habitat, Nekhvoroshcha; 3 specimens, 7.05–13.06.2014, mesic mead.; 50 specimens, 4.08–9.09.2014, same place; 29 specimens, 7.05–13.06.2014, wet mead.; 10 specimens, 4.08–9.09.2014, same place, Svitlivshchyna.

Family Staphylinidae

134. *Aleochara* sp.: 1 specimen, 4.08–9.09.2014, mesic mead.; 1 specimen, 4.08–9.09.2014, wet mead., Svitlivshchyna.
 135. Staphylinidae gen. sp.: 12 specimens, 7.05–13.06.2014, saline mead.; 1 specimen, 4.08–9.09.2014, same habitat; 9 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 18 specimens,

- 7.05–13.06.2014, mesic mead.; 6 specimens, 4.08–9.09.2014, same habitat; 9 specimens, wet mead., 7.05–13.06.2014, Svitlivshchyna.
136. *Lomechusa emarginata* (Paykull, 1789): 1 specimen, 7.05–13.06.2014, saline mead., Nekhvoroshcha.
137. *Staphylinus dimidiaticornis* Gemminger, 1851: 2 specimens, 4.08–9.09.2014, mesic mead.; 5 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
- Family Tenebrionidae**
138. *Crypticus quisquilius* (Linnaeus, 1760): 133 specimens, saline mead., 7.05–13.06.2014; 125 specimens, 4.08–9.09.2014, same habitat; 46 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 5 specimens, 4.08–9.09.2014, mesic mead.; 20 specimens, 7.05–13.06.2014, wet mead., Svitlivshchyna.
139. *Gonocephalum granulatum pusillum* (Fabricius, 1792): 4 specimens, 7.05–13.06.2014, saline mead.; 1 specimen, 4.08–9.09.2014, same habitat; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.
140. *Opatrum sabulosum* (Linnaeus, 1760): 127 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 4.08–9.09.2014, same habitat; 165 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 14 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Order HYMENOPTERA

Family Mutillidae

1. *Myrmilla glabrata* (Fabricius, 1775): 3 specimens, 7.05–13.06.2014, saline mead.; 2 specimens, 7.05–13.06.2014, mesic mead., Nekhvoroshcha.

Order DIPTERA

Family *Terevidae

1. *Thereva* sp.: 1 specimen, 7.05–28.05.2014, mesic mead., Nekhvoroshcha

Family *Ulidiidae

2. *Platypalpus* sp.: 2 specimens, 7.05–28.05.2014, mesic mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, wet mead., Svitlivshchyna.

Family *Empididae

3. *Meliera picta* (Meigen 1826): 1 specimen, 7.05–28.05.2014, mesic mead., Svitlivshchyna.
4. *Meliera crassipennis* F.: 1 specimen, 7.05–28.05.2014, saline mead., Nekhvoroshcha; 1 specimen, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

Family *Lauxaniidae

5. *Calliopum aeneum* (Fallen 1820): 1 specimen, 7.05–28.05.2014, mesic mead., Svitlivshchyna

Family *Anthomyzidae

6. *Anthomyza sabulosa* Haliday, 1837: 5 specimens 7.05–28.05.2014, mesic mead., Svitlivshchyna

Family Chloropidae

7. *Elachiptera brevipennis* (Meigen 1830): 1 specimen, 7.05–28.05.2014, mesic mead., Svitlivshchyna.
8. *Oscinella* sp.: 1 specimen, 7.05–28.05.2014, mesic mead., Nekhvoroshcha; 5 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
9. *Aphanotrigonum brachypterum* Zetterstedt, 1848: (the identification was confirmed by Emilia Nartshuk, St-Petersburg, Russia) 1 specimens, 7.05–28.05.2014, mesic mead., Nekhvoroshcha; 47 specimens, 7.05–28.05.2014, mesic mead.; 3 specimens, 4.08–09.09.2014, same habitat; 3 specimens, 7.05–28.05.2014, wet mead., Svitlivshchyna.
10. *Chlorops* sp.: 11 specimens, 7.05–13.06.2014, saline mead.; 3 экз, 07.05–13.06.2014, mesic mead., Nekhvoroshcha.
11. *Thaumatomyia notata* (Meigen 1830): 2 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.
- Family *Drosophilidae**
12. *Drosophila* sp.: 1 specimen, 7.05–13.06.2014, mesic mead., Nekhvoroshcha; 4 specimens, 7.05–13.06.2014, mesic mead., Svitlivshchyna.

RESULTS AND DISCUSSION

Spiders (Aranei). Thirty-five spider species from 10 families were recorded in the studied meadows: 29 species were found in the vicinity of Nekhvoroshcha, and 22 species in the environs of Svitlivshchyna. Six species are new for Poltava Region (*Alopecosa aculeata*, *Arctosa leopardus*, *Antistea elegans*, *Haplodrassus minor*, *Zelotes latreillei*, *Salticus zebraneus*), one species (*Pardosa maisa*) is new for Ukraine. *P. maisa* has a patched geographic distribution in Middle and Northern Europe. It has also been registered in Belarus, Central Black Earth Region of Russia and in the Middle Urals (Polchaninova, 2012; Mikhailov, 2013). According to newly obtained data, the southern boundary of its range in the East European Plain runs through the village of Svitlivshchyna in Poltava Region and the village of Nesterivka (49°54'N 37°18'E) in Kharkiv Region. In both localities, the species occurs in wet meadows (Polchaninova, pers. data).

The other rare species in Poltava Region, *Haplodrassus bohemicus*, is known from the Czech Republic, Bulgaria, Macedonia, Greece, Ukraine and southeastern European Russia (Kovblyuk & al., 2012; Nentwig & al., 2016). According to our data, it is a common generalist species in the Right-Bank Ukraine. Further to the east, it decreases in numbers and in the northeast of its geographic range (in Poltava and Kharkiv Regions), it occurs exclusively in the intrazonal habitats like sandy steppes, saline meadows and/or agricultural fields (Zhuravel & al., 2012; Polchaninova).

Alopecosa kovblyuki has been registered on the Crimean peninsula, in Kherson, Mykolaiv and Poltava Regions of Ukraine, and in southeastern European Russia (Nadolny & al., 2013). Presumably, the northern boundary of its geographic range passes through Poltava Region.

Spider assemblages in the saline meadow were the richest (25 species, 314 individuals), while the assemblages of the mesic non-saline and wet non-saline meadows were poorer and differed insignificantly (15 and 14 species, 127 and 166 individuals, respectively).

Beetles (Coleoptera). The overwhelming majority of the collected insects belongs to the Coleoptera order (4174 individuals from 25 families: 4077 individuals have been identified to the species level (129 species), 35 individuals have been recorded to the genus level (9 genera), and 62 individuals to the family level). Eighty-four beetle species were collected from the vicinity of Nekhvoroshcha and 97 species from the environs of Svitlivshchyna. The majority of collected beetles is common species widely spread within the forest-steppe and steppe zones of Ukraine (Sumarokov, 2002, 2003). Five species (*Cylindromorphus filum*, *Habroloma breiti*, *Dermestes kaszabi*, *Corticarina truncatella* и *Agathidium marginatum*) have been recorded from Poltava Region for the first time. Of these, *D. kaszabi* is quite rare, and it has been registered in Odessa, Dnipropetrovsk Regions, and the Crimea (Zhantiev, 1976; Sumarokov, 2003); we have also personal data from Zaporizhzhia and Kharkiv Regions. The other four species are widely distributed, but have not been collected yet from Poltava Region.

Our collection has proved the distribution of a vast range of ground beetle species, recorded constantly from Poltava Region (Kolesnikov & Brauner, 1988; Kolesnikov & Sumarokov 1993; Putchkov, 2012). Nevertheless, we have managed to find some new and poorly known species such as *Acupalpus luteatus*, *Brachinus psophia*, *Callistus lunatus*, *Carabus clathratus*, *Harpalus luteicornis*, and *Harpalus subcylindricus*. Carabid assemblages were the richest in mesic meadows (44 species, more than 600 specimens). In the wet meadow, the species composition decreased by almost a quarter (33 species), remaining at the same level in the terms of individual numbers. The saline meadow was characterized by the poorest species composition and abundance of ground beetles (22 species and nearly 240 individuals).

It should be mentioned a high abundance of *Silpha tristis* (Silphidae) in the meadows near the village of Svitlivshchyna, though in the neighbouring Kharkiv Region, this species is rare and listed in the Red Data Book (Drovalenko, 2013).

The finds of *Lycoperdina succincta* (Elateridae), associated in its development stages with the fungus-slickers, and *Colon serripes* and *Leiodes badia* (Leioididae), associated with the actinomycetes fungi having underground fruiting bodies, show a good preservation of natural habitats and moderate anthropogenic pressure on this area. A significant part of the found species considers as agricultural pests (*Harpalus rufipes*, *Bothynoderes affinis*, *Tanymecus palliatus*, *Agriotes lineatus*, *Miltotrogus vernus*, *Maladera holosericea*, *Pentodon idiota*, *Gonocephalum granulatum*, *Opatrum sabulosum*).

True bugs (Hemiptera: Heteroptera). In the studied meadows, the true bugs were represented by 26 species from seven families. Eight species (*Canthophorus impressus*, *Hebrus ruficeps*, *Megalonotus antennatus*, *Podops inunctus*, *P. rectidens*, *Chartoscirta elegantula*, *Salda muelleri* и *Agramma fallax*) are new to Poltava Region. Five of them (*H. ruficeps*, *P. inunctus*, *P. rectidens*, *Ch. elegantula*, and *S. muelleri*) can be considered habitat specialists preferring wetlands.

Short-horn flies (Brachycera: Diptera). The collected dipterans belonged to 16 families, but we have listed only seven which specimens were indentified to the genus and/or species level. The traps caught many typical herb-dwelling species, as a rule saprophagous developing in the grasses stalks. *Aphanotrigonum brachypterum*, a short-wing fruit fly from Chloropidae family, is of particular interest. According to the European Database, it is a quite rare species registered in the Great Britain, Denmark, Sweden, Germany, Hungary and Slovakia (Nartshuk & Andersson, 2013; Fauna Europaea, 2013). In the Identification Guide of the Diptera of the European part of the USSR (Opredelitel' ... 1970), it was referred to Western Europe with a note on possible finds eastwards. It is the first record of *A. brachypterum* in the East European Plain. In the studied locality, the species preferred mesic non-saline meadows.

The orthopterans in our collection included only three species from two families of the long-horn Orthoptera, and belonged to common species.

Only one species of collected **hymenopterans** was identified, the velvet ant *Myrmilla glabrata*. It parasitizes solitary bees and belongs to typical ground-dwelling insects.

CONCLUSIONS

Thus, despite a relatively short collecting period, in the southeast of Poltava Region there were recorded 35 spider species from 10 families and more than 170 insect species from 42 families and five orders. Nineteen species of various orders have been registered in Poltava Region for the first time. The species composition and arthropods' abundance (on the example of the spiders and beetles) differed significantly when comparing saline and non-saline meadows. The finds of a range of rare species as well as new species for Ukraine and the East European Plain indicate a high conservation value of the study area.

The obtained data are preliminary and may be extended and refined in the course of further research.

REFERENCES

- Angelini, F. & Perkovskiy, E.E. (1998). Leyodid beetles of the tribe Anisotomini (Coleoptera, Leiodidae) of the European part of the former USSR and the caucasus. II. Subgenus *Cyphocele* Thoms. and *Neoccele* Goz. of the genus *Agathidium* Panz. *Entomologicheskoye obozrenie*, 77, 151–170.
- Bartenev, A.F. (2009). *Zhuki-usachi Levoberezhnoy Ukrainy i Kryma*. Kharkiv. KhNU im. V.N. Karazina. (In Russian)
- Drogvalenko O.M. (2013). *Chervona knyha Kharkivskoi oblasti. Tvarynnyi svit*. Kharkiv. KhNU im. V.N. Karazina. (In Ukrainian)
- Fauna Europaea: Diptera, Chloropidae. Retrieved from: <http://www.faunaeur.org>.
- Gritsai, V.F. (1973). On the trophic relations of the blood-sucking dipteran insects (Culicidae, Ceratopogonidae, Simuliidae) in Poltava Region. *Meditinskaya parazitologiya i parazitarnye bolezni*. 42, 676–683. (In Russian)
- Kolesnikov, L.O. & Brunner Yu.N. (1988). Predatory ground beetles (Coleoptera, Carabidae) in the fields of tilled-grain crop rotation with subsurface soil treatment in the Left-Bank Forest-Steppe of Ukraine. In: *Ekologiya i taksonomiya nasekomykh Ukrainy* (pp. 38–44.). Kiev. Naukova dumka. (In Russian)
- Kolesnikov, L.O., Sumarokov, A.M. (1993). Zonal peculiarities of the ground beetle fauna (Coleoptera, Carabidae) of the wheat coenoses of the forest-steppe and steppe zones of Ukraine. *Entomologicheskoye obozrenie*, 72, 326–332. (In Russian)
- Kovblyuk, M.M., Kastrygina, Z.A., Omelko, M.M. (2012). A review of the spider genus *Haplodrassus* Chamberlin, 1922 in Crimea (Ukraine) and adjacent areas (Araneae, Gnaphosidae). *Zookeys*, 205, 59–89.
- Lebedeva, L.I. & Kovban, V.Z. (1971). To the study of the blackfly fauna (Diptera, Simuliidae) of Poltava Region. *Vestnik zoologii*, 2, 76–78. (In Russian)
- Mikhailov, K.G. (2013). The spiders (Arachnida, Aranei) of Russia and adjacent countries: a non-annotated checklist. *Arthropoda Selecta, Supplement 3*. Moscow: KMK Scientific Press Ltd.
- Nartshuk, E., Andersson, H. (2013). *The Fruit Flies (Chloropidae, Diptera) of Fennoscandia and Denmark*. Leiden-Boston.
- Nentwig, W., Blick, T., Gloor, D., Hänggi, A., Kropf, C. (2016). *Spiders of Europe*. Retrieved from: www.araneae.unibe.ch.

- Nadolny, A.A., Ponomarev, A.V., Dvadenko, K.V. (2012). A new wolf spider species in the genus *Alopecosa* Simon, 1885 (Araneae: Lycosidae) from Eastern Europe. *Zootaxa*, 3484, 83–88.
- Opredelitel nasekomykh evropeiskoi chasti SSSR v 5 tomakh. T. V. Dvukrylye, Blokhi.* (1970). Leningrad. Nauka. Leningradskoe ottdelenie. (In Russian)
- Polchaninova, N.Yu. (2005). Preliminary data on the spiders of the Nizhnevorsklyansky Nature Park (Poltava Region). In *Sovremennye problemy zoologii I ekologii. Proceed. Int. Conf.*, Odessa. Fenix. (In Russian)
- Polchaninova, N.Yu. (2012). Spiders (Araneae) of the “Stepnoi” spot, a prospective conservation area in Kursk Region. *Nauchnye vedomosti BelGU. Estestvennyye nauki*, 15(134), 20, 65–68. (In Russian)
- Polchaninova, N.Yu. (2015). Kytivka sands as a refuge of the rare spider species (Aranei) of Kharkiv Region (Ukraine). *Vestnik Kharkivskoho natsionalnoho universytetu imeni V.N. Karazina. Seria biologia*, 25, 196–199. (In Russian)
- Polchaninova, N.Yu. & Prokopenko, E.V. (2013). Catalogue of the spiders (Arachnida, Aranei) of Left-Bank Ukraine. *Arthropoda Selecta, Supplement 2*. Moscow: KMK Scientific Press.
- Polchaninova, N.Yu. & Slutskiy, A.I. (2013). Addition to the checklist of spiders (Araneae) of Kharkiv Region (Ukraine) *Vestnik Kharkivskoho natsionalnoho universytetu imeni V.N. Karazina. Seria biologia*, 17(1056), 120–128. (In Russian)
- Prokhorov, A.V. (2010). An annotated checklist of the jewel beetles (Coleoptera: Buprestidae) of the forest-steppe and steppe zones of Ukraine. *Ukrainska entomofaunistyka*, 1, 1–72. (In Russian)
- Putchkov, A.V. (1990). Beetles (Coleoptera) of the wheat fields of the southwest of the steppe zone of the European part of the USSR. *Entomoogicheskoye. Obozrenie*, 69, 538–549. (In Russian)
- Putchkov, A.V. (2007). A survey of the ground beetles of the tribe Pterostichini (Coleoptera: Carabidae) of the fauna of Ukraine. *Izvestiya Kharkovskogo Entomologicheskogo Obshchestva*, 15, 57–61. (In Russian)
- Putchkov, A.V. (2012). Faunistic survey of the carabid beetles (Coleoptera, Caraboidea) of Ukraine. *Ukrainskyi entomolohichnyi zhurnal*, 2(5), 3–44. (In Russian)
- Putshkov, V.G., Putshkov, P.V. (1996). *Heteroptera of the Ukraine: checklist and distribution*. Saint Petersburg. (in Russian).
- Singaevsky, E.N. (2014). Annotated species list of spiders (Arachnida, Aranei) of the Pyryatynskiy national environmental park (Poltava Province, Ukraine). *Zapovina sprava*, 20, 76–83. (In Russian)
- Sumarokov, A.M. (2002). Changes in species composition and trophic structure of the Coleoptera fauna under reducing pesticide pressure in the biocenoses of the steppe zone of Ukraine. *Izvestiya Kharkovskogo Entomologicheskogo Obshchestva*, 10, 160–174. (In Russian)
- Sumarokov A.M. (2004). Species composition and trophic structure of the beetle fauna (Insecta: Coleoptera) in the agrobiocenosis of the steppes of Ukraine. *Izvestiya Kharkovskogo Entomologicheskogo Obshchestva*, 21, 188–196. (In Russian)
- Sumarokov, A.M. (2009). *Vosstanovlenie bioticheskogo potentsiala biogeotsenozov pri umen'shenii pestitsidnykh nagruzok*. Donetsk: "Veber". (In Russian)
- Trikhleb T.A. (2003). A survey of the minute brown scavenger beetles (Coleoptera, Latridiidae) of the Steppe and Forest-Steppe of the Left-Bank Ukraine. *Vestnik zoologii, dopolnenie 16*, 150–160.
- Zhantiev, R.D. (1976). *Zhuki-kozheedy fauny SSSR*. Moscow: MGU. (in Russian)
- Zhuravel N.Yu., Lezhenina I.P., Polchaninova N.Yu. & Yaremenko, V.V. (2012). Use of ground-dwelling arthropods in the monitoring of soil reclamation in oil and gas fields. *Izvestiya Kharkovskogo Entomologicheskogo Obshchestva*, 20, 5–14. (In Ukrainian)