

## Fauna of Sarcophagidae and Calliphoridae (Diptera) of the West Ukraine

<sup>1</sup>Yuriy Verves\* and <sup>2</sup>Lyudmyla Khronokalo

<sup>1</sup>Department of Ecological Monitoring, Institute for Evolutionary Ecology, National Academy of Sciences of Ukraine, Kyiv, Ukraine, Academician Lebedev Str. 37, Kyiv, Ukraine, 03143.

<sup>2</sup>Department of Physical Chemistry, National Technical University of Ukraine “Kyiv Polytechnic Institute”, Peremohy Awe. 37, Kyiv, Ukraine, 03056.

(Email: yuryverves@gmail.com)

### Abstract

A total of 74 calliphorid and 180 sarcophagid species are listed from Ukraine, however in the present paper 48 calliphorid and 101 sarcophagid species, which are known from West Ukrainian territory are listed. One calliphorid species (*Eggisops pecchiolii*) is firstly recorded for territory of Ukraine. 16 species are firstly reported from Lviv region, including 10 species of Sarcophagidae (*Nyctia halterata*, *Blaesoxipha laticornis*, *Heteronychia bulgarica*, *H. haemorrhoa*, *H. rohdendorfiana*, *Bellieriomima subulata*, *Liopygia argyrostoma*, *Krameraea schuetzei*, *Rosellea aratrix*, *Sarcophaga schusteri*) and 6 species of Calliphoridae (*Lucilia silvarum*, *L. ampullacea*, *L. illustris*, *Pollenia hungarica*, *P. labialis*, *P. vera*). 7 species of Calliphoridae (*Lucilia illustris*, *Protocalliphora azurea*, *P. proxima*, *P. rognesi*, *Trypocalliphora braueri*, *Eggisops pecchiolii*, *Pollenia vera*) and 6 species of Sarcophagidae (*Pterella melanura*, *Miltogramma brevipila*, *Metopia argentata*, *M. italiana*, *Amobia signata*, *Blaesoxipha grylloctona*) are firstly recorded from Zakarpattia region. One species of Sarcophagidae (*Sarcophaga jupalnica*) is firstly reported for Ivano-Frankivsk region.

**Keywords:** Calliphoridae, Sarcophagidae, fauna, West Ukraine.

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### Introduction

Altogether (including present data) 74 species of Calliphoridae (Grunin, 1970; Szpila & Verves, 2008; Verves, 1985b, 2003, 2004, 2005, 2012, 2013; Verves & Khronokalo, 2010) and 180 species of Sarcophagidae (Draber-Moňko, 1973; Khitzova, 1976; Povolný & Verves, 1986, 1997; Rohdendorf, 1970; Verves, 1973, 1974, 1975, 1978a, b, 1982, 1984, 1985a, 1986, 1989, 1993, 1998, 2000, 2003, 2014; Verves & Khronokalo, 2010, 2014a, b; Verves & Radchenko, 2017; Verves & Szpila, 2008, 2011; Verves *et al.*, 1977, 1989, 1984, 1991) have been recorded from the Ukraine.

### Materials and Methods

The faunistic data of the results of field collections of both authors in West Ukraine, Zakarpattia (Uzhgorod District, Nyzhne Solotvyno village, 48°33'N, 22°26'E, 140-200 m.a.s.l. 16-23.viii. 2014 and 08-21.viii. 2015 in

beech forest; Irshava District, Dovhe village, 48°22' N, 23°17'E, 160-220 m.a.s.l., 08-26.viii.2016, at mesophytic meadows with bushes) and Lviv (north environs of Truskavets City, 49°17' N, 23°31' E, 330-350 m.a.s.l., 2-18.viii.2017 in bushes and beech forest along stream) regions (= “oblasts”) are presented (Table 1). Flies were collected by net. The genera and subgenera of Sarcophagidae are given after Verves, 1986, 1989, 1990, 1993; Verves & Khronokalo, 2006; Calliphoridae – after Rognes, 1991, 1998; Rognes & Pape, 2007. The analysis and generalization of literature data about regional faunas of West Ukraine are presented too. Several investigations of regional faunas have been realized in borders of West Ukraine (Verves, 1979a, b) and its separate regions: Chernivtsi (Verves, 1985b, 2001), Ivano-Frankivsk (Verves, 1977), and Volyn (Khronokalo & Verves, 2009) regions. A level of

knowledge of faunas of both families of West Ukraine is moderately low (see Table 2).

## **Results**

1305 specimens from 64 species were collected and identified (Table 1). 16 species are firstly reported from Lviv region, including 10 species of Sarcophagidae (*Nyctia halterata*, *Blaesoxipha laticornis*, *Heteronychia bulgarica*, *H. haemorrhoa*, *H. rohdendorfiana*, *Bellieriomima subulata*, *Liopygia argyrostoma*, *Kramerea schuetzei*, *Rosellea aratrix*, *Sarcophaga schusteri*) and 6 species of Calliphoridae (*Lucilia silvarum*, *L. ampullacea*, *L. illustris*, *Pollenia hungarica*, *P. labialis*, *P. vera*). 7 species of Calliphoridae (*Lucilia illustris*, *Protocalliphora azurea*, *P. proxima*, *P. rognesi*, *Trypocalliphora braueri*, *Eggisops pecchiolii*, *Pollenia vera*) and 6 species of Sarcophagidae (*Pterella melanura*, *Miltogramma brevipila*, *Metopia argentata*, *M. italiana*, *Amobia signata*, *Blaesoxipha grylloctona*) are firstly recorded from Zakarpattia region. One species of Sarcophagidae (*Sarcophaga jupalnica*) is firstly reported for Ivano-Frankivsk region. One species, *Eggisops pecchiolii*, is firstly reported from Ukraine. As a result, the quantity of Ukrainian species of Calliphoridae grew to 74 correspondently. The lists of recorded regional species are essentially widened: for Lviv region - Sarcophagidae (from 30 to 41) and Calliphoridae (from 9 to 15); for Zakarpattia region - Sarcophagidae (from 73 to 79) and Calliphoridae (from 28 to 34). One species of sarcophagids is firstly found in Ivano-Frankivsk region (its number of species grew to 62).

The check lists of species of Calliphoridae and species of Sarcophagidae from different regions of West Ukraine according to analysis of literature data and original collections of authors are given below.

## **Calliphoridae**

1. *Bellardia bayeri* (Jacentkovský, 1937). “East Carpathians” (Grunin, 1970); Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Ivano-Frankivsk region (Grunin, 1970; Schumann, 1974; Verves & Khrokalo, 2010); Lviv region (Schumann, 1974; Verves & Khrokalo, 2010), Zakarpattya region (Schumann, 1974; Verves &

Khrokalo, 2010); Mezigiria district, Kolochava village (Verves, 2005).

2. *B. pandia* (Walker, 1849). Chernivtsi region (Skufyin & Kitzova, 1978; Verves & Khrokalo, 2010), Vyzhnytsia district, Lopushna village (Skufyin & Kitzova, 1978); Khmelnytskyi region (Grunin, 1970; Verves & Khrokalo, 2010); Volyn region: Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia (Grunin, 1970; Verves & Khrokalo, 2010).
3. *B. polita* (Mik, 1884). Zakarpattia: environs of Mukacheve city (Verves, 1985b).
4. *B. stricta* (Villeneuve, 1926). Chernivtsi region (Skufyin & Kitzova, 1978; Verves & Khrokalo, 2010): Khotyn town (Verves, 1985); Novoselitzia district, Chernivka village (Skufyin & Kitzova, 1978); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Lopushna village (Skufyin & Kitzova, 1978); Khmelnytskyi region (Grunin, 1970; Verves & Khrokalo, 2010); Volyn region (Verves & Khrokalo, 2010): Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region (Verves & Khrokalo, 2010); Mezigiria district, Kolochava village (Verves, 2005); Mukacheve city (Verves, 2005).
5. *B. viarum* (Robineau-Desvoidy, 1830). Chernivtsi region (Verves & Khrokalo, 2010): Vyzhnytsia district, Dolysny Shepit village (Verves, 2001).
6. *B. vulgaris* (Robineau-Desvoidy, 1830). “East Carpathians” (Grunin, 1970); Chernivtsi region: Novoselitzia district, Chernivka village (Skufyin & Kitzova, 1978); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Lopushna village (Skufyin & Kitzova, 1978).
7. *Calliphora* (s. str.) *loewi* Enderlein, 1903. Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Volyn region (Verves & Khrokalo, 2010): Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region: Mezigiria district, Kolochava village (Verves & Khrokalo, 2010).
8. *C. (s. str.) uralensis* Villeneuve, 1922. Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010): environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Skufyin & Kitzova, 1978); Putila district, Shepit village (Skufyin & Kitzova, 1978); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Lopushna village (Skufyin & Kitzova, 1978); Volyn region

(Verves, 2005; Verves & Khrokalo, 2010): Lutzk (Khanina & Khvesik, 1963); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region (Verves, 2005; Verves & Khrokalo, 2010); Mukacheve district, Siniak village (Skufyin & Khitzova, 1978); Uzhhorod (Moskaletz, 1960).

9. *C. (s. str.) vicina* Robineau-Desvoidy, 1830. Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010): environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Skufyin & Khitzova, 1978); Putila district, Shepit village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Zaleshchyky town (Verves, 2005); Khmelnytskyi region (Verves & Khrokalo, 2010; Viktorov-Nabokov, 1959); Lviv region (Verves & Khrokalo, 2010); Ternopil region (Verves & Khrokalo, 2010; Viktorov-Nabokov, 1959); Volyn region (Verves, 2005; Verves & Khrokalo, 2010): Lutzk (Khanina & Khvesik, 1963); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region: Mezigiria district, Kolochava village (Verves & Khrokalo, 2010); Uzhhorod (Moskaletz, 1960).

10. *C. (s. str.) vomitoria* (Linnaeus, 1758). Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010): environs of Khotyn town (Verves, 1985b); Putila district, Shepit village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Skufyin & Khitzova, 1978); Ivano-Frankivsk region: Rozhnyativ district, Mshana river valley (Verves & Khrokalo, 2010); Khmelnytskyi region (Belke, 1859); Lviv region (Verves & Khrokalo, 2010): Zhidachiv town (Verves, 2005); Volyn region (Verves & Khrokalo, 2010): Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region: Mezigiria district, Kolochava village (Verves & Khrokalo, 2010); Mukacheve district, Siniak village (Skufyin & Khitzova, 1978); Uzhhorod (Moskaletz, 1960).

11. *C. (Sterigomyia) stelviana* (Brauer & Bergenstamm, 1891). Chernivtsi region (Verves, 2005): Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001).

12. *C. (S.) subalpina* (Ringdahl, 1931). Chernivtsi region (Verves, 2005): Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Volyn region (Verves & Khrokalo, 2010): Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009).

13. *Cynomya mortuorum* (Linnaeus, 1761). Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010): Khotyn town (Verves, 1985); Putila district,

Shepit village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region: Rozhnyativ district, Mshana river valley (Verves & Khrokalo, 2010); Volyn region (Verves & Khrokalo, 2010).

14. *Onesia austriaca* Villeneuve, 1920. "East Carpathians" (Grunin, 1970); Chernivtsi region: Novoselitzia district, Chernivka village (Skufyin & Khitzova, 1978); Putila district, Shepit village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Skufyin & Khitzova, 1978); Ivano-Frankivsk region: Kosiv district, Gorod village (Verves, 1985b, 2005); Zakarpattya region: Mezigiria district, Kolochava village (Verves, 2005); Mukacheve district, Siniak village (Skufyin & Khitzova, 1978).

15. *O. kowarzi* Villeneuve, 1920. Zakarpattya region: Mukacheve district, Siniak village (Skufyin & Khitzova, 1978).

16. *Lucilia (Bufolucilia) bufonivora* Moniez, 1876. Ternopil region (Verves & Khrokalo, 2010).

17. *L. (B.) silvarum* (Meigen, 1826). Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010): Khotyn town (Verves, 1985b); Putila district, Shepit village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region: Rozhnyativ district, Mshana river valley (Verves & Khrokalo, 2010); Volyn region (Verves & Khrokalo, 2010): Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region (Verves, 2005; Verves & Khrokalo, 2010): Uzhhorod (Moskaletz, 1960).

18. *L. (s. str.) ampullacea* Villeneuve, 1922. Zakarpattya region (Verves & Khrokalo, 2010): Mezigiria district, Kolochava village (Verves, 2005).

19. *L. (s. str.) caesar* (Linnaeus, 1758). Chernivtsi region (Skufyin & Khitzova, 1978; Verves & Khrokalo, 2010): environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Skufyin & Khitzova, 1978); Zaleshchyky town (Verves, 2005); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Skufyin & Khitzova, 1978); Khmelnytskyi region (Belke, 1859; Verves, 2005; Verves & Khrokalo, 2010; Viktorov-Nabokov, 1959); Lviv region (Verves, 2005; Verves & Khrokalo, 2010; Viktorov-Nabokov, 1959); Ternopil region (Verves, 2005; Verves & Khrokalo, 2010; Viktorov-Nabokov, 1959); Volyn region (Verves, 2005; Verves & Khrokalo, 2010): Lutzk (Khanina & Khvesik, 1963); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009);

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Zakarpattya region (Verves, 2005; Verves & Khrokalo, 2010); Uzhhorod (Moskaletz, 1960).

20. *L. (s. str.) illustris* (Meigen, 1826). Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010); environs of Khotyn town (Verves, 1985b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Khmelnytskyi region (Belke, 1859); Volyn region (Verves, 2005; Verves & Khrokalo, 2010); Lutsk (Khanina & Khvesik, 1963); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region: Mezigiria district, Kolochava village (Verves & Khrokalo, 2010).

21. *L. (s. str.) magnicornis* (Siebke, 1863). Khmelnytskyi region (Belke, 1859).

22. *L. (Phaenicia) regalis* (Meigen, 1826). Firstly recorded for West Ukraine.

23. *L. (P.) richardsi* Collin, 1926. Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010); environs of Khotyn town (Verves, 1985b).

24. *L. (P.) sericata* (Meigen, 1826). Chernivtsi region (Skufyin & Khitzova, 1978; Verves & Khrokalo, 2010); environs of Khotyn town (Verves, 1985b); Khmelnytskyi region (Viktorov-Nabokov, 1959; Verves & Khrokalo, 2010); Lviv region (Viktorov-Nabokov, 1959; Verves & Khrokalo, 2010); Ternopil region (Viktorov-Nabokov, 1959; Verves & Khrokalo, 2010); Volyn region (Verves & Khrokalo, 2010); Lutsk (Khanina & Khvesik, 1963); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region: Mezigiria district, Kolochava village (Verves & Khrokalo, 2010); Uzhhorod (Moskaletz, 1960).

25. *Eggisops pecchiolii* Rondani, 1862. Firstly recorded for Ukraine.

26. *Melinda gentilis* Robineau-Desvoidy, 1830. Chernivtsi region: Putila district, Shepit village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1985b); Deliatyn town (Verves, 1985b); Lviv region (Grunin, 1970); Zakarpattya region: Mukacheve city (Verves, 2005); Mukacheve district, Siniak village (Skufyin & Khitzova, 1978).

27. *M. viridicyanea* (Robineau-Desvoidy, 1830). Chernivtsi region (Skufyin & Khitzova, 1978; Verves & Khrokalo, 2010); environs of Khotyn town (Verves, 1985b, 2005); Ivano-Frankivsk region (Verves & Khrokalo, 2010); Kosiv district, Rozhniv village (Verves, 2005); Volyn region: Shatsk district,

environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region (Skufyin & Khitzova, 1978; Verves & Khrokalo, 2010); Mezigiria district, Kolochava village (Verves, 2005).

28. *Chrysomya albiceps* (Wiedemann, 1819). Zakarpattya region (Verves & Khrokalo, 2010); Mezhigiria district, Kolochava village (Verves, 2004).

29. *Phormia regina* (Meigen, 1826). Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010); Khotyn town (Verves, 1985b); Khotyn district, Stavchany village (Verves, 2005); Zaleshchyky town (Verves, 2005); Khmelnytskyi region (Belke, 1859); Zakarpattya region (Verves, 2005; Verves & Khrokalo, 2010); Uzhhorod (Moskaletz, 1960).

30. *Protocalliphora azurea* (Fallén, 1817). Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010); Khotyn town (Verves, 1985b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Volyn region (Verves & Khrokalo, 2010); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009).

31. *P. proxima* Grunin, 1966. Volyn region: Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009).

32. *P. rognesi* Thompson & Pont, 1993. Volyn region (Verves & Khrokalo, 2010); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009).

33. *Protophormia terraenovae* (Robineau-Desvoidy, 1830). Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010); environs of Khotyn town (Verves, 1985b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Khmelnytskyi region (Verves, 2005; Verves & Khrokalo, 2010); Viktorov-Nabokov, 1959; Lviv region (Verves, 2005; Verves & Khrokalo, 2010); Viktorov-Nabokov, 1959; Volyn region (Verves, 2005; Verves & Khrokalo, 2010); Lutsk (Khanina & Khvesik, 1963); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region (Verves & Khrokalo, 2010); Uzhhorod (Moskaletz, 1960).

34. *Trypocalliphora braueri* (Hendel, 1901). Chernivtsi region: Vyzhnytsia district, Lopushna village (Skufyin & Khitzova, 1978).

35. *Pollenia amentaria* (Scopoli, 1763). Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010); Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Skufyin & Khitzova, 1978);

Lviv region (Verves & Khrokalo, 2010); Volyn region (Verves & Khrokalo, 2010); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region (Verves & Khrokalo, 2010); Mezигiria district, Kolochava village (Verves, 2005).

36. *P. angustigena* Wainwright, 1940. Zakarpattya region (Verves & Khrokalo, 2010); Mezигiria district, Kolochava village (Verves, 2005).

37. *P. dasypoda* Portschinsky, 1881. Chernivtsi region (Verves & Khrokalo, 2010); Khotyn town (Verves, 2005); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001).

38. *P. griseotomentosa* (Jacentkovský, 1944). Chernivtsi region (Verves & Khrokalo, 2010); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Khmelnytskyi region: Chemerivtsi district, Chorna village (Verves & Khrokalo, 2010); Slavuta city (Verves, 2005); Zakarpattya region (Verves & Khrokalo, 2010); Mezигiria district, Kolochava village (Verves, 2005).

39. *P. hungarica* Rognes, 1987. Chernivtsi region (Verves & Khrokalo, 2010); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2005); Volyn region (Verves & Khrokalo, 2010); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region (Verves & Khrokalo, 2010); Mezигiria district, Kolochava village (Verves, 2005).

40. *P. labialis* Robineau-Desvoidy, 1863. Chernivtsi region (Verves, 2005; Verves & Khrokalo, 2010); Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Skufyin & Khitzova, 1978); Putila district, Shepit village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Volyn region (Verves & Khrokalo, 2010); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region (Verves & Khrokalo, 2010); Mezигiria district, Kolochava village (Verves, 2005).

41. *P. pediculata* Macquart, 1834. Ivano-Frankivsk region (Verves & Khrokalo, 2010; Verves, 2012); Deliatyn town (Verves, 2005); Lviv region (Verves & Khrokalo, 2010; Verves, 2012); Ternopil region (Verves, 2005), Zakarpattya region (Verves, 2010).

42. *P. ponti* Rognes, 1991. Chernivtsi region: Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001).

43. *P. rудis* (Fabricius, 1794). Chernivtsi region (Verves & Khrokalo, 2010); environs of Khotyn town (Verves, 1985b); Novoselitzia district,

Chernivka village (Skufyin & Khitzova, 1978); Putila district, Shepit village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Skufyin & Khitzova, 1978); Khmelnytskyi region (Belke, 1859); Volyn region (Verves & Khrokalo, 2010); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattya region (Verves & Khrokalo, 2010); Mezигiria district, Kolochava village (Verves, 2005).

44. *P. vagabunda* (Meigen, 1826). Chernivtsi region (Verves & Khrokalo, 2010); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Volyn region (Verves & Khrokalo, 2010); Zakarpattya region (Verves & Khrokalo, 2010); Mezигiria district, Kolochava village (Verves, 2005).

45. *P. vera* Jacentkovský, 1936. "East Carpathians" (Grunin, 1970); Chernivtsi region: Novoselitzia district, Chernivka village (Skufyin & Khitzova, 1978); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Skufyin & Khitzova, 1978).

46. *P. viatica* Robineau-Desvoidy, 1830. Chernivtsi region: Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001).

47. *Eurychaeta muscaria* (Meigen, 1926). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2010); Khmelnytskyi region (Belke, 1859); Ternopil region: Zalishchyky town (Verves & Khrokalo, 2010).

48. *E. palpalis* (Robineau-Desvoidy, 1830). Chernivtsi region (Verves, 1998, 2005; Verves & Khrokalo, 2010); environs of Khotyn town (Verves, 1985b); Ivano-Frankivsk region (Verves, 1998, 2005; Verves & Khrokalo, 2010); Kosiv district (Verves, 1977); Volyn region (Verves & Khrokalo, 2010); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998, 2005; Verves & Khrokalo, 2010).

### Sarcophagidae

1. *Macronychia* (s. str.) *striginervis* (Zetterstedt, 1838). Chernivtsi region (Verves, 1998); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2006, 2014a); Lviv region (Verves, 1998; Verves & Khrokalo, 2006, 2014a); Rivne region (Verves, 1998; Verves & Khrokalo, 2006, 2014a); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2006, 2014a).

2. *M. (Moschusa) agrestis* (Fallén, 1810). Volyn region (Verves, 1998; Verves & Khrokalo, 2014a).

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3. *M. (M.) griseola* (Fallén, 1820). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014a); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2006, 2014a); Lviv region (Verves, 1998; Verves & Khrokalo, 2006, 2014a); Rivne region (Verves, 1998; Verves & Khrokalo, 2006, 2014a); Ternopil region (Verves, 1998; Verves & Khrokalo, 2006, 2014a); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2006, 2014a).
4. *M. (M.) polyodon* (Meigen, 1824). Chernivtsi region (Verves & Khrokalo, 2014a); Vyzhnytsia district, Dolishny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976; Verves & Khrokalo, 2006); Ivano-Frankivsk region (Verves, 1998); Lviv region (Verves, 1998); Busk district, Krasne station (Verves & Khrokalo, 2006); Ternopil region (Verves, 1998; Verves & Khrokalo, 2006); Volyn region (Verves, 1982); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2006, 2014a).
5. *Senotainia (Arrenopus) albifrons* (Rondani, 1859). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014a); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).
6. *S. (s. str.) conica* (Fallén, 1810). Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014a); Lviv region (Verves, 1998; Verves & Khrokalo, 2014a); Volyn region (Verves & Khrokalo, 2014a); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).
7. *Pterella grisea* (Meigen, 1824). Ivano-Frankivsk region (Verves & Khrokalo, 2014a), Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014a); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014a); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).
8. *P. melanura* (Meigen, 1824). Khmelnytskyi region (Verves & Khrokalo, 2014a).
9. *Miltogramma brevipila* Villeneuve, 1911. Firstly recorded for West Ukraine.
10. *M. germari* Meigen, 1824. Rivne region: Dibrovychia town (Verves & Khrokalo, 2014a).
11. *M. oestracea* (Fallén, 1820). Ternopil region (Verves, 1998; Verves & Khrokalo, 2014a).
12. *M. punctata* Meigen, 1824. Khmelnytskyi region (Draber-Mońko, 1973; Verves, 1998; Verves & Khrokalo, 2014a); Ternopil (Draber-Mońko, 1973).
13. *Miltogrammidium rutilans* (Meigen, 1824). Khmelnytskyi region (Verves & Khrokalo, 2014a).
14. *Metopia argentata* Macquart, 1850. Ivano-Frankivsk region (Verves & Khrokalo, 2014a); Kosiv district (Verves, 1977); Lviv region (Verves & Khrokalo, 2014a).
15. *M. argyrocephala* Meigen, 1824. Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014a); Vyzhnytsia district, Dolishny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014a); Kosiv district (Verves, 1977); Lviv region (Verves, 1998; Verves & Khrokalo, 2014a); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014a); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).
16. *M. campestris* (Fallén, 1810). Chernivtsi region (Verves & Khrokalo, 2014a); Vyzhnytsia district, Dolishny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014a); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014a); Lviv region (Verves, 1998; Verves & Khrokalo, 2014a); Volyn region (Verves & Khrokalo, 2014a); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).
17. *M. grandii* Venturi, 1953. Chernivtsi region (Verves & Khrokalo, 2014a); Vyzhnytsia district, Dolishny Shepit village (Verves, 2001); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).
18. *M. italiana* Pape, 1985. Lviv region (Verves, 1998; Verves & Khrokalo, 2014a).
19. *M. staegeri* Rondani, 1859. Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014a); Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).
20. *Hilarella hilarella* (Zetterstedt, 1844). Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).
21. *H. stictica* (Meigen, 1830). Lviv region (Verves, 1998; Verves & Khrokalo, 2014a); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014a).
22. *Paragusia elegantula* (Zetterstedt, 1844). Volyn region (Verves, 1998; Verves & Khrokalo, 2014a).
23. *Taxigramma heteroneura* (Meigen, 1830). Lviv region (Verves, 1998; Verves & Khrokalo, 2014a); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014a); Volyn region (Verves & Khrokalo, 2014a);

Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).

24. *Amobia signata* (Meigen, 1824). Firstly recorded for West Ukraine.

25. *Nyctia halterata* (Panzer, 1798). Chernivtsi region: Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014a); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014a); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014a); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).

26. *Agria affinis* (Fallén, 1817). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014a); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014a); Kosiv district (Verves, 1977); Lviv region (Verves, 1998; Verves & Khrokalo, 2014a); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).

27. *A. mamillata* (Pandellé, 1896). Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014a); Kosiv district (Verves, 1977); Lviv region (Verves, 1998; Verves & Khrokalo, 2014a); Zakarpattia (Verves, 1982; Verves & Khrokalo, 2014a).

28. *Brachicoma devia* (Fallén, 1820). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014a); environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014a); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014a); Lviv region (Verves, 1982, 1998; Verves & Khrokalo, 2014a); Volyn region (Verves, 1998; Verves & Khrokalo, 2014a); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a); Mukacheve district, Syniak village (Khitzova, 1976).

29. *Sarcophila latifrons* (Fallén, 1817). Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014a); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014a); Lviv region (Verves, 1998; Verves & Khrokalo, 2014a); Rivne region (Verves, 1998; Verves & Khrokalo, 2014a); Volyn region (Verves & Khrokalo, 2014a); Shatsk district,

environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).

30. *S. meridionalis* Verves, 1982. Khmelnytskyi region (Verves & Khrokalo, 2014a).

31. *Wohlfahrtia magnifica* (Schiner, 1862). Zakarpattia region (Verves & Khrokalo, 2014a).

32. *W. meigeni* (Schiner, 1862). Chernivtsi region (Verves & Khrokalo, 2014a); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014a); Lviv region (Verves, 1998; Verves & Khrokalo, 2014a); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014a); Volyn region (Verves, 1998; Verves & Khrokalo, 2014a); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014a).

33. *Sarcotachinella sinuata* (Meigen, 1826). Chernivtsi region (Verves, 1998); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region: Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998); Ternopil region (Verves, 1998); Volyn region (Verves, 1998); Zakarpattia (Verves, 1998); Rakhiv (Verves, 1974).

34. *Blaesoxipha grylloctona* Löw, 1861. Firstly recorded for West Ukraine.

35. *B. laticornis* (Meigen, 1826). Chernivtsi region (Verves & Khrokalo, 2014b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia (Verves, 1998; Verves & Khrokalo, 2014b); Rakhiv (Verves, 1974).

36. *B. redempta* (Pandellé, 1896). Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974); Merzigiria district, Kolochava village (Verves & Khrokalo, 2014b); Uzhgorod District: Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

37. *Servaisia* (s. str.) *erythrura* (Meigen, 1826). Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

38. *S.* (s. str.) *rossica* (Villeneuve, 1912). Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998;

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- Verves & Khrokalo, 2014b); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974).
39. *Tephromyia grisea* (Meigen, 1826). Khmelnytskyi region (Draber-Moňko, 1973; Verves, 1998; Verves & Khrokalo, 2014b); Ternopil (Draber-Moňko, 1973); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b).
40. *Ravinia pernix* (Harris, 1780). Chernivtsi region (Verves, 1998); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998); Lviv region (Verves, 1998); Rivne region (Verves, 1998); Ternopil region (Verves, 1998); Volyn region (Verves, 1998); Zakarpattia region (Verves, 1998); Berehove district, Rafainove village (Staněk, 1974).
41. *Helicophagella* (s. str.) *agnata* (Rondani, 1860). Chernivtsi region (Verves & Khrokalo, 2014b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974).
42. *H.* (s. str.) *crassimargo* (Pandellé, 1896). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Volyn region (Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974).
43. *H.* (s. str.) *noverca* (Rondani, 1860). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); environs of Khotyn town (Verves, 1985b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998); Berehove district, Rafainove village (Staněk, 1974); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).
44. *H.* (s. str.) *novercoides* (Böttcher, 1913). Chernivtsi region (Verves, 1998, 2001; Verves & Khrokalo, 2014b); Novoselitzia district, Chernivka village (Khitzova, 1976); Vyzhnytsia district, Lopushna village (Khitzova, 1976); Ivano-Frankivsk region: Kosiv district (Verves, 1977).
45. *H.* (s. str.) *rosellei* (Böttcher, 1912). Chernivtsi region (Verves & Khrokalo, 2014b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Zakarpattia region: Berehove district, Rafainove village (Staněk, 1974); Mezgiria district, Kolochava village (Verves & Khrokalo, 2014b).
46. *H. (Parabellieria) melanura* (Meigen, 1826). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998); Berehove district, Rafainove village (Staněk, 1974); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).
47. *Discachaeta arcipes* (Pandellé, 1896). Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Pidgora village (Verves & Kuzmovich, 1979); environs of Ternopil (Verves & Kuzmovich, 1979); Zastinoche village (Verves & Kuzmovich, 1979).
48. *D. pumila* (Meigen, 1826). Ivano-Frankivsk region (Verves, 1998); Kosiv district (Verves, 1977; Verves & Khrokalo, 2014b); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b).
49. *Heteronychia* (s. str.) *bulgarica* (Enderlein, 1936). Volyn region (Verves, 1998; Verves & Khrokalo, 2014b).
50. *H.* (s. str.) *consanguinea* (Rondani, 1860). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia region: Mukacheve district, Syniak village (Khitzova, 1976).

51. *H.* (s. str.) *depressifrons* (Zetterstedt, 1845). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Volyn region (Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).
52. *H.* (s. str.) *dissimilis* (Meigen, 1826). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b) Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia region: Mezигiria district, Kolochava village (Verves & Khrokalo, 2014b); Rakiv town (Verves, 1974).
53. *H.* (s. str.) *haemorrhoa* (Meigen, 1826). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); environs of Khotyn town (Verves, 1985b); Ivano-Frankivsk region (Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977, 1079b); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).
54. *H.* (s. str.) *haemorrhoides* (Böttcher, 1913). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).
55. *H.* (s. str.) *proxima* (Rondani, 1860). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Ivano-Frankivsk region (Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974).
- (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia region (Verves, 1998); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).
56. *H.* (s. str.) *rohdendorfi* (Povolný & Slamečková, 1959). Chernivtsi region (Verves & Khrokalo, 2014b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region: Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).
57. *H.* (s. str.) *rohdendorfiana* Mihályi, 1975. Chernivtsi region: Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998); Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998); Mezигiria district, Kolochava village (Verves & Khrokalo, 2014b).
58. *H.* (s. str.) *schinieri* (Bezzi, 1891). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); environs of Khotyn town (Verves, 1985b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Ternopil region: Zalishchyky town (Verves & Khrokalo, 2014b); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974).
59. *H.* (s. str.) *slovaca* Povolný & Slamečková, 1967. Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977, 1979b).
60. *H.* (s. str.) *vagans* (Meigen, 1826). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Ivano-Frankivsk region (Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974).
61. *H.* (s. str.) *vicina* (Macquart, 1835). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolyshny Shepit village (Verves,

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2001); Lopushna village (Khitzova, 1976); Volyn region (Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009).

62. *H. (Pandelleola) filia* (Rondani, 1860). Chernivtsi region: environs of Khotyn town (Verves, 1985b).

63. *Karovia hirticrus* (Pandellé, 1896). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): environs of Khotyn town (Verves, 1985b); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

64. *Ascelocella (Mimarhopocnemis) granulata* (Kramer, 1908). Chernivtsi region (Verves, 1998, 2001; Verves & Khrokalo, 2014b): Vyzhnytsia district, Lopushna village (Khitzova, 1976).

65. *Bellieriomima subulata* (Pandellé, 1896). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Volyn region (Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974).

66. *Krameromyia anaces* (Walker, 1849). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): environs of Khotyn town (Verves, 1985b); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

67. *Myorhina (Mehria) nemoralis* (Kramer, 1908). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

68. *M. (s. str.) lunigera* (Böttcher, 1914). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Zakarpattia region (Verves, 1998); Mezigiria district, Kolochava village (Verves & Khrokalo, 2014b).

69. *M. (s. str.) nigriventris* (Meigen, 1826). Chernivtsi region (Verves & Khrokalo, 2014b): environs of Khotyn town (Verves, 1985b); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

70. *M. (s. str.) pandifera* (Blackith & Pape, 1999). Chernivtsi region (Verves & Khrokalo, 2014b): Vyzhnytsia district, Dolysny Shepit village (Verves, 2001).

71. *M. (s. str.) socrus* (Rondani, 1860). Chernivtsi region (Verves & Khrokalo, 2014b): Vyzhnytsia district, Dolysny Shepit village (Verves, 2001).

72. *M. (s. str.) soror* (Rondani, 1860). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

73. *M. (s. str.) villeneuvei* (Böttcher, 1912). Chernivtsi region (Verves, 2001; Verves & Khrokalo, 2014b): Putila district, Shepit village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977).

74. *Pandelleana protuberans* (Pandellé, 1896). Chernivtsi region (Verves & Khrokalo, 2014b): Putila district, Shepit village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977).

75. *Sarina sexpunctata* (Fabricius, 1805). Chernivtsi region (Verves & Khrokalo, 2014b): Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

76. *Thrysocnema incisilobata* (Pandellé, 1896). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves,

1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998), Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia region: Berehove district, Rafainove village (Staněk, 1974); Mezigiria district, Kolochava village (Verves & Khrokalo, 2014b); Uzhgorod (Verves, 1974); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b); Velyko-Berezna District: Vyshka village (Verves & Khrokalo, 2014b)

77. *T. kentejana* (Rohdendorf, 1937). Zakarpattia region (Verves, 1998): Mezigiria district, Kolochava village (Verves & Khrokalo, 2014b).

78. *Bercaea africa* (Wiedemann, 1824). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Khmelnytskyi region (Belke, 1859; Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

79. *Liopygia (Thomsonea) argyrostoma* (Robineau-Desvoidy, 1830). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

80. *L. (Varirosellea) uliginosa* (Kramer, 1908). Ivano-Frankivsk region: Kosiv district (Verves, 1977); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974).

81. *Liosarcophaga* (s. str.) *emdeni* (Rohdendorf, 1969). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Pidgora village (Verves & Kuzmovich, 1979), environs of Ternopil (Verves & Kuzmovich,

1979); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia region (Verves, 1998): Mukacheve district, Syniak village (Khitzova, 1976); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

82. *L. (s. str.) harpax* (Pandellé, 1896). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Zakarpattia region (Logoida, 1978; Verves, 1998; Verves & Khrokalo, 2014b); Berehove district, Rafainove village (Staněk, 1974).

83. *L. (s. str.) portschinskyi* (Rohdendorf, 1937). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): Vyzhnytsia district, Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Zakarpattia region (Verves, 1998; Verves & Khrokalo, 2014b).

84. *L. (s. str.) tuberosa* (Pandellé, 1896). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): Novoselitzia district, Chernivka village (Khitzova, 1976); Vyzhnytsia district, Lopushna village (Khitzova, 1976); Ivano-Frankivsk region: Kosiv district (Verves, 1977); Volyn region (Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Logoida, 1978; Verves, 1998; Verves & Khrokalo, 2014b); Mukacheve district, Syniak village (Khitzova, 1976).

85. *L. (Pandelleisca) similis* (Meade, 1876). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998): Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

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86. *Parasarcophaga* (s. str.) *albiceps* (Meigen, 1826). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998); Berehove district, Rafainove village (Staněk, 1974); Mukacheve district, Syniak village (Khitzova, 1976); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

87. *Robineauella* (s. str.) *caerulescens* (Zetterstedt, 1838). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998); Mezgiria district, Kolochava village (Verves & Khrokalo, 2014b); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

88. *Kramerea schuetzei* (Kramer, 1909). Ivano-Frankivsk region (Verves, 1998; Xue et al., 2011); Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Xue et al., 2011); Volyn region: Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Xue et al., 2011); Berehove district, Rafainove village (Staněk, 1974).

89. *Rosellea aratrix* (Pandellé, 1896)\*. Chernivtsi region (Verves, 1998; Xue et al., 2011); environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Lopushna

village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Xue et al., 2011); Kosiv district (Verves, 1977); Volyn region (Verves, 1998; Xue et al., 2011); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998; Xue et al., 2011); Berehove district, Rafainove village (Staněk, 1974); Mukacheve district, Syniak village (Khitzova, 1976).

\*Data “Zakarpattia: Pivtzy” (Verves, 1974) really belongs to Pivtzy village (Chernigiv region).

90. *Sarcophaga bachmayeri* (Lehrer, 1978). Zakarpattia (Povolný & Verves, 1986; Verves, 1998); Perechyn district, Turyi Remety village (Verves & Khrokalo, 2014b); Rakliv town (Verves & Khrokalo, 2014b); Velyko-Berezny town (Verves & Khrokalo, 2014b).

91. *S. carnaria* (Linnaeus, 1758). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); environs of Khotyn town (Verves, 1985b); Vyzhnytsia district, Dolyshny Shepit village (Verves, 2001); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b); Kosiv district (Verves, 1977); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b); Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998); Mezgiria district, Kolochava village (Verves & Khrokalo, 2014b); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

92. *S. disputata* Lehrer, 1967. Zakarpattia region (Verves & Radchenko, 2017).

93. *S. hennigi* Lehrer, 1978. Zakarpattia region: Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

94. *S. jupalnica* Lehrer, 1967. Chernivtsi region\*; Ivano-Frankivsk region: Kosiv district, Rozhniv village (Verves & Khrokalo, 2014b).

\*After Khitzova (1976), who listed this species under erroneous name “*Sarcophaga bergi* Rohdendorf, 1937”.

95. *S. lehmanni* Müller, 1922. Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b); environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo,

2014b): Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves & Khrokalo, 2014b): Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998): Berehove city (Verves, 1974); Berehove district, Rafainove village (Staněk, 1974); Uzhgorod (Verves, 1974); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

96. *S. moldavica* Rohdendorf, 1937. Chernivtsi region (Povolný & Verves, 1986; Verves, 1998; Verves & Khrokalo, 2014b): Novoselitzia district, Chernivka village (Khitzova, 1976); Zakarpattia region (Povolný & Verves, 1986; Verves, 1998): Mezigiria district, Kolochava village (Verves & Khrokalo, 2014b); Mukacheve district, Syniak village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976).

97. *S. mouchajosefi* Lehrer, 1978 Zakarpattia region: Rakhiv district (Verves & Khrokalo, 2014b).

98. *S. schusteri* Lehrer, 1959. Chernivtsi region: Vyzhnytsia district, Dolysny Shepit village (Verves & Khrokalo, 2014b); Zakarpattia region: Mezigiria district, Kolochava village (Verves & Khrokalo, 2014b); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

99. *S. subvicina* Rohdendorf, 1937. Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): environs of Chernivtsi city (Khitzova, 1976); environs of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region: Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998); Zakarpattia region (Verves, 1998): Berehove district, Rafainove village (Staněk, 1974); Mezigiria district, Kolochava village (Verves & Khrokalo, 2014b); Mukacheve district, Syniak village (Khitzova, 1976).

100. *S. variegata* (Scopoli, 1763). Chernivtsi region (Verves, 1998; Verves & Khrokalo, 2014b): environs

of Khotyn town (Verves, 1985b); Novoselitzia district, Chernivka village (Khitzova, 1976); Putila district, Shepit village (Khitzova, 1976); Vyzhnytsia district, Dolysny Shepit village (Verves, 2001); Lopushna village (Khitzova, 1976); Ivano-Frankivsk region (Verves, 1998; Verves & Khrokalo, 2014b): Kosiv district (Verves, 1977); Khmelnytskyi region (Verves, 1998; Verves & Khrokalo, 2014b); Lviv region (Verves, 1998; Verves & Khrokalo, 2014b); Rivne region (Verves, 1998; Verves & Khrokalo, 2014b); Ternopil region (Verves, 1998; Verves & Khrokalo, 2014b); Volyn region (Verves, 1998; Verves & Khrokalo, 2014b): Shatsk district, environs of Svitiaz lake (Khrokalo & Verves, 2009); Zakarpattia region (Verves, 1998): Berehove district, Rafainove village (Staněk, 1974); Mezigiria district, Kolochava village (Verves & Khrokalo, 2014b); Rakhiv city (Verves, 1974); Uzhgorod District, Nyzhne Solotvyno village (Verves & Khrokalo, 2014b).

101. *S. zumptiana* Lehrer, 1959. Ivano-Frankivsk region (Povolný & Verves, 1986; Verves, 1998; Verves & Khrokalo, 2014b): Kosiv district (Verves, 1977); Zakarpattia region (Povolný & Verves, 1986; Verves, 1998): Mezigiria district, Kolochava village (Verves & Khrokalo, 2014b); Rakhiv town (Verves, 1974); Velykyi Bereznyi town, forest (Verves, 1974).

## **Discussion**

Regional faunas of Western Ukraine are not studied in detail: their review (including the results of present paper) is given at Table 2. The regional special lists present not less than 60-70% of full special list of calliphorids in Chernivtsi (37 species) and Zakarpattia (35 species); of sarcophagids in Zakarpattia (80 species), Chernivtsi (63 species), and Ivano-Frankivsk (62 species). The faunistic lists of species at level 30-60% of full special list is known for Calliphoridae: Volyn (23 species), Lviv (15 species), Khmelnytskyi (13 species), and Ivano-Frankivsk (12 species); for Sarcophagidae: Lviv (41 species), Volyn (34 species), Khmelnytskyi (29 species) and Ternopil (29 species). The levels of faunistic studies in others regions are very low: Calliphoridae: Ternopil (6 species) and Rivne (2 species); Sarcophagidae: Rivne (17 species). One calliphorid species (*Eggisops pecchiolii*) is firstly recorded for territory of Ukraine.

**Fauna of Sarcophagidae and Calliphoridae (Diptera) of the West Ukraine**

**Table 1. List of specimens of the species of Calliphoridae and Sarcophagidae, collected in Zakarpattia and Lviv regions in 2014-2017**

No.	Species	Nyzhne Solotvyno	Dovhe	Zakarpatia sum	Truskavets (Lviv region)	Total sum of specimens
1	<i>Calliphora vicina</i>	-	-	-	1	1
2	<i>C. vomitoria</i>	-	-	-	1	1
3	<i>Lucilia ampullacea</i>	-	1	1	4	5
4	<i>L. caesar</i>	22	17	39	80	119
5	<i>L. illustris</i>	-	3	3	8	11
6	<i>L. sericata</i>	4	11	15	39	54
7	<i>L. silvarum</i>	-	4	4	1	5
8	<i>Eggisops pecchiolii</i>	-	1	1	-	1
9	<i>Chrysomya albiceps</i>	2	4	6	-	6
10	<i>Protocalliphora azurea</i>	-	2	2	-	4
11	<i>P. proxima</i>	-	1	1	-	1
12	<i>P. rognesi</i>	-	3	3	-	3
13	<i>Trypocalliphora braueri</i>	1	-	1	-	1
14	<i>Pollenia hungarica</i>	8	1	9	2	11
15	<i>P. labialis</i>	-	-	-	1	1
16	<i>P. pediculata</i>	11	11	22	6	28
17	<i>P. rufa</i>	5	2	7	-	7
18	<i>P. vera</i>	11	5	16	1*	17
<b>18</b>	<b>Calliphoridae</b>	<b>64</b>	<b>66</b>	<b>130</b>	<b>134</b>	<b>264</b>
19	<i>Macronymchia polyodon</i>	-	2	2	-	2
20	<i>Senotainia conica</i>	-	1	1	1	2

21	<i>Amobia signata</i>	-	1	1*	-	1
22	<i>Miltogramma brevipila</i>	-	1	1*	-	1
23	<i>Pterella melanura</i>	1	-	1*	-	1
24	<i>Metopia argentata</i>	3	-	3*	-	3
25	<i>M. argyrocephala</i>	-	-	-	1	1
26	<i>M. campestris</i>	-	1	1	-	1
27	<i>M. italiana</i>	1	-	1*	-	1
27	<i>Nyctia halterata</i>	-	-	-	18*	18
29	<i>Sarcophila latifrons</i>	-	1	1	-	1
30	<i>Blaesoxipha grylloctona</i>	-	13	13*	-	13
31	<i>B. laticornis</i>	-	1	1	1*	2
32	<i>B. redempta</i>	1	6	7	-	7
33	<i>Ravinia pernix</i>	1	-	1	-	1
34	<i>Helicophagella melanura</i>	2	6	8	20	28
35	<i>H. agnata</i>	-	2	2	-	2
36	<i>H. noverca</i>	2	23	25	-	25
37	<i>Heteronychia bulgarica</i>	-	-	-	1*	1
38	<i>H. depressifrons</i>	1	4	5	-	5
39	<i>H. haemorrhoa</i>	-	2	2	2*	4
40	<i>H. haemorrhoides</i>	-	1	1	5	6
41	<i>H. proxima</i>	5	10	15	13	28
42	<i>H. rohdendorfiana</i>	-	-	-	2*	2
43	<i>H. vagans</i>	-	4	4	6	10
44	<i>Karovia hirticrus</i>	-	1	1	-	1
45	<i>Bellieriomima subulata</i>	-	9	9	1*	10

**Fauna of Sarcophagidae and Calliphoridae (Diptera) of the West Ukraine**

46	<i>Myorhina nigriventris</i>	1	1	2	-	2
47	<i>Sarina sexpunctata</i>	1	-	1	-	1
48	<i>Thyrsocnema incisilobata</i>	2	28	30	5	35
49	<i>Bercaea africa</i>	-	1	1	-	1
50	<i>Liopygia argyrostoma</i>	-	4	4	3*	7
51	<i>Liosarcophaga emdeni</i>	11	15	26	-	26
52	<i>L. tuberosa</i>	-	4	4	-	4
53	<i>L. similis</i>	4	24	28	1	29
54	<i>Parasarcophaga albiceps</i>	2	2	4	2	6
55	<i>Robineauella caerulescens</i>	3	-	3	2	5
56	<i>Kramerea schuetzei</i>	1	-	1	1*	2
57	<i>Rosellea aratrix</i>	31	40	71	5*	76
58	<i>Sarcophaga carnaria</i>	28	88	116	66	182
59	<i>S. disputata</i>	1	-	1	-	1
60	<i>S. hennigi</i>	3	-	3	-	3
61	<i>S. lehmanni</i>	30	-	30	81	111
62	<i>S. schusteri</i>	1	-	1	5*	6
63	<i>S. subvicina</i>	-	1	1	14	15
64	<i>S. variegata</i>	34	160	194	157	351
<b>46</b>	<b>Sarcophagidae</b>	<b>173</b>	<b>456</b>	<b>629</b>	<b>412</b>	<b>1041</b>
<b>Total sum of specimens</b>		<b>237</b>	<b>522</b>	<b>759</b>	<b>546</b>	<b>1305</b>

**Table 2. List of species of Calliphoridae and Sarcophagidae from the West Ukraine regions**

No.	Species	Regions								<b>Zakarpattia</b>
		<b>Chernivtsi</b>	<b>Ivano-Frankivsk</b>	<b>Khmelnitskyi</b>	<b>Lviv</b>	<b>Rivne</b>	<b>Ternopil</b>	<b>Volyn</b>		
1	<i>Bellardia bayeri</i> (Jacentkovský, 1937)	x	x	-	x	-	-	-	x	
2	<i>B. pandia</i> (Walker, 1849)	x	-	x	-	-	-	x	x	
3	<i>B. polita</i> (Mik, 1884)	-	-	-	-	-	-	-	x	
4	<i>B. stricta</i> (Villeneuve, 1926)	x	-	x	-	-	-	x	x	
5	<i>B. viarum</i> (Robineau-Desvoidy, 1830)	x	-	-	-	-	-	-	-	
6	<i>B. vulgaris</i> (Robineau-Desvoidy, 1830)	x	-	-	-	-	-	-	-	
7	<i>Calliphora</i> (s. str.) <i>loewi</i> Enderlein, 1903	x	-	-	-	-	-	x	x	
8	<i>C. (s. str.) uralensis</i> Villeneuve, 1922	x	x	-	-	-	-	x	x	
9	<i>C. (s. str.) vicina</i> Robineau-Desvoidy, 1830	x	-	x	x	-	x	x	x	
10	<i>C. (s. str.) vomitoria</i> (Linnaeus, 1758)	x	x	x	x	-	-	x	x	
11	<i>C. (Sterigomyia) stelviana</i> (Brauer & Bergenstamm, 1891)	x	-	-	-	-	-	-	-	
12	<i>C. (S.) subalpina</i> (Ringdahl, 1931)	x	-	-	-	-	-	x	-	

**Fauna of Sarcophagidae and Calliphoridae (Diptera) of the West Ukraine**

13	<i>Cynomya mortuorum</i> (Linnaeus, 1761)	x	x	-	-	-	-	x	-
14	<i>Onesia austriaca</i> Villeneuve, 1920	x	x	-	-	-	-	-	x
15	<i>O. kowarzi</i> Villeneuve, 1920	-	-	-	-	-	-	-	x
16	<i>Lucilia (Bufolucilia) bufonivora</i> <sup>1</sup> Moniez, 1876	x*	-	-	-	-	x	-	-
17	<i>L. (B.) silvarum</i> (Meigen, 1826)	x	x	-	x*	-	-	x	x
18	<i>L. (s. str.) ampullacea</i> Villeneuve, 1922	-	-	-	x*	-	-	-	x
19	<i>L. (s. str.) caesar</i> (Linnaeus, 1758)	x	x	x	x	-	x	x	x
20	<i>L. (s. str.) illustris</i> (Meigen, 1826)	x	-	x	x*	-	-	x	x*
21	<i>L. (s. str.) magnicornis</i> (Siebke, 1863)	-	-	x	-	-	-	-	-
22	<i>L. (Phaenicia) regalis</i> (Meigen, 1826) <sup>2</sup>	-	-	-	-	x*	-	-	-
23	<i>L. (P.) richardsi</i> Collin, 1926	x	-	-	-	-	-	-	-
24	<i>L. (P.) sericata</i> (Meigen, 1826)	x	-	x	x	x	x	x	x
25	<i>Eggisops pecchiolii</i> Rondani, 1862**	-	-	-	-	-	-	-	x*
26	<i>Melinda gentilis</i> Robineau-Desvoidy, 1830	x	x	-	x	-	-	-	x
27	<i>M. viridicyanea</i> (Robineau-Desvoidy, 1830)	x	x	-	-	-	-	x	x
28	<i>Chrysomya albiceps</i> (Wiedemann, 1819)	-	-	-	-	-	-	-	x
29	<i>Phormia regina</i> (Meigen, 1826)	x	-	x	-	-	-	-	x

<sup>1</sup> Chernivtsi region: Zaleshchyky, coast of Dnister, 20-21.05.1986 (S. Zhrazhevskiy), 2 females.

<sup>2</sup> Rivne region: 22 km N of Ostrog, 17.07.1988 (S. Zhrazhevsky), 1 male.

30	<i>Protocalliphora azurea</i> (Fallén, 1817)	x	-	-	-	-	-	x	x*
31	<i>P. proxima</i> Grunin, 1966	-	-	-	-	-	-	x	x*
32	<i>P. rognesi</i> Thompson & Pont, 1993	-	-	-	-	-	-	x	x*
33	<i>Protophormia terraenavae</i> (Robineau-Desvoidy, 1830)	x	-	x	x	-	-	x	x
34	<i>Trypocalliphora braueri</i> (Hendel, 1901)	x	-	-	-	-	-	-	x*
35	<i>Pollenia amentaria</i> (Scopoli, 1763)	x	-	-	x	-	-	x	x
36	<i>P. angustigena</i> Wainwright, 1940	-	-	-	-	-	-	-	x
37	<i>P. dasypoda</i> Portschinsky, 1881	x	-	-	-	-	-	-	-
38	<i>P. griseotomentosa</i> (Jacentkovský, 1944)	x	-	x	-	-	-	-	x
39	<i>P. hungarica</i> Rognes, 1987	x	-	-	x*	-	-	x	x
40	<i>P. labialis</i> Robineau-Desvoidy, 1863	x	-	-	x*	-	-	x	x
41	<i>P. pediculata</i> Macquart, 1834	-	x	-	x	-	x	-	x
42	<i>P. ponti</i> Rognes, 1991	x	-	-	-	-	-	-	-
43	<i>P. rufa</i> (Fabricius, 1794)	x	x	x	-	-	-	x	x
44	<i>P. vagabunda</i> (Meigen, 1826)	x	-	-	-	-	-	x	x
45	<i>P. vera</i> Jacentkovský, 1936	x	-	-	x*	-	-	-	x*
46	<i>P. viatica</i> Robineau-Desvoidy, 1830	x	-	-	-	-	-	-	-
47	<i>Eurychaeta muscaria</i> (Meigen, 1926)	x	-	x	-	-	x	-	-
48	<i>E. palpalis</i> (Robineau-Desvoidy, 1830)	x	x	-	-	-	-	x	x

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Calliphoridae		37	12	13	15	2	6	23	35
1	<i>Macronymchia</i> (s. str.) <i>striginervis</i> (Zetterstedt, 1838)	-	x	-	x	x	-	-	x
2	<i>M. (Moschusa) agrestis</i> (Fallén, 1810)	-	-	-	-	-	-	x	-
3	<i>M. (M.) griseola</i> (Fallén, 1820)	x	x	-	x	x	x	-	x
4	<i>M. (M.) polyodon</i> (Meigen, 1824)	x	x	-	-	-	-	-	x
5	<i>Senotainia</i> (Arrenopus) <i>albifrons</i> (Rondani, 1859)	x	-	-	-	-	-	-	x
6	<i>S. (s. str.) conica</i> (Fallén, 1810)	-	x	-	x	-	x	x	x
7	<i>Pterella grisea</i> (Meigen, 1824)	-	x	x	-	-	x	-	x
8	<i>P. melanura</i> (Meigen, 1824)	-	-	x	-	-	-	-	x*
9	<i>Miltogramma brevipila</i> Villeneuve, 1911	-	-	-	-	-	-	-	x*
10	<i>M. germari</i> Meigen, 1824	-	-	-	-	x	-	-	-
11	<i>M. oestracea</i> (Fallén, 1820)	-	-	-	-	-	x	-	-
12	<i>M. punctata</i> Meigen, 1824	-	-	x	-	-	x	-	-
13	<i>Miltogrammidium rutilans</i> (Meigen, 1824)	-	-	x	-	-	-	-	-
14	<i>Metopia argentata</i> Macquart, 1850	-	x	-	x	-	-	-	x*
15	<i>M. argyrocephala</i> Meigen, 1824	x	x	-	x	-	x	-	x
16	<i>M. campestris</i> (Fallén, 1810)	x	x	x	x	-	-	x	x
17	<i>M. grandii</i> Venturi, 1953	x	-	-	-	-	-	-	x
18	<i>M. italiana</i> Pape, 1985	-	-	-	x	-	-	-	x*
19	<i>M. staegeri</i> Rondani, 1859	-	x	-	-	-	-	-	x

20	<i>Hilarella hilarella</i> (Zetterstedt, 1844)	-	-	-	-	-	-	-	x
21	<i>H. stictica</i> (Meigen, 1830)	-	-	-	x	-	x	-	-
22	<i>Paragusia elegantula</i> (Zetterstedt, 1844)	-	-	-	-	-	-	x	-
23	<i>Taxigramma heteroneura</i> (Meigen, 1830)	-	-	-	x	-	x	x	x
24	<i>Amobia signata</i> (Meigen, 1824)	-	-	-	-	-	-	-	x*
25	<i>Nyctia halterata</i> (Panzer, 1798)	x	x	x	x*	-	x	-	x
26	<i>Agria affinis</i> (Fallén, 1817)	x	x	-	x	-	-	-	x
27	<i>A. mamillata</i> (Pandellé, 1896)	-	x	-	x	-	-	-	x
28	<i>Brachicoma devia</i> (Fallén, 1820)	x	x	x	x	-	-	x	x
29	<i>Sarcophila latifrons</i> (Fallén, 1817)	-	x	x	x	x	-	x	x
30	<i>S. meridionalis</i> Verves, 1982	-	-	x	-	-	-	-	-
31	<i>Wohlfahrtia magnifica</i> (Schiner, 1862)	-	-	-	-	-	-	-	x
32	<i>W. meigeni</i> (Schiner, 1862)	x	-	x	x	-	x	x	x
33	<i>Sarcotachinella sinuata</i> (Meigen, 1826)	x	x	x	-	-	x	x	x
34	<i>Blaesoxiphia grylloctona</i> Löw, 1861	-	-	-	-	-	-	-	x*
35	<i>B. laticornis</i> (Meigen, 1826)	x	-	-	x*	x	-	-	x
36	<i>B. redempta</i> (Pandellé, 1896)	-	x	x	-	-	x	-	x
37	<i>Servaisia</i> (s. str.) <i>erythrura</i> (Meigen, 1826)	-	-	-	-	-	-	-	x
38	<i>S. (s. str.) rossica</i> (Villeneuve, 1912)	-	-	x	-	-	x	-	x

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39	<i>Tephromyia grisea</i> (Meigen, 1826)	-	-	X	-	-	X	X	-
40	<i>Ravinia pernix</i> (Harris, 1780)	X	X	X	X	X	X	X	X
41	<i>Helicophagella</i> (s. str.) <i>agnata</i> (Rondani, 1860)	X	X	-	-	-	-	-	X
42	<i>H.</i> (s. str.) <i>crassimargo</i> (Pandellé, 1896)	X	X	-	-	-	-	X	X
43	<i>H.</i> (s. str.) <i>noverca</i> (Rondani, 1860)	X	X	-	-	-	-	-	X
44	<i>H.</i> (s. str.) <i>novercoides</i> (Böttcher, 1913)	X	X	-	-	-	-	-	-
45	<i>H.</i> (s. str.) <i>rosellei</i> (Böttcher, 1912)	X	X	-	-	-	-	-	X
46	<i>H.</i> ( <i>Parabellieria</i> ) <i>melanura</i> (Meigen, 1826)	X	X	X	X	X	X	X	X
47	<i>Discachaeta arcipes</i> (Pandellé, 1896)	-	-	-	-	-	X	-	-
48	<i>D. pumila</i> (Meigen, 1826)	-	X	X	-	-	X	-	-
49	<i>Heteronychia</i> (s. str.) <i>bulgarica</i> (Enderlein, 1936)	-	-	-	X*	-	-	X	-
50	<i>H.</i> (s. str.) <i>consanguinea</i> (Rondani, 1860)	X	-	-	-	-	-	-	X
51	<i>H.</i> (s. str.) <i>depressifrons</i> (Zetterstedt, ).	X	X	-	-	-	-	X	X
52	<i>H.</i> (s. str.) <i>dissimilis</i> (Meigen, 1826)	X	X	X	-	X	X	X	X
53	<i>H.</i> (s. str.) <i>haemorrhoa</i> (Meigen, 1826)	X	X	-	X*	-	-	-	X
54	<i>H.</i> (s. str.) <i>haemorrhoides</i> (Böttcher, 1913)	X	X	X	X	-	X	X	X
55	<i>H.</i> (s. str.) <i>proxima</i> (Rondani, 1860)	X	X	-	X	-	-	X	X

56	<i>H. (s. str.) rohdendorfi</i> (Povolný & Slamečková, 1959)	x	x	-	-	-	-	-	x
57	<i>H. (s. str.) rohdendorfiana</i> Mihályi, 1975	x	x	-	x*	-	-	-	x
58	<i>H. (s. str.) schineri</i> (Bezzi, 1891)	x	x	-	-	-	x	-	x
59	<i>H. (s. str.) slovaca</i> Povolný & Slamečková, 1967	-	x	-	-	-	-	-	-
60	<i>H. (s. str.) vagans</i> (Meigen, 1826)	x	x	x	x	x	x	x	x
61	<i>H. (s. str.) vicina</i> (Macquart, 1835)	x	-	-	-	-	-	x	-
62	<i>H. (Pandelleola) filia</i>	x	-	-	-	-	-	-	-
63	<i>Karovia hirticrus</i> (Pandellé, 1896)	x	x	-	-	-	-	-	x
64	<i>Asceloctella (Mimarhopocnemis) granulata</i> (Kramer, 1908)	x	-	-	-	-	-	-	-
65	<i>Bellieriomima subulata</i> (Pandellé, 1896)	x	x	-	x*	-	-	x	x
66	<i>Krameromyia anaces</i> (Walker, 1849)	x	-	-	-	-	-	-	x
67	<i>Myorhina (Mehria) nemoralis</i> (Kramer, 1908)	x	x	-	-	-	-	-	x
68	<i>M. (s. str.) lunigera</i> (Böttcher, 1914)	x	-	-	-	-	-	-	x
69	<i>M. (s. str.) nigriventris</i> (Meigen, 1826)	x	x	-	-	-	-	-	x
70	<i>M. (s. str.) pandifera</i> (Blackith & Pape, 1999)	x	-	-	-	-	-	-	-
71	<i>M. (s. str.) socrus</i> (Rondani, 1860)	x	-	-	-	-	-	-	-
72	<i>M. (s. str.) soror</i> (Rondani, 1860)	x	x	-	-	-	-	-	x
73	<i>M. (s. str.) villeneuvei</i> (Böttcher, 1912)	x	x	-	-	-	-	-	-

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74	<i>Pandelleana protuberans</i> (Pandellé, 1896)	X	X	-	-	-	-	-	-
75	<i>Sarina sexpunctata</i> (Fabricius, 1805)	X	X	-	-	-	-	-	X
76	<i>Thrysocnema incisilobata</i> (Pandellé, 1896)	X	X	X	X	X	X	X	X
77	<i>T. kentejana</i> (Rohdendorf, 1937)	-	-	-	-	-	-	-	X
78	<i>Bercea africa</i> (Wiedemann, 1824)	X	X	X	X	X	X	X	X
79	<i>Liopygia</i> ( <i>Thomsonea</i> ) <i>argyrostoma</i> (Robineau-Desvoidy, 1830)	X	X	-	X*	-	-	-	X
80	<i>L. (Varirosellea) uliginosa</i> (Kramer, 1908)	-	X	-	-	-	-	-	X
81	<i>Liosarcophaga</i> (s. str.) <i>emdeni</i> (Rohdendorf, 1969)	X	X	X	X	X	X	X	X
82	<i>L.</i> (s. str.) <i>harpax</i> (Pandellé, 1896)	X	X	-	-	-	-	-	X
83	<i>L.</i> (s. str.) <i>portschinskyi</i> (Rohdendorf, 1937)	X	X	-	X	-	-	X	X
84	<i>L.</i> (s. str.) <i>tuberosa</i> (Pandellé, 1896)	X	X	-	-	-	-	X	X
85	<i>L. (Pandelleisca) similis</i> (Meade, 1876)	X	X	-	X	X	X	X	X
86	<i>Parasarcophaga</i> (s. str.) <i>albiceps</i> (Meigen, 18926)	X	X	X	X	-	-	X	X
87	<i>Robineauella</i> (s. str.) <i>caerulescens</i> (Zetterstedt, 1838)	X	X	X	X	X	X	X	X
88	<i>Kramereaa schuetzei</i> (Kramer, 1909)	-	X	X	X*	-	-	X	X
89	<i>Rosellea aratrix</i> (Pandellé, 1896)	X	X	-	X*	-	-	X	X

90	<i>Sarcophaga bachmayeri</i> (Lehrer, 1978)	-	-	-	-	-	-	-	x
91	<i>S. carnaria</i> (Linnaeus, 1758)	x	x	-	x	x	-	x	x
92	<i>S. disputata</i> Lehrer, 1967	-	-	-	-	-	-	-	x
93	<i>S. hennigi</i> Lehrer, 1978	-	-	-	-	-	-	-	x
94	<i>S. jupalnica</i> Lehrer, 1967	x	x*	-	-	-	-	-	-
95	<i>S. lehmanni</i> Müller, 1922	x	x	x	x	x	x	x	x
96	<i>S. moldavica</i> Rohdendorf, 1937	x	-	-	-	-	-	-	x
97	<i>S. mouchajosefi</i> Lehrer, 1978	-	-	-	-	-	-	-	x
98	<i>S. schusteri</i> Lehrer, 1959	x	-	-	x*	-	-	-	x
99	<i>S. subvicina</i> Rohdendorf, 1937	x	x	x	x	-	-	-	x
100	<i>S. variegata</i> (Scopoli, 1763)	x	x	x	x	x	x	x	x
101	<i>S. zumptiana</i> Lehrer, 1959	-	x	-	-	-	-	-	x
<b>Sarcophagidae</b>		<b>63</b>	<b>62</b>	<b>29</b>	<b>41</b>	<b>17</b>	<b>29</b>	<b>3</b>	<b>80</b>

\*Firstly recorded for regional fauna

\*\*Firstly recorded for Ukraine

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