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## ON THE FAUNA OF LEPIDOPTERA (INSECTA) OF THE NATIONAL NATURE PARK 'DVORICHANSKYI' (KHARKIV REGION, UKRAINE) AND ITS ENVIRONS. CONTRIBUTION 5

Каролінський, Є. О., Дем'яненко, С. О., Бідзіля, О. В., Будашкін, Ю. І., Гугля, Ю. О., Кавурка, В. В., Мушинський, В. Г. До фауни лускокрилих (Insecta: Lepidoptera) Національного природного парку «Дворічанський» (Харківська область, Україна) та його околиць. Повідомлення 5. *Вісті Харківського ентомологічного товариства*. 2021. Т. XXIX, вип. 1. С. 53–63. DOI: 10.36016/KhESG-2021-29-1-4.

Наведено анотований список нових знахідок лускокрилих Національного природного парку «Дворічанський». Список містить 103 види лускокрилих, з яких 80 видів уперше вказано для території парку, 60 видів — уперше для Харківської області, а 3 види (*Trifurcula austriaca* van Nieukerken, 1990, *Ochsenheimeria capella* Möschler, 1860 та *Leucoptera genistae* (M. Herring, 1933)) — уперше для України. Загалом у НПП «Дворічанський» відмічено 1 364 види Lepidoptera, з яких 13 видів занесено до Червоної Книги України та 24 види — до Червоної Книги Харківської області. 7 рис., 14 назв.

**Ключові слова:** Lepidoptera, лускокрилі, фауна, Національний природний парк «Дворічанський».

Каролінский, Е. А., Демьяненко, С. А., Бидзиля, А. В., Будашкин, Ю. И., Гугля, Ю. А., Кавурка, В. В., Мушинский, В. Г. К фауне чешуекрылых (Insecta: Lepidoptera) Национального природного парка «Дворечанский» (Харьковская область, Украина) и его окрестностей. Сообщение 5. *Известия Харьковского энтомологического общества*. 2021. Т. XXIX, вып. 1. С. 53–63. DOI: 10.36016/KhESG-2021-29-1-4.

Приведен аннотированный список новых находок чешуекрылых Национального природного парка «Дворечанский». Список включает в себя 103 вида чешуекрылых, из которых 80 видов впервые приведены для территории парка, 60 видов — впервые для Харьковской области, а 3 вида (*Trifurcula austriaca* van Nieukerken, 1990, *Ochsenheimeria capella* Möschler, 1860 и *Leucoptera genistae* (M. Herring, 1933)) — впервые для фауны Украины. Всего в НПП «Дворечанский» отмечены 1 364 вида Lepidoptera, из которых 13 видов внесены в Красную Книгу Украины и 24 вида — в Красную Книгу Харьковской области. 7 рис., 14 назв.

**Ключевые слова:** Lepidoptera, чешуекрылые, фауна, Национальный природный парк «Дворечанский».

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An annotated list of new records of butterflies and moths of the National Nature Park 'Dvorichanskyi' is provided. The list includes 103 species, of which 80 are registered in the park for the first time, 60 are new records for Kharkiv Region, and 3 (*Trifurcula austriaca* van Nieukerken, 1990, *Ochsenheimeria capella* Möschler, 1860, and *Leucoptera genistae* (M. Herring, 1933)) are new for Ukraine. Totally, there are 1,364 species of Lepidoptera registered in the National Nature Park 'Dvorichanskyi'. There are 13 species from the Red Data Book of Ukraine and 24 species from the Red Data Book of Kharkiv Region of Ukraine registered in the park. 7 figs, 14 refs.

**Keywords:** Lepidoptera, butterflies and moths, fauna, National Nature Park 'Dvorichanskyi'.

**Introduction.** This paper is the fifth contribution towards the inventory of Lepidoptera of the National Nature Park (NNP) 'Dvorichanskyi' and its close environs. In our fourth paper (Karolinskiy *et al.*, 2020), 1,284 species of Lepidoptera were recorded for the park. However, these data are preliminary, and the species diversity of the study area is higher. The examination of new material collected by us resulted in the discovery of 80 additional species, 60 of which were recorded for the Kharkiv Region for the first time, and three of them are new for Ukraine. We exclude one species, *Elegia fallax* (Staudinger, 1881), from the fauna of the park due to systematic rearrangement (Slamka, 2019); the correct name of the specimen from the park

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(Karolinskiy et al., 2019) is *Elegia atrifasciella* Ragonot, 1887. Currently, the list of Lepidoptera of NNP 'Dvorichanskiy' and its environs consists of 1,364 species.

**Materials and methods.** This paper is based on the material collected and observed by the authors and O. Novikov, M. Parhomenko, S. Trotsenko and S. Tsykal during the following period: May 2016, June 2017, June 2018, from April to October 2019, and from March to October 2020.

The material was observed and collected via daytime catching by a net, attracting by light (125W, 160W, and 250W mercury-vapor lamps, 8W and 26W fluorescent UV lamps), and photographing.

The material was identified by the authors. The determination by photographs was carried out only for species with distinct differences in habitus. In difficult cases, specimens were dissected for identification. Genitalia was macerated in 8–12% potassium hydroxide solution, then washed in faint acetic acid solution, and then in distilled water. After that, genitalia was examined in glycerol and stored in microvials placed on the pins of the specimens; in some cases genitalia was embedded in euparal and slide-mounted.

Photographs of mounted specimens and their genitalia were taken by O. Bidzilya.

The material collected by V. Mushinskiy, S. Trotsenko and S. Tsykal is in their research collections; Tortricidae are in the collection of I. I. Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine; other 'microlepidoptera' except Pyraloidea and Pterophoroidea are in the collection of the Institute for Evolutionary Ecology of the National Academy of Sciences of Ukraine; the rest of the material is in the collection of the Museum of Nature of the Vasyl Karazin Kharkiv National University.

Places of observation, dates and collectors (for attracting by light): **Novomlynsk** (49.88°N, 37.73°E) — further in the text 'N.' — 29.05.2016 (E. Karolinskiy, S. Trotsenko), 07.06.2017 (S. Demyanenko, E. Karolinskiy, O. Novikov), 14–15.06.2019 (S. Demyanenko), 18.05.2019, 11.07.2019 and 18.08.2019 (E. Karolinskiy), 05.09.2019 (E. Karolinskiy, O. Novikov), 28.06.2020, 03.07.2020, 12.07.2020, 24–25.07.2020, 11.08.2020, 04.09.2020 and 10.09.2020 (E. Karolinskiy); NNP 'Dvorichanskiy', 3 km NNE of Novomlynsk, '**Berezki**' (49.912°N, 37.756°E) — further in the text 'B.' — 08–09.08.2020 (E. Karolinskiy, V. Mushinskiy); NNP 'Dvorichanskiy', **Kamenka** (49.97°N, 37.83°E) — further in the text 'K.' — 28–30.06.2019 (E. Karolinskiy, O. Novikov), 07–08.03.2020 (E. Karolinskiy); NNP 'Dvorichanskiy', 4.8 km NNE of Novomlynsk, gulch '**Shlagbaumnaya**' (49.930°N, 37.751°E) — further in the text 'Sh.' — 28–30.07.2019 (E. Karolinskiy, V. Mushinskiy, O. Novikov), 19–21.06.2020 (E. Karolinskiy, V. Mushinskiy), 07.08.2020 (E. Karolinskiy, V. Mushinskiy); NNP 'Dvorichanskiy', 1.7 km NNE of Novomlynsk, gulch '**Sosnovaya**' (49.900°N, 37.750°E) — further in the text 'S.' — 22.08.2019 (S. Demyanenko, E. Karolinskiy, S. Tsykal), 06–07.06.2020 (S. Trotsenko, S. Tsykal), 05–06.08.2020 (E. Karolinskiy, S. Tsykal); NNP 'Dvorichanskiy', 2 km NNE of Novomlynsk, gulch '**Mogila the 1st**' (49.902°N, 37.751°E) — further in the text 'M.' — 04.06.2018 and 27.04.2019 (E. Karolinskiy), 26.06.2019, 19.08.2019 and 06.09.2019 (E. Karolinskiy, O. Novikov), 03.10.2019, 01.07.2020, 04.07.2020, 16.07.2020, 02–03.09.2020, 06.09.2020, 13.09.2020 and 25–26.09.2020 (E. Karolinskiy).

Daytime collecting and recording were conducted mainly on the above dates (for other dates the collector's name is indicated in the text) at the following locations: NNP 'Dvorichanskiy', right bank of Oskol River between **Novomlynsk** and **Krasnoe Pervoe** (49.89–94°N, 37.74–78°E) — further in the text '**d-N.-Kr.**'; NNP 'Dvorichanskiy', right bank of Oskol River between **Kamenka** and **Krasnoe Pervoe** (49.94–97°N, 37.78–83°E) — further in the text '**d-Kam.-Kr.**'.

In the list below an asterisk (\*) indicates a species new for NNP 'Dvorichanskiy' and its environs; two asterisks (\*\*) — a species new for the Kharkiv region as a whole; three asterisks (\*\*\*) — a species new for Ukraine. For the species new for Ukraine, their general distribution is given. The species without asterisks were already registered in the environs of NNP 'Dvorichanskiy', i.e., in Novomlynsk and its northern surroundings (Karolinskiy et al., 2017, 2018, 2019, 2020), and now we register these species strictly at the territory of NNP.

The higher system of Lepidoptera follows Nieukerken et al. (2011) and Heikkilä et al. (2014).

## Results.

### Infraorder HETERONEURA Tillyard, 1918

### Superfamily NEPTICULOIDEA Stainton, 1854

### Family NEPTICULIDAE Stainton, 1854

#### \*\* *Stigmella thuringiaca* (Petry, 1904)

**Material.** N., 12.07.2020 — 1 ♂.

\*\* *Stigmella rolandi* van Nieukerken, 1990

Material. Sh., 19.06.2020 — 1 ♂.

\*\*\* *Trifurcula austriaca* van Nieukerken, 1990 (fig. 1–3)

Material. B., 09.08.2020 — 1 ♂

Distribution. Austria, Czech Republic, Slovakia, Italy, Greece (Nieukerken, 2020).

\*\* *Trifurcula pallidella* (Duponchel, [1843])

Material. Sh., 19.06.2020 — 1 ♂.

Superfamily TINEOIDEA Latreille, 1810

Family TINEIDAE Latreille, 1810

*Nemapogon variatella* (Clemens, 1860)

Material. K., 30.06.2019 — 1 ♀.

\*\* *Infurcitinea rumelicella* (Rebel, 1903)

Material. N., 15.06.2019 — 1 ♂.

*Ateliotum hungaricellum* (Staudinder, 1871)

Material. M., 01.07.2020 — 2 sp.; Sh., 19.06.2020 — 2 sp.

\* *Tineola bisselliella* (Hummel, 1823)

Material. N., 05.09.2019 — 1 ♀.

Superfamily GRACILLARIOIDEA Stainton, 1854

Family GRACILLARIIDAE Stainton, 1854

\*\* *Caloptilia alchimiella* (Scopoli, 1763)

Material. Sh., 29.07.2019 — 1 ♂.

*Caloptilia fidella* (Reutti, 1853)

Material. M., 03.10.2019 — 1 ♂; S., 05.08.2020 — 1 ♀.

\*\* *Caloptilia populetorum* (Zeller, 1839)

Material. S., 05.08.2020 — 1 ♀.

*Phyllonorycter issikii* (Kumata, 1963)

Material. B., 09.08.2020 — 1 ♂; K., 30.06.2019 — 1 ♂.

\*\* *Phyllonorycter schreberella* (Fabricius, 1781)

Material. S., 05.08.2020 — 1 ♀.

\*\* *Phyllocnistis saligna* (Zeller, 1839)

Material. K., 30.06.2019 — 1 ♂.

Superfamily YPONOMEUTOIDEA Stephens, 1829

Family YPONOMEUTIDAE Stephens, 1829

\*\* *Swammerdamia caesiella* (Hübner, 1796)

Material. N., 24.07.2020 — 1 ♂.

Family ARGYRESTHIIDAE Bruand, 1850

*Argyresthia spinosella* (Stainton, 1849)

Material. Sh., 29.07.2019 — 1 ♀.

**Family YPSOLOPHIDAE Guenée, 1845**

**\* *Ypsolopha sequella* (Clerck, 1759)**

Material. Sh., 20.06.2020 — 1 ♀.

**\*\*\* *Ochsenheimeria capella* Möscher, 1860 (fig. 4–5)**

Material. M., 06.09.2019 — 3 ♂♂, 03.09.2020 — 1 ♂.

**Distribution.** Hungary, NW Kazakhstan, and Volga-Don, Mid-Volga and South Ural regions of Russia (Agassiz, 2020; Zagulajev, 1981; Ponomarenko, Sinev, 2019).

**Family LYONETIIDAE Meyrick, 1880**

**\*\*\* *Leucoptera genistae* (M. Herring, 1933) (fig. 6–7)**

Material. Sh., 29.07.2019 — 1 ♂.

**Distribution.** Austria, Bulgaria, Germany, Hungary, Italy, France (Mey, 2020).

**Superfamily GELECHIOIDEA Stainton, 1854**

**Family OECOPHORIDAE Bruand, 1850**

***Promalactis procerella* ([Denis et Schiffermüller], 1775)**

Material. Sh., 21.06.2020 — 1 sp.

**Family ELACHISTIDAE Bruand, 1850**

**\*\* *Elachista fasciola* Parenti, 1983**

Material. Sh., 28.07.2019 — 2 ♂♂; N., 12.07.2020 — 1 ♂.

**\*\* *Elachista littoricola* Le Marchand, 1938**

Material. Sh., 29.07.2019 — 1 ♂.

**\*\* *Elachista pullicomella* Zeller, 1839**

Material. N., 18.08.2019 — 1 ♂.

***Elachista pollutella* Duponchel, [1844]**

Material. M., 27.04.2019 — 2 ♂♂.

**\*\* *Elachista serricornis* Stainton, 1854**

Material. N., 28.06.2020 — 1 ♀.

**Family DEPRESSARIIDAE Meyrick, 1883**

**\*\* *Agonopterix heracliana* (Linnaeus, 1758)**

Material. K., 07.03.2020 — 1 ♂, 08.03.2020 — 1 ♂.

**\*\* *Agonopterix furvella* (Treitschke, 1832)**

Material. Sh., 20.06.2020 — 1 ♂.

**\*\* *Agonopterix liturosa* (Haworth, [1811])**

Material. Sh., 20.06.2020 — 1 ♂, 21.06.2020 — 1 sp.

**Family COLEOPHORIDAE Bruand, 1850**

**\*\* *Ascleriductia ochripennella* (Zeller, 1849), comb. n.**

Material. K., 30.06.2019 — 1 ♂; M., 04.06.2018 — 1 ♂.

**\*\* *Calcomarginia ballotella* (Fischer von Röslerstamm, 1839)**

Material. K., 29.06.2019 — 1 ♂; M., 26.06.2019 — 1 ♂; N., 14.06.2019 — 1 ♂, 11.07.2019 — 1 ♂, 03.07.2020 — 1 ♂.

**\*\* *Apista lacera* Falkovitsh, 1993**

Material. M., 27.04.2019 — 1 ♂.

- \*\* *Amseliphora colutella* (Fabricius, 1794)  
Material. Sh., 28.07.2019 — 1 ♂.
- \*\* *Multicoloria ditella* (Zeller, 1849)  
Material. N., 18.05.2019 — 1 ♂.
- \*\* *Orthographis conyzae* (Zeller, 1868)  
Material. N., 11.08.2020 — 1 ♀.
- \*\* *Casignetella halophilella* (Zimmermann, 1926)  
Material. N., 04.09.2020 — 1 ♂.
- \* *Casignetella versurella* (Zeller, 1849)  
Material. N., 15.06.2019 — 1 ♀.
- \*\* *Casignetella adspersella* (Benander, 1939)  
Material. S., 05.08.2020 — 1 ♀; N., 25.07.2020 — 1 ♂, 11.08.2020 — 1 ♀.
- \*\* *Casignetella odorariella* (Mühlig et Frey, 1857)  
Material. N., 15.06.2019 — 1 ♂.
- \*\* *Casignetella occatella* (Staudinger, 1880)  
Material. N., 04.09.2020 — 1 ♀.
- \*\* *Goniodoma auroguttella* (Fischer von Röslerstamm, 1841)  
Material. N., 18.08.2019 — 1 ♂.

**Family COSMOPTERIGIDAE Heinemann et Wocke, 1876**

- \*\* *Eteobalea tririvella* (Staudinger, 1871)  
Material. N., 24.07.2020 — 1 ♂, 25.07.2020 — 1 ♂.

**Family GELECHIIDAE Stainton, 1854**

- \*\* *Aproaerema albifrontella* (Heinemann, 1870)  
Material. K., 28.06.2019 — 1 ♂; S., 22.08.2019 — 1 ♂; N., 15.06.2019 — 1 ♂.

*Aproaerema anthyllidella* (Hübner, [1813])

Material. M., 19.08.2019 — 2 ♂♂, 02.09.2020 — 1 ♂, 03.09.2020 — 2 ♂♂, 3 ♀♀, 06.09.2020 — 1 ♂; S., 22.08.2019 — 1 ♂, 05.08.2020 — 3 ♂♂.

\* *Anarsia eleagnella* Kuznetsov, 1957

Material. S., 05.08.2020 — 1 ♂.

*Brachmia blandella* (Fabricius, 1798)

Material. M., 16.07.2020 — 1 ♀.

*Helcystogramma arulensis* (Rebel, 1929)

Material. S., 05.08.2020 — 1 sp.

\* *Platyedra subcinerea* (Haworth, 1828)

Material. K., 30.06.2019 — 1 ♀.

\*\* *Bryotropha rossica* Anikin et Piskunov, 1996

Material. N., 04.09.2020 — 1 ♂.

\*\* *Bryotropha patockai* Elsner et Karsholt, 2003

Material. N., 03.07.2020 — 1 ♀.

\*\* *Megacraspedus dolosellus* (Zeller, 1839)

Material. N., 15.06.2019 — 1 ♂.

\*\* *Megacraspedus podolicus* Toll, 1942

Material. Sh., 19.06.2020 — 1 ♂.

**\*\* *Apodia bifractella* (Duponchel, [1843])**

Material. M., 04.07.2020 — 1 ♂; N., 12.07.2020 — 1 ♂.

**\*\* *Monochroa nomadella* (Zeller, 1868)**

Material. Sh., 20.06.2020 — 2 ♂♂.

**\*\* *Xystophora pulveratella* (Herrich-Schäffer, [1854])**

Material. Sh., 28.07.2019 — 1 sp.

**\*\* *Scrobipalpa pauperella* (Heinemann, 1870)**

Material. N., 25.07.2020 — 1 ♀.

**\*\* *Scrobipalpa erichi* Povolný, 1964**

Material. N., 04.09.2020 — 1 ♂, 10.09.2020 — 1 ♂, 2 ♀♀.

***Caryocolum fischerella* (Treitschke, 1833)**

Material. Sh., 30.07.2019 — 1 ♂, 07.08.2020 — 1 ♀.

**Family SCYTHRIDIDAE Rebel, 1901**

**\*\* *Scythris buszkoi* Baran, 2004**

Material. N., 04.09.2020 — 1 ♂.

**Family BLASTOBASIDAE Meyrick, 1894**

**\*\* *Hypatopa inunctella* (Zeller, 1839)**

Material. N., 12.07.2020 — 1 ♀.

**Superfamily ALUCITOIDEA Leach, 1815**

**Family ALUCITIDAE Leach, 1815**

**\*\* *Alucita huebneri* Wallengren, 1859**

Material. d-Kam.-Kr., 09.03.2020 (E. Karolinskiy) — 1 ♂.

**Superfamily PTEROPHOROIDEA Latreille, 1802**

**Family PTEROPHORIDAE Latreille, 1802**

**\*\* *Hellinsia chrysocomae* (Ragonot, 1875)**

Material. B., 09.08.2020 — 1 ♂; N., 07.06.2017 — 1 ♀.

**Superfamily CHOREUTOIDEA Stainton, 1858**

**Family CHOREUTIDAE Stainton, 1858**

**\*\* *Prochoreutis stellaris* (Zeller, 1847)**

Material. M., 01.07.2020 — 1 ♀, 03.09.2020 — 1 ♂, 1 ♀.

**Superfamily TORTRICOIDEA Latreille, 1802**

**Family TORTRICIDAE Latreille, 1802**

**Subfamily CHLIDANOTINAE Meyrick, 1906**

**\* *Isotrias hybridana* (Hübner, [1817])**

Material. Sh., 19.06.2020 — 1 ♀, 21.06.2020 — 1 ♀.

**Subfamily OLETHREUTINAE Walsingham, 1895**

***Eucosma obumbratana* (Lienig & Zeller, 1846)**

Material. B., 09.08.2020 — 1 sp.

\*\* *Eucosma campoliliana* ([Denis et Schiffermüller], 1775)

Material. S., 05.08.2020 — 2 ♀♀.

\* *Epiblema costipunctana* (Haworth, [1811])

Material. N., 12.07.2020 — 1 ♂.

\*\* *Corticivora piniana* (Herrich-Schäffer, [1851])

Material. M., 04.07.2020 — 1 ♂.

*Ancylis laetana* (Fabricius, 1775)

Material. S., 06–07.06.2020 — 1 ♀.

\* *Cydia fagiglandana* (Zeller, 1841)

Material. B., 09.08.2020 — 1 ♂.

Superfamily PAPILIONOIDEA Latreille, 1802

Family HESPERIIDAE Latreille, 1809

\*\* *Muschampia orientalis* (Hübner, [1808–1813])

Material. d–N.–Kr., 05–11.09.2020 (E. Karolinskiy) — 4 ♂♂.

Superfamily PYRALOIDEA Latreille, 1809

Family PYRALIDAE Latreille, 1809

\*\* *Bradyrrhoa gilveolella* (Treitschke, 1832)

Material. M., 01.07.2020 — 1 sp.

\*\* *Epischidia fulvostrigella* (Eversmann, 1844)

Material. Sh., 07.08.2020 — 1 sp.

\* *Acrobasis repandana* (Fabricius, 1798)

Material. Sh., 20.06.2020 — 1 sp., 21.06.2020 — 2 sp.

\*\* *Eurhodope cirrigerella* (Zincken, 1818)

Material. Sh., 19.06.2020 — 1 sp., 20.06.2020 — 1 sp.

\*\* *Euzophera bigella* (Zeller, 1848)

Material. B., 09.08.2020 — 1 ♂.

\*\* *Cadra figulilella* (Gregson, 1871)

Material. B., 08–09.08.2020 — 1 ♂; N., 04.09.2020 — 1 ♀.

Family CRAMBIDAE Latreille, 1810

\*\* *Scoparia ingrattella* (Zeller, 1846)

Material. Sh., 19.06.2020 — 1 ♂.

\*\* *Euchromius bella* (Hübner, 1796)

Material. S., 05.08.2020 — 1 ♀.

*Evergestis pallidata* (Hufnagel, 1767)

Material. B., 09.08.2020 — 1 sp.

*Pyrausta purpuralis* (Linnaeus, 1758)

Material. Sh., 21.06.2020 — 1 sp.

*Ostrinia palustralis* (Hübner, [1796])

Material. S., 05.08.2020 — 1 sp.

**Superfamily BOMBYCOIDEA Latreille, 1802**

**Family SPHINGIDAE Latreille, 1802**

\* *Proserpinus proserpina* (Pallas, 1772)

Material. S., 06–07.06.2020 — 1 sp.

**Superfamily GEOMETROIDEA Leach, 1815**

**Family GEOMETRIDAE Leach, 1815**

**Subfamily ENNOMINAE Duponchel, 1845**

*Epione repandaria* (Hufnagel, 1767)

Material. M., 03.09.2020 — 1 sp.

**Subfamily STERRHINAE Meyrick, 1892**

\*\* *Idaea trigeminata* (Haworth, [1809])

Material. Sh., 21.06.2020 — 1 sp.

\*\* *Idaea deversaria* (Herrich-Schäffer, 1847)

Material. Sh., 20.06.2020 — 1 ♂, 1 ♀.

\*\* *Scopula ochraceata* (Staudinger, 1901)

Material. B., 09.08.2020 — 1 sp.

**Subfamily LARENTIINAE Duponchel, 1845**

\*\* *Eupithecia pimpinellata* (Hübner, [1813])

Material. B., 08.08.2020 — 2 sp., 09.08.2020 — 3 sp.; S., 05.08.2020 — 5 sp., 06.08.2020 — 5 sp.; Sh., 07.08.2020 — 3 sp.

**Superfamily NOCTUOIDEA Latreille, 1809**

**Family NOTODONTIDAE Stephens, 1829**

*Harpyia milhauseri* (Fabricius, 1775)

Material. B., 08.08.2020 — 1 sp.; Sh., 20.06.2020 — 1 sp., 21.06.2020 — 2 sp.

**Family EREBIDAE Leach, 1815**

**Subfamily ARCTIINAE Leach, [1815]**

\* *Lacydes spectabilis* (Tauscher, 1806)

Material. N., 04.09.2020 — 1 ♂.

**Subfamily EREBINAE Leach, 1815**

*Catocala hymenaea* ([Denis et Schiffermüller], 1775)

Material. B., 09.08.2020 — 1 sp.; S., 05.08.2020 — 1 sp.

**Family NOCTUIDAE Latreille, 1809**

**Subfamily METOPONIINAE Herrich-Schäffer, [1851]**

\* *Mycteroplus puniceago* (Boisduval, 1840)

Material. N., 11.08.2020 — 1 sp.

**Subfamily CUCULLIINAE Herrich-Schäffer, 1850**

\* *Cucullia argentina* (Fabricius, 1787)

Material. Sh., 21.06.2020 — 1 sp.



**Subfamily ONCOCNEMIDINAE Forbes et Franclemont, 1954**

\* *Calophasia opalina* (Esper, 1794)

Material. B., 08.08.2020 — 1 sp.

**Subfamily AMPHIPYRINAE Guenée, 1837**

*Amphipyra livida* ([Denis et Schiffermüller], 1775)

Material. M., 26.09.2020 — 1 sp.

**Subfamily XYLENINAE Guenée, 1837**

*Caradrina albina* Eversmann, 1848

Material. M., 02.09.2020 — 1 sp., 13.09.2020 — 1 sp.

\* *Cirrhia ocellaris* (Borkhausen, 1792)

Material. M., 25.09.2020 — 1 sp., 26.09.2020 — 1 sp.

*Griposia aprilina* (Linnaeus, 1758)

Material. d-Kam.-Kr., 03.10.2020 (M. Parhomenko) — 1 sp.

\* *Gortyna flavago* ([Denis et Schiffermüller], 1775)

Material. N., 10.09.2020 — 1 sp.

\* *Laterologia ophiogramma* (Esper, 1794)

Material. Sh., 21.06.2020 — 1 sp.

**Subfamily HADENINAE Guenée, 1837**

\* *Leucania comma* (Linnaeus, [1760])

Material. Sh., 21.06.2020 — 1 sp.

**Subfamily NOCTUINAE Latreille, 1809**

*Ochropleura plecta* (Linnaeus, 1761)

Material. S., 06.08.2020 — 1 sp.

\* *Opigena polygona* ([Denis et Schiffermüller], 1775)

Material. Sh., 20.06.2020 — 1 sp.

\* *Diarsia rubi* (Vieweg, 1790)

Material. N., 29.05.2016 — 1 sp.

*Xestia stigmatica* (Hübner, [1813])

Material. S., 06.08.2020 — 1 sp.

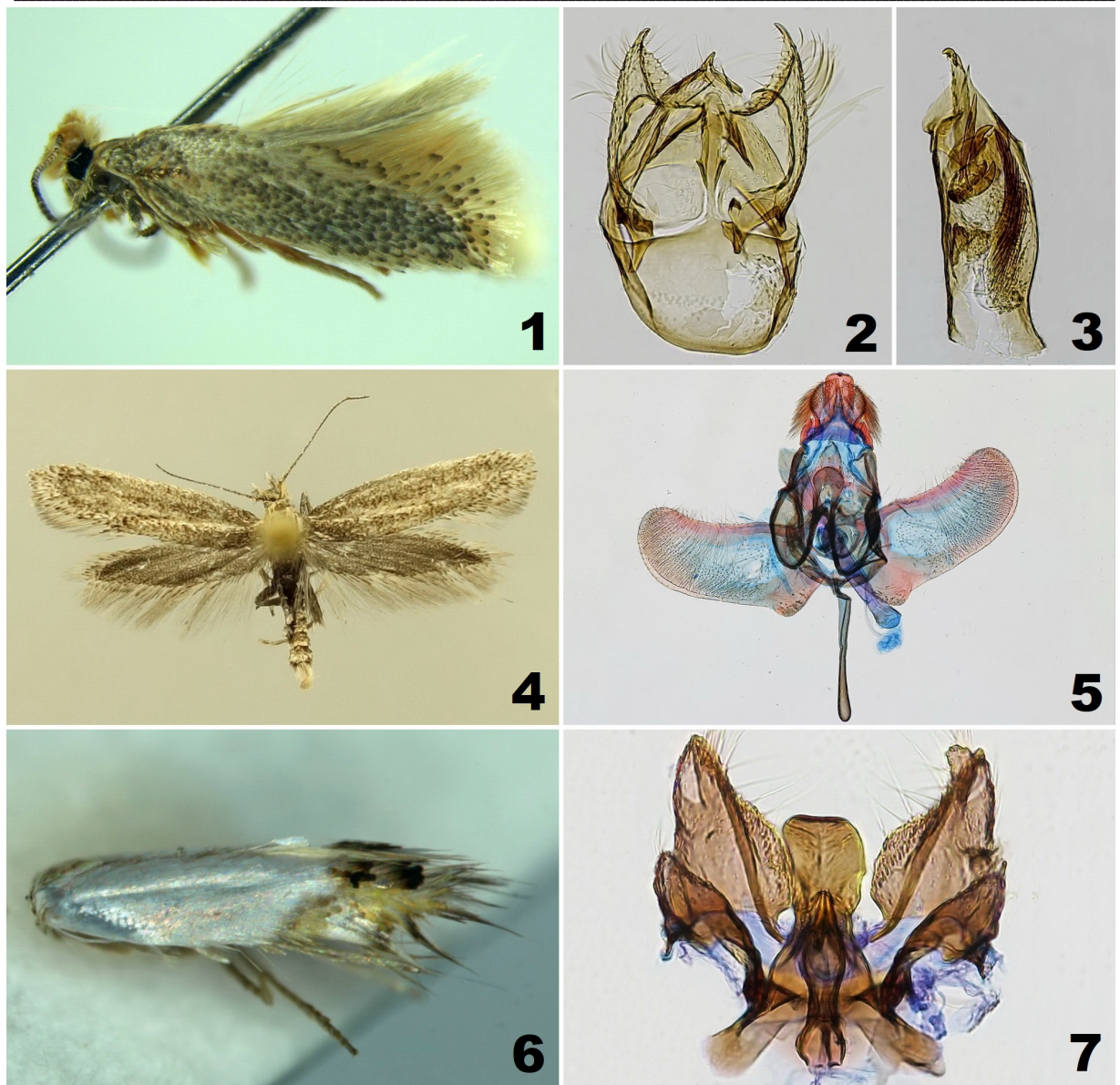
**Conclusions.** According to the results of our research and the literature data, 1,364 species of Lepidoptera are found in NNP 'Dvorichanskiy' and its environs, 80 of which are given for the park for the first time. Of these, 13 species are included in the Red Data Book of Ukraine (Akimov, 2009) and 24 species are included to the Red Data Book of Kharkiv Region of Ukraine (Tokarsky, Shandikov, Ateamasova, 2013). The above data indicate a very high biodiversity and uniqueness of the fauna of Lepidoptera of NNP 'Dvorichanskiy'. At the same time, the list of Lepidoptera of the park is still not complete and further studies will certainly supplement it with new species.

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## REFERENCES

- Agassiz, D. 2020. *Ochsenheimeria capella* Möscher, 1860. In: Karsholt, O., Nieuekerken, E. J. van. *Fauna Europaea: Lepidoptera*. Fauna Europaea version 2020.06. URL: [https://fauna-eu.org/cdm\\_dataportal/taxon/b63622c0-d77f-40cc-9986-86ed8904a7dd](https://fauna-eu.org/cdm_dataportal/taxon/b63622c0-d77f-40cc-9986-86ed8904a7dd). [Accessed: 10 November 2020].
- Akimov, I. A., ed. 2009. *Red Data Book of Ukraine. Animals* [Червона книга України. Тваринний світ]. Hlobalkonsaltnh, Kyiv, 1–624. ISBN: 9789669705907. [in Ukrainian].
- Heikkilä, M., Mutanen, M., Kekkonen, M., Kaila, L. 2014. Morphology reinforces proposed molecular phylogenetic affinities: a revised classification for Gelechioidea (Lepidoptera). *Cladistics*, 30(6), 563–589. DOI: <https://doi.org/10.1111/cla.12064>.
- Karolinskiy, Ye. A., Demyanenko, S. A., Zhakov, A. V., Mushinskiy, V. G. 2017. On the fauna of Lepidoptera (Insecta) of the National Nature Park 'Dvorichanskyi' (Kharkiv Region, Ukraine) and its environs [К фауне чешуекрылых (Insecta: Lepidoptera) Национального природного парка «Дворечанский» (Харьковская область, Украина) и его окрестностей]. *The Kharkov Entomological Society Gazette* [Известия Харьковского энтомологического общества], 25(1), 5–47. URL: [http://nbuv.gov.ua/UJRN/Vkhet\\_2017\\_25\\_1\\_3](http://nbuv.gov.ua/UJRN/Vkhet_2017_25_1_3). [in Russian].
- Karolinskiy, Ye. A., Demyanenko, S. A., Guglya, Yu. A., Zhakov, A. V., Kavurka, V. V., Mushinskiy, V. G. 2018. On the fauna of Lepidoptera (Insecta) of the National Nature Park 'Dvorichanskyi' (Kharkiv Region, Ukraine) and its environs. Contribution 2. *The Kharkov Entomological Society Gazette*, 26(1), 55–114. URL: [http://nbuv.gov.ua/UJRN/Vkhet\\_2018\\_26\\_1\\_6](http://nbuv.gov.ua/UJRN/Vkhet_2018_26_1_6).
- Karolinskiy, Ye. O., Demyanenko, S. O., Bidzilya, O. V., Budashkin, Yu. I., Guglya, Yu. O., Kavurka, V. V., Mushinskiy, V. G., Zhakov, O. V. 2019. On the fauna of Lepidoptera (Insecta) of the National Nature Park 'Dvorichanskyi' (Kharkiv Region, Ukraine) and its environs. Contribution 3. *The Kharkov Entomological Society Gazette*, 27(1), 5–24. DOI: <https://doi.org/10.36016/KhESG-2019-27-1-1>.
- Karolinskiy, Ye. O., Demyanenko, S. O., Guglya, Yu. O., Kavurka, V. V., Mushinskiy, V. G. 2020. On the fauna of Lepidoptera (Insecta) of the National Nature Park 'Dvorichanskyi' (Kharkiv Region, Ukraine) and its environs. Contribution 4. *The Kharkov Entomological Society Gazette*, 28(1), 17–25. DOI: <https://doi.org/10.36016/KhESG-2020-28-1-3>.
- Mey, W. *Leucoptera genistae* (M. Hering, 1933). In: Karsholt, O., Nieuekerken, E. J. van. *Fauna Europaea: Lepidoptera*. Fauna Europaea version 2020.06. URL: [https://fauna-eu.org/cdm\\_dataportal/taxon/d845c885-52a3-451d-ba86-de1f37482afb](https://fauna-eu.org/cdm_dataportal/taxon/d845c885-52a3-451d-ba86-de1f37482afb). [Accessed: 10 November 2020].
- Nieuekerken, E. J. van, Kaila, L., Kitching, I. J., Kristensen, N. P., Lees, D. C., Minet, J., Mitter, C., Mutanen, M., Regier, J. C., Simonsen, T. J., Wahlberg, N., Yen, S.-H., Zahiri, R., Adamski, D., Baixeras, J., Bartsch, D., Bengtsson, B. Å., Brown, J. W., Bucheli, S. R., Davis, D. R., De Prins, J., De Prins, W., Epstein, M. E., Gentili-Poole, P., Gielis, C., Hättenschwiler, P., Hausmann, A., Holloway, J. D., Kallies, A., Karsholt, O., Kawahara, A. Y., Koster, J. C., Kozlov, M. V., Lafontaine, J. D., Lamas, G., Landry, J.-F., Lee, S., Nuss, M., Park, K.-T., Penz, C., Rota, J., Schintlmeister, A., Schmidt, B. C., Sohn, J.-C., Solis, M. A., Tarmann, G. M., Warren, A. D., Weller, S., Yakovlev, R. V., Zolotuhin, V. V. and Zwick, A. 2011. Order Lepidoptera Linnaeus, 1758. In: Zhang, Z.-Q., ed. *Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness*, *Zootaxa*, 3148(1), 212–221. DOI: <https://doi.org/10.11646/zootaxa.3148.1.3>.
- Nieuekerken, E. J. van. 2020. *Trifurcula (Trifurcula) austriaca* van Nieuekerken, 1990. In: Karsholt, O., Nieuekerken, E. J. van. *Fauna Europaea: Lepidoptera*. Fauna Europaea version 2020.06. URL: [https://fauna-eu.org/cdm\\_dataportal/taxon/ad248b18-88d6-43d5-a036-0366c3226f25](https://fauna-eu.org/cdm_dataportal/taxon/ad248b18-88d6-43d5-a036-0366c3226f25). [Accessed: 10 November 2020].
- Ponomarenko, M. G., Sinev, S. Yu. 2019. Ypsolophidae. In: Sinev, S. Yu., ed. *Catalogue of the Lepidoptera of Russia* [Каталог чешуекрылых (Lepidoptera) России]. 2<sup>nd</sup> ed. Zoological Institute RAS, Saint Petersburg, 49–50. ISBN: 9785980920685. [in Russian].
- Slamka, F. 2019. *Pyraloidea of Europe (Lepidoptera). Volume 4. Phycitinae. Part 1*. Frantisek Slamka, Bratislava. ISBN: 9788057010234.
- Tokarsky, V. A., Shandikov, G. A., Ateasova, T. A., eds. 2013. *Red Data Book of Kharkiv Region of Ukraine. Animals* [Червона книга Харківської області. Тваринний світ]. Vasyl Karazin Kharkiv National University, Kharkiv, 1–472. [in Ukrainian].
- Zagulajev, A. K., 1981. *Ochsenheimeriidae*. In: Medvedev, G. S., ed. *Key to the Insects of European part of USSR. Volume IV. Lepidoptera. Part 2* [Определитель насекомых европейской части СССР. Том IV. Чешуекрылые. Вторая часть]. Nauka, Leningrad, 99–103. [in Russian].

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**Fig. 1–7. Species of Lepidoptera new for Ukraine from NNP 'Dvorichanskiy' and its environs:**  
1–3 — *Trifurcula austriaca*, ♂: 1 — imago, 2 — genitalia with aedeagus removed, ventral view,  
3 — aedeagus, lateral view; 4–5 — *Ochsenheimeria capella*, ♂: 4 — imago, 5 — genitalia;  
6–7 — *Leucoptera genistae*, ♂: 6 — imago, 7 — genitalia.