

© 2020 Ye. O. KAROLINSKIY, S. O. DEMYANENKO,  
Yu. O. GUGLYA, V. V. KAVURKA, V. G. MUSHINSKIY

## ON THE FAUNA OF LEPIDOPTERA (INSECTA) OF THE NATIONAL NATURE PARK 'DVORICHANSKYI' (KHARKIV REGION, UKRAINE) AND ITS ENVIRONS. CONTRIBUTION 4

Каролінський, С. О., Дем'яненко, С. О., 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 4. *Вісті Харківського ентомологічного товариства*. 2020. Т. XXVIII, вип. 1. С. 17–25. DOI: 10.36016/KhESG-2020-28-1-3.

У статті наведено анотований список нових знахідок лускокрилих Національного природного парку «Дворічанський». Список містить 85 видів лускокрилих, з яких 46 видів уперше вказано для території парку, 24 види — уперше для Харківської області, а 1 вид (*Phtheochroa unionana* (Kennel, 1900)) — уперше для України. Загалом у НПП «Дворічанський» відмічено 1 284 види Lepidoptera, з яких 12 видів занесені до Червоної Книги України та 23 види — до Червоної Книги Харківської області. 11 назв.

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

Каролинский, Е. А., Демьяненко, С. А., Гугля, Ю. А., Кавурка, В. В., Мушинский, В. Г. К фауне чешуекрылых (Insecta: Lepidoptera) Национального природного парка «Двуречанский» (Харьковская область, Украина) и его окрестностей. Сообщение 4. *Известия Харьковского энтомологического общества*. 2020. Т. XXVIII, вып. 1. С. 17–25. DOI: 10.36016/KhESG-2020-28-1-3.

В статье приводится аннотированный список новых находок чешуекрылых Национального природного парка «Двуречанский». Список включает в себя 85 видов чешуекрылых, из которых 46 видов впервые приведены для территории парка, 24 вида — впервые для Харьковской области, а 1 вид (*Phtheochroa unionana* (Kennel, 1900)) — впервые для фауны Украины. Всего в НПП «Двуречанский» отмечены 1 284 вида Lepidoptera, из которых 12 видов внесены в Красную Книгу Украины и 23 вида — в Красную Книгу Харьковской области. 11 назв.

**Ключевые слова:** Lepidoptera, чешуекрылые, фауна, меловые обнажения, Национальный природный парк «Двуречанский».

Karolinskiy, Ye. O., Demyanenko, S. O., Guglya, Yu. O., Kavurka, V. V., Mushinskiy, V. G. 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*. 2020. Vol. XXVIII, iss. 1. P. 17–25. DOI: 10.36016/KhESG-2020-28-1-3.

An annotated list of new records of butterflies and moths of the National Nature Park 'Dvorichanskyi' is provided. The list includes 85 species, of which 46 are registered in the park for the first time, 24 are new records for Kharkiv Region, and 1 (*Phtheochroa unionana* (Kennel, 1900)) is new for Ukraine. Totally, there are 1,284 species of Lepidoptera registered in the National Nature Park 'Dvorichanskyi'. There are 12 species from the Red Data Book of Ukraine and 23 species from the Red Data Book of Kharkiv Region of Ukraine registered in the park. 11 refs.

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

**Introduction.** This paper is the fourth contribution towards an inventory of Lepidoptera of the National Nature Park (NNP) 'Dvorichanskyi' and its close environs. In our third paper (Karolinskiy et al., 2019), 1,238 species of Lepidoptera were recorded for the park. One more species, *Yelenka calciferella* Bidzilya, Budashkin and Karolinskiy, 2020, was recently described from the park territory (Trofimova et al., 2020). 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 46 additional species, 24 of which were recorded for the first time for the Kharkiv Region, and 1 species is recorded as new for Ukraine. We exclude one species, *Porrittia galactodactyla* ([Denis et Schiffermüller], 1775), from the fauna of the park due to misidentification (the correct determination is *Wheeleria obsoletus* (Zeller, 1841)). Currently, the list of Lepidoptera of NNP 'Dvorichanskyi' and its environs consists of 1,284 species.

Karolinskiy E. A. Vasyl Karazin Kharkiv National University,

4, Svobody Sqr., Kharkiv, 61022, UKRAINE; e-mail: kharkov.but@gmail.com

Demyanenko S. A. Severodonetsk, 93400, UKRAINE; e-mail: severlepsi@gmail.com

Guglya Yu. A. Museum of Nature of the Vasyl Karazin Kharkiv National University,

8, Trinklera St., Kharkiv, 61058, UKRAINE; e-mail: pteroj@gmail.com

Kavurka V. V. Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine,

15, Khmel'nitskogo St., Kyiv, 01601, UKRAINE; e-mail: tortrix1984@gmail.com

Mushinskiy V. G. Zaporizhzhia, UKRAINE; e-mail: 2790601@gmail.com

**Materials and methods.** This paper is based on the material collected and observed by the authors and V. Kletenkin, O. Novikov, and S. Tsykal during the period from April to October 2019 and from March to April 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 determination of the material was carried out by the authors. The identification by photographs was carried out only for species with distinct differences in habitus. In difficult cases, the determination was made by genitalia prepared by maceration in 8–12% NaOH solution.

The material collected by V. Mushinskiy and S. Tsykal is in their research collections. Tortricidae are in the collection of the Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine. Other Microlepidoptera except Pyraloidea 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.**’ — 26.04.2019 (Ye. Karolinskiy), 28.04.2019 (Ye. Karolinskiy, O. Novikov), 14–16.06.2019 (S. Demyanenko), 11–12.07.2019 and 18.08.2019 (Ye. Karolinskiy), 23.08.2019 (S. Demyanenko), 05.09.2019 (Ye. Karolinskiy, O. Novikov); NNP ‘Dvorichanskiy’, **Kamenka** (49.97°N, 37.83°E) — further in the text ‘**K.**’ — 28–30.06.2019 (Ye. Karolinskiy, O. Novikov), 08.03.2020 (Ye. Karolinskiy); NNP ‘Dvorichanskiy’, 3 km NNE of Novomlynsk, **Berezki** (49.912°N, 37.756°E) — further in the text ‘**B.**’ — 31.07.2019 (Ye. Karolinskiy, V. Mushinskiy); 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 (Ye. Karolinskiy, V. Mushinskiy, O. Novikov); NNP ‘Dvorichanskiy’, 1.7 km NNE of Novomlynsk, gulch ‘**Sosnovaya**’ (49.900°N, 37.750°E) — further in the text ‘**S.**’ — 17–18.06.2019 (S. Tsykal), 21.08.2019 (Ye. Karolinskiy, S. Tsykal), 22.08.2019 (S. Demyanenko, Ye. 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.**’ — 25–26.06.2019, 19.08.2019, and 06.09.2019 (Ye. Karolinskiy, O. Novikov), 03.10.2019 (Ye. 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: right bank of the Oskol River in **Novomlynsk** and its northern environs (49.87–89°N, 37.72–74°E) — further in the text ‘**d–N.**’; left bank of the Oskol River in SE environs of **Novomlynsk** (49.86–87°N, 37.73°E) — further in the text ‘**d–N.–SE.**’; NNP ‘Dvorichanskiy’, right bank of the 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 the 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, its 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), and now we register these species strictly at the territory of NNP.

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

## Results.

### Infraorder HETERONEURA Tillyard, 1918

#### Superfamily ADELOIDEA Bruand, 1850

##### Family ADELIDAE Bruand, 1850

###### \*\* *Nematopogon swammerdamella* (Linnaeus, 1758)

**Material.** d–N.–Kr., 27.04.2019 (Ye. Karolinskiy) — 1 ♀.

#### Superfamily TINEOIDEA Latreille, 1810

##### Family PSYCHIDAE Boisduval, 1829

###### \*\* *Psyche casta* (Pallas, 1767)

**Material.** d–N.–Kr., 15.07.2019 (Ye. Karolinskiy) — 1 larval case.

\**Acanthopsyche ecksteini* (Lederer, 1855)

Material. d-N.-Kr., 15.07.2019 (Ye. Karolinskiy) — 1 larval case, 29.07.2019 — 1 larval case.

Family TINEIDAE Latreille, 1810

*Monopis pallidella* Zagulajev, 1955

Material. K., 28.06.2019 — 2 ♂, 30.06.2019 — 1 ♂.

\*\**Monopis obviella* ([Denis et Schiffermüller], 1775)

Material. K., 30.06.2019 — 1 ♂; M., 25.06.2019 — 1 ♀.

\*\**Wegneria panchalcella* (Staudinder, 1871)

Material. N., 18.08.2019 — 1 ♂.

Superfamily GRACILLARIOIDEA Stainton, 1854

Family BUCCULATRICIDAE Fracker, 1915

\*\**Bucculatrix albedinella* (Zeller, 1839)

Material. d-N.-Kr., 23.08.2019 — 9 empty mines on *Ulmus* sp.

Family GRACILLARIIDAE Stainton, 1854

\**Acrocercops brongniardella* (Fabricius, 1798)

Material. d-N.-Kr., 15.06.2019 — 4 empty mines on *Quercus robur*.

\**Phyllonorycter acerifoliella* (Zeller, 1839)

Material. d-N.-Kr., 16.06.2019 — 2 empty mines on *Acer tataricum*.

Superfamily YPONOMEUTOIDEA Stephens, 1829

Family YPONOMEUTIDAE Stephens, 1829

*Yponomeuta evonymella* (Linnaeus, 1758)

Material. K., 30.06.2019 — 1 sp.

Family ARGYRESTHIIDAE Bruand, 1850

\*\**Argyresthia goedartella* (Linnaeus, 1758)

Material. Sh., 29.07.2019 — 1 ♀.

Family GLYPHIPTERIGIDAE Stainton, 1854

*Orthotelia sparganella* (Thunberg et Wenner, 1794)

Material. K., 30.06.2019 — 1 sp.

Family YPSOLOPHIDAE Guenée, 1845

\**Ypsolopha asperella* (Linnaeus, [1760])

Material. K., 08.03.2020 — 1 sp.; N., 15.06.2019 — 1 sp.

\**Ypsolopha chazariella* (Mann, 1866)

Material. M., 26.06.2019 — 1 sp.

Superfamily GELECHIOIDEA Stainton, 1854

Family OECOPHORIDAE Bruand, 1850

*Pleurota aristella* (Linnaeus, 1767)

Material. Sh., 30.07.2019 — 1 ♂.

**Family DEPRESSARIIDAE Meyrick, 1883**

**Subfamily DEPRESSARIINAE Meyrick, 1883**

**\*\**Depressaria emeritella* Stainton, 1849**

Material. N., 26.04.2019 — 1 ♀.

**Subfamily ETHMIINAE Busck, 1909**

**\*\**Ethmia pyrausta* (Pallas, 1771)**

Material. d–Kam.–Kr., 03.04.2020 (V. Kletenkin) — 1 sp.

**Family GELECHIIDAE Stainton, 1854**

**\**Chrysoesthia drurella* (Fabricius, 1775)**

Material. K., 28.06.2019 — 1 ♂.

***Carpatolechia fugacella* (Zeller, 1839)**

Material. M., 25.06.2019 — 1 ♂.

**\*\**Klimeschiopsis kiningerella* (Duponchel, [1843])**

Material. S., 21.08.2019 — 1 ♀.

**\*\**Sophronia sicarellus* (Zeller, 1839)**

Material. N., 14.06.2019 — 1 ♂.

**\*\**Nothris verbascella* ([Denis et Schiffermüller], 1775)**

Material. K., 28.06.2019 — 1 ♂.

***Pexicopia malvella* (Hübner, [1805])**

Material. K., 28.06.2019 — 2 sp.

**Superfamily PTEROPHOROIDEA Latreille, 1802**

**Family PTEROPHORIDAE Latreille, 1802**

**\*\**Merrifieldia baliodactylus* (Zeller, 1841)**

Material. M., 25.06.2019 — 1 ♂.

**\*\**Hellinsia inulae* (Zeller, 1852)**

Material. N., 05.09.2019 — 1 ♂.

**\*\**Hellinsia osteodactylus* (Zeller, 1841) s. l.**

Material. K., 30.06.2019 — 1 ♂, 1 ♀.

**Remarks.** The male genitalia correspond to '*Leioptilus trimmatodactylus* Christoph, 1872' sensu Zagulajev et al. (1986).

**Superfamily TORTRICOIDEA Latreille, 1802**

**Family TORTRICIDAE Latreille, 1802**

**Subfamily TORTRICINAE Latreille, 1802**

***Acleris kochiella* (Goeze, 1783)**

Material. M., 25.06.2019 — 1 ♂.

**\*\*\**Phtheochroa unionana* (Kennel, 1900)**

Material. K., 29.06.2019 — 2 ♂.

**Distribution.** Caucasus, Asia Minor, in Europe: Bulgaria, Romania, and Volga–Don and East Caucasus regions of Russia (Razovski, 2002, Sinev, Nedoshivina, Dubatolov, 2019, Zlatkov, Huemer, 2016).

**\**Aethes rubigana* (Treitschke, 1830)**

Material. N., 11.07.2019 — 1 ♂.

\**Eana incanana* (Stephens, 1852)

Material. K., 28.06.2019 — 2 ♀; N., 14.06.2019 — 1 ♂, 15.06.2019 — 4 ♂.

Subfamily OLETHREUTINAE Walsingham, 1895

\**Zeiraphera isertana* (Fabricius, 1794)

Material. d–N.–Kr., 15.06.2019 — 1 sp. on a trunk of *Quercus robur*.

*Epiblema cirsiiana* (Zeller, 1843)

Material. S., 22.08.2019 — 1 ♀.

*Cydia coniferana* (Saxesen, 1840)

Material. S., 22.08.2019 — 1 sp.

*Dichrorampha simpliciana* (Haworth, [1811])

Material. K., 30.06.2019 — 1 ♂.

Superfamily COSSOIDEA Leach, 1815

Family COSSIDAE Leach, 1815

\**Paracossulus thrips* (Hübner, [1810–1813])

Material. Sh., 29.07.2019 — 1 sp.

Superfamily PAPILIONOIDEA Latreille, 1802

Family NYMPHALIDAE Rafinesque, 1815

\**Melitaea cinxia* (Linnaeus, 1758)

Material. d–N., 20.05.2019 (Ye. Karolinskiy) — 1 ♂.

\**Melitaea trivialis* ([Denis et Schiffermüller], 1775)

Material. d–N.–Kr., 12.07.2019 — 2 ♀.

\**Brenthis daphne* ([Denis et Schiffermüller], 1775)

Material. d–N., 27.06.2019 (Ye. Karolinskiy) — 1 ♀; d–N.–SE, 14.06.2019 — 3 sp., 26.06.2019 — 3 sp.

Superfamily PYRALOIDEA Latreille, 1809

Family PYRALIDAE Latreille, 1809

*Pyralis perversalis* (Herrich–Schäffer, [1849])

Material. M., 25.06.2019 — 1 sp.

*Gymnancyla hornigii* (Lederer, 1852)

Material. M., 19.08.2019 — 1 sp.; S., 21.08.2019 — 3 sp., 22.08.2019 — 3 sp.

\*\**Phycita meliella* (Mann, 1864)

Material. Sh., 29.07.2019 — 1 sp.

*Ancylosis oblitella* (Zeller, 1848)

Material. S., 21.08.2019 — 1 sp.

\*\**Phycitodes saxicola* (Vaughan, 1870)

Material. M., 19.08.2019 — 1 ♂, 1 ♀; S., 21.08.2019 — 1 ♂.

Family CRAMBIDAE Latreille, 1810

\*\**Agriphila poliellus* (Treitschke, 1832)

Material. N., 05.09.2019 — 1 sp.

*Chrysocrambus cassentiniellus* (Herrich–Schäffer, [1848])

Material. K., 30.06.2019 — 1 sp.

***Pediasia contaminella* (Hübner, [1796])**

Material. M., 19.08.2019 — 1 sp.

**\*\* *Talis quercella* ([Denis et Schiffermüller], 1775)**

Material. S., 22.08.2019 — 1 ♂.

***Eurrhysis pollinalis* ([Denis et Schiffermüller], 1775)**

Material. d–N.–Kr., 16.06.2019 — 1 sp.

**Superfamily BOMBYCOIDEA Latreille, 1802**

**Family SATURNIIDAE Boisduval, 1837**

**\* *Aglia tau* (Linnaeus, 1758)**

Material. d–Kam.–Kr., 30.04.2020 (V. Kletenkin) — 1 ♂.

**Superfamily GEOMETROIDEA Leach, 1815**

**Family GEOMETRIDAE Leach, 1815**

**Subfamily ENNOMINAE Duponchel, 1845**

***Apeira syringaria* (Linnaeus, 1758)**

Material. Sh., 29.07.2019 — 1 sp.

***Colotois pennaria* (Linnaeus, 1761)**

Material. M., 03.10.2019 — 1 ♀.

***Aspitates gilvaria* ([Denis et Schiffermüller], 1775)**

Material. d–N.–Kr., 23.08.2019 — 1 sp.

**Subfamily STERRHINAE Meyrick, 1892**

***Idaeia sylvestraria* (Hübner, [1799])**

Material. M., 06.09.2019 — 2 sp. (1 ♂ coll.).

***Idaeia mancipiata* (Staudinger, 1871)**

Material. S., 22.08.2019 — 1 ♂.

**\* *Cyclophora pendularia* (Clerck, 1759)**

Material. S., 17.06.2019 — 1 sp.

**Subfamily LARENTIINAE Duponchel, 1845**

***Pelurga comitata* (Linnaeus, 1758)**

Material. Sh., 29.07.2019 — 1 sp.

**\*\* *Eulithis mellinata* (Fabricius, 1787)**

Material. N., 16.06.2019 — 1 sp.

**\* *Hydrelia flammeolaria* (Hufnagel, 1767)**

Material. S., 17.06.2019 — 1 sp.; N., 14.06.2019 — 1 sp.

***Perizoma alchemillata* (Linnaeus, 1758)**

Material. B., 31.07.2019 — 1 sp.

***Perizoma bifaciata* (Haworth, [1809])**

Material. M., 19.08.2019 — 1 sp.; S., 21.08.2019 — 1 sp., 22.08.2019 — 1 sp.

***Eupithecia vulgata* (Haworth, [1809])**

Material. K., 30.06.2019 — 1 ♀.

**Superfamily NOCTUOIDEA Latreille, 1809**

**Family NOTODONTIDAE Stephens, 1829**

**\**Dicranura ulmi* ([Denis et Schiffermüller], 1775)**

Material. N., 28.04.2019 — 2 ♂, 1 ♀.

**Family EREBIDAE Leach, 1815**

**Subfamily LYMANTRIINAE Hampson, 1893**

**\**Orgyia antiquoides* (Hübner, [1819–1822])**

Material. S., 18.06.2019 — 1 sp.

***Spilosoma urticae* (Esper, 1789)**

Material. K., 30.06.2019 — 1 sp.

**Subfamily BOLETOBIINAE Guenée, 1858**

***Parascotia fuliginaria* (Linnaeus, 1761)**

Material. K., 29.06.2019 — 1 sp.

**Subfamily EREBINAE Leach, 1815**

**\*\**Dysgonia algira* (Linnaeus, 1767)**

Material. S., 21.08.2019 — 1 sp., 22.08.2019 — 1 sp.; N., 15.06.2019 — 1 sp.

**Family NOCTUIDAE Latreille, 1809**

**Subfamily PLUSIINAE Boisduval, 1828**

***Plusia festucae* (Linnaeus, 1758)**

Material. K., 28.06.2019 — 1 sp., 30.06.2019 — 2 sp.

**Subfamily ACRONICTINAE Heinemann, 1859**

**\**Acronicta auricoma* ([Denis et Schiffermüller], 1775)**

Material. Sh., 29.07.2019 — 1 sp.

**Subfamily METOPONIINAE Herrich–Schäffer, 1851**

***Aegle kaekeritziana* (Hübner, [1799])**

Material. S., 18.06.2019 — 1 sp.

**Subfamily CUCULLIINAE Herrich–Schäffer, 1850**

***Cucullia argentea* (Hufnagel, 1766)**

Material. Sh., 29.07.2019 — 3 sp.

**\*\**Cucullia virgaureae* Boisduval, 1840**

Material. S., 21.08.2019 — 5 sp.

**Subfamily XYLENINAE Guenée, 1837**

***Caradrina kadenii* Freyer, 1836**

Material. K., 28.06.2019 — 1 sp.

***Chilodes maritima* (Tauscher, 1806)**

Material. S., 22.08.2019 — 5 sp.

***Cosmia pyralina* ([Denis et Schiffermüller], 1775)**

Material. K., 30.06.2019 — 3 sp.

***Agrochola laevis* (Hübner, [1800–1803])**

Material. S., 22.08.2019 — 1 sp.

***Conistra rubiginosa* (Scopoli, 1763)**

Material. M., 03.10.2019 — 1 sp.

***Apterogenum ypsilon* ([Denis et Schiffermüller], 1775)**

Material. S., 17.06.2019 — 1 sp.

**\* *Sidemia spilogramma* (Rambur, 1871)**

Material. S., 22.08.2019 — 1 sp.

***Helotropha leucostigma* (Hübner, [1803–1808])**

Material. B., 30.07.2018 — 2 sp.

**Subfamily HADENINAE Guenée, 1837**

**\*\* *Saragossa siccanorum* (Staudinger, 1871)**

Material. S., 22.08.2019 — 3 sp.

**Subfamily NOCTUINAE Latreille, 1809**

**\* *Euxoa nigricans* (Linnaeus, [1760])**

Material. N., 23.08.2019 — 2 sp. (1 ♂ coll.).

**\*\* *Euxoa foeda* (Lederer, 1855)**

Material. S., 22.08.2019 — 1 ♂.

**\* *Agrotis vestigialis* (Hufnagel, 1766)**

Material. S., 21.08.2019 — 1 sp.

***Agrotis bigramma* (Esper, 1790)**

Material. S., 22.08.2019 — 1 sp.

***Dichagyris signifera* ([Denis et Schiffermüller], 1775)**

Material. K., 28.06.2019 — 5 sp., 29.06.2019 — 2 sp., 30.06.2019 — 5 sp.

**Conclusions.** According to the results of our research and the literature data, 1,284 species of Lepidoptera are found in NNP 'Dvorichanskyi' and its environs, 46 of which are given for the park for the first time. Of these, 12 species are included in the Red Data Book of Ukraine (Akimov, 2009) and 23 species are included to the Red Data Book of Kharkiv Region of Ukraine (Tokarsky, Shandikov and Ateasova, 2013; Karolinskiy et al., 2018). The above data indicate very high biodiversity and uniqueness of the fauna of Lepidoptera of NNP 'Dvorichanskyi'. 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.

**Acknowledgements.** The authors are sincerely grateful to O. Bidzilya (Institute for Evolutionary Ecology of the National Academy of Sciences of Ukraine, Kyiv), Yu. Geryak (Sambir), A. Matov (Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia), E. Rutjan (Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine, Kyiv), V. Sergienko (Kyiv), V. Yepishin (Institute for Evolutionary Ecology of the National Academy of Sciences of Ukraine, Kyiv), and A. Zhakov (Zaporizhzhia) for consultations in some difficult determination cases, and to V. Kletenkin, O. Novikov (NNP 'Dvorichanskyi'), and S. Tsykal (Kyiv) for cooperation in joint field expeditions and assistance in collecting material for this research.

## REFERENCES

- 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*, 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>.
- Nieukerken, 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., Zehner, 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.-I., 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>.
- Razowski, J. 2002. *Tortricidae (Lepidoptera) of Europe. Volume 1. Tortricinae and Chlidanotinae*. Frantisek Slamka, Bratislava. ISBN: 8096754092.
- Sinev, S. Yu., Nedoshivina, S. V., Dubatolov, V. V. 2019. Tortricidae. 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, 120–156. [in Russian]. ISBN: 9785980920685.
- Tokarsky, V. A., Shandikov, G. A., Atemasova, 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. [in Ukrainian].
- Trofimova, T., Bidzilya, O., Budashkin, Y., Karolinskiy, E., Shovkoon, D., Tsvetkov, E. 2020. Description of a new genus, a new species and a new subspecies of snout moths (Lepidoptera: Pyralidae: Phycitinae) from Eastern Europe and Central Asia. *Zootaxa* [in litt.].
- Zagulajev, A. K., Kuznetsov, V. I., Martin, M. O., Sinev, S. Yu., Falkovitch, M. I. 1986. *Key to the Insects of European part of USSR. Volume IV. Lepidoptera. Part 3 [Определитель насекомых европейской части СССР. Том IV. Чешуекрылые. Третья часть]*. Nauka, Leningrad. [in Russian].
- Zlatkov, B., Huemer, P. 2016. *Phtheochroa unionana* (Kennel, 1900) recognised as a dimorphic Cochylini species, with description of the hitherto unknown male genitalia (Lepidoptera, Tortricidae). *Nota Lepidopterologica*, 39(2), 113–121. DOI: <https://doi.org/10.3897/nl.39.9050>.

Vasyl Karazin Kharkiv National University

Museum of Nature of the Vasyl Karazin Kharkiv National University

Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine