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## THE LONGHORN BEETLES (COLEOPTERA: CERAMBYCIDAE) OF NATIONAL PARK «KREMENETSKI HORY»

*The fauna of the longhorn beetles of ecoregion of Kremenetski Hory and the eponymous National Park was studied very poorly. In the most recent catalogue of Cerambycidae of Western Podillya it was listed only 13 species for the ecoregion. Including other sources, to date, it was known 17 species of the longhorn beetles. In the current study we identified 59 species of the longhorn beetles, 42 of which are reported for the first time for National Park «Kremenetski Hory» and the ecoregion in general. Under our proposed prediction the Cerambycidae species richness should reach 100-120 species. We also presented result of quantitative study of the longhorn beetles within different types of ecosystems of National Park «Kremenetski Hory». We revealed that 10 species are the most abundant on the studied territory.*

**Key words:** Cerambycidae, Kremenetski Hory, Western Podillya.

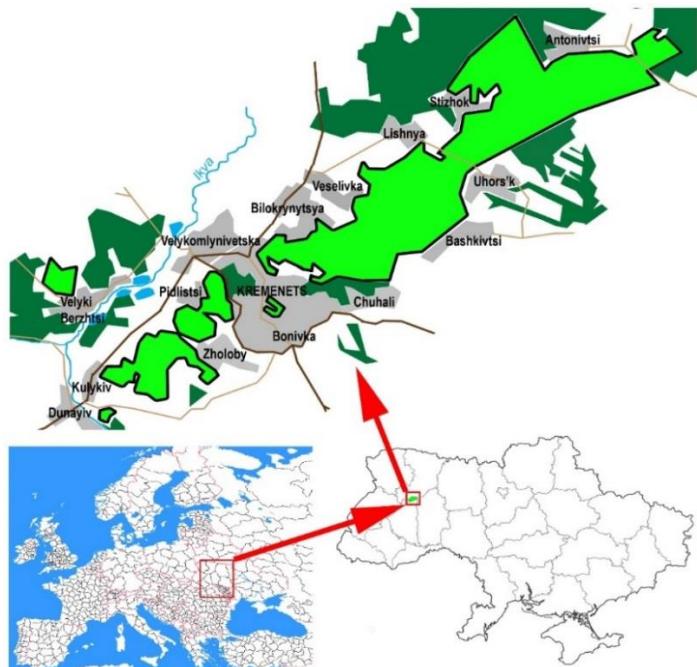
National Park "Kremenetski Hory" (hereinafter NP "Kremenetski Hory") is one of the youngest and smallest in Ukraine. It has been created in 2009 with the total area 69.5 km<sup>2</sup>. It is situated on the northernmost margin of Podillya Upland within two subbiomes of wooded steppes and mixed forests. These cause the mosaic distribution of different ecosystems, including forests, steppes, meadows and swamps [6]. To date, the longhorn beetles' fauna of NP "Kremenetski Hory" was studied very poorly [2]. A very little data was published in a few papers, including the most recent catalogue of the longhorn beetles of Western Podillya [10]. To the current study, it was known only 17 species of Cerambycidae in fauna of NP "Kremenetski Hory". That constituted 12% of the regional fauna.

The earliest data on Cerambycidae from the territory of the modern NP "Kremenetski Hory" we found in collection of Octavian Duda (1939) that preserved in Kremenets Museum of Regional History. There are only 6 species of the longhorn beetles, including *Prionus coriarius* Linnaeus, 1758, *Stenurella melanura* Linnaeus, 1758, *Obrium cantharinum* Linnaeus, 1767, *Chlorophorus herbsti* Brahm, 1790, *Dorcadion equestre* (Laxmann, 1770), *Acanthocinus aedilis* Linnaeus, 1758 [10]. Another species, *Tetrops praeusta* Linnaeus, 1758 was mentioned in the paper of Ivan Zahaykevych from the studied area [7, 10]. Several species are preserved in collection of Nature Reserve "Medobory", collected in their Kremenets division (now is the part of NP "Kremenetski Hory") by scientific staff Yaroslav Kapelyukh in 1999. These include *Allosterna tabacicolor* De Geer, 1775, *Paracorymbia maculicornis* (De Geer, 1775), *Pseudovadonia livida* Fabricius, 1776, *Spondilis buprestoides* Linnaeus, 1758, *Lieopus nebulosus* Linnaeus, 1758, *Pogonocherus hispidulus* Piller et Mitterpacher, 1783 [4, 10]. Finely, five additional species were listed in monography of Shtohryn and colleagues [6]. Their list includes the next species *Cerambyx cerdo cerdo* (Linnaeus, 1758), *Leptura maculata* (Poda, 1761), *Prionus coriarius* (Linnaeus, 1758), *Stictoleptura rubra* (Linnaeus, 1758) and *Strangalina attenuata* (Linnaeus, 1758).

In the current study we listed 59 species of the longhorn beetles, 42 species of which were recorded for the first time from NP "Kremenetski Hory".

### Materials and methods

**The territory of study.** National Park "Kremenetski Hory" is situated on the northernmost margin of Podillya Upland (Ternopil Region, Ukraine). It occupies the highest and the most eroded fragment of ecoregion of Kremenetski Hory between 50.064049N 25.624347E on the south west and 50.209863N 26.007450E on the north east (Fig. 1). The total length of its territory is 33 km. Average altitudes vary near 200 m a.s.l. and maximum altitude extends 400 m a.s.l. [3]. Climatic conditions are mild with average annual temperature +7.4°C and 600 mm of precipitations [1].

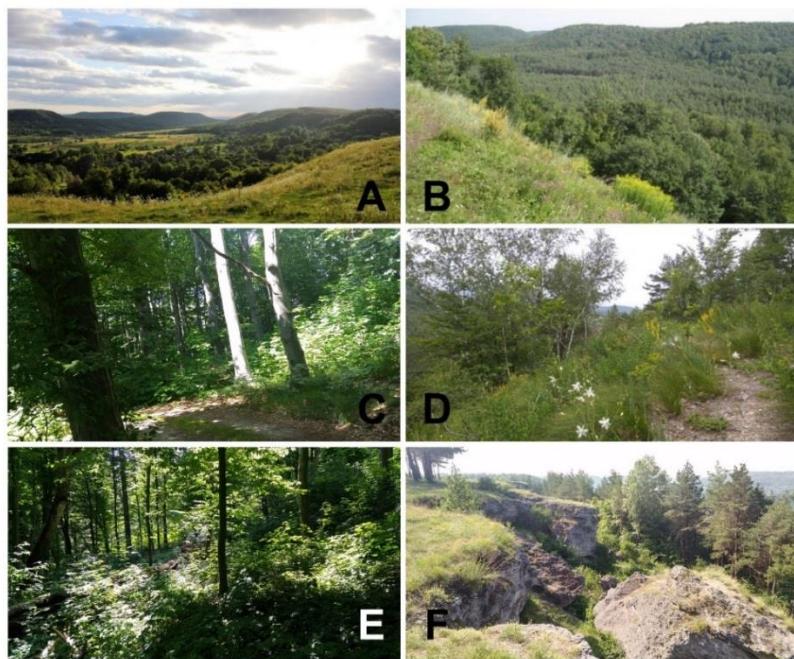


**Figure 1. Location of National Park "Kremenetski Hory" (bold bordered).**

Forests are the main type of vegetation, which cover 98.6% of the area, and represented by *Querceta roboris* and *Pineta sylvestris*. The small patches of *Querceta petraea*, *Fageta sylvatica* and *Alneta glutinosa* are presented on the territory of NP "Kremenetski Hory". Such species like *Carpinus betulus*, *Fraxinus excelsior*, *Ulmus glabra*, *Acer platanoides*, *Acer pseudoplatanus*, *Tilia cordata*, *Betula klokovii*, *Betula pendula*, *Betula pubescens* are typical in forests. The rest 1.6% of the area is covered by meadows (1.3%) and steppes (0.3%). The most common types of meadow vegetation are *Arrhenatheretum elatioris*, *Festucetum pratensis*, *Anthoxantho-Agrostietum*. Steppes usually are represented by *Cariceta humilis*, *Festuceta pallentis*, *Stipeta capillatae*, *Stipeta pennatae* plants communities [6].

**Methods.** The qualitative and quantitative studies of the longhorn beetles were conducted on four selected plots within NP "Kremenetski Hory". Plot 1 is located west from

Kremenets (50.092709, 25.695936) in locality "Buchyna". It represents 110 years old beech forest (square 46, part 12, Masliatyn Division) (Fig. 2, C). Plot 2 is located east from Kremenets in locality "Hora Divochi Skeli" (50.118299, 25.727369). It represents steppe with mosaic spreading of thermophilous brushwood (square 3, parts 11-13, Bilokrynytsya Division) (Fig. 2, F).



**Figure 2. The main types of habitats of National Park «Kremenetski Hory»:**  
**A.** Typical landscape of Kremenetski Hory; **B.** Steppe patch in locality "Hora Strakhova"; **C.** Old-aged beech forest in Maslyatyn Division; **D.** Thermophilous brushwood with *Betula klokovii* in locality "Hora Strakhova"; **E.** Hornbeam-Oak forest in Bilokrynytsya Division; **F.** Petrophilous steppe in locality "Divochi Skeli".

Plot 3 is located south from Bilokrynytsya (50.120639, 25.754796). It represents 130 years old oak forest (square 29, part 4, Bilokrynytsya Division) (Fig. 2, E). Plot 4 is located south west from Lishnya in locality "Lypova Aleya" (50.143402, 25.809021). It represents mesophilous meadows and abandoned fruit gardens surrounded by hornbeam-oak forests (square 36, part 11, Bilokrynytsya Division).

The multiple methods of insects collecting were applied. These include manual collecting of the longhorn beetles on forage plants; on host plants during imago emerging from pupae chambers, adults mating and females ovipositing; sweeping insects out of grasslands vegetation, forest edges and clearings. Collected materials deposited in NP "Kremenetski Hory" (Kremenets) and Vasyl Stefanyk Precarpathian National University (Ivano-Frankivsk). Insects sampling were carried under the limits set by Ministry of Ecology

and Natural Resources of Ukraine for NP "Kremenetski Hory". All material has been collected under approved ethics guidelines.

### Results and discussion

We identified 59 species of the longhorn beetles within NP "Kremenetski Hory". These species belong to 37 genera, 20 tribes and 5 subfamilies (see list below). Forty-two species were found at the first time in NP "Kremenetski Hory". Several records have special faunistic interest. These include *Pidonia lurida* Fabricius, 1792, *Cortodera humeralis* (Schaller, 1783), *Xylotrechus antilope* Schönherr, 1817 and *Cyrtoclytus capra* Germar, 1824. *Pidonia lurida* is rare in NP "Kremenetski Hory" because here it is on the eastern border of its natural range in Europe [8, 9, 10]. Our finding of *C. humeralis* is the second record for Western Podillya macroregion since 1952 [10]. We also found *X. antilope* Schönherr, 1817 which is typical for Polissya macroregion. This is the second recent record of this species within West Podillya [10]. Another interesting species is *C. capra* Germar, 1824, which is postglacial relict, which is common for Eastern Carpathians macroregion than for Western Podillya [8]. On Western Podillya *C. capra* was known only from Voronyaky the neighbor ecoregion to Kremenetski Hory [10]. We believe that the ecoregions of Voronyaky and Kremenetski Hory are refugium for *C. capra* within Western Podillya. Additionally, we identified *Aromia moschata* Linnaeus, 1758, *Cerambyx cerdo* (Linnaeus, 1758) and *Dorcadiion equestre* (Laxmann, 1770), which listed in Red Databook of Ukraine [5].

The revealed diversity of Cerambycidae of NP "Kremenetski Hory" constitutes 41% (59 vs 144 species) in comparison with whole Western Podillya macroregion and 28.1% of Voronyaky ecoregion (59 vs 21 species) and 58.4% of Medobory ecoregion (59 vs 101 species). Comparing of the longhorn beetle's richness of NP "Kremenetski Hory" with neighbor National Parks (NP) and Nature Reserves (NR) on Western Podillya territories was shown the near equal number of species within them (table 1). We predict that possible total number of the longhorn beetles in NP "Kremenetski Hory" may be 100-120 species.

Table 1

**The current knowledge of the longhorn beetles' fauna of NP «Kremenetski Hory» in comparison with neighbor National Parks and Nature Reserves on Western Podillya**

	NP Kremenetski Hory	NP Halych	NP Dnister Canyon	Northern Podillya	NR Roztochya	NR Medobory	Total for Western Podillya
Number of species	59	67	63	23	61	91	144
The percentage (%) for NP Kremenetski Hory	100	88.0	93.7	256.5	96.7	64.8	41.0

Our quantitative analysis showed that ten species of Cerambycidae are the most abundant in NP "Kremenetski Hory". These include *Anastrangalia dubia reyi* (Heyden, 1889) – 4.75 spec./km, *Allosterna tabacicolor* Linnaeus, 1758 – 12.25 spec./km, *Dinoptera collaris* Linnaeus, 1758 – 39.75 spec./km, *Judolia cerambyciformis* Schrank, 1781 – 9.25 spec./km, *Leptura maculata* Poda, 1761 – 9.00 spec./km, *Plagionotus detritus* Linnaeus, 1758 – 6.25 spec./km, *Pseudovadonia livida* Fabricius, 1776 – 4.75 spec./km, *Paracorymbia maculicornis* De Geer, 1775 – 41.5 spec./km, *Stenurella bifasciata* Müller, 1776 – 9.00 spec./km, *Stenurella melanura* Linnaeus, 1758 – 14.25 spec./km (table 2).

Table 2

**The results of quantitative studies of the longhorn beetles on sample plots of NP «Kremenetski Hory». Data measured in specimens per kilometer**

Species	Plot 1	Plot 2	Plot 3	Plot 4	Mean
<i>A. cardui</i>	4	-	2	-	1,50
<i>A. dubia</i>	11	2	1	5	4,75
<i>A. griseus</i>	1	-	-	-	0,25
<i>A. tabacicolor</i>	9	2	24	14	12,25
<i>A. villosoviridescens</i>	-	-	-	1	0,25
<i>C. capra</i>	-	-	-	1	0,25
<i>Ch. herbsti</i>	-	-	-	1	0,25
<i>D. collaris</i>	49	1	31	78	39,75
<i>G. ruficornis</i>	-	-	-	1	0,25
<i>J. cerambyciformis</i>	32	-	-	5	9,25
<i>L. aethiops</i>	-	-	-	1	0,25
<i>L. annularis</i>	-	-	-	1	0,25
<i>L. linnei</i>	1	-	-	4	1,25
<i>L. maculata</i>	25	-	11	-	9,00
<i>M. curculinoides</i>	-	-	-	1	0,25
<i>M. umbelatarum</i>	-	-	-	2	0,50
<i>P. arcuatus</i>	4	-	-	-	1,00
<i>P. detritus</i>	25	-	-	-	6,25
<i>P. livida</i>	2	14	2	1	4,75
<i>P. lurida</i>	-	-	4	-	1,00
<i>P. maculicornis</i>	72	5	35	54	41,50
<i>Ph. affinis</i>	-	-	-	1	0,25
<i>Ph. testaceus</i>	5	-	-	-	1,25
<i>S. bifasciata</i>	-	34	-	2	9,00
<i>S. buprestoides</i>	2	-	-	-	0,50
<i>S. melanura</i>	21	14	14	8	14,25
<i>S. meridianus</i>	-	-	1	1	0,50
<i>S. nigra</i>	-	-	-	8	2,00
<i>S. scalaris</i>	-	-	-	1	0,25
<i>S. scutellata</i>	-	-	1	-	0,25
<i>X. antelope</i>	1	-	-	-	0,25
<b>Total:</b>	<b>264</b>	<b>72</b>	<b>128</b>	<b>190</b>	<b>163,25</b>

## THE TAXONOMIC LIST OF THE RECORDS

Familia Cerambycidae

Subfamilia Prioninae

Tribus Pirionini

Genus *Prionus* Geoffroy, 1762

1. *Prionus coriarius* Linnaeus, 1758:

Examined materials: 12.VIII.2016, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), I. Dovhaniuk. 20.VII.2017, Pidlistsi, locality "Hora Strakhova" (50.094754, 25.675431), I. Dovhaniuk. 01.IX.2017, Kremenets, locality "Zamkova Hora" (50.093772, 25.728886), I. Dovhaniuk.

Literature sources: Kremenets [6, 10].

Subfamilia Lepturinae

Tribus Rhagiini Kirby, 1837

Genus *Rhagium* Fabricius, 1775

2. *Rhagium inquisitor* Linnaeus, 1758:

Examined materials: 12.VIII.2016, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), I. Dovhaniuk. 12.VI.2019, Kremenets, locality "Hora Chercha" (50.099519, 25.732804), I. Dovhaniuk.

3. *Rhagium sycophanta* Schrank, 1781

Examined materials: 12.VIII.2016, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), I. Dovhaniuk. 25.V.2018, Kremenets, locality "Osovyytsya" (50.098057, 25.711689), I. Dovhaniuk. 10.VI.2020, Lishnya, locality "Lypova Aleya" (50.138686, 25.816038), I. Dovhaniuk.

4. *Rhagium mordax* (DeGeer, 1775)

Examined materials: 05.VI.2018, Kremenets, (50.114627, 25.760289), A. Zamoroka. 09.VI.2020, Kremenets, (50.092660, 25.704560), I. Dovhaniuk.

Genus *Stenocorus* Geoffroy, 1762

5. *Stenocorus meridianus* Linnaeus, 1758

Examined materials: 05.VI.2018, Kremenets, (50.114627, 25.760289), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Genus *Dinoptera* Mulsant, 1863

6. *Dinoptera collaris* Linnaeus, 1758

Examined materials: 04.VI.2018, Pidlistsi, locality "Hora Strakhova" (50.094754, 25.675431), A. Zamoroka. 04.VI.2018, Kremenets, locality "Buchyna" (50.092363, 25.696053), A. Zamoroka. 05.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Genus *Pidonia* Mulsant, 1863

7. *Pidonia lurida* Fabricius, 1792

Examined materials: 05.VI.2018, Bilokrynytsya (50.121861, 25.759254), A. Zamoroka.

Genus *Cortodera* Mulsant, 1863

8. *Cortodera humeralis* (Schaller, 1783)

Examined materials: 21.V.2019, Pidlistsi, locality "Hora Strakhova" (50.097007, 25.675080), I. Dovhaniuk.

Tribus Lepturini Latreille, 1804

Genus *Grammoptera* Audinet-Serville, 1835

9. *Grammoptera ruficornis* Fabricius, 1781

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Genus *Pseudovadonia* Lobanov, Danilevsky et Murzin, 1981

10. *Pseudovadonia livida* Fabricius, 1776

Examined materials: 04.VI.2018, Pidlistsi, locality "Hora Strakhova" (50.094754, 25.675431), A. Zamoroka. 04.VI.2018, Kremenets, locality "Buchyna" (50.092363, 25.696053), A. Zamoroka. 05.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Literature sources: Kremenets [4, 10].

Genus *Allosterna* Mulsant, 1863

11. *Allosterna tabacicolor* Linnaeus, 1758

Examined materials: 04.VI.2018, Pidlistsi, locality "Hora Strakhova" (50.094754, 25.675431), A. Zamoroka. 04.VI.2018, Kremenets, locality "Buchyna" (50.092363, 25.696053), A. Zamoroka. 05.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Literature sources: Kremenets [4, 10].

Genus *Judolia* Mulsant, 1863

12. *Judolia cerambyciformis* Schrank, 1781

Examined materials: 05.VI.2018, Kremenets, (50.114627, 25.760289), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Genus *Stenurella* Villiers, 1974

13. *Stenurella melanura* Linnaeus, 1758

Examined materials: 04.VI.2018, Pidlistsi, locality "Hora Strakhova" (50.094754, 25.675431), A. Zamoroka. 04.VI.2018, Kremenets, locality "Buchyna" (50.092363, 25.696053), A. Zamoroka. 05.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), A. Zamoroka. 05.VI.2018, Bilokrynytsya (50.121861, 25.759254), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Literature sources: Kremenets [10].

14. *Stenurella bifasciata* Müller, 1776

Examined materials: 05.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

15. *Stenurella nigra* (Linnaeus, 1758)

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Genus *Leptura* Linnaeus, 1758

16. *Leptura aethiops* Poda, 1761

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

17. *Leptura maculata* Poda, 1761

Examined materials: 04.VI.2018, Pidlistsi, locality "Hora Strakhova" (50.094754, 25.675431), A. Zamoroka. 04.VI.2018, Kremenets, locality "Buchyna" (50.092363, 25.696053), A. Zamoroka. 05.VI.2018, Bilokrynytsya (50.121861, 25.759254), A. Zamoroka.

Literature sources: Kremenets [6].

18. *Leptura annularis* Fabricius, 1801

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Genus *Anastrangalia* Casey, 1924

19. *Anastrangalia dubia reyi* (Heyden, 1889)

Examined materials: 04.VI.2018, Pidlistsi, locality "Hora Strakhova" (50.094754, 25.675431), A. Zamoroka. 04.VI.2018, Kremenets, locality "Buchyna" (50.092363, 25.696053), A. Zamoroka. 05.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582,

25.727934), A. Zamoroka. 05.VI.2018, Bilokrynytsya (50.121861, 25.759254), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Literature sources: Kremenets [10].

20. *Anastrangalia sanguinolenta* L., 1758

Examined materials: 21.V.2018, Lishnya (50.149010, 25.802904), I. Dovhaniuk. 05.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), A. Zamoroka.

Genus *Paracorymbia* Miroshnikov, 1998

21. *Paracorymbia maculicornis* De Geer, 1775

Examined materials: 04.VI.2018, Pidlistsi, locality "Hora Strakhova" (50.094754, 25.675431), A. Zamoroka. 04.VI.2018, Kremenets, locality "Buchyna" (50.092363, 25.696053), A. Zamoroka. 05.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), A. Zamoroka. 05.VI.2018, Bilokrynytsya (50.121861, 25.759254), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Literature sources: Kremenets [4, 10].

Genus *Stictoleptura* Casey, 1924

22. *Stictoleptura rubra* Linnaeus, 1758

Examined materials: 01.VII.2017, Kremenets (50.093953, 25.712951), I. Dovhaniuk. 21.VII.2019, Pidlistsi, locality "Hora Strakhova" (50.090917, 25.677293), I. Dovhaniuk.

23. *Stictoleptura scutellata* Fabricius, 1781

Examined materials: 05.VI.2018, Kremenets, (50.114627, 25.760289), A. Zamoroka.

Literature sources: Kremenets [6].

Genus *Strangalia* Audinet-Serville, 1835

24. *Strangalia attenuata* (Linnaeus, 1758)

Literature sources: Kremenets [6].

Subfamilia Aseminae (Spondylidinae)

Tribus Asemini Thomson, 1860

Genus *Asemum* Eschscholtz, 1830

25. *Asemum striatum* Linnaeus, 1758

Examined materials: 04.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), I. Dovhaniuk.

Genus *Arhopalus* Audinet-Serville, 1834

26. *Arhopalus rusticus* Linnaeus, 1758

Examined materials: 23.V.2017, Antonivtsi, locality "Hora Unias" (50.201200, 25.939884), I. Dovhaniuk. 01.VII.2017, Kremenets (50.093953, 25.712951), I. Dovhaniuk.

Tribus Spondylidini Audinet-Serville, 1832

Genus *Spondylis* Fabricius, 1775

27. *Spondylis buprestoides* Linnaeus, 1758

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka. 01.IX.2017, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), I. Dovhaniuk.

Literature sources: Zholoby, locality "Hora Maslyatyn" [4, 10].

Subfamilia Cerambycinae

Tribus Cerambycini Latreille, 1804

Genus *Cerambyx* Linnaeus, 1758

28. *Cerambyx cerdo* (Linnaeus, 1758)

Literature sources: Kremenets [6].

29. *Cerambyx scopolii* Fuessly, 1775

Examined materials: 20.V.2017, Kremenets (50.096157, 25.718762), I. Dovhaniuk. 5.V.2017, 29.V.2018, Kremenets (50.099801, 25.716696), I. Dovhaniuk. 13.V.2019, Kremenets (50.092370, 25.726936), I. Dovhaniuk.

Tribus *Callichromini* Blanchard, 1845

Genus *Aromia* Audinet-Serville, 1833

30. *Aromia moschata* Linnaeus, 1758

Examined materials: 26.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118005, 25.725004), O. Dukh and I. Dovhaniuk.

Tribus *Obriini* Mulsant, 1839

Genus *Obrium* Dejean, 1821

31. *Obrium cantharinum* Linnaeus, 1767

Literature sources: Kremenets [10].

Tribus *Molorchini* Mulsant, 1863

Genus *Molorchus* Fabricius, 1792

32. *Molorchus umbellatarum* Schreber, 1759

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Tribus *Hylotrupini* Zahajkevych, 1991

Genus *Hylotrupes* Audinet-Serville, 1834

33. *Hylotrupes bajulus* Linnaeus, 1758

Examined materials: 20.VI.2018, Kremenets (50.096157, 25.718762), I. Dovhaniuk. 15.VII.2019, Kremenets (50.114946, 25.717588), I. Dovhaniuk.

Tribus *Callidiini* Kirby, 1837

Genus *Phymatodes* Mulsant, 1839

34. *Phymatodes testaceus* Linnaeus, 1758

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka.

35. *Callidium violaceum* Linnaeus, 1758

Examined materials: 15.V.2018, Stizhok (50.176205, 25.875445), I. Dovhaniuk.

Tribus *Clytini* Mulsant, 1839

Genus *Plagionotus* Mulsant, 1842

36. *Plagionotus detritus* Linnaeus, 1758

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka.

37. *Plagionotus arcuatus* Linnaeus, 1758

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka.

Genus *Clytus* Laicharting, 1784

38. *Clytus arietis* Linnaeus, 1758

Examined materials: 21.V.2019, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), I. Dovhaniuk.

Genus *Chlorophorus* Chevrolat, 1863

39. *Chlorophorus herbsti* Brahm, 1790

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Literature sources: Kremenets (Zamoroka and al., 2012)

Genus *Xylotrechus* Chevrolat, 1860

40. *Xylotrechus antilope* Schönherr, 1817

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka.

41. *Xylotrechus rusticus* (Linnaeus, 1758)

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka.

Genus *Cyrtoclytus* Ganglbauer, 1881

42. *Cyrtoclytus capra* Germar, 1824

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

#### Subfamilia Lamiinae

Tribus Mesosini Thomson, 1860

Genus *Mesosa* Latreille, 1829

43. *Mesosa curculionoides* Linnaeus, 1758

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

44. *Mesosa nebulosa* Fabricius, 1781

Examined materials: 16.VII.2017, Lishnya (50.160372, 25.839107), I. Dovhaniuk.

Tribus Monochamini Aurivillius, 1921

Genus *Monochamus* Dejean, 1821

45. *Monochamus galloprovincialis* Olivier, 1795

Examined materials: 05.VII.2018, Kulykiv, locality "Hora Vovcha" (50.067787, 25.622364), I. Dovhaniuk.

Tribus Dorcadionini Latreille, 1825

Genus *Dorcadion* Dalman, 1817

46. *Dorcadion fulvum* Scopoli, 1763

Examined materials: 12.VIII.2016, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), I. Dovhaniuk.

47. *Dorcadion holosericeum* Krynicki, 1832

Examined materials: 07.VI.2017, Kremenets, locality "Hora Divochi Skeli" (50.119444, 25.727444), I. Dovhaniuk.

48. *Dorcadion equestre* (Laxmann, 1770)

Literature sources: Kremenets [10].

Tribus Pogonocherini Mulsant, 1839

Genus *Pogonoherus* Dejean, 1821

49. *Pogonoherus hispidulus* Piller et Mitterpacher, 1783

Examined materials: 01.VII.2017, Lishnya (50.160372, 25.839107), I. Dovhaniuk.

Literature sources: Kremenets [4, 10]

Tribus Acanthocinini Blanchard, 1845

Genus *Acanthocinus* Dejean, 1821

50. *Acanthocinus aedilis* Linnaeus, 1758

Examined materials: 14.IV.2018, Kremenets (50.096000, 25.727191) I. Dovhaniuk.

Literature sources: Kremenets [10]

51. *Acanthocinus griseus* Fabricius, 1792

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka.

Genus *Leiopus* Audinet-Serville, 1835

52. *Leiopus nebulosus* Linnaeus, 1758

Literature sources: Zholoby, locality "Hora Maslyatyn" [4, 10].

53. *Leiopus linnei* Wallin, Nýlander & Kvamme, 2009

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Tribus Agapanthiini Mulsant, 1839

Genus *Agapanthia* Audinet-Serville, 1935

54. *Agapanthia villosoviridescens* De Geer, 1775

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka. 21.05.2018, Lishnya (50.145397, 25.803048) I. Dovhaniuk.

55. *Agapanthia cardui* Linnaeus, 1767

Examined materials: 04.VI.2018, Pidlistsi, locality "Hora Strakhova" (50.094754, 25.675431), A. Zamoroka. 04.VI.2018, Kremenets, locality "Buchyna" (50.092363, 25.696053), A. Zamoroka. 05.VI.2018, Kremenets, locality "Hora Divochi Skeli" (50.118582, 25.727934), A. Zamoroka. 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka. 05.VI.2018, Bilokrynytsya (50.121861, 25.759254), A. Zamoroka.

Tribus Tetraopini Thomson, 1860

Genus *Tetrops* Stephens, 1829 not Kirby, 1826

56. *Tetrops praevusta* Linnaeus, 1758

Literature sources: Kremenets [7, 10]

Tribus Saperdini Mulsant, 1839

Genus *Saperda* Fabricius, 1775

57. *Saperda carcharias* Linnaeus, 1758

Examined materials: 04.VI.2018, Kremenets, Office of NP "Kremenetski Hory" (50.094041, 25.713025), A. Zamoroka.

58. *Saperda scalaris* Linnaeus, 1758

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

Genus *Phytoecia* Dejean, 1835

59. *Phytoecia affinis* Harrer, 1784

Examined materials: 05.VI.2018, Lishnya, locality "Lypova Aleya" (50.143232, 25.808983), A. Zamoroka.

## Conclusions

In summary, we presented the first relevant list of 59 species of the longhorn beetles for National Park "Kremenetski Hory" and predicted their number around 100-120 species. According to our quantitative study ten species of the longhorn beetles are the most abundant in NP "Kremenetski Hory" and distributed within all types of local ecosystems.

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Довганюк І. Я., Заморока А. М.

**Жуки-вусачі (Coleoptera: Cerambycidae) національного природного парку «Кременецькі Гори»**

Фауна жуків-вусачів екорегіону Кременецькі Гори а також однієїменного національного природного парку тривалий час залишалася вкрай слабко вивченою. У каталозі вусачів Західного Поділля для цього екорегіону було вказано всього 13 видів, а з урахуванням інших джерел – 17 видів. У чинному дослідженні подаються знахідки 59 видів жуків-вусачів, 42 з яких вперше наводяться для території національного природного парку «Кременецькі Гори» та екорегіону назагал. Також представлено результати кількісних обліків жуків-вусачів у різних екосистемах національного парку, що виявили 10 найроздовсюдженіших і найчисленніших видів.

**Ключові слова:** *Cerambycidae*, Кременецькі Гори, Західне Поділля.