

## АГРАРНО-ПРАВОВА ПРИРОДА АКТИВ ПРЕЗИДЕНТА УКРАЇНИ

### CALLIPHORIDAE (DIPTERA) FROM TRANSCARPATHIAN UKRAINE

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**Annotation.** A total list of 22 Calliphoridae species from Borzhava locality is given. One species (*Stomorrhina lunata*) is firstly recorded for Zakarpattia region, and 8 species (*Calliphora vicina*, *C. uralensis*, *Lucilia bufonivora*, *Phormia regina*, *Protophormia terraenovae*, *Pollenia angustigena*, *P. vagabunda*, *S. lunata*) are firstly registered in Borzhava locality. As referred literature data and original faunistic research, only 35 species of Calliphoridae are reported for Ukrainian Zakarpattia. This quantity is not less than 60-70 % of full regional species list. So, faunistic data on Transcarpathian calliphorids need for further investigation.

**Keywords:** flies, Calliphoridae, fauna, Zakarpattia, Borzhava

### **Introduction.**

Altogether 74 species of Calliphoridae have been reported from the Ukraine [11]. Regional faunas of Western Ukraine are not studied in detail. Only 35 species of those flies are known for Zakarpattia region [1, 2, 5-11 and present data]. This number not less than 60-70% of full regional species list.

### **Material and methods.**

The faunistic data of the results of field collections of both authors [08.-26.08.2016

[11] and 03.-19.07.2018, original data] in West Ukraine, Zakarpattia, Irshava Distr., Sanatorium "Borzhava" territory, 48°22' N, 23°17' E, 160-220 m a. s. l., at hygro- and mesophytic meadows with bushes; at decorative flowering herbaceous plants; in 50-year old park, are present. The genera and subgenera of Calliphoridae are given after [3, 9]. 486 specimens (66 flies in 2016 and 420 – in 2018) from 29 species were collected by entomological net and identified after [1, 3, 4, 8]. Thus, during 2016 and 2018 42 species of sarcophagids have been known for Borzhava locality in general (table 1).

## Results.

Total list of 35 species of calliphorids from Zakarpattia region composed as a result of our own collections and analysis of literature data is such:

*Bellardia bayeri* (Jacentkovský, 1937). “East Carpathians” [1]; Zakarpattia [4, 8]; Mezigiria distr., Kolochava village (Verves, 2005).

*B. pandia* (Walker, 1849). Zakarpattia [1, 4, 10].

*B. polita* (Mik, 1884). Zakarpattia: environs of Mukacheve city [6].

*B. stricta* (Villeneuve, 1926). Zakarpattia [10]; Mezigiria distr., Kolochava village [6]; Mukacheve city [6].

*Calliphora* (s. str.) *loewi* Enderlein, 1903. Zakarpattia: Irshava Distr., Mezigiria distr., Kolochava village [10].

*C.* (s. str.) *uralensis* Villeneuve, 1922. Zakarpattia [8, 10]; Irshava distr., Borzhava locality [present data]; Mukacheve distr., Siniak village [5]; Uzhhorod [2].

*C.* (s. str.) *vicina* Robineau-Desvoidy, 1830. Zakarpattia: Irshava distr., Borzhava locality [present data]; Mezigiria distr., Kolochava village [10]; Uzhhorod [2].

*C.* (s. str.) *vomitorea* (Linnaeus, 1758). Zakarpattia: Mezigiria distr., Kolochava village [10]; Mukacheve distr., Siniak village [5]; Uzhhorod [2].

*Onesia austriaca* Villeneuve, 1920. “East Carpathians” [1]; Zakarpattia: Mezigiria distr., Kolochava village [8]; Mukacheve distr., Siniak village [5].

*O. kowarzi* Villeneuve, 1920. Zakarpattia: Mukacheve distr., Siniak village [5].

*L. (Bufolucilia) bufonivora* Moniez, 1876. Zakarpattia: Irshava distr., Borzhava locality [present data].

*L. (B.) silvarum* (Meigen, 1826). Zakarpattia (Verves, 2005; Verves & Khrokalo, 2010): Irshava distr., Borzhava locality [11]; Uzhhorod [2].

*L.* (s. str.) *ampullacea* Villeneuve, 1922. Zakarpattia [10]; Irshava distr., Borzhava locality [11]; Mezigiria distr., Kolochava village [8].

*L.* (s. str.) *caesar* (Linnaeus, 1758). Zakarpattia [5, 9]; Irshava distr., Borzhava locality [11 & present data]; Uzhhorod [2].

*L.* (s. str.) *illustris* (Meigen, 1826). Zakarpattia: Irshava distr., Borzhava locality [11 & present data]; Mezigiria distr., Kolochava village [10].

*L.* (s. str.) *sericata* (Meigen, 1826). Zakarpattia: Irshava distr., Borzhava locality [11 & present data]; Mezigiria distr., Kolochava village [10]; Uzhhorod [2].

*Eggisops pecchiolii* Rondani, 1862. Zakarpattia: Irshava distr., Borzhava locality [11].

*Melinda gentilis* Robineau-Desvoidy, 1830. Zakarpattia: Mukacheve city [8]; Mukacheve distr., Siniak village [5].

*M. viridicyanea* (Robineau-Desvoidy, 1830). Zakarpattia [5, 10]; Mezigiria distr., Kolochava village [8].

*Chrysomya albiceps* (Wiedemann, 1819). Zakarpattia [10]; Irshava distr., Borzhava locality [11 & present data]; Mezhygiria distr., Kolochava village [7].

*Phormia regina* (Meigen, 1826). Zakarpattia region [8, 10]; Irshava distr., Borzhava locality (present data); Uzhhorod [2].

*Protocalliphora azurea* (Fallén, 1817). Zakarpattia: Irshava distr., Borzhava locality [11 & present data].

*P. proxima* Grunin, 1966. Zakarpattia: Irshava distr., Borzhava locality [11].

*P. rognesi* Thompson & Pont, 1993. Zakarpattia: Irshava distr., Borzhava locality [11 & present data].

*Protophormia terraenavae* (Robineau-Desvoidy, 1830). Zakarpattia [10]; Irshava distr., Borzhava locality (present data); Uzhhorod [2].

*Trypocalliphora braueri* (Hendel, 1901). Chernivtsi region: Vyzhnytsya distr., Lopushna village [5].

*Pollenia amentaria* (Scopoli, 1763). Zakarpattia [10]: Mezigiria distr., Kolochava village [8].

*P. angustigena* Wainwright, 1940. Zakarpattia [10]: Irshava distr., Borzhava locality (present data); Mezigiria distr., Kolochava village [8].

*P. griseotomentosa* (Jacentkovský, 1944). Zakarpattia [10]: Mezigiria distr., Kolochava village [8].

*P. hungarica* Rognes, 1987. Zakarpattia [10]: Irshava distr., Borzhava locality [11 & present data]; Mezigiria distr., Kolochava village [8].

*P. labialis* Robineau-Desvoidy, 1863. Zakarpattia [10]: Mezigiria distr., Kolochava village [8].

*P. pediculata* Macquart, 1834. Zakarpattia [10]: Irshava distr., Borzhava locality [11 & present data].

*P. rudis* (Fabricius, 1794). Zakarpattia [10]: Irshava distr., Borzhava locality [11 & present data]; Mezigiria distr., Kolochava village [8].

*P. vagabunda* (Meigen, 1826). Zakarpattia [10]: Irshava distr., Borzhava locality (present data); Mezigiria distr., Kolochava village [8].

*P. vera* Jacentkovský, 1936. "East Carpathians" [1]; Zakarpattia: Irshava distr., Borzhava locality [11 & present data].

*Eurychaeta palpalis* (Robineau-Desvoidy, 1830). Zakarpattia [8, 10].

### 1. List of Calliphoridae, collected in Borzhava locality in 2016 and 2018

no	Species	Specimens		
		08.-26. VII.2016	03.-19. VII.2018	sum
1	<i>Calliphora</i> (s. str.) <i>vicina</i> Robineau-Desvoidy, 1830	-	1	1
2	<i>C.</i> (s. str.) <i>uralensis</i> Villeneuve, 1922	-	2	2
3	<i>Lucilia</i> (s. str.) <i>ampullacea</i> Villeneuve, 1922	1	-	1
4	<i>L.</i> (s. str.) <i>caesar</i> (Linnaeus, 1758)	17	50	67
5	<i>L.</i> (s. str.) <i>illustris</i> (Meigen, 1826)	3	1	4
6	<i>L.</i> (s. str.) <i>sericata</i> (Meigen, 1826)	11	1	12
7	<i>L.</i> ( <i>Bufo</i> <i>lucilia</i> ) <i>bufonivora</i> Moniez, 1876	-	2	2
8	<i>L.</i> ( <i>B.</i> ) <i>silvarum</i> (Meigen, 1826)	4	-	4
9	<i>Eggisops</i> <i>pecchiolii</i> Rondani, 1862	1	-	1
10	<i>Chrysomya</i> <i>albiceps</i> (Wiedemann, 1819)	4	3	7
11	<i>Phormia</i> <i>regina</i> (Meigen, 1826)	-	98	98
12	<i>Protocalliphora</i> <i>azurea</i> (Fallén, 1817)	2	1	3
13	<i>P. proxima</i> Grunin, 1966	1	-	1
14	<i>P. rognesi</i> Thompson & Pont, 1993	3	8	11
15	<i>Protophormia</i> <i>terraenovae</i> (Robineau-Desvoidy, 1830)	-	4	4
16	<i>Pollenia angustigena</i> Wainwright, 1940	-	19	19
17	<i>P. hungarica</i> Rognes, 1987	1	117	118
18	<i>P. pediculata</i> Macquart, 1834	11	10	21
19	<i>P. rudis</i> (Fabricius, 1794)	2	103	105
20	<i>P. vagabunda</i> (Meigen, 1826)	-	4	4
21	<i>P. vera</i> Jacentkovský, 1936	5	6	11
22	<i>Stomorhina</i> <i>lunata</i> (Fabricius, 1805)	-	1	1
Sum		66	420	486

*Stomorhina lunata* (Fabricius, 1805). Zakarpattia: Irshava distr., Borzhava locality [present data]. Firstly reported for Ukrainian Zakarpattia.

Oll original data on materials collected at 2016 and 2018 years are given in table 1.

### Discussion.

The list of 22 species from Borzhava locality is given. One species (*Stomorhina lunata*) is firstly recorded for Zakarpattia region, and 8 species (*Calliphora vicina*, *C. uralensis*, *Lucilia bufonivora*, *Phormia regina*, *Protophormia terraenovae*, *Pollenia angustigena*, *P. vagabunda*, *S. lunata*) are firstly registered in Borzhava locality. The number of known calliphorid's species from Ukrainian Zakarpattia (35 species) is not more than 60-70 % of distinct regional list of species. So, faunistic data on Transcarpathian calliphorids need for futher investigation.

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**Анотація.** Наведений список 22 видів мух каліфорид з території Боржави. Один вид (*Stomorhina lunata*) вперше вказано для Закарпатської області та 8 видів (*Calliphora vicina*, *C. uralensis*, *Lucilia bufonivora*, *Phormia regina*, *Protophormia terraenovae*, *Pollenia angustigena*, *P. vagabunda*, *S. lunata*) вперше виявлено в околицях Боржави. Як свідчать дані літератури та власні дослідження фауни, тільки 35 видів каліфорид на сьогодні відомо з регіону Закарпатської України. Вказана кількість видів не перевищує 60-70 % регіональної фауни. Таким чином, фауністичні дослідження каліфорид Закарпаття мають бути продовжені.

**Ключові слова:** мухи, Calliphoridae, фауна, Закарпаття, Боржава

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**Аннотация.** Приведен список 22 видов мух калифорид с территории Боржавы. Один вид (*Stomorphina lunata*) впервые указан для Закарпатской области и 8 видов (*Calliphora vicina*, *C. uralensis*, *Lucilia bufonivora*, *Phormia regina*, *Protophormia terraenovae*, *Pollenia angustigena*, *P. vagabunda*, *S. lunata*) впервые обнаружено в окрестностях Боржавы. Как свидетельствуют литературные данные и оригинальные исследования фауны, только 35 видов калифорид на данный момент найдено на территории Закарпатской Украины. Указанное количество видов не превышает 60-70 % региональной фауны. Таким образом, фаунистические исследования калифорид Закарпатья должны быть продолжены.

**Ключевые слова:** мухи, Calliphoridae, фауна, Закарпатье, Боржава.

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