SHILAP Revta. lepid., 50 (198) junio 2022: 213-228 eISSN: 2340-4078 ISSN: 0300-5267
https://doi.org/10.57065/shilap.125

Materials on the Lepidoptera fauna of the Dagestan Republic (Northeastern Caucasus, Russia): autumn aspect (Insecta: Lepidoptera)

P. Ya. Ustjuzhanin, A. A. Teimurov, V. V. Anikin, A. Yu. Matov, A. E. Naydenov, A. N. Streltsov & R. V. Yakovlev

Abstract

The article provides the list of Lepidoptera (the families: Cossidae, Coleophoridae, Choreutidae, Ethmiidae, Pterophoridae, Pyralidae, Crambidae, Lemoniidae, Lasiocampidae, Drepanidae, Geometridae, Sphingidae, Erebidae, Noctuidae, Lycaenidae, Nymphalidae, Pieridae), collected in four localities in the Republic of Dagestan in September 2020. In total, 207 species have been recorded. Five species are reported for the fauna of Russia for the first time: *Casignetella texanella* (Chambers, 1878) (Coleophoridae), *Agriphila cyrenaicellus* (Ragonot, 1887), *Thyridiphora furia* (Swinhoe, 1884), *Haritalodes derogata* (Fabricius, 1775) (Crambidae), and *Scopula minorata* (Boisduval, 1833) (Geometridae); 23 species - for the fauna of Eastern Caucasus: *Perygra glaucicolella* (Wood, 1892), *Ecebalia halophilella* (Zimmermann, 1926), *E. linosyris* (E. Hering, 1937), *Ionescumia clypeiferella* (O. Hofmann, 1871), *Carpochena trientella* (Christpoh, 1872) (Coleophoridae), *Tebenna micalis* (Mann, 1857) (Choreutidae), *Ethmia candidella* (Alpheraky, 1908) (Ethmiidae), *Stenoptilia zophodactyla* (Duponchel, 1838), *Stenoptilodes taprobanes* (Felder & Rogenhofer, 1875), *Crombrugghia laetus* (Zeller, 1847) (Pterophoridae), *Glyptoteles leucacrinella* Zeller, 1848, *Cadra calidella* (Guenée, 1845), (Pyralidae), *Agriphila selasella* (Hübner, 1813), *Agriphila tolli* (Błeszyński, 1952), *Agriphila poliellus* (Treitschke, 1832), *Pediasia contaminella* (Hübner, 1796), *Pediasia fascelinella* (Hübner, [1813]), *Uresiphita gilvata* (Fabricius, 1794), *Antigastra catalaunalis* (Duponchel, 1833) (Crambidae), *Watsonalla binaria* (Hufnagel, 1767) (Drepanidae), *Idaea degeneraria erschoffi* (Christoph, 1872), *Scopula nigropunctata* (Hufnagel, 1767), and *Rhodometra sacraria* (Linnaeus, 1767) (Geometridae).
KEY WORDS: Insecta, Lepidoptera, biodiversity, faunistic record, species richest, Caspian basin, Dagestan State Reserve, Russia.

Materiales sobre la fauna de Lepidoptera de la República de Dagestán (noreste del Cáucaso, Rusia): aspecto otoñal (Insecta: Lepidoptera)

Resumen

El artículo proporciona la lista de Lepidoptera (las familias: Cossidae, Coleophoridae, Choreutidae, Ethmiidae, Pterophoridae, Pyralidae, Crambidae, Lemoniidae, Lasiocampidae, Drepanidae, Geometridae, Sphingidae, Erebidae, Noctuidae, Lycaenidae, Nymphalidae, Pieridae), collectadas en cuatro localidades en la República de Dagestán en septiembre de 2020. En total, 207 especies han sido registradas. Por primera vez, cinco especies son registradas para la fauna de Rusia: *Casignetella texanella* (Chambers, 1878) (Coleophoridae), *Agriphila cyrenaicellus* (Ragonot, 1887), *Thyridiphora furia* (Swinhoe, 1884), *Haritalodes derogata* (Fabricius, 1775) (Crambidae) y *Scopula minorata* (Boisduval, 1833) (Geometridae); 23 especies - para la fauna de este del Cáucaso: *Perygra glaucicolella*

(Wood, 1892), *Ecebalia halophilella* (Zimmermann, 1926), *E. linosyris* (E. Hering, 1937), *Ionescumia clypeiferella* (O. Hofmann, 1871), *Carpochena trientella* (Christpoh, 1872) (Coleophoridae), *Tebenna micalis* (Mann, 1857) (Choreutidae), *Ethmia candidella* (Alpheraky, 1908) (Ethmiidae), *Stenoptilia zophodactyla* (Duponchel, 1838), *Stenoptilodes taprobanes* (Felder & Rogenhofer, 1875), *Crombrugghia laetus* (Zeller, 1847) (Pterophoridae), *Glyptoteles leucacrinella* Zeller, 1848, *Cadra calidella* (Guenée, 1845), (Pyralidae), *Agriphila selasella* (Hübner, [1813]), *Agriphila tolli* (Błeszyński, 1952), *Agriphila poliellus* (Treitschke, 1832), *Pediasia contaminella* (Hübner, 1796), *Pediasia fascelinella* (Hübner, [1813]), *Uresiphita gilvata* (Fabricius, 1794), *Antigastra catalaunalis* (Duponchel, 1833) (Crambidae), *Watsonalla binaria* (Hufnagel, 1767) (Drepanidae), *Idaea degeneraria erschoffi* (Christoph, 1872), *Scopula nigropunctata* (Hufnagel, 1767) y *Rhodometra sacraria* (Linnaeus, 1767) (Geometridae).
PALABRAS CLAVE: Insecta, Lepidoptera, biodiversidad, registros faunísticos, riqueza de especies, cuenca del Caspio, Reserva Estatal de Dagestán, Rusia.

Introduction

The Lepidoptera of the Russian part of Caucasus are studied fragmentary. With a relatively good study of the western part of the Caucasus (the Black Sea), the Central and Eastern Caucasus are very poorly studied. The information on the Republics of North Ossetia, Ingushetia, Chechnya is very fragmentary. A little better is the situation on the Lepidoptera fauna in the Republic of Dagestan, but it is still impossible to say that it has been studied sufficiently. In the Catalog of Lepidoptera of Russia (ANIKIN *et al*., 2019), the Caucasus was divided into two sub-regions: the West Caucasian region (region No. 13), including the Krasnodar and Stavropol Territories, the Republic of Adygea, Kabardino-Balkaria, Karachay-Cherkesskaya, North Ossetia-Alania, Ingushetia and the East Caucasian region (region # 14), including the Chechen Republic and the Republic of Dagestan. For the West Caucasian region, 2811 species of Lepidoptera are given, and for the East Caucasian region - 2112 species.

The format of this work does not provide the inclusion of a full essay on the history of the study of Lepidoptera in Dagestan; therefore, we will focus only on the main publications.

The fauna of Lepidoptera in the East Caucasian region is the best studied in the Republic of Dagestan (Figs 1-2). Traditionally, the best studied are Papilionoidea. A near-exhaustive essay on the history of study on Papilionoidea of Dagestan with a full bibliography is given on the website Butterflies of Caucasus (TIKHONOV *et al*., 2021). Detailed data on the faunistics of Papilionoidea in Dagestan are provided on this website and in recent publications (ILYINA & MORGUN, 2010, 2011; TSHIKOLOVETS & NEKRUTENKO, 2012).

The study of moths, first of all, can be associated with the activity of the outstanding Russian entomologist M. A. Ryabov, who lived in Makhachkala from 1924 to 1925 and from 1933 to 1952. Although he did not publish a large number of works, he collected significant materials in various parts of Dagestan. Additionally, A. K. Zagulyaev collected a lot of specimens, mostly Microlepidoptera, in the vicinity of the village Kurush (1990).

In recent years, large materials have been collected in Dagestan by the entomologists V. Tikhonov (Pyatigorsk), E. Ilyina (Makhachkala), V. Kovtunovich and D. Morgun (Moscow), etc. The information obtained by these researchers has been published in a large number of different taxonomic and faunistic summaries on different groups of Lepidoptera (POLTAVSKY & ILYINA, 2002, 2003; KOVTUNOVICH, 2006; ILYINA *et al*., 2012; YAKOVLEV *et al*., 2015; LEILEI, 2016; SINEV, 2019; DUBATOLOV *et al*., 2021).

Material and methods

Collecting localities

1. Russia, Dagestan Rep., Dagestan Reserve, Kumtor-Kale Station, Sary-Kum dune, 43º 00’ 14” N / 47º 14’ 1” E, 60 m, 21-22-IX-2020 and 30-IX-2020, P. Ya. Ustjuzhanin & R.V. Yakovlev leg. (locality 1, Fig. 3).

2. Russia, Dagestan Rep., Dagestan Reserve, Magaramkent distr., Samur Forest, 41º 52' 0" N / 48º 33' 23" E, - 20 m, 23-24-IX-2020, P. Ya. Ustjuzhanin & R. V. Yakovlev leg.(locality 2, Fig. 4).
3. Russia, Dagestan Rep., Tabasaran distr., 5 km W Sirtych vill., 41º 48' 6" N / 48º 10' 31" E, 200 m, 25-IX-2020 , P. Ya. Ustjuzhanin & R.V. Yakovlev leg. (locality 3, Fig. 5).
4. Russia, Dagestan Rep., 12 km SE Novokayakent, 42º 20' 21" N / 48º 4' 9" E, -10 m, 26-28-IX-2020, P. Ya. Ustjuzhanin & R.V. Yakovlev leg. (locality 4, Fig. 6).

Habitats descriptions

Locality 1. Sarykum

The highest (about 250 m above sea level) central portion of the eolian-accumulative complex "Sarykum", divided by the Shura-Ozen river into two unequal halves - the left bank Big (Western) and the right bank Small (Eastern) Sarykums - is occupied with blown sands. In geomorphological terms, they represent a system of dunes with a south-west-north-east orientation, with length from 300-400 m to 1200 m (IDRISOV, 2010; GUSAROV, 2015). This system of dune-ridge sands is surrounded by a complex of semi-fixed hilly-cellular sands, which, in turn, smoothly turn into flat surfaces.

The vascular plants flora of Sarykum according to ADZHIEVA (2015) includes 438 species belonging to 279 genera and 74 families.

In botanical terms, it is of interest to find a number of psammophilic species in the flora of Sarykum (*Astragalus lehmannianus* Bunge, *A. karakugensis* Bunge*, Eremosparton aphyllum* (Pall.) Fisch. et C. A. Mey. (Fabaceae), *Calligonum aphyllum* (Pall.) Gurke. (Polygonaceae), the main part of the range of which is confined to the Central Asian deserts (MAIOROV, 1928; ABACHEV, 1995; ADZHIEVA, 2007).

In the crest of the dunes, where the sandy substrate is in constant motion, there are no plants. In areas with less mobile sands, along with the Central Asian species mentioned above, shrubs are observed: *Artemisia procera* Willd*., A. tschernieviana* Bess., *Senecio schischkinianus* Sof. (Asteraceae), *Corispermum aralo-caspicum* Iljin (Amaranthaceae), *Leymus racemosus* (Lam.) Tzvelev. (Poaceae).

Down the slope, where the eolian activity of sand is significantly reduced, along with an increase in the species diversity, the projective cover also increases. On slopes of different exposure and steepness, various associations of semi-desert and dry-steppe vegetation can be found.

The natural picture of vegetation is disturbed by artificial planting of trees and shrubs (*Sophora japonica* L., *Amorpha fruticosa* L., *Gleditschia triacanthos* L., *Robinia pseudoacacia* L. (Fabaceae), *Ailanthus altissima* (Mill.) Swingle (Simaroubaceae), *Armeniaca vulgaris* L., and *Morus nigra* Lam. (Rosaceae) along the railway, protecting it from sand drifts.

Locality 2. Samur Forest

In the Samur delta ecosystem, we observe a complex combination of plant communities, in terms of the area they are dominated by forests of temperate subtropical appearance, with a characteristic abundance of lianas: *Vitis sylvestris* S.G. Gmel. (Vitaceae), *Smilax excelsa* L. (Smilicaceae), *Hedera pastuchowii* Woronow (Araliaceae), *Periploca graeca* L. (Apocynaceae), *Lonicera caprifolium* L. (Caprifoliaceae), *Clematis vitalba* L. (Ranunculaceae), etc. Samur forests are a complex of trees of *Populus* L. (Salicaceae), *Quercus* L. (Fagaceae), *Alnus* Mill. and *Caprinus* L. (Betulaceae), previously covering almost the entire area of the delta with a continuous massif. Currently, large areas are occupied by artificial plantations of *Juglans regia* L. (Juglandaceae), *Robinia* L. and *Gleditsia* J. Clayton (Fabaceae), and *Pinus* L. (Pinaceae). The associated tree species include *Fraxinus excelsior* (Oleaceae), three species of maple (*Acer campestre* L., *A. platanoides* L., *A. laetum* C.A. Mey.) (Sapindaceae), several species of the genus *Salix* L. (Salicaceae), *Pyrus caucasica* Browicz (Rosaceae), *Tilia begoniifolia* Steven (Malvaceae), etc.

The common species of the underbrush are: *Crataegus* Tourn. ex L.*, Mespilus germanica* L.

(Rosaceae), *Corylus avellana* L. (Betulaceae), *Euonymus verrucosa* Scop. (Celastraceae), *Swida australis* (C.A. Mey.) Pojark. ex Grossh. (Cornaceae), *Viburnum opulus* L. (Adoxaceae), *Frangula alnus* Mill. (Rhamnaceae), etc. (Rhamnaceae), etc.

In open spaces, there are areas with cereal-wormwood vegetation. On the coastal sands, sparse psammophytic plant complexes are found. Meadow vegetation occurs in the form of disseminations in the forest areas and is confined mainly to the coastal strip of branches. Along the coast of the sea, in shallow lagoon waters and in artificial reservoirs, meadow-bog vegetation has formed with the predominance of *Phragmites* (Poaceae), *Thypha* (Thyphaceae), and *Carex* (Cyperaceae).

The most striking characteristic feature of the Samur delta forests is the continuous and very dynamic successional processes that support the existence of various forest communities, with regular changes from one forest type to another (NOVIKOVA & POLYANSKAYA, 1994). The spatio-temporal changes in moisture supply conditions caused by seasonal floods, fluctuations in the water content of branches and the restructuring of the main watercourses in the delta are the direct cause of changes in the plant complexes accompanying the evolutionary development of the deltaic landscapes.

Locality 3. Sirtych

It is dominated by wormwood-saltwort semi-shrub and small-shrub communities, the species composition of which varies depending on the exposure and steepness of the slope. The main factor determining the species diversity is the degree and nature of soil salinization.

The projective cover ranges from 20 to 70%. We have noted *Artemisia* L. (Asteraceae) with *Halothamnus glaucus* (M. Bieb.) Botsch., *Climacoptera crassa* M. Bieb.) Botsch., *Salsola soda* L., *S. ericoides* M. Bieb., *Kalidium foliatum* (Pall.) Moq., *Petrosimonia oppositifolia* (Pall.) Litv. (Amaranthaceae).

Locality 4. Novokayakent

The natural landscape in the area of Lake Adzhi-Papas is formed by a massif of poorly fixed shallow sands with sandy loam and clay loamy takyr-like depressions. About 50-55% of this area is occupied by arable lands.

Of the natural vegetation, predominantly semi-desert areas (mostly with excessive soil salinity) and fragmented tree and shrub vegetation have been preserved here. *Festuca valesiaca* Gaudin, *Poa bulbosa* L., *Bromus squarrosus* L., *Elytrigia trichophora* (Link) Nevski, *Cynodon dactylon* (L.) Pers., *Agropyron cristatum* (L.) Gaertn. (Poaceae), *Artemisia austriaca* Jacq., *A. monogyna* Waldst. et Kit., and *A. lercheana* Weber ex Stechm. (Asteraceae) are characteristic of the area. On highly saline soils, halophilic species prevail, such as *Salsola dendroides* Pall., *S. laricina* Pall., *Kochia prostrata* (S.G.Gmel.) Borb., *Suaeda physophora* Pall., *Halimione verrucifera* (Bieb.) Aell., *Camphorosma lessingii* Litv., *Petrosimonia brachiata* (Pall.) Bunge (Amaranthaceae), *Limonium meyeri* (Boiss.) O. Kuntze (Limoniaceae), *Puccinellia gigantea* (Grossh.) Grossh. (Poaceae), and *Tamarix amosissima* Ledeb. (Tamaricaceae). The sandy massifs and the coastal strip are characterized by psammophytic and littoral vegetation of *Convolvulus persicus* L. (Convolvulaceae), *Cakile euxina* Pobed. (Brassicaceae), *Argusia sibirica* (L.) Dandy (Boraginaceae), *Artemisia procera* Willd. (Asteraceae), *Anisantha tectorum* (L.) Nevski, *Leymus racemosus* (Lam.) Tzvelev (Poaceae) and others, among which there are shrubs of *Elaeagnus angustifolia* L. (Elaeagnaceae). In some places, as a result of overgrazing, sibljak thickets are formed from species of *Crataegus* (Rosaceae) with participation of *Paliurus spina-christi* Mill. and *Rhamnus pallasii* Fisch. et C.A. Mey. (Rhamnaceae).

Collecting methods

1. Collecting with butterfly net at different times of the day and night.
2. Collecting at light (we used autonomous LED light traps and a DRV-250W lamp).

Determination and nomenclature

In the presented list of species, the genus names are placed as in the second edition of the

"Catalogue of the Lepidoptera of Russia" (ANIKIN *et al*., 2019). All definitions are made from the genital structures of the species according to the standard method (ROBINSON, 1976).

Results

Species list

(* new for Eastern Caucasus; ** new for Russia; + - collecting in the locality; - - not collecting in the locality)

Taxa	**localities**			
	1	**2**	**3**	**4**
Cossidae				
Phragmataecia castaneae (Hübner, 1790)	-	+	-	+
Coleophoridae				
**Perygra glaucicolella* (Wood, 1892)	-	+	-	-
**Ecebalia halophilella* (Zimmermann, 1926)	-	+	-	+
**Ecebalia linosyris* (E. Hering, 1937)	-	+	-	+
***Casignetella texanella* (Chambers, 1878)	+	+	-	-
**Ionescumia clypeiferella* (O. Hofmann, 1871)	+	-	-	-
**Carpochena trientella* (Christpoh, 1872)	+	+	-	-
Choreutidae				
**Tebenna micalis* (Mann, 1857)	+	+	-	-
Ethmiidae				
**Ethmia candidella* (Alpheraky, 1908)	+	-	-	+
Ethmia bipunctella (Fabricius, 1775)	+	-	-	-
Pterophoridae				
Agdistis adactyla (Hübner, [1823])	-	+	-	-
Agdistis frankeniae (Zeller, 1847)	-	-	-	+
Agdistis intermedia Caradja, 1920	-	-	-	+
Agdistis tamaricis (Zeller, 1847)	-	+	-	-
**Stenoptilia zophodactyla* (Duponchel, 1838)	-	+	-	-
**Stenoptilodes taprobanes* (Felder & Rogenhofer, 1875)	-	+	-	+
Capperia maratonica Adamczewski, 195I	+	-	-	-
**Crombrugghia laetus* (Zeller, 1847)	+	-	-	-
Emmelina monodactyla (Linnaeus, 1758)	+	-	-	-
Wheeleria obsoleta (Zeller, 1841)	-	-	-	+
Tabulaephorus marptys (Christoph, 1873)	+	-	-	-
Pterophorus ischnodactyla (Treitschke, 1833)	-	+	-	-
Pyralidae				
Endotricha flammealis ([Denis & Schiffermüller], 1775)	-	+	-	-
Hypsopygia (*Hypsopygia*) *costalis* (Fabricius, 1775)	-	+	-	-
Hypsopygia (*Ocrasa*) *glaucinalis* (Linnaeus, 1758)	-	+	-	-
Pyralis kacheticalis (Christoph, 1893)	-	+	+	-
Oncocera semirubella (Scopoli, 1763)	-	+	-	-
Acrobasis tumidana ([Denis & Schiffermüller], 1775)	-	+	-	-
Acrobasis advenella (Zincken, 1818)	-	+	-	-
**Glyptoteles leucacrinella* Zeller, 1848	-	+	-	-
Bradyrrhoa gilveolella (Treitschke, 1832)	-	+	-	+

Isauria dilucidella (Duponchel, 1836)	-	+	-	-
Gymnancyla hornigii (Lederer, 1852)	-	+	-	-
Nyctegretis lineana (Scopoli, 1786)	-	-	+	-
Ancylosis oblitella (Zeller, 1848)	-	+	-	+
**Cadra calidella* (Guenée, 1845)	-	+	-	-
Cadra furcatella (Herrich-Schäffer, 1849)	-	+	-	-
Coenochroa ablutella (Zeller, 1839)	-	+	-	-
Crambidae				
Chilo phragmitellus (Hübner, [1805])	-	+	-	-
Calamotropha paludella (Hübner, [1824])	-	+	-	-
Euchromius ocellea (Haworth, 1811)	+	+	-	+
Agriphila deliella (Hübner, [1813])	-	+	-	+
**Agriphila selasella* (Hübner, [1813])	-	+	-	+
***Agriphila cyrenaicellus* (Ragonot, 1887)	-	+	-	+
Agriphila tersellus (Lederer, 1855)	-	+	-	
**Agriphila tolli* (Błeszyński, 1952)	-	+	-	+
Agriphila tristella ([Denis & Schiffermüller], 1775)	+	+	-	+
**Agriphila poliellus* (Treitschke, 1832)	-	+	-	-
**Pediasia contaminella* (Hübner, 1796)	-	+	-	+
**Pediasia fascelinella* (Hübner, [1813])	+	-	-	-
Pediasia matricella (Treitschke, 1832)	+	+	-	+
Ancylolomia palpella ([Denis & Schiffermüller], 1775)	-	+	-	+
***Thyridiphora furia* (Swinhoe, 1884)	-	+	-	+
Parapoynx stratiotata (Linnaeus, 1758)	-	+	+	+
Cynaeda dentalis ([Denis & Schiffermüller], 1775)	-	+	-	+
Tegostoma comparalis (Hübner, 1796)	-	+	-	-
Hellula undalis (Fabricius, 1781)	+	+	-	-
Loxostege sticticalis (Linnaeus, 1761)	-	+	+	-
Pyrausta aurata (Scopoli, 1763)	-	+	-	+
Pyrausta despicata (Scopoli, 1763)	-	+	-	+
**Uresiphita gilvata* (Fabricius, 1794)	-	+	-	-
Euclasta splendidalis (Herrich-Schäffer, 1848)	-	+	-	-
Anania verbascalis ([Denis & Schiffermüller], 1775)	-	+	-	-
Patania ruralis (Scopoli, 1763)	-	+	-	-
***Haritalodes derogata* (Fabricius, 1775)	-	+	-	-
Diasemia reticularis (Linnaeus, 1761)	-	+	-	-
Spoladea recurvalis (Fabricius, 1775)	-	+	-	-
Udea ferrugalis (Hübner, 1796)	-	+	+	+
Nomophila noctuella ([Denis & Schiffermüller], 1775)	-	+	-	+
Cydalima perspectalis (Walker, 1859)	-	-	-	+
Dolicharthria punctalis ([Denis & Schiffermüller], 1775)	-	+	+	+
**Antigastra catalaunalis* (Duponchel, 1833)	-	+	-	-
Glyphodes pyloalis Walker, 1859	-	+	-	-
Lemoniidae				
Lemonia balcanica (Herrich-Schaffer, 1847)	+	-	-	-
Lasiocampidae				
Pachygastria trifolii ([Denis & Schiffermüller], 1775)	-	+	-	-
Drepanidae				
**Watsonalla binaria* (Hufnagel, 1767)	-	+	-	-

Habrosyne pyritoides (Hufnagel, 1766)	-	+	-	-
Geometridae				
Erannis defoliaria (Clerck, 1759)	-	-	+	
Biston betularia (Linnaeus, 1758)	-	+	-	-
Peribatodes rhomboidaria ([Denis & Schiffermüller], 1775)	+	+	-	-
Eumannia oppositaria (Mann, 1864)	-	+	-	-
Odontognophos zacharia (Staudinger, 1879)	+	-	+	-
Thetidia smaragdaria (Fabricius, 1787)	-	-	+	+
Hemithea aestivaria (Hübner, [1799])	-	+	-	-
Microloxia herbaria (Hübner, [1813])	-	-	+	+
**Idaea degeneraria erschoffi* (Christoph, 1872)	+	+	+	-
Idaea dimidiata (Hufnagel, 1767)	-	+	-	-
Idaea camparia (Herrich-Schäffer, 1852)	+	-	-	-
Idaea elongaria (Rambur, 1833)	+	-	-	-
Idaea rusticata ([Denis & Schiffermüller], 1775)	+	-	-	-
Idaea subsericeata (Haworth, 1809)	-	+	-	-
**Scopula nigropunctata* (Hufnagel, 1767)	+	+	-	-
***Scopula minorata* (Boisduval, 1833)	-	+	+	-
Scopula marginepunctata (Goeze, 1781)	+	+	-	-
Scopula ochraceata (Staudinger, 1901)	+	+	-	-
Scopula ornata (Scopoli, 1763)	-	+	-	-
Cyclophora annularia (Fabricius, 1775)	-	+	-	-
Cyclophora punctaria fritzae Hausmann, 2003	+	-	-	-
**Rhodometra sacraria* (Linnaeus, 1767)	+	+	-	+
Casilda antophillaria (Hübner, [1813])	-	-	+	-
Orthonama obstipata (Fabricius, 1794)	-	+	-	-
Xanthorhoe fluctuata (Linnaeus, 1758)	+	+	-	-
Camptogramma bilineata (Linnaeus, 1758)	+	+	-	+
Costaconvexa polygrammata (Borkhausen, 1794)	-	-	+	+
Epirrhoe rivata (Hübner, [1813])	-	+	-	-
Pelurga comitata (Linnaeus, 1758)	-	+	-	-
Gymnoscelis rufifasciata (Haworth, 1809)	-	+	-	-
Eupithecia ochridata Schütze & Pinker, 1968	+	+	+	+
Eupithecia variostrigata Alphéraky, 1876	+	+	+	+
Sphingidae				
Laothoe populi (Linnaeus, 1758)	-	+	-	-
Agrius convolvuli (Linnaeus, 1758)	+	-	-	-
Macroglossum stellatarum (Linnaeus, 1758)	+	-	-	-
Hyles euphorbiae (Linnaeus, 1758)	-	+	-	-
Lycaenidae				
Aricia agestis ([Denis & Schiffermüller], 1775)	+	-	-	-
Lycaena phlaeas (Linnaeus, 1761)	+	-	+	-
Polyommatus icarus (Rottemburg, 1775)	+	+	+	+
Pieridae				
Pieris brassicae (Linnaeus, 1758)	+	-	-	-
Pieris rapae (Linnaeus, 1758)	+	-	-	-
Colias croceus (Geoffroy, 1785)	+	-	-	-
Colias erate Esper, 1805	+	-	-	+

Nymphalidae				
Argynnis pandora ([Denis & Schiffermüller], 1775)	+	-	-	-
Danaus chrysippus (Linnaeus, 1758)	+	-	-	-
Satyridae				
Pararge aegeria (Linnaeus, 1758)	-	+	-	-
Hipparchia autonoe (Esper, 1783)	+	-	-	-
Erebidae				
Paracolax tristalis (Fabricius, 1794)	-	+	-	-
Herminia tarsicrinalis (Knoch, 1782)	-	+	-	-
Zanclognatha lunalis (Scopoli, 1763)	-	+	-	-
Pechipogo plumigeralis (Hübner, [1825])	-	+	-	-
Rivula sericealis (Scopoli, 1763)	-	+	-	-
Eublemma amoena (Hübner, [1803])	+	-	-	-
Eublemma ostrina (Hübner, 1790)	-	+	-	-
Eublemma parva (Hübner, [1808])	-	-	+	-
Eublemma purpurina ([Denis & Schiffermüller], 1775)	+	-	-	-
Catocala deducta (Esper, 1787)	-	+	-	-
Drasteria herzi (Alphéraky, 1892)	-	-	+	-
Dysgonia rogenhoferi (Bohatsch, 1880)	+	-	-	-
Grammodes bifasciata (Petagna, 1787)	-	+	-	-
Grammodes stolida (Fabricius, 1775)	+	+	-	-
Lygephila craccae ([Denis & Schiffermüller], 1775)	-	+	-	-
Cymbalophora rivularis (Ménétriés, 1832)	+	-	+	+
Utetheisa pulchella (Linnaeus, 1758)	+	-	-	-
Katha depressa (Esper, 1787)	-	+	-	-
Manulea complana (Linnaeus, 1758)	+	+	+	-
Manulea pygmaeola (Doubleday, 1847)	+	-	-	-
Pelosia muscerda (Hufnagel, 1766)	-	+	+	-
Lithosia quadra (Linnaeus, 1758)	+	+	-	-
Dysauxes famula (Freyer, 1836)	+	+	-	-
Orgyia antiqua (Linnaeus, 1758)	-	+	-	-
Noctuidae				
Chrysodeixis chalcites (Esper, 1789)	-	-	+	-
Macdunnoughia confusa (Stephens, 1850)	-	-	+	-
Autographa gamma (Linnaeus, 1758)	+	-	+	+
Mycteroplus puniceago (Boisduval, 1840)	-	-	-	+
Sympistis nigricula (Eversmann, 1847)	+	-	-	-
Amphipyra pyramidea (Linnaeus, 1758)	-	+	-	-
Heliothis peltigera ([Denis & Schiffermüller], 1775)	+	-	+	-
Helicoverpa armigera (Hübner, [1808])	+	-	-	-
Spodoptera exigua (Hübner, [1808])	+	-	+	+
Caradrina kadenii Freyer, 1836	-	+	-	-
Hoplodrina ambigua ([Denis & Schiffermüller], 1775)	+	+	-	+
Athetis furvula (Hübner, [1808])	-	-	+	-
Athetis lepigone (Möschler, 1860)	-	+	-	-
Mormo maura (Linnaeus, 1758)	-	+	-	-
Thalpophila matura (Hufnagel, 1766)	-	+	-	-
Phlogophora meticulosa (Linnaeus, 1758)	+	-	-	-
Auchmis detersa (Esper, 1787)	-	-	+	

Luperina rjabovi Kljutschko, 1967	-	+	-	+
Rhizedra lutosa (Hübner, [1803])	+	-	-	-
Apamea monoglypha (Hufnagel, 1766)	-	-	+	-
Apamea oblonga (Haworth, 1809)	+	-	-	-
Cirrhia gilvago ([Denis & Schiffermüller], 1775)	-	+	-	-
Sunira circellaris (Hufnagel, 1766)	-	+	-	-
Episema glaucina (Esper, 1789)	+	-	+	-
Episema lederi Christoph, 1895	+	-	-	+
Cleoceris scoriacea (Esper, 1789)	+	-	-	-
Mesogona acetosella ([Denis & Schiffermüller], 1775)	-	-	+	-
Aporophyla lutulenta ([Denis & Schiffermüller], 1775)	-	-	-	+
Tholera decimalis (Poda, 1761)	-	-	-	+
Anarta trifolii (Hufnagel, 1766)	+	-	+	+
Lacanobia oleracea (Linnaeus, 1758)	-	+	-	-
Mythimna albipuncta ([Denis & Schiffermüller], 1775)	+	-	-	-
Mythimna congrua (Hübner, [1817])	-	+	-	-
Mythimna ferrago (Fabricius, 1787)	-	+	+	-
Mythimna l-album (Linnaeus, 1767)	+	+	-	-
Mythimna unipuncta (Haworth, 1809)	-	+	-	+
Mythimna vitellina (Hübner, [1808])	+	+	+	+
Leucania loreyi (Duponchel, 1827)	-	-	-	+
Leucania punctosa (Treitschke, 1825)	+	+	-	-
Actebia fugax (Treitschke, 1825)	+	+	-	-
Actebia praecox (Linnaeus, 1758)	-	+	-	-
Dichagyris flammatra ([Denis & Schiffermüller], 1775)	-	-	+	-
Euxoa conspicua (Hübner, [1824])	+	-	-	-
Euxoa obelisca ([Denis & Schiffermüller], 1775)	-	-	+	-
Euxoa segnilis (Duponchel, 1836)	+	-	-	+
Euxoa temera (Hübner, [1808])	+	-	-	+
Agrotis segetum ([Denis & Schiffermüller], 1775)	-	-	+	+
Agrotis spinifera (Hübner, [1808])	+	-	-	+
Agrotis vestigialis (Hufnagel, 1766)	+	-	-	-
Agrotis villosus Alphéraky, 1887	-	+	-	-
Ochropleura plecta (Linnaeus, 1761)	-	+	-	-
Rhyacia arenacea (Hampson, 1907)	-	-	+	-
Noctua comes Hübner, [1813]	+	+	+	+
Noctua janthe (Borkhausen, 1792)	-	+	-	-
Noctua orbona (Hufnagel, 1766)	+	-	+	-
Noctua pronuba Linnaeus, 1758	+	+	-	+
Xestia c-nigrum (Linnaeus, 1758)	-	+	-	-
Xestia cohaesa (Herrich-Schäffer, 1849)	+	-	-	+
Xestia xanthographa ([Denis & Schiffermüller], 1775)	+	+	+	+

Notes about new records

Perygra glaucicolella (Wood, 1892)

The species was not previously recorded for Dagestan (ANIKIN & SHCHUROV, 2001, 2004), but is known from other republics of the Northern Caucasus (ANIKIN *et al*., 2019) and the Caucasus (BUDASHKIN *et al*., 2015; BALDIZZONE, 2016).

Ecebalia halophilella (Zimmermann, 1926)

Previously, the species was not recorded for Dagestan and other republics of the Northern Caucasus (ANIKIN & SHCHUROV, 2001, 2004; ANIKIN *et al*., 2019).

Ecebalia linosyris (E. Hering, 1937)

Previously, the species was not recorded for Dagestan and other republics of the Northern Caucasus (ANIKIN & SHCHUROV, 2001, 2004; ANIKIN *et al*., 2019).

Casignetella texanella (Chambers, 1878)

The species is first noted for the fauna of the Russian Federation. The species is known from Southern Europe, the larvae feeds on *Portulaca oleracea* L. (Portulacacae), develops in 2 generations (BALDIZZONE & NEL, 2009).

Ionescumia clypeiferella (O. Hofmann, 1871)

The species was not previously recorded for Dagestan (ANIKIN & SHCHUROV, 2001, 2004), but is known from other republics of the Northern Caucasus (ANIKIN *et al*., 2019) and the Caucasus (BUDASHKIN *et al*., 2015; BALDIZZONE, 2016).

Carpochena trientella (Christpoh, 1872)

The species was not previously recorded for Dagestan (ANIKIN & SHCHUROV, 2001, 2004), but is known from other republics of the Northern Caucasus (ANIKIN *et al*., 2019).

Ethmia candidella (Alpheraky, 1908)

Previously, the species was not recorded for Dagestan and the other republics of the Northern Caucasus (ANIKIN *et al*., 2019).

Tebenna micalis (Mann, 1857)

Previously, the species was not recorded for Dagestan and the other republics of the Northern Caucasus. Reported for Russia only from Crimea (ANIKIN *et al*., 2019).

Stenoptilia zophodactyla (Duponchel, 1838)

The species was not previously recorded for Dagestan but is known from other republics of the Northern Caucasus and the Crimea (KOVTUNOVICH, 2006; ANIKIN *et al*., 2019).

Stenoptilodes taprobanes (Felder & Rogenhofer, 1875)

Previously, the species was not recorded for Dagestan and the other republics of the Northern Caucasus. Reported for Russia only from Crimea (KOVTUNOVICH, 2006; ANIKIN *et al*., 2019).

Crombrugghia laetus (Zeller, 1847)

The species was not previously recorded for Dagestan but is known from other republics of the Northern Caucasus and the Crimea (KOVTUNOVICH, 2006; ANIKIN *et al*., 2019).

Glyptoteles leucacrinella Zeller, 1848

The species was not previously recorded for Dagestan (POLTAVSKY & ILYINA, 2016), but is known from other republics of the Northern Caucasus and is widespread in the forest zone of Eurasia (ANIKIN *et al*., 2019; SLAMKA, 2019).

Cadra calidella (Guenée, 1845)

The species was not previously recorded in Dagestan (POLTAVSKY & ILYINA, 2016), in Russia it was found in the Volga region and in the Southern Urals (ANIKIN *et al*., 2019), outside Russia it is distributed in Europe and North Africa, Central Asia and the Canary Islands (LERAUT, 2014).

Agriphila selasella (Hübner, [1813])

The species was not previously recorded in Dagestan (POLTAVSKY & ILYINA, 2016), in Russia it is widespread in the European part and in the south of Western Siberia (ANIKIN *et al*., 2019).

Agriphila cyrenaicellus (Ragonot, 1887) (Figs 7-8)

First recorded for the fauna of the Russian Federation. The species is known from Southern Europe, North Africa, Transcaucasia, Turkey, Israel, Iraq, Iran, Syria, and Central Asia (SLAMKA, 2008).

Agriphila tolli (Błeszyński, 1952)

The species was not previously recorded for Dagestan and East Caucasian region but is known from other republics of the Northern Caucasus and Crimea (ANIKIN *et al*., 2019).

Agriphila poliellus (Treitschke, 1832)

The species was not previously recorded in Dagestan (POLTAVSKY & ILYINA, 2016), in Russia it is widespread in the European part and in the south Siberia up to Tuva (ANIKIN *et al*., 2019).

Pediasia contaminella (Hübner, 1796)

The species was not previously recorded in Dagestan (POLTAVSKY & ILYINA, 2016), in Russia it is widespread in the European part and in the south of Western Siberia (ANIKIN *et al*., 2019).

Pediasia fascelinella (Hübner, [1813])

The species was not previously recorded in Dagestan (POLTAVSKY & ILYINA, 2016), in Russia it is widespread in the European part and in the south Siberia up to Tuva Republic (ANIKIN *et al*., 2019).

Thyridiphora furia (Swinhoe, 1884) (Figs 9-10)

First recorded for the fauna of the Russian Federation. The species is known from Greece, Transcaucasia, Turkey, Africa, Syria, India, Pakistan and Central Asia (SLAMKA, 2008).

Uresiphita gilvata (Fabricius, 1794)

In Dagestan, the species was not previously recorded (POLTAVSKY & ILYINA, 2016); in Russia, it is found in the center of the European part, in the Volga region and the Southern Urals, in the Crimea and the Far East (ANIKIN *et al*., 2019).

Haritalodes derogata (Fabricius, 1775) (Figs 11-12)

First recorded for the fauna of the Russian Federation. The species is known from the tropics and subtropics of the Old World (SLAMKA, 2008); there are indications of a find in Holland. Another species of this genus, *Haritalodes basipunctalis* (Bremer, 1864), is widespread in the Russian Far East (ANIKIN *et al*., 2016). Differences between species of the genus *Haritalodes* Warren, 1890 are well shown in the article by YAMANAKA (2008).

Antigastra catalaunalis (Duponchel, 1833)

Previously, in Dagestan and in the North Caucasus as a whole, the species was not recorded. Recorded for Russia only from Crimea (ANIKIN *et al*., 2019).

Watsonalla binaria (Hufnagel, 1767)

The species was not previously recorded for Dagestan (ANIKIN *et al*., 2019).

Idaea degeneraria erschoffi (Christoph, 1872)

The species was not previously recorded for Dagestan and East Caucasian region but is known from other republics of the Northern Caucasus (ANIKIN *et al*., 2019).

Scopula nigropunctata (Hufnagel, 1767)
The species was not previously recorded for Dagestan and East Caucasian region but is known from other republics of the Northern Caucasus (ANIKIN *et al*., 2019).

Scopula minorata (Boisduval, 1833)
The species is first noted for the fauna of the Russian Federation. The species is known from Africa, the Arabian Peninsula and southern Europe (HAUSMANN, 2004).

Rhodometra sacraria (Linnaeus, 1767)
The species was not previously recorded for Dagestan and East Caucasian region but is known from Crimea and Lower Volga region (ANIKIN *et al*., 2019).

Danaus chrysippus (Linnaeus, 1758)
Reported for Dagestan (Miatli (October 2020, 43.074755º N / 46.834346º E, Kizilyurt District) only in 2021 (MORGUN & ILYINA, 2021). Found by us in September 2020 (about 10 males, one of which was caught) in the vicinity of sand-dune Sarykum.

Sympistis nigricula (Eversmann, 1847)
Very rare species in Daghestan. Our record is third (POLTAVSKY *et al*., 2007).

Mormo maura (Linnaeus, 1758)
Very rare species in Daghestan. Our record is third (POLTAVSKY & ILYINA, 2016).

Agrotis villosus Alphéraky, 1887
Very rare species in Daghestan. Our record is third (POLTAVSKY *et al*., 2007).

Acknowledgements

We thank G. S. Dzhamirzoev, M.-R. D. Magomedov, K. M. Kuniev, E. Ilyina, O. V. Kravets (all from Makhachkala, Russia), D. Morgun (Moscow, Russia), Z. M. Asadulaev (Gunib, Russia) for organizing and undertaking an expedition to Dagestan, in which the material treated in this paper was collected; V. M. Spitsyn (Arkhangelsk), D. V. Shovkoon (Buzuluk, Russia), and S. V. Vasilenko (Novosibirsk, Russia) for help with determination of Acrtiinae, Ethmiidae and Geometridae. The English of the final draft was edited by Anna Ustjuzhanina (Tomsk, Russia).

BIBLIOGRAPHY

ABACHEV, K. YU., 1995.– *Flora and vegetation of the Sarykum dune and their protection*: 45 pp. Makhachkala. (in Russian).

ADZHIEVA, A. I., 2007.– Some results of the study of the vegetation cover of the dune Sarykum (Dagestan).– *Tribune of Dagestan State University*, **2007**(4): 44-47. (in Russian).

ADZHIEVA, A. I., 2015.– Abstract of the flora of vascular plants of the Sarykum massif (Dagestan).– *Botanical Journal*, **100**(12): 1298-1310. (in Russian).

ANIKIN, V. V., BARYSHNIKOVA, S. V., BELYAEV, E. A., DUBATOLOV, V. V., EFETOV K. A., ZOLOTUKHIN, V. V., KOVTUNOVICH, V. N., KOZLOV, M. V., KONONENKO, V. S., LVOVSKY, A. L., NEDOSHIVINA, S. V., PONOMARENKO, M. G., SINEV, S. YU., STRELTZOV, A. N., USTJUZHANIN, P. YA., CHISTYAKOV, YU. A. & YAKOVLEV, R. V., 2016.– *Annotated catalogue of the insects of Russian Far East*. *Volume II. Lepidoptera*: 812 pp. Vladivostok. (in Russian).

ANIKIN, V. V., BARYSHNIKOVA, S. V., BELJAEV, E. A., BUDASHKIN, YU. I., VAN NIEUKERKEN, E. J., GORBUNOV, O. G., DUBATOLOV, V. V., EFETOV, K. A., ZOLOTUHIN, V. V., KNYAZEV, S. A., KOVTUNOVICH, V. N., KOZLOV, M. V., KONONENKO, V. S., LOVTSOVA, JU. A., LUKHTANOV, V. A., LVOVSKY, A. L., MATOV, A. YU., MIRONOV, V. G., NEDOSHIVINA, S. V., PONOMARENKO, M. G., SVIRIDOV, A. V., SINEV, S. YU., SOLOVJEV, A. V., STRELTZOV, A. N., TROFIMOVA, T. A.,

USTJUZHANIN, P. YA., SHOVKOON, D. F. & YAKOVLEV, R. V., 2019.– *Catalogue of the Lepidoptera of Russia*: 448 pp. St. Petersburg.

ANIKIN, V. V. & SHCHUROV, V. I., 2001.– Casebearers from Caucasus (Lepidoptera: Coleophoridae).– *Zoosystematica Rossica*, **10**: 171-179.

ANIKIN, V. V. & SHCHUROV, V. I., 2004.– To the Casebearers fauna (Lepidoptera: Coleophoridae) of the North Caucasus with description natural landscapes.– *Proceedings of III International Conference: Biodiversity of Caucasus*, **1**: 68-76.

BALDIZZONE, G., 2016.– The Coleophoridae of Armenia collected by Ole Karsholt in 2011. Contributions to the knowledge of the Coleophoridae CXXXI (Lepidoptera: Coleophoridae).– *SHILAP Revista de lepidopterología*, **44**(173): 129-144.

BALDIZZONE, G. & NEL, J., 2009.– On the biology of *Coleophora coxi* Baldizzone & van der Wolf, 2007 (Lepidoptera: Coleophoridae).– *SHILAP Revista de lepidopterología*, **37**(148): 515-518.

BUDASHKIN, YU. I., RICHTER, I. & TABELL, J., 2015.– A new finds of the casebearer moths (Lepidoptera: Coleophoridae) in Russia and Armenia.– *Eversmannia*, **41**: 11-22.

DUBATOLOV, V. V., POLTAVSKY, A. N. & ILYINA, E. V., 2021.– Lithosiini and Arctiini of Daghestan (NE Caucasus) (Lepidoptera: Erebidae, Arctiinae).– *SHILAP Revista de lepidopterologia*, **49**(193): 129-148.

GUSAROV, A. V., 2015.– Aeolian-accumulative complex "Sarykum" as a unique geomorphological object of Russia: history of study, hypotheses of origin.– *Geomorphology*, **2015**(2): 54-71. (in Russian).

HAUSMANN, A., 2004.– *The Geometrid Moths of Europe*, **2**: 600 pp. Apollo Books. Stenstrup.

IDRISOV, I. A., 2010.– On the history of the formation and development of the sandy massif Sarykum.– *Proceedings of the Reserve "Dagestanskyi*", **3**: 19-27. (in Russian).

ILYINA, E. V., POLTAVSKY, A. N., MATOV, A. YU. & GASANOVA, N. M.-S., 2012.– *Catalogue of Owlet-Moths (Lepidoptera: Nolidae, Erebidae, Noctuidae) of Dagestan*: 192 pp. Makhachkala. (in Russian).

ILYINA, E. V. & MORGUN, D. V., 2010.– Ecological and faunistic review of butterflies (Lepidoptera, Hesperioidea et Papilionoidea) of Daghestan: Part 1.– *Entomological Review*, **90**(9): 1167-1191.

ILYINA, E. V. & MORGUN, D. V., 2011.– Ecological and faunistic review of butterflies (Lepidoptera, Hesperioidea et Papilionoidea) of Daghestan: Part 2.– *Entomological Review*, **91**(4): 450-466.

KOVTUNOVICH, V. N., 2006.– Materials on the fauna of Plume Moths (Lepidoptera, Pterophoridae) of Dagestan.– *Scientists notes of BGPU, Biology,* **23**: 70-85. (in Russian).

LELEI, A. S., 2016 (ed.).– *Annotated catalogue of the insects of Russian Far East. Lepidoptera*, **2**: 812 pp. Dalnauka, Vladivostok. (in Russian).

LERAUT, P., 2014.– *Moths of Europe, Pyralids 2,* **4**: 441 pp. N. A. P. Editions, Verrières-le-Buisson.

MAIOROV, A. A., 1928.– *Aeolian desert at the foot of Dagestan*: 116 pp. Makhachkala. (in Russian).

MORGUN, D. V. & ILYINA, E. V., 2021.– The first record of *Danaus chrysippus* (Linnaeus, 1758) (Lepidoptera: Danaidae) in Russia in the context of the contemporary distribution of this species in the Western Palaearctic.– *Caucasian Entomological Bulletin*, **17**(1): 115-119. DOI: 10.23885/181433262021171-115119.

NOVIKOVA, N. M. & POLYANSKAYA, A. V., 1994.– *Samur Liana Forests: the Problem of Biodiversity Conservation in a Developing Water Economy*: 106 pp. Moscow. (in Russian).

POLTAVSKY, A. N. & ILYINA, E. V., 2002.– The Noctuidae (Lepidoptera) of the Daghestan Republic (Russia).– *Phegea*, **30**(1): 11-36.

POLTAVSKY, A. N. & ILYINA, E. V., 2003.– The Noctuidae (Lepidoptera) of the Daghestan Republic (Russia). II.– *Phegea*, **31**(4): 167-181.

POLTAVSKY, A. N. & ILYINA, E. V., 2016.– Materials to the Snout-Moths Fauna (Lepidoptera: Pyraloidea) of Dagestan Republic.– *Tribune of Dagestan State Pedagogical University*, **1**: 53-59. (in Russian).

POLTAVSKY, A. N., ILYINA, E. V. & MATOV, A. Y., 2007.– Owlets (Lepidoptera: Noctuidae) of Dagestan.– *Trudў Yuzhnogo Nauchnogo Tsentra Rossiyskoy Akademii Nauk*, **3**: 164-226. (in Russian).

ROBINSON, G., 1976.– The preparation of slides of Lepidoptera genitalia with special reference to the Microlepidoptera.– *Entomologist's Gazette*, **27**: 127-132.

SINEV, S. YU., 2019 (ed.).– *Catalogue of the Lepidoptera of Russia*: 448 pp. Zoological Institute RAS, St. Petersburg.

SLAMKA, F., 2008.– *Pyraloidea of Europe (Lepidoptera). Crambinae & Schoenobiinae. Identification, distribution, habitat, biologie,* **2**: 224 pp. František Slamka, Bratislava.

SLAMKA, F., 2013.– *Pyraloidea of Europe (Lepidoptera). Pyraustinae & Spilomelinae. Identification, distribution, habitat, biologie,* **3**: 357 pp. František Slamka, Bratislava.

SLAMKA, F., 2019.– *Pyraloidea of Europe (Lepidoptera). Phycitinae. Part 1. Identification, distribution, habitat, biologie,* **4**: 432 pp. František Slamka, Bratislava.

TIKHONOV, V. V., STRADOMSKYI, B. V., KUZNETSOV, G. V. & ANDREEV, S. A., 2021.– *Butterflies of Caucasus and South of Russia*: (Available from http://www.babochki-kavkaza.ru).

TSHIKOLOVETS, V. V. & NEKRUTENKO, Y., 2012.– *The Butterflies of Caucasus and Transcaucasia (Armenia, Azerbaijan, Georgia and Russian Federation)*: 424 pp. Kyev.

YAKOVLEV, R. V., POLTAVSKY, A. N., ILYINA, E. V., SHCHUROV, V. I. & WITT, T. J., 2015.– Cossidae (Lepidoptera) of the Russian Caucasus with the description of a new species.– *Zootaxa*, **4044**(2): 270-288.

YAMANAKA, H., 2008.– Revisional study of some species of the genus *Haritalodes* Warren (Pyralidae, Pyraustinae) from eastern Palaearctic and Oriental region.– *Tinea*, **20**(4): 243-252.

P. Ya. U.
Altai State University
pr. Lenina, 61
RUS-656049 Barnaul
RUSIA / *RUSSIA*
E-mail: petrust@mail.ru
https://orcid.org/0000-0002-5222-2241

y / *and*

Tomsk State University
Lenina pr., 36
RUS-634050 Tomsk
RUSIA / *RUSSIA*

A. A. T.
Dagestan State University
Gadzhieva, 43A
RUS-367000 Makhachkala
RUSIA / *RUSSIA*
E-mail: gamidt@mail.ru
https://orcid.org/0000-0003-1832-7864

V. V. A.
Saratov State University
Astrakhanskaya Street, 83
RUS-410012 Saratov
RUSIA / *RUSSIA*
E-mail: anikinvasiliiv@mail.ru
https://orcid.org/0000-0001-8575-5418

A. Yu. M.
Zoological Institute of Russian Academy of Sciences
Universitetskaya embankment, 1
RUS-199034 St.-Petersburg
RUSIA / *RUSSIA*
E-mail: noctua2006@yandex.ru
https://orcid.org/0000-0002-6066-6440

A. E. N.
Altai State University
pr. Lenina, 61
RUS-656049 Barnaul
RUSIA / *RUSSIA*
E-mail: naydenov.24@mail.ru
https://orcid.org/0000-0001-9367-3578

A. N. S.
Herzen University
48 Moika Embankment 18
RUS-191186 St. Petersburg
RUSIA / *RUSSIA*
E-mail: streltzov@mail.ru
https://orcid.org/0000-0002-5658-8515

*R. V. Y.
Altai State University
pr. Lenina 61
RUS-656049 Barnaul
RUSIA / *RUSSIA*
E-mail: yakovlev_asu@mail.ru
https://orcid.org/0000-0001-9512-8709

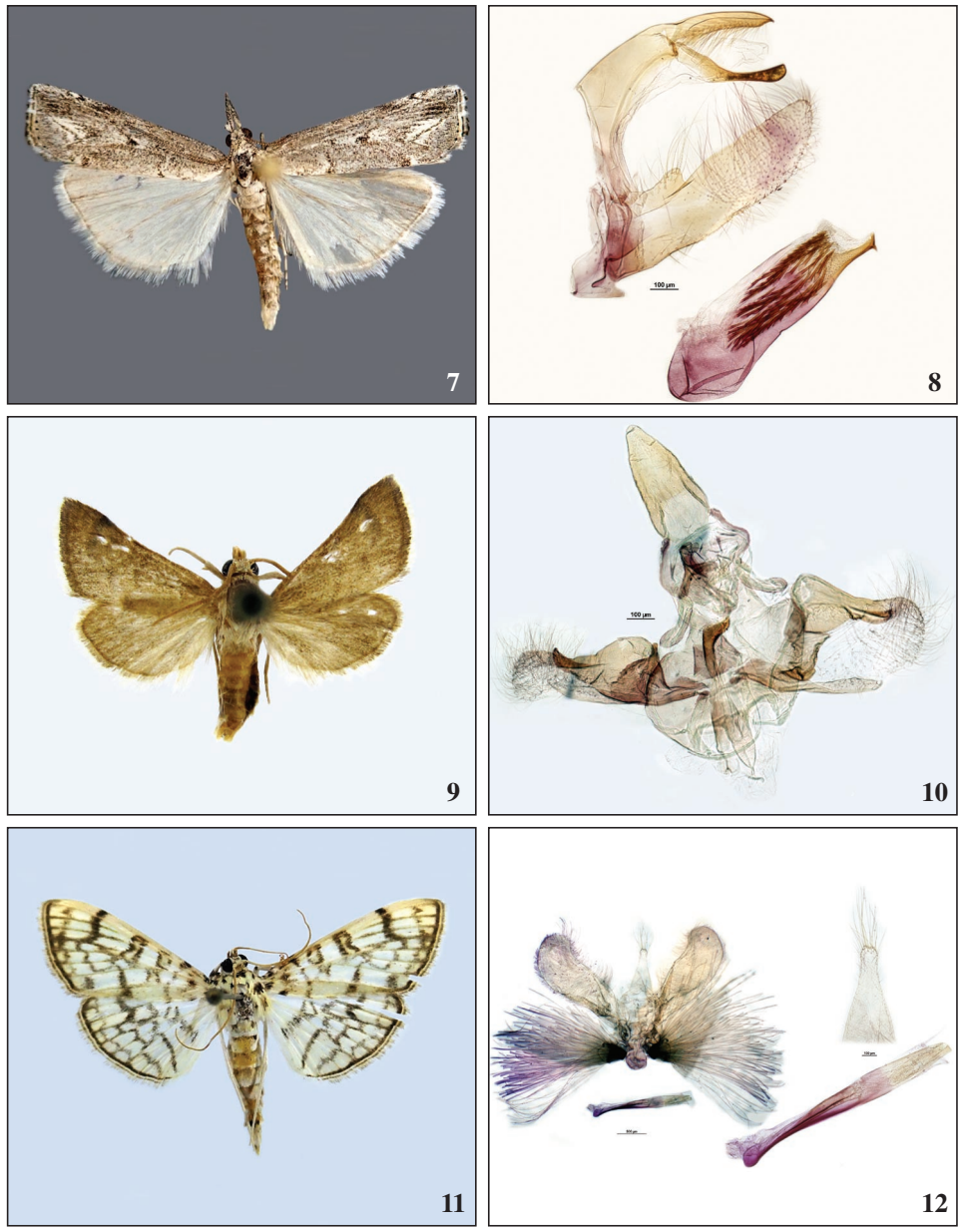
y / *and*

Tomsk State University
Lenina pr., 36
634050 Tomsk
RUSIA / *RUSSIA*

Autor para la correspondencia / *Corresponding author*

(Recibido para publicación / *Received for publication* 28-IX-2021)
(Revisado y aceptado / *Revised and accepted* 6-XI-2021)
(Publicado / *Published* 30-VI-2022)

Figures 1-6.– 1. Dagestan Republic on the map. **2.** Map of the collecting localities. **3.** Sarykum Barkhan, September 2020 (photo by R. Yakovlev). **4.** Samur forest, September 2020 (photo by R. Yakovlev). **5.** Sirtych, September 2020 (photo by R. Yakovlev). **6.** Novokayakent, September 2020 (photo by R. Yakovlev).



Figures 7-12.– 7. *Agriphila cyrenaicellus* (Ragonot, 1887), male, adult (photo by A. Streltzov). **8.** *Agriphila cyrenaicellus* (Ragonot, 1887), male genitalia (photo by A. Streltzov). **9.** *Thyridiphora furia* (Swinhoe, 1884), male, adult (photo by A. Streltzov). **10.** *Thyridiphora furia* (Swinhoe, 1884), male genitalia (photo by A. Streltzov). **11.** *Haritalodes derogata* (Fabricius, 1775), male, adult (photo by A. Streltzov). **12.** *Haritalodes derogata* (Fabricius, 1775), male genitalia (photo by A. Streltzov).