

# The Noctuidae (Lepidoptera) of the Daghestan Republic (Russia)

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**Abstract.** In this paper the complete list of Noctuidae currently known from Daghestan, the largest republic in the North Caucasus, is given. The list comprises 343 species and includes original data of the authors, records from the two main national collections in Russia, and some data from a few publications. Noctuidae were recorded from 37 localities in Daghestan, situated in the five natural zones of the country. The time interval of the faunistic studies spreads through the main part of the 20th Century: from 1926 to 2000.

**Samenvatting.** De Noctuidae (Lepidoptera) van de Republiek Daghestan (Rusland) Dit artikel bevat de volledige lijst van de 343 soorten Noctuidae die tot op heden bekend zijn uit Daghestan, de grootste republiek in de Noord-Kaukasus. De lijst werd samengesteld met persoonlijke waarnemingen van de auteurs, gegevens uit de twee belangrijkste verzamelingen in Rusland en enkele gepubliceerde gegevens. Noctuidae werden op 37 plaatsen verzameld in Daghestan, gelegen in de 5 natuurlijke gebieden van het land. De waarnemingen stammen uit een grote tijdsperiode in de 20ste eeuw: van 1926 tot 2000.

**Résumé.** Les Noctuidés (Lepidoptera) de la République du Daghestan (Russie) Cet article contient la liste complète des 343 espèces de Noctuidae qui sont connues du Daghestan, la république la plus grande du Nord-Caucase. La liste a été compilée avec les observations personnelles des auteurs, les données des deux plus grandes collections de Russie et quelques citations dans la littérature. Des Noctuidae furent capturés dans 37 localités différentes, situées dans les 5 zones naturelles du pays. Les observations s'étendent sur une vaste partie du 20ème siècle: de 1926 à 2000.

**Key words:** Russia – Daghestan – Noctuidae – faunistics – catalogue

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## Natural conditions

The Daghestan Republic, 50.3 km<sup>2</sup>, is situated in the eastern part of the North Caucasus along the west coast of the Caspian Sea. It extends from the north to the south on 435 km and its maximum width from west to east is 250 km in the southern part.

The southern half of the Republic consists of mountainous area with contrasting natural conditions, the eastern part of the Great Caucasus. The northern half, with very monotonous plain lowlands, is part of the wide nearby Caspian Lowland (Dobrinin 1926). Some parts of this plain lay under sea level (-28 m).

The Caspian Lowland consists of ancient and present river alluviums. There is no fresh water on the wide areas. There are 300,000 acres of saline and salt-marshes, and equal areas of sandy deserts. In the eastern part of the Lowland there are anchor sands. In the western part there are unstable sandy barchans (Osmanov 1986). The most important rivers of Daghestan are: Kuma, Terek, Sulak and Samur. The vegetation in the Lowlands is rather variable: psammophytes on sands, dry polyherb steppes with *Artemisia* and *Salsola*

complexes. In the river wetlands there are grassy meadows and tugai forests (Gurlev 1972).

The Seaside Lowland spreads like a narrow ribbon to the southwards to the town of Machatschkala. To the west and southwest from it arise the Foothills. This zone is 20–40 km wide. It spreads from the west to the southern boundaries of Daghestan with altitudes of 150–800 m. In places like Machatschkala and Derbent, the Foothills reach the seacoast. The Foothills ranges consist of soft rocks and this causes a smooth break relief. The semidesert landscapes go up to an altitude of 400 m, and then change by steppes up to 800 m. On the eastern slopes, the semidesert abruptly by the tangled low-woods (Gurlev 1972).

Above the Foothills, there is a zone of Front mountain-ranges with oak (*Quercus*) and beech (*Fagus*) forests. The top of the ranges is covered by subalpine meadows. There are dives in zonal altitudes and in different parts of the Republic: 500–600 m (in Tabasaransky and Kazbekovsky districts) and 1700–2000 m (northern slopes of Salatau, east slopes of Gimrinsky mountain ranges). The Front ranges zone surrounds the central mountain area of Daghestan (Gurlev 1972).

The great mountain disturbed area, includes many separate ranges, plateaus and deep hollows. Some mountain peaks are rather high, up to 2959 m. The southern slopes of Andisky, Salatau and Gimrinsky ranges are xerophytous with characteristic plant formations as: shibljak (bushes) and frigana (herbs). There are some woods, but only on the northern slopes of the Andisky Koisu Valley, the Arakmeer range, and near the Gunib, at an altitude of 1500 m and higher. On the more gentle slopes, the forests were cut down, the soil tilled and used for agriculture or for mesophytous meadows. The subalpine zone in this area begins from as high as 2000–2200 m (Gurlev 1972).

The Daghestan Highland covers the complete southwest part of the Republic and includes Bokovoj (Lateral) and Vodorazdelnij (Watershed) mountain ranges with altitudes of 3500–4400 m. The Bokovoj mountain range is cut by river valleys into a few separate ranges: the Bogosky, Nukatl, Samursky and others. In the Daghestan Highland area, heavy precipitations are typical. The main zonal elements in this area are the mountain steppes. The forest zone is distinct enough in the basins of the rivers: The Avarsky and Andisky Koisu go up to altitudes of 2200–2400 m. At the base of the forest zone, there are broad-leaved and pine woods, in the mid-forest zone there are only pine woods, and up to the 2000 m range, there are birchwoods (*Betula*) and ash-trees (*Acer*). Actually, only 7% of the Daghestan territory is covered by forests.

Otherwise, the subalpine zone in the high mountain area covers the wide territories between 1770–1900 m and 2500–2600 m. The major part of the subalpine meadows has some reminiscences of steppes. In the western part of the area there are many *Rhododendron* associations (*Rhododendron caucasicum* Pall). The alpine zone begins from an altitude of approximately 2500–2600 m up to the eternal snow.



Figure 1: Foothills near Machatschkala.



Figure 2: Front mountain ranges near Upper Kazanische Village.

## Material and methods

The first observations of Noctuidae using light-traps were carried out in the settlement Ribatchij of the Tchernozemelsk District (Kalmyk Republic) just on the bank of the Kuma river, the natural boundary between Kalmykia and the Nogaisky District in the Daghestan Republic, 7–27.VI.1974 (Poltavsky & Korostov 1981). Furthermore, Noctuidae were collected during expeditions in 1998–2000 in 19 localities in different districts of Daghestan.

We also include some observations by M. P. Kornelio in Gunib (July 1975) and by A. V. Nekrasov in Agvali, Andi (1981, 1983). All of the other data used come from the scientific collections of the Zoological Institute of the Russian Academy of Science (ZIN RAS, Sankt-Petersburg), and the Zoological Museum of the Moscow State University (MSU Moscow).

Some Noctuidae species in Daghestan were previously listed in catalogues by A. N. Poltavsky (1980, 1981a, b) without exact localities, but only with zonal distribution in the North Caucasus region. The most modern publication, concerning the Noctuidae of the North-East Caucasus, is the paper by Herczig *et.al.* (1990). It represents the most complete list of noctuids in the Chechen and Ingush Republics and some species from 3 localities in Daghestan, including the boundary with the Chechen Republic (Kezenoy-am lake). We have also included these data in the present list. And there are two more species included, mentioned in publications: by Kljutschko (1983) - *Euchalcia armeniae*; Kljutschko & Hacker (1996) - *Hadena scythia*. Of the earlier publications, we used the data from papers by Rjabov (1926, 1956) and Idrisov (1959).

The Noctuidae systematics and nomenclature are according to Karsholt & Razowski (1997). Colour photographs of specimens are made by A. I. Dantchuk from the collection of A. N. Poltavsky. Photographs of landscapes are made by E. V. Ilyina.

## Zonal divisions of the localities

### I. Lowland Daghestan:

1. Ribatchij – settlement in the Tchernozemelsk District (Kalmyk Republic).
2. Tchervlennie Buruni – village of the Nogaisky District.
3. Leninaul – village in the Nogaisky District.
4. Agrahansky Gulf – gulf in the Caspian Sea in the Babajurt District.
5. Sulak – village 30km N of Machatschkala.
6. Temirgoe – railway station in the Kumtor-Kala District.
7. Machatschkala – capital of the Daghestan Republic.
8. New Hushet – settlement (Machatschkala suburb).
9. Manas – railway station in the Karabudahkent District.
10. Manaskent – village in the Karabudahkent District.
11. Berikey – railway station in the Derbent District.
12. Derbent – town
13. Arabljar – railway station in the Derbent District.
14. Samur – village in the Magaramkent District.

### II. Foothill Daghestan:

15. Tarki – settlement (Machatschkala suburb).
16. Kaptchugaj – village in the Bujnaks District (extinct in present time).
17. Kaiakent – village in the Kaiakent District.
18. Kumtor-Kale – railway station in the Kumtor-Kala District.
19. Lower Djengutaj – village in the Bujnaks District.

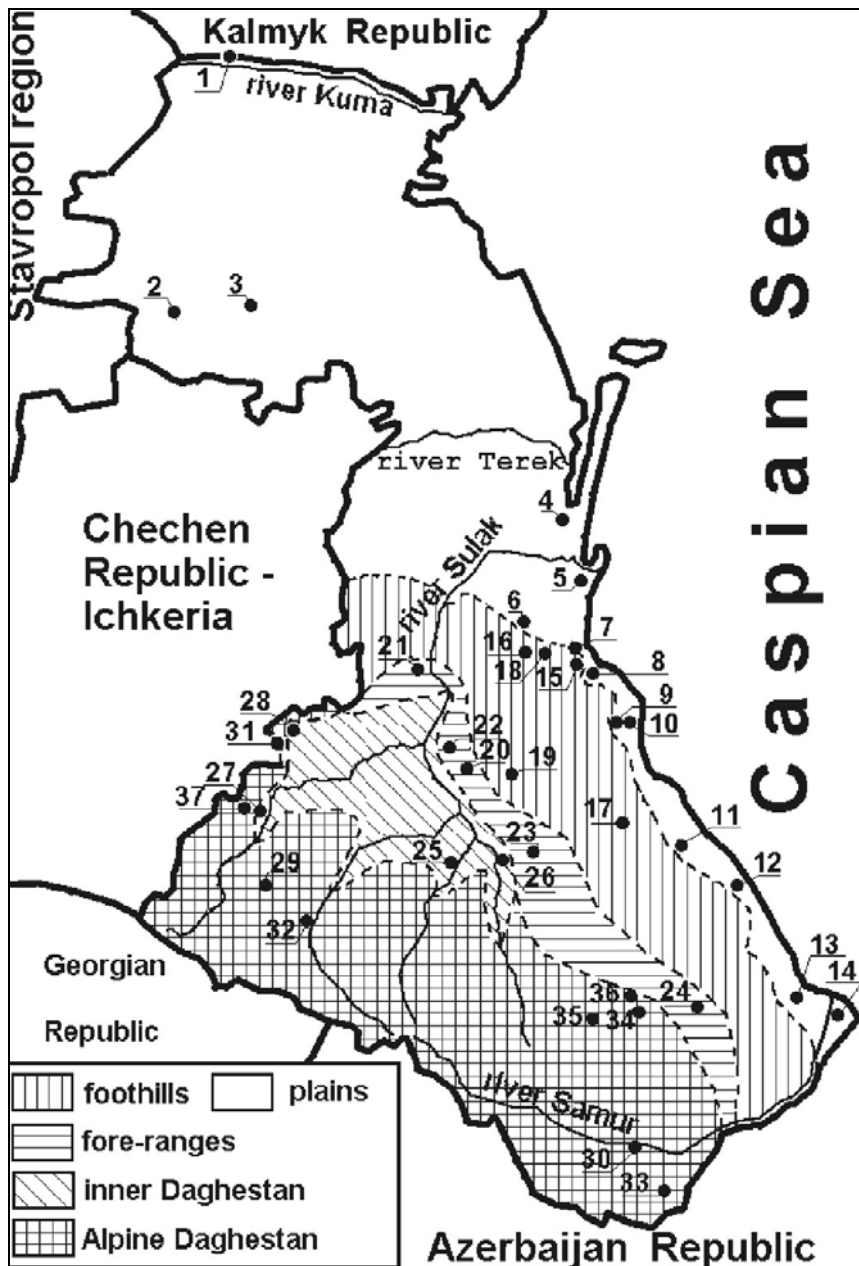


Figure 3: Map of Daghestan with indication of natural zones and localities.

### III. Front mountain-ranges of Daghestan:

20. Upper Kazanische – village in the Bujnaks District.
21. Gertma – village in the Kazbekovsky District.
22. Termenlik – tourist camp in the Bujnaks District.
23. Levashi – village in the Levashi District.
24. Turag – village in the Tabasaransky District.

### IV. Central mountain area of Daghestan:

25. Gunib – village in the Gunib District.
26. Hadjalmahi – village in the Levashi District.
27. Agvali – village in the Tsumada District.
28. Andi – village in the Botlih District.

### V. Highland Daghestan:

29. Aknada – village in the Tsumada District.
30. Ahti – village in the Ahti District.
31. Kezenoy-am – lake in the Botlih District (on the boundary with Ichkeria).
32. Kosob – village in the Tljarata District.
33. Kurush – village in the Dokuzparinsky District.
34. Burshag – village in the Agulsky District.
35. Chirag – village in the Agulsky District.
36. Shary – village in the Agulsky District.
37. Upper Gakvary – village in the Tsumada District.

### Abbreviations:

! – caught for the first time in Daghestan during 1998–2000.

\* – first mention for Daghestan (data from museum collections).

Localities: Manaskent, Kezenoy-am and Kurush without date and collector name means the reference data from Herczig *et al.* (1990).

Figures in brackets: (I, II, III, IV, V) – the natural zones of species distribution: I– Lowlands, II– Foothills, III– Front mountain-ranges, IV– Central mountain area, V– Highlands.

## Systematic list of the Noctuidae of Daghestan

### Subfamily Acronictinae

1. \**Eogena contaminei* (Eversmann, 1847) – Gunib, 10–15.07.1975 (M. P. Kornelio). (IV).
2. !*Acronicta tridens* ([Denis & Schiffermüller], 1775) – Sulak, 26.07.1999. (I).
3. !*Acronicta leporina* (Linnaeus, 1758) – Upper Gakvary (12–14.07.2000). (V).
4. *Acronicta megacephala* ([Denis & Schiffermüller], 1775) – Manaskent. (I).
5. \**Acronicta euphorbiae* ([Denis & Schiffermüller], 1775) – Agvali, 22.08.1981 (A. V. Nekrasov); Upper Gakvary (12–14.07.2000). (IV, V).
6. !*Acronicta rumicis* (Linnaeus, 1758) – Samur, 1–3.05.1999; Gertma, 7–8.08.1999; Termenlik. (I, III).
7. \**Craniophora pontica* (Staudinger, 1879) – Tarki (ZIN: M. A. Rjabov). (II).
8. \**Simyra dentinosa* (Freyer, 1838) – Tarki (ZIN: M. A. Rjabov). (II).
9. *Colocasia coryli* (Linnaeus, 1758) – Termenlik, 20.06.1998. (III).

### Subfamily Bryophilinae

10. !*Cryphia rectilinea* (Warren, 1909) – Sulak, 26.07.1999. (I).
11. \**Cryphia raptricula* ([Denis & Schiffermüller], 1775) – Derbent, 20.08.1931 (ZIN: M. A. Rjabov). (I).
12. \**Cryphia muralis* (Forster, 1771) – ZIN: Kaptchugaj, 15.07.1926 (ZIN: M. A. Rjabov). (II).

### Subfamily Herminiinae

13. !*Paracolax tristalis* (Fabricius, 1794) – Upper Kazanische, 25–27.06.1999. (III).
14. *Polypogon tentacularia* (Linnaeus, 1758) – Kezenoy-am. (V).
15. \**Pechipogo plumigeralis* (Hübner, [1825]) – Machatschkala (ZIN: M. A. Rjabov). (I).
16. !*Zanclognatha lunalis* (Scopoli, 1763) – Upper Kazanische, 25–27.06.1999. (III).
17. !*Zanclognatha tarsipennalis* (Treitschke, 1835) – Upper Kazanische, 25–27.06.1999. (III).

### Subfamily Sarrothripinae

18. \**Nycteola asiatica* (Kroulikowsky, 1904) – Upper Kazanische, 25–27.06.1999; Gunib, 10–15.07.1975 (M. P. Kornelio). (III, IV).
19. !*Nycteola revayana* (Scopoli, 1772) – Turag, 16.06.1998. (III).

### Subfamily Chloephorinae

20. !*Pseudoips fagana* (Fabricius, 1781) – Kosob, 13.07.1998; Termenlik, 19.06.1998. (III, V).
21. !*Pseudoips bicolorana* (Fuessly, 1775) – Upper Gakvary, 12–14.07.2000. (V).

### Subfamily Catocalinae

22. \**Catocala neonympha* (Esper, 1805) – Tarki (ZIN: M. A. Rjabov). (II).
23. !*Catocala elocata* (Esper, 1788) – Manas, 07.07.1999; Gertma, 7–8.08.1999. (I, III).
24. !*Clytie illunaris* (Hübner, [1813]) – Manas, 07.07.1999; Agrahansky gulf, 19–20.06.1999. (I).
25. *Clytie syriaca* (Bugnion, 1837) – Manaskent. (I).
26. \**Clytie delunaris* (Staudinger, 1889) – Gunib, 10–15.07.1975 (M. P. Kornelio). (IV).
27. *Dysgonia algira* (Linnaeus, 1767) – Machatschkala, 10.07–20.08.1999; Berikey, 03.07.1999; Manaskent. (I).
28. !*Dysgonia rogengoferi* (Bohatsch, 1880) – Gunib, 11.07.1999. (IV).
29. !*Prodotis stolidia* (Fabricius, 1775) – Sulak, 26.07.1999; Agvali, 10.07.2000. (I, IV).
30. \**Drasteria cailino* (Lefèbvre, 1827) – Gunib, 11.07.1999; Tchervlennie Buruni, 16.05.1960 (MSU: Chen-Yun-Lin); Gunib, 10–15.07.1975 (M.P.Kornelio). (I, IV).
31. \**Drasteria saisani* (Staudinger, 1882) – Kumtor-Kale, 16.07.1947; (ZIN: M. A. Rjabov); Kaptchugaj, 16.08.1940 (ZIN: M. A. Rjabov). (II).
32. !*Drasteria caucasica* (Kolenati, 1846) – Samur, 1–3.05.1999. (I).
33. \**Drasteria flexuosa* (Ménétriés, 1849) – Ribatchij, 7–27.06.1974; Gunib, 10–15.07.1975 (M.P.Kornelio). (I, IV).
34. \**Drasteria picta* (Christoph, 1877) – Kumtor-Kale (ZIN: M. A. Rjabov); Derbent (ZIN: M. A. Rjabov). (I, II).



Figure 4: Highland Daghestan, subalpine zone, Burshag Village.

35. \**Drasteria herzi* Kozhantschikov, 1930 – Ahti, 07.09.1926 (ZIN: M. A. Rjabov). (V).
36. \**Armada panaceorum* (Ménétriés, 1849) – Machatschkala, 03.05.1946 (ZIN: Kamtceva). (I).
37. *Lygephila ludicra* (Hübner, 1790) – Kezenoy-am. (V).
38. !*Lygephila viciae* (Hübner, 1822) – Upper Kazanische, 25–27.06.1999. (III).
39. *Lygephila cracca* ([Denis & Schiffermüller], 1775) – Manaskent. (I).
40. !*Lygephila pastinum* (Treitschke, 1826) – Termenlik, 19.06.1998; Kosob, 14.07.1998. (III, V).
41. \**Aedia funesta* (Esper, 1786) – Gunib, 10–15.07.1975 (M.P.Kornelio). (IV).
42. *Acantholipes regularis* (Hübner, [1813]) – Tchervlennie Buruni, 16.05.1960 (MSU: Chen-Yun-Lin); Manaskent. (I).
43. \**Tyta luctuosa* ([Denis & Schiffermüller], 1775) – Samur, 1–3.05.1999; Berikey, 03.07.1999; New Hushet, 19.07.1999; Gertma, 7–8.08.1999; Kaiakent, 18.06.1998; Ribatchij, 7–27.06.1974; Shary, 08.08.2000. (I, II, III, V).
44. *Euclidia glyphica* (Linnaeus, 1758) – Samur, 1–3.05.1999; Kosob, 22.06.1999; Kezenoy-am. (I, V).
45. !*Euclidia fortalitium* (Tauscher, 1809) – Agrahansky gulf, 19–20.06.1999. (I).
46. \**Laspeyria flexula* ([Denis & Schiffermüller], 1775) – Gunib, 10–15.07.1975 (M. P. Kornelio). (IV).
47. *Percyima albidentaria* (Freyer, 1842) – Leninaul 18–22.05.1999; Sulak, 26.07.1999; Gunib, 10–15.07.1975 (M. P. Kornelio); Manaskent. (I, IV).



### Subfamily Calpinae

48. !*Calyptra thalictri* (Borkhausen, 1790) – Gunib, 20.08.2000. (IV).

### Subfamily Hypeninae

49. \**Rhynchodontodes ravularis* (Staudinger, 1879) – Arabljar, 15.08.1924 (ZIN: M. A. Rjabov); New Hushet, 19.07.1999. (I).  
50. \**Hypena rostralis* (Linnaeus, 1758) – Gunib, 10–15.07.1975 (M. P. Kornelio). (IV).  
51. *Hypena obesalis* (Treitschke, 1828) – Kezenoy-am. (V).  
52. \**Hypena opulenta* (Christoph, 1877) – Ahti, 28.05.1933 (ZIN: M. A. Rjabov). (V).  
53. !*Rivula sericealis* (Scopoli, 1763) – Upper Kazanische, 25–27.06.1999; Samur, 1–3.05.1999, New Hushet, 19.07.1999. (I, III).

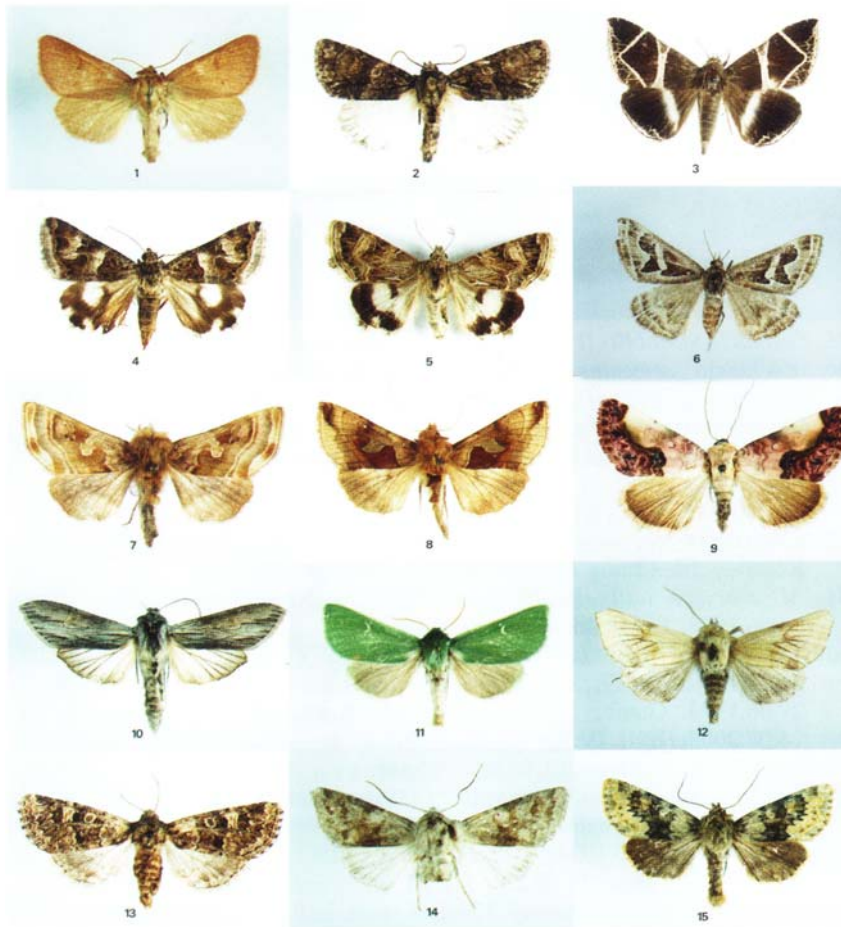
### Subfamily Euteliinae

54. \**Eutelia adulatrix* (Hübner, [1813]) – Upper Kazanische, 25–27.06.1999; Kuntor-Kale, Kaptchugaj (ZIN: M. A. Rjabov). (II, III).

### Subfamily Plusiinae

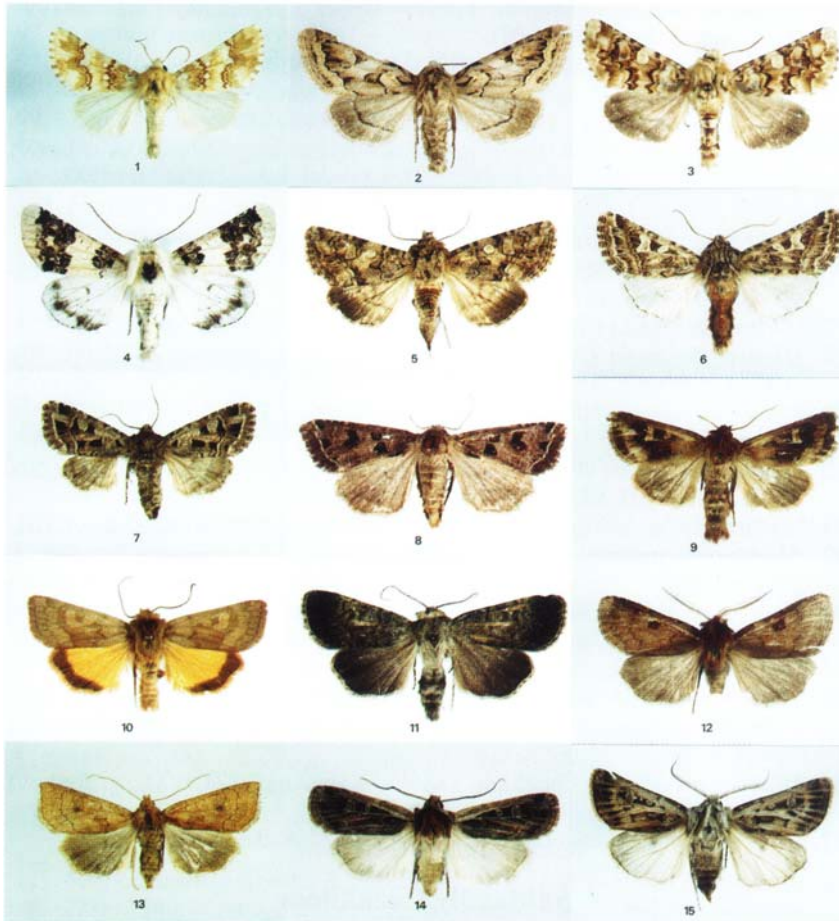
55. *Euchalcia variabilis* (Piller, 1783) – Kezenoy-am. (V).  
56. *Euchalcia armeniae* Dufay, 1966 – Kezenoy-am; Upper Kazanische (Kljutschko 1983). (III, V).  
57. *Euchalcia consona* (Fabricius, 1787) – Kurush; Kezenoy-am. (V).  
58. !*Polychrysia moneta* (Fabricius, 1787) – Burshag, 7–9.08.2000. (V).  
59. *Panchrysia deaurata* (Esper, 1787) – Kezenoy-am.; Upper Gakvary 12–14.07.2000. (V).  
60. *Diachrysia chrysitis* (Linnaeus, 1758) – Turag, 16.06.1998; Kurush; Kezenoy-am; Chirag 12–14.07.2000, 11.08.2000. (III, V).  
61. !*Diachrysia tutti* (Kostrowicki, 1961) – Kosob, 14.07.1998; Turag, 15.06.1998; Termenlik, 19.06.1998. (III, V).  
62. \**Macdounnoughia confusa* (Stephens, 1850) – Machatschkala, 10.07–20.08.1999; Sulak, 26.07.1999; Termenlik, 19.06.1998; Ribatchij, 7–27.06.1974; Gunib, 10–15.07.1975 (M.P.Kornelio); Upper Gakvary, 12–14.07.2000. (I, III, IV, V).  
63. *Plusia festucae* (Linnaeus, 1758) – Kurush. (V).  
64. *Autographa gamma* (Linnaeus, 1758) – Samur, 1–3.05.1999; Kosob, 22.06.1999; Machatschkala, 10.07–20.08.1999, Gertma, 7–8.08.1999; Ribatchij, 7–27.06.1974; Kurush; Shary, 08.08.2000; Upper Gakvary, 12–14.07.2000; Chirag, 11.08.2000. (I, III, V).  
65. *Autographa jota* (Linnaeus, 1758) – Kosob, 13.07.89; Kurush (ZIN: M. A. Rjabov); Shary, 08.08.2000; Upper Gakvary, 12–14.07.2000; ssp. *anatolica* Schwingenschuss, 1936 - Kezenoy-am. (V).  
66. *Autographa bractea* ([Denis & Schiffmüller], 1775) – Gunib, 11.07.1999 (ZIN: M. A. Rjabov); Upper Gakvary, 12–14.07.2000; Kezenoy-am; Kurush. (IV, V).

## Plate 1



1. *Eogena contaminei* – 2. *Craniophora pontica* – 3. *Dysgonia rogenhoferi* – 4. *Drasteria picta* – 5. *Armada panaceorum* – 6. *Euclidia fortalitium* – 7. *Euchalcia armeniae* – 8. *Autographa aemula* – 9. *Acontia urania* – 10. *Cucullia behouneki korsosi* – 11. *Isochlora viridis* – 12. *Pyrrhia victorina* – 13. *Leucochlaena cypraote* – 14. *Ammoconia senex* – 15. *Apamea* sp.

## Plate 2



1. *Metopoplus excelsa* – 2. *Hadena picturata* – 3. *Hadena irregularis* – 4. *Hadena laudeti* – 5. *Hadena scythia* – 6. *Saragossa siccanorum* – 7. *Saragossa porosa* – 8. *Hyssia cavernosa* – 9. *Cerapteryx megala* – 10. *Chersotis luperinoides* – 11. *Standfussiana nictymera* – 12. *Netrocerocera quadrangula* – 13. *Xestia ochreago* – 14. *Ledereragrotis multifida* – 15. *Agrotis faidica*.

67. *Autographa aemula* ([Denis & Schiffermüller], 1775) – Kezenoy-am; Kurush. (V).  
 68. *Cornutiplusia circumflexa* (Linnaeus, 1767) – Kurush. (V).  
 69. *Trichoplusia ni* (Hübner, [1803]) – Kezenoy-am. (V).  
 70. *Abrostola trigemina* (Werneburg, 1864) – Gertma, 7–8.08.1999; Kezenoy-am; Gunib, 10–15.07.1975 (M. P. Kornelio). (III, IV, V).

#### Subfamily Acontiinae

71. !*Emmelia trabealis* (Scopoli, 1763) – Upper Kazanische, 25–27.06.1999; Kaiakent, 18.06.1998. (II, III).  
 72. \**Acontia urania* (Frivaldszky, 1835) – Tarki (ZIN: M. A. Rjabov) (II).  
 73. !*Acontia lucida* (Hufnagel, 1766) – Kaiakent, 18.06.1998. (II).  
 74. !*Acontia titania* (Esper, 1798) – Gunib, 11.07.1999. (IV).  
 75. \**Phyllophila obliterata* (Rambur, 1833) – Kaptchugaj (ZIN: M. A. Rjabov). (II).

#### Subfamily Eustrotiinae

76. \**Protodeltote pygarga* (Hufnagel, 1766) – Upper Kazanische, 25–27.06.1999; Derbent (ZIN: M. A. Rjabov). (I, III).  
 77. \**Deltote delicatula* Christoph, 1882 – Tarki, (ZIN: M. A. Rjabov). (II).  
 78. !*Deltote bankiana* (Fabricius, 1775) – Upper Kazanische, 25–27.06.1999. (III).  
 79. \**Odice arcuinna* (Hübner, 1790) – Kaptchugaj, Tarki, Ahti (ZIN: M. A. Rjabov). (II, V).  
 80. \**Eublemma ostrina* (Hübner, [1808]) – Ahti, Derbent, Gunib, Levashi (ZIN: M. A. Rjabov). (I, III, IV, V).  
 81. \**Eublemma parva* (Hübner, [1808]) – Kaptchugaj (ZIN: M. A. Rjabov). (II).  
 82. \**Eublemma pannonica* (Freyer, 1840) – Tarki, Kaptchugaj (ZIN: M. A. Rjabov). (II).  
 83. \**Eublemma rosea* (Hübner, 1790) – Tarki, Kaptchugaj, Levashi, 30.07.1940. (II, III).  
 84. \**Eublemma amoena* (Hübner, [1803]) – Derbent, 13.05.1940. (I).  
 85. \**Eublemma purpurina* ([Denis & Schiffermüller], 1775) – Manaskent; Tarki (ZIN: M. A. Rjabov). (I, II).  
 86. \**Eublemma debilis* (Christoph, 1886) – Kaptchugaj (ZIN: M. A. Rjabov). (II).  
 87. *Eublemma polygramma* (Duponchel, 1836) – Manaskent. (I).

#### Subfamily Cuculliinae

88. \**Cucullia argentina* (Fabricius, 1787) – Ahti (ZIN: M. A. Rjabov); Ribatchij, 7–27.06.1974. (I, V).  
 89. \**Cucullia magnifica* Freyer, 1839 – Ahti (ZIN: M. A. Rjabov). (V).  
 90. *Cucullia absinthii* (Linnaeus, 1761) – Kurush. (V).  
 91. !*Cucullia spectabilisoides* Poole, 1989 – Aknada (ZIN: M. A. Rjabov). (V).

93. *Cucullia lucifuga* ([Denis & Schiffermüller], 1775) – Kurush (ZIN: M. A. Rjabov); Kurush. (V).
94. *Cucullia umbratica* (Linnaeus, 1758) – Turag, 16.06.1998; Termenlik, 19.06.1998; Upper Gakvary, 12–14.07.2000; Kezenoy-am; Kurush. (III, V).
95. \**Cucullia biornata* (Fischer von Waldheim, 1840) – Tchervlennie Buruni, 16.05.1960 (MSU: Chen-Yun-Lin); Ribatchij, 7–27.06.1974. (I).
96. \**Cucullia tanacetii* ([Denis & Schiffermüller], 1775) – Tarki (ZIN: M. A. Rjabov). (II).
97. \**Cucullia mixta* Freyer, 1841 – Ahti (ZIN: M. A. Rjabov). (V).
98. \**Cucullia lactea* (Fabricius, 1787) – Kumtor-Kale, 16.07.1947 (ZIN: M. A. Rjabov). (II).
99. *Cucullia behouneki korsosi* Ronkay, 1990 – Kurush. (V).
100. \**Shargacucullia lychnitis* (Rambur, 1833) – ZIN: Kaptchugaj, Levashi, Derbent (ZIN: M. A. Rjabov). (I,II,III).
101. *Shargacucullia strigicosta* (Boursin, 1940) – Kurush. (V).
102. \**Calophasia opalina* (Esper, 1793) – Kaptchugaj (ZIN: M. A. Rjabov). (II).
103. \**Behouneka freyeri* (Frivaldszky, 1835) – Machatschkala (ZIN: M. A. Rjabov). (I).
104. \**Omphalophana antirrhini* (Hübner, [1809]) – Termenlik, 21.06.1998; Derbent (ZIN: M. A. Rjabov). (I, III).
105. \**Oncocnemis nigricula* (Eversmann, 1847) – Agvali, 22.08.1981 (A. V. Nekrasov). (IV).
106. \**Epimecia ustula* (Freyer, 1835) – Levashi (ZIN: M. A. Rjabov). (III).

#### **Subfamily Amphipyrinae**

107. !*Amphipyra tragopoginis* (Clerck, 1759) – Chirag, 11.08.2000 (V).
108. *Amphipyra berbera* Rungs, 1949 – Kurush. (V).

#### **Subfamily Psaphidinae**

109. \**Brachionycha sphinx* (Hufnagel, 1766) – Tarki, 29.10.1945 (ZIN: M. A. Rjabov). (II).

#### **Subfamily Stiriinae**

110. \**Mycteroplus puniceago* (Boisduval, 1840) – Gunib, 10–15.07.1975 (M. P. Kornelio). (IV).

#### **Subfamily Heliothinae**

111. *Schinia scutosa* ([Denis & Schiffermüller], 1775) – Upper Kazanische, 25–27.06.1999; Kosob, 22.06.1999; Termenlik, 19–21.06.1998; Ribatchij, 7–27.06.1974; Shary, 08.08.2000; Manaskent. (I, III, V).
112. \**Isochlora viridis* Staudinger, 1882 – Agvali, 23.07.1981 (A. V. Nekrasov).
113. *Heliothis viriplaca* (Hufnagel, 1766) – Termenlik, 19.06.1998; Ribatchij, 7–27.06.1974; Manaskent. (I, III).
114. *Heliothis peltigera* ([Denis & Schiffermüller], 1775) – Kaiakent, 18.06.1998; Termenlik, 19–21.06.1998; Manaskent. (I, II, III).

115. \**Heliothis nubigera* (Herrich-Schaffer, 1851) – Machatschkala, 17.05.1940 (ZIN: M. A. Rjabov); Agvali, 10.07.2000. (I, V).
116. *Helicoverpa armigera* (Hübner, [1808]) – Termenlik, 19.06.1998; Upper Gakvary, 12–14.07.2000; Manaskent; Kezenoy-am. (I, III, V).
117. !*Pyrrhia umbra* (Hufnagel, 1766) – Termenlik, 19.06.1998; Upper Gakvary, 12–14.07.2000. (III).
118. \**Pyrrhia victorina* (Sodoffsky, 1849) – Tarki (ZIN: M. A. Rjabov) (II).
119. !*Periphanes delphinii* (Linnaeus, 1758) – Gertma, 7–8.08.1999. (III).
120. \**Chazaria incarnata* (Freyer, 1838) – Kumtor-Kale, 21.05.1947 (ZIN: M. A. Rjabov), Kaptchugaj (ZIN: M. A. Rjabov). (II).
121. \**Aedophron rhodites* (Eversmann, 1851) – Tarki, Kaptchugaj (ZIN: M. A. Rjabov). (II).

### Subfamily Hadeninae

122. *Caradrina morpheus* (Hufnagel, 1766) – Leninaul 18–22.05.1999; Upper Gakvary, 12–14.07.2000. (I, V).
123. \**Paradrina selini* (Boisduval, 1840) – Gunib, 10–15.07.1975 (M. P. Kornelio). (IV).
124. !*Paradrina clavipalpis* (Scopoli, 1763) – Upper Gakvary, 12–14.07.2000; Chirag, 11.08.2000. (V).
125. *Paradrina muricolor* (Boursin, 1933) – Kurush. (V).
126. *Hoplodrina octogenaria* (Goeze, 1781) – Upper Kazanische, 25–27.06.1999; Termenlik, 19.06.1998; Kosob, 12.07.1998; Kaiakent, 18.06.1998; Upper Gakvary, 12–14.07.2000; Levashi (ZIN: M. A. Rjabov); Kezenoy-am. (II, III, V).
127. \**Hoplodrina ambigua* ([Denis & Schiffermüller], 1775) – Machatschkala, 10.07–20.08.1999; Upper Gakvary, 12–14.07.2000; Derbent (ZIN: M. A. Rjabov); Gunib, 20.08.2000. (I, IV).
128. \**Hoplorina blanda* ([Denis & Schiffermüller], 1775) – Termenlik, 19.06.1998; Kaiakent, 18.06.1998; Levashi (ZIN: M. A. Rjabov). (II, III).
129. *Hoplodrina pfeifferi* (Boursin, 1932) – Kezenoy-am. (V).
130. \**Stenodrina aeshita* (Boursin, 1937) – Derbent (ZIN: M. A. Rjabov). (I).
131. *Spodoptera exigua* (Hübner, [1808]) – Kezenoy-am. (V).
132. \**Sesamia cretica* Lederer, 1857 – Derbent (ZIN: M. A. Rjabov). (I).
133. \**Epipsammia accurata* (Christoph, 1882) – Tarki (ZIN: M. A. Rjabov). (II).
134. \**Chilodes maritima* (Tauscher, 1806) – Machatschkala, 21.06.1943 (ZIN: M. A. Rjabov). (I).
135. *Athetis gluteosa* (Treitschke, 1835) – Kezenoy-am. (V).
136. *Athetis pallustris* (Hübner, [1808]) – Kezenoy-am. (V).
137. !*Dypterygia scabriuscula* (Linnaeus, 1758) – Kosob, 22.06.1999; Machatschkala, 10.07–20.08.1999. (I, V).
138. !*Rusina ferruginea* (Esper, 1785) – Turag, 16.06.1998. (III).
139. \**Thalpophila matura* (Hufnagel, 1766) – Tarki (M. A. Rjabov). (II).



Figure 5: Highland Daghestan, subalpine zone, lake near Chirag Village.

140. !*Euplexia lucipara* (Linnaeus, 1758) – Termenlik, 19.06.1998. (III).
141. \**Phlogophora meticulosa* (Linnaeus, 1758) – Machatschkala (ZIN: M. A. Rjabov). (I).
142. !*Phlogophora scita* (Hübner, 1790) – Kosob, 13.07.1998; Shary, 08.08.2000. (V).
143. *Auchmis detersa* (Esper, 1791) – Kosob, 13.07.1998; Gunib, 08.08.2000; Kurush; Gunib, 10–15.07.1975 (M. P. Kornelio). (IV, V).
144. !*Enargia paleacea* Esper, 1788 – Kosob, 13.07.1998. (V).
145. \**Mesogona acetosellae* ([Denis & Schiffermüller], 1775) – Tarki (ZIN: M. A. Rjabov). (II).
146. \**Mesogona oxalina* (Hübner, [1803]) – Tarki (ZIN: M. A. Rjabov). (II).
147. \**Dicycla oo* Linnaeus, 1758 – Kaptchugaj (ZIN: M. A. Rjabov). (II).
148. \**Cosmia affinis* (Linnaeus, 1767) – Derbent (ZIN: M. A. Rjabov). (I).
149. \**Xanthia icteritia* (Hufnagel, 1766) – Tarki, 1937 (ZIN: M. A. Rjabov). (II).
150. \**Agrochola helvola* (Linnaeus, 1758) – Tarki, 1937 (ZIN: M. A. Rjabov). (II).
151. \**Agrochola egorovi* (Bang-Haas, 1934) – Hadjalmahi, 28.09.1932 (ZIN: M. A. Rjabov). (IV).
152. \**Episema glaucina* (Esper, 1789) – Kaptchugaj, 4–18.09.1937; Tarki (ZIN: M. A. Rjabov). (II).
153. \**Leucochlaena cypraota* (Hampson, 1918) – Machatschkala, 05.10.1934; Sulak, Derbent, 1931 (ZIN: M. A. Rjabov). (I).
154. \**Ulochlaena hirta* (Hübner, [1813]) – Kaptchugaj (ZIN: M. A. Rjabov). (II).
155. !*Brachylomia viminalis* (Fabricius, 1777) – Kosob, 14.07.1998. (V).

156. \**Aporophyla lutulenta* ([Denis & Schiffermüller], 1775) – Tarki, 12–18.09.1939 (ZIN: M. A. Rjabov). (II).
157. \**Dryobotodes monochroma* (Esper, 1790) – Machatschkala (ZIN: M. A. Rjabov). (I).
158. \**Ammoconia caecimacula* ([Denis & Schiffermüller], 1775) – Tarki (ZIN: M. A. Rjabov). (II).
159. \**Ammoconia senex* (Geyer, 1829) – Hadjalmahi, 02.09.1926 (ZIN: M. A. Rjabov). (IV).
160. \**Polymixis rufocincta* (Geyer, 1828) – Machatschkala (ZIN: M. A. Rjabov). (I).
161. *Mniotype adusta* (Esper, 1790) – Kezenoy-am; Upper Gakvary (12–14.07.2000). (V).
162. *Apamea monoglypha* (Hufnagel, 1766) – Gertma, 7–8.08.1999, Kosob, 13.07.1998; Upper Gakvary, 12–14.07.2000; Kurush. (III, V).
163. *Apamea crenata* (Hufnagel, 1766) – Kezenoy-am; Gunib, 20.08.2000. (IV, V).
164. *Apamea lateritia* (Hufnagel, 1766) – Kosob, 12-14.07.1998; Kezenoy-am; Kurush. (IV); Upper Gakvary (12–14.07.2000); Burshag, 7–9.08.2000; Agvali, 10.07.2000; Chirag, 11.08.2000. (IV, V).
165. *Apamea furva* ([Denis & Schiffermüller], 1775) – Kezenoy-am; Kurush; Upper Kazanische, 17.06.1999; Upper Gakvary (12–14.07.2000). (V).
166. *Apamea platinea* (Treitschke, 1825) – Kezenoy-am; Kurush. (V).
167. *Apamea remissa* (Hübner, [1809]) – Kezenoy-am; Upper Gakvary (12–14.07.2000). (V).
168. *Apamea leucodon* (Eversmann, 1837) – Kurush. (V).
169. *Apamea sordens* (Hufnagel, 1766) – Kosob, 14.07.1998; Kezenoy-am. (V).
170. *Apamea ferrago* (Eversmann, 1837) – Gertma, 7–8.08.1999; Burshag, 7–9.08.2000; Kezenoy-am; Kurush. (III, V).
171. \**Apamea ophiogramma* (Esper, 1794) – Kurush, 18.08.1933 (ZIN: M. A. Rjabov). (V).
172. *Apamea* sp. – Kurush. (V).
173. *Eremobina pabulatricula* (Brahm, 1791) – Kurush. (V).
174. \**Oligia latruncula* ([Denis & Schiffermüller], 1775) – Kosob, 12.07.1998; Turag, 16.06.1998; Termenlik, 19–21.06.1998; Derbent, 10.06.1928 (ZIN: M. A. Rjabov). (I, III, V).
175. !*Oligia dubia* (Heydemann, 1942) – Upper Gakvary, 12–14.07.2000. (V).
176. \**Mesoligia furuncula* ([Denis & Schiffermüller], 1775) – Derbent (ZIN: M. A. Rjabov); Chirag, 11.08.2000; Shary, 08.08.2000. (I, V).
177. \**Mesapamea secalis* (Linnaeus, 1758) – Derbent (ZIN: M. A. Rjabov); Gunib, 10–15.07.1975 (M. P. Kornelio). (I, IV).
178. \**Photodes brevilinea* (Fenn, 1864) – Ribatchij, 7–27.06.1974. (I).
179. \**Luperina dumerilii* (Duponchel, 1826) – Tarki, 2-12.09.1945 (ZIN: M. A. Rjabov); Derbent, 10.09.1928 (ZIN: M. A. Rjabov). (I, II).
180. \**Luperina rjabovi* Kljutschko, 1967 – Tarki, 03.09.1945 (ZIN: M. A. Rjabov). (II).



181. \**Rhizedra lutosa* (Hübner, 1803) – Machatschkala, Derbent, Tarki, Kaptchugaj (ZIN: M. A. Rjabov). (I, II).
182. \**Pseudohadena indigna* (Christoph, 1887) – Sulak (ZIN: M. A. Rjabov). (I).
183. *Amphipoea oculea* (Linnaeus, 1761) – Kezenoy-am. (V).
184. \**Gortyna cervago* (Eversmann, 1844) – Tarki (M. A. Rjabov). (II).
185. \**Goryna borelii* (Pierret, 1837) – Hadjalmahi (ZIN: M. A. Rjabov). (IV).
186. \**Calamia tridens* (Hufnagel, 1766) – Kosob, 14.07.1998; Ahti (ZIN: M. A. Rjabov); Gunib, 20.08.2000; Burshag, 07.08.2000. (IV, V).
187. *Archanara geminipuncta* (Haworth, 1809) – Machatschkala (ZIN: M. A. Rjabov); Manaskent. (I).
188. \**Archanara neurica* (Hübner, [1808]) – Machatschkala (ZIN: M. A. Rjabov). (I).
189. !*Archanara dissoluta* (Treitschke, 1825) – Agrahansky gulf, 19–20.06.1999. (I).
190. \**Arenostola phragmitidis* (Hübner, [1803]) – Ribatchij, 7–27.06.1974. (I).
191. \**Oria musculosa* (Hübner, [1808]) – Machatschkala, Derbent, (ZIN: M. A. Rjabov). (I).
192. !*Metopoplus boursini* Brandt, 1938 – Agvali, 10.07.2000 (IV).
193. \**Metopoplus excelsa* Christoph, 1885 – Kaptchugaj, 14.07.1937 (ZIN: M. A. Rjabov). (II).
194. *Discestra furca* (Eversmann, 1852) – Kezenoy-am. (V).
195. *Discestra trifolii* (Hufnagel, 1766) – Samur, 1–3.05.1999; Termenlik, 19–21.06.1998; Kezenoy-am; Manaskent. (I, III, V).
196. \**Discestra stigmosa* (Christoph, 1887) – New Hushet, 19.07.1999; Ribatchij, 7–27.06.1974. (I).
197. \**Discestra sociabilis* (de Graslin, 1850) – Kaptchugaj (ZIN: M. A. Rjabov). (II).
198. !*Lacanobia w-latinum* (Hufnagel, 1766) – Upper Kazanische, 25–27.06.1999; Kosob, 22.06.1999; Gunib, 11.07.1999. (III, IV, V).
199. \**Lacanobia blenna* (Hübner, [1824]) – Ribatchij, 7–27.06.1974. (I).
200. !*Lacanobia oleracea* (Linnaeus, 1758) – Upper Kazanische, 25–27.06.1999; Samur, 1–3.05.1999; Kaiakent, 18.06.1998; Upper Gakvary, 12–14.07.2000. (I, II, III, V).
201. *Lacanobia thalassina* (Hufnagel, 1766) – Termenlik, 19.06.1998; Kezenoy-am. (III, V).
202. *Lacanobia contigua* ([Denis & Schiffermüller], 1775) – Kosob, 12.07.1998; Kezenoy-am; Upper Gakvary, 12–14.07.2000. (V).
203. !*Lacanobia suasa* ([Denis & Schiffermüller], 1775) – Leninaul 18–22.05.1999. (I).
204. *Hada plebeja* (Linnaeus, 1761) – Kezenoy-am; Upper Gakvary, 12–14.07.2000. (V).
205. !*Aetheria dysodea* ([Denis & Schiffermüller], 1775) – Burshag, 7–9.08.2000. (V).
206. !*Aetheria bicolorata* (Hufnagel, 1766) – Upper Gakvary, 12–14.07.2000. (V).

207. \**Aetheria cappa* (Hübner, [1809]) – Ribatchij, 7–27.06.1974; Gunib, 10–15.07.1975 (M. P. Kornelio); Agvali, 10.07.2000; Burshag, 7–9.08.2000. (I, IV, V).
208. \**Hadena luteago* ([Denis & Schiffermüller], 1775) – Manas, 07.07.1999; Tchervlennie Buruni, 16.05.1960 (MSU: Chen-Yun-Lin); Upper Gakvary, 12–14.07.2000. (I, V).
209. \**Hadena picturata* (Alpheraky, 1882) – Levashi, Kaptchugaj (ZIN: M. A. Rjabov). (II, III).
210. *Hadena compta* ([Denis & Schiffermüller], 1775) – Kurush; Kezenoy-am; Ahti (ZIN: M. A. Rjabov). (V).
211. *Hadena confusa* (Hufnagel, 1766) – Kurush; Kezenoy-am; Levashi (ZIN: M. A. Rjabov); Upper Gakvary, 12–14.07.2000. (III, V).
212. *Hadena albimacula* (Borkhausen, 1792) – Kurush; Agvali, 10.07.2000. (IV, V).
213. \**Hadena magnolii* (Boisduval, 1829) – Tchervlennie Buruni, 16.05.1960 (MSU: Chen-Yun-Lin); Derbent, 21.05.1935 (ZIN: M. A. Rjabov). (I).
214. *Hadena clara* (Staudinger, 1901) – Kezenoy-am, Kurush, 12.08.1933 (ZIN: M. A. Rjabov). (V).
215. *Hadena vulcanica* (Turati, 1907) – Kezenoy-am. (V).
216. *Hadena melanochroa* (Staudinger, 1892) – Sulak, 26.07.1999; Gunib, 11.07.1999; Kezenoy-am; Kurush; Upper Gakvary, 12–14.07.2000. (I, IV, V).
217. !*Hadena consparcatoides* (Schawerda, 1928) – Burshag, 7–9.08.2000. (V).
218. *Hadena tephroleuca* (Boisduval, 1833) – Ahti (Idrisov 1959); Upper Gakvary, 12–14.07.2000. (V).
219. !*Hadena rivularis* (Fabricius, 1775) – Upper Gakvary, 12–14.07.00. (V).
220. !*Hadena perplexa* ([Denis & Schiffermüller], 1775) – Upper Gakvary, 12–14.07.2000. (V).
221. \**Hadena silenens* (Hübner, [1822]) – Kaptchugaj (ZIN: M. A. Rjabov). (II).
222. !*Hadena irregularis* (Hufnagel, 1766) – Upper Gakvary, 12–14.07.2000. (V).
223. \**Hadena laudeti* (Boisduval, 1840) – Kaptchugaj (ZIN: M. A. Rjabov). (II).
224. *Hadena pseudodealbata* Hacker, 1988 – Kosob, 12.07.1998; Kurush. (V).
225. *Hadena cimelia* (Brandt, 1938) – Ahti (Idrisov, 1959). (V).
226. *Hadena grisea* (Rjabov, 1901) – Kurush. (V).
227. *Hadena scythia* Klutschko & Hacker, 1996 – Ahti, 07.07.1937 (M. A. Rjabov). (V).
228. *Kuruschia dianthoecioides* (Boursin, 1940) – Kurush, 07.07.1937 (ZIN: M. A. Rjabov); Agvali, 23.07.1981 (A. V. Nekrasov); Kurush; Burshag, 7–9.08.2000; Chirag, 11.08.2000. (IV, V).
229. *Sideridis albicolon* (Hübner, [1813]) – Kosob, 13.07.1998; Machatschkala (ZIN: M. A. Rjabov); Kezenoy-am. (I, V).
230. !*Sideridis egena* (Lederer, 1853) – Agvali, 10.07.2000 (IV).
231. *Sideridis reticulata* (Goeze, 1781) – Termenlik, 19.06.1998; Kosob, 12.07.1998; Kurush; Kezenoy-am; Gunib, 10–15.07.1975 (M.P.Kornelio); Upper Gakvary, 12–14.07.2000. (III, IV, V).



Figure 6: Central mountain-area of Daghestan: Hunzagh plateau, 1700 m.



Figure 7: Highland Daghestan: Bogosky mountain range, alpine zone, about 3500 m.

232. \**Conisania ostrogovichi* (Draudt, 1933) – Hadjalmahi, 29.06.1926 (ZIN: M. A. Rjabov); Tchervlennie Buruni, 16.05.1960 (MSU: Chen-Yun-Lin); Andi, 07.06.1983 (A. V. Nekrasov). (I,IV).
233. \**Saragossa siccanorum* (Staudinger, 1870) – Derbent (ZIN: M. A. Rjabov). (I).
234. \**Saragossa porosa* (Eversmann, 1854) – Temirgoe (ZIN: M. A. Rjabov). (I).
235. !*Melanchra persicariae* (Linnaeus, 1761) – Upper Kazanische, 25–27.06.1999; Gunib, 11.07.1999. (III, IV).
236. *Melanchra pisi* (Linnaeus, 1758) – Kezenoy-am. (V).
237. !*Mamestra brassicae* (Linnaeus, 1758) – Gertma, 7–8.08.1999; Kosob, 13.07.1998; ); Upper Gakvary, 12–14.07.2000. (III, V).
238. *Polia bombycina* (Hufnagel, 1766) – Gertma, 7–8.08.1999, Kosob, 13.07.1998; Kurush; Kezenoy-am; Upper Gakvary, 12–14.07.2000; Shary, 08.08.2000. (III, V).
239. *Polia nebulosa* (Hufnagel, 1766) – Turag, 17.06.1998; Termenlik, 19–Kezenoy-am; Gunib, 10–15.07.1975 (M. P. Kornelio). (III, IV, V).
240. *Polia serratilinea* (Treitschke, 1825) – Kurush; Kezenoy-am; Upper Gakvary, 12–14.07.2000. (V).
241. *Polia trimaculosa* (Esper, 1788) – Kezenoy-am; Gunib, 10–15.07.1975 (M.P.Kornelio). (IV, V).
242. *Mythimna conigera* ([Denis & Schiffermüller], 1775) – Gertma, 7–8.08.1999; Gunib, 11.07.1999; Termenlik, 19.06.1998; Kosob, 13.07.1998; Kurush; Kezenoy-am; Upper Gakvary, 12–14.07.2000; Burshag, 7–9.08.2000. (III, IV, V).
243. !*Mythimna ferrago* (Fabricius, 1787) – Kosob, 14.07.1998; Upper Gakvary, 12–14.07.2000. (V).
244. !*Mythimna albipuncta* ([Denis & Schiffermüller], 1775) – Berikey, 03.07.1999. (I).
245. \**Mythimna vitellina* (Hübner, [1808]) – Leninaul 18–22.05.1999; Termenlik, 19.06.1998; Derbent, 15.07.1936 (ZIN: M. A. Rjabov). (I, III).
246. \**Mythimna pudorinae* ([Denis & Schiffermüller], 1775) – Tarki (ZIN: M. A. Rjabov). (II).
247. \**Mythimna straminea* (Treitschke, 1825) – Machatschkala, 26.09.1949 (ZIN: M. A. Rjabov); Derbent, 14.06.1948 (ZIN: M. A. Rjabov). (I).
248. \**Mythimna obsoleta* (Hübner, [1803]) – Ribatchij, 7–27.06.1974. (I).
249. *Mythimna comma* (Linnaeus, 1761) – Gunib, 11.07.1999; Kosob, 12–14.07.1998; Kurush; Kezenoy-am; Upper Gakvary, 12–14.07.2000. (V).
250. \**Mythimna zaeae* (Duponchel, 1827) – Machatschkala, Kumtor-Kale, Kaptchugaj (ZIN: M. A. Rjabov). (I, II).
251. \**Mythimna flammea* (Curtis, 1828) – Kaptchugaj, 1941 (ZIN: M. A. Rjabov). (II).
252. \**Mythimna punctosa* (Treitschke, 1825) – Machatschkala, 30.08.1946 (ZIN: M. A. Rjabov); Tarki (ZIN: M. A. Rjabov). (I, II).
253. *Mythimna l-album* (Linnaeus, 1767) – Berikey, 03.07.1999; Manaskent; Agvali, 10.07.2000. (I, IV).

254. *Mythimna andereggii* (Boisduval, 1840) – Machatschkala (ZIN: M. A. Rjabov); Kezenoy-am. (I, V).
255. \**Mythimna alopecuri* (Boisduval, 1840) – Machatschkala, Kumtor-Kale, Levashi, Kaptchugaj (ZIN: M. A. Rjabov). (I, II, III).
256. \**Mythimna lineata* (Eversmann, 1937) – Hadjalmahi (ZIN: M. A. Rjabov). (III).
257. \**Orthosia miniosa* ([Denis & Schiffermüller], 1775) – Tarki (ZIN: M. A. Rjabov). (II).
257. \**Perigrapha i-cinctum* ([Denis & Schiffermüller], 1775) – Kaptchugaj (ZIN: M. A. Rjabov). (II).
259. \**Hyssia cavernosa* (Eversmann, 1842) – Andi, 07.06.1983 (A. V. Nekrasov). (IV).
260. !*Cerapteryx megala* Alpheraky, 1882 – Chirag, 11.08.00. (V).
261. *Pachetra sagittigera* (Hufnagel, 1766) – Kezenoy-am. (V).
262. *Eriopygodes imbecilla* (Fabricius, 1794) – Gunib, 11.07.1999; Termenlik, 19.06.1998; Kosob, 12–14.07.1998; Kezenoy-am; Upper Gakvary, 12–14.07.2000. (III, IV, V).
263. *Lasionycta proxima* (Hübner, [1809]) – Kosob, 12–14.07.1998; Termenlik, 19.06.1998; Chirag, 11.08.2000; Burshag, 7–9.08.2000; Kurush; Kezenoy-am. (III, V).
264. *Lasionycta draudti* (Wagner, 1936) – Kezenoy-am. (V).

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265. !*Axylia putris* (Linnaeus, 1761) – Upper Kazanische, 25–27.06.1999; Turag, 16.06.1998; Termenlik, 19.06.1998; ); Upper Gakvary, 12–14.07.2000. (II, III).
266. \**Lycophorus villosus* (Alpheraky, 1887) – Machatschkala (ZIN: M. A. Rjabov). (I).
267. *Ochropleura flammatra* ([Denis & Schiffermüller], 1775) – Ribatchij, 7–27.06.1974; Kurush; Gunib, 10–15.07.1975 (M. P. Kornelio); Machatschkala (Rjabov, 1952). (I, IV, V).
268. *Ochropleura musiva* (Hübner, [1803]) – Kezenoy-am. (V).
269. \**Ochropleura plecta* (Linnaeus, 1761) – Upper Kazanische, 25–27.06.1999; Samur, 1–3.05.1999; Turag, 16.06.1998; Termenlik, 12.06.1998; Gunib, 10–15.07.1975 (M. P. Kornelio). (I, III, IV).
270. !*Diarsia mendica* (Fabricius, 1775) – Upper Kazanische, 25–27.06.1999. (III).
271. *Diarsia dahlia* (Hübner, [1813]) – Termenlik, 19–21.06.1998; Kosob, 12–14.07.1998; ); Upper Gakvary, 12–14.07.2000. (III, V).
272. *Diarsia rubi* (Vieweg, 1790) - Kezenoy-am. (V).
273. \**Noctua pronuba* (Linnaeus, 1758) – Gunib, 10–15.07.1975 (M. P. Kornelio). (IV).
274. \**Noctua orbona* (Hufnagel, 1766) – Termenlik, 19–21.06.1998; Machatschkala, 25.06.1946 (ZIN: M. A. Rjabov). (I, III).



Figure 8: Highland Daghestan, subalpine zone, Shary Village.

275. \**Noctua comes* (Hübner, [1813]) – Machatschkala, 10.06.1948 (ZIN: M.A.Rjabov); Derbent, 26.06.1932 (ZIN: M. A. Rjabov). (I).
276. *Chersotis rectangula* ([Denis & Schiffermüller], 1775) – Tarki, 1941 (ZIN: M. A. Rjabov); Kezenoy-am. (II, V).
277. !*Chersotis ocellina* ([Denis & Schiffermüller], 1775) – Burshag, 7–9.08.2000. (V).
278. *Chersotis alpestris* (Boisduval, 1837) – Kurush, 27.08.1925 (ZIN: M. A. Rjabov); Kezenoy-am; Kurush. (V).
279. *Chersotis multangula* (Hübner, [1803]) – Kezenoy-am. (V).
280. *Chersotis margaritacea* (de Villers, 1789) – Kezenoy-am. (V).
281. *Chersotis anatolica* (Draudt, 1936) – Kurush. (V).
282. !*Chersotis elegans* (Eversmann, 1837) – Chirag, 11.08.2000. (V).
283. *Chersotis larixia* (Guenée, 1852) – Kurush, 01.09.1926 (ZIN: .A.Rjabov); Kurush. (V).
284. *Chersotis luperinoides* (Guenée, 1852) – Kezenoy-am; Kurush. (V).
285. *Rhyacia simulans* (Hufnagel, 1766) – Upper Kazanische, 25–27.06.1999; Leninaul 18–22.05.1999; Kurush; Upper Gakvary, 12–14.07.2000. (I, III, V).
286. \**Rhyacia helvetina* (Boisduval, 1833) – Kurush. (V).
287. *Rhyacia nictymerides* (O. Bang-Haas, 1922) – Kezenoy-am. (V).
288. *Epipsilia grisescens* (Fabricius, 1794) – Kezenoy-am; Kurush; Shary, 08.08.2000. (V).
289. !*Standfussiana nictymera* (Boisduval, 1834) – Upper Gakvary, 12–14.07.2000. (V).

290. \**Standfussiana lucernea* (Linnaeus, 1758) – Kaptchugaj ZIN: M. A. Rjabov). (II).
291. *Netrocerocora quadrangula* (Eversmann, 1844) – Kezenoy-am; Kurush. (V).
292. *Eurois occulta* (Linnaeus, 1758) – Kosob, 13.07.1998; Kezenoy-am; Gunib, 10–15.07.1975 (M. P. Kornelio); Gunib, 20.08.2000; Kurush. (IV, V).
293. \**Spaelotis ravidia* ([Denis & Schiffermüller], 1775) – Gertma, 7–8.08.1999; Ribatchij, 7–27.06.1974; Gunib, 10–15.07.1975 (M. P. Kornelio); Upper Gakvary, 12–14.07.2000. (I, III, IV, V).
294. \**Eugnorisma chaldaica* (Boisduval, 1840) – Kaptchugaj (ZIN: M. A. Rjabov). (II).
295. \**Eugnorisma caerulea* (Wagner, 1932) – Kaptchugaj (ZIN: M. A. Rjabov). (II).
296. *Xestia c-nigrum* (Linnaeus, 1758) – Upper Kazanische, 25–27.06.1999; Gertma, 7–8.08.1999; Turag, 16.06.1998; Termenlik, 19.06.1998; Machatschkala (Rjabov, 1952); Burshag, 7–9.08.2000. (I, III, V).
297. *Xestia ditrapezium* ([Denis & Schiffermüller], 1775) – Termenlik, 19.06.1998; Kezenoy-am; Upper Gakvary, 12–14.07.2000; Shary, 08.08.2000. (III, V).
298. !*Xestia triangulum* (Hufnagel, 1766) – Upper Kazanische, 25–27.06.1999; Kosob, 12.07.1998; Shary, 08.08.2000. (III, V).
299. *Xestia ashworthii* (Doubleday, 1855) – Kezenoy-am. (V).
300. *Xestia baja* ([Denis & Schiffermüller], 1775) – Kezenoy-am. (V).
301. \**Xestia trifida* (Fischer v. Waldheim, 1820) – Tarki (ZIN: M. A. Rjabov). (II).
302. *Xestia ochreago* (Hübner, [1808]) – Kezenoy-am; Kurush; Burshag, 7–9.08.2000; Chirag, 11.08.2000. (IV).
303. *Anaplectoides prasina* ([Denis & Schiffermüller], 1775) – Termenlik, 21.06.1998; Kezenoy-am; Kurush; Upper Gakvary, 12–14.07.2000. (III, V).
304. !*Paradiarsia sobrina* Duponchel, 1840 – Termenlik, 19.06.1998. (III).
305. *Parexarnis fugax* (Treitscke, 1825) – Ribatchij, 7–27.06.1974; Kurush, 21.08.1931 (ZIN: M. A. Rjabov); Machatschkala (Rjabov, 1952); Upper Gakvary, 12–14.07.2000. (I, V).
306. *Parexarnis pseudosollers* (Boursin, 1940) – Kezenoy-am; Kurush. (V).
307. *Protexarnis squalida* (Guenée, 1852) – Kezenoy-am; Kurush. (V).
308. *Euxoa lidia* (Stoll, 1782) – Kurush, 01.09.1926 (ZIN: M. A. Rjabov); Kezenoy-am; Burshag, 7–9.08.2000. (V).
309. \**Euxoa hilaris* (Freyer, 1938) – Kurush, 01.09.1926 (ZIN: M. A. Rjabov). (V).
310. *Euxoa recussa* (Hübner, [1817]) – Kezenoy-am. (V).
311. *Euxoa birivia* ([Denis & Schiffermüller], 1775) – Kurush. (V).
312. *Euxoa heringi* (Staudinger, 1877) – Machatschkala (Rjabov 1956). (I).
313. *Euxoa decora* ([Denis & Schiffermüller], 1775) – Agvali, 23.07.1981 (A. V. Nekrasov); Kurush. (IV, V).
314. *Euxoa aquilina* ([Denis & Schiffermüller], 1775) – Derbent, 20.08.1931 (ZIN: M. A. Rjabov); Kezenoy-am. (I, V).

315. *Euxoa distinguenda* (Lederer, 1857) – Ahti, 23.09.1932 (ZIN: M. A. Rjabov); Hadjalmahi, 02.09.1926 (ZIN: M. A. Rjabov); Tarki, 12–18.09.1939 (ZIN: M. A. Rjabov); Machatschkala (Rjabov 1956). (I, II, IV, V).
316. *Euxoa temera* (Hübner, [1808]) – Machatschkala, 11.07.1944 (ZIN: M. A. Rjabov); Machatschkala (Rjabov 1956). (I).
317. *Euxoa nigricans* (Linnaeus, 1761) – Kezenoy-am. (V).
318. *Euxoa tritici* (Linnaeus, 1761) – Machatschkala (Rjabov, 1952). (I).
319. *Euxoa obelisca* ([Denis & Schiffermüller], 1775) – Kaiakent, 18.06.1998. (II).
320. *Euxoa ochrogaster* (Staudinger, 1852) – Kezenoy-am. (IV).
321. *Euxoa conspicua* (Hübner, [1824]) – Machatschkala, 10.07–20.08.1999; Termenlik, 19.06.1998; Ribatchij, 7–27.06.1974; Machatschkala (Rjabov, 1952); Kezenoy-am; Chirag, 11.08.2000; Upper Gakvary, 12–14.07.2000. (I, III, V).
322. *Euxoa anatolica* (Draudt, 1936) – Machatschkala (Rjabov 1956). (I).
323. *Dichagyris vallesiaca* (Boisduval, 1837) – Ahti; Tarki (ZIN: M. A. Rjabov). (II, V).
324. *Dichagyris squalorum* (Eversmann, 1856) – Kaiakent, 18.06.1998; Machatschkala, 19.06.1933 (ZIN: M. A. Rjabov). (I, II).
325. *Dichagyris squalidior* (Staudinger, 1901) – Machatschkala, 19.07.1952 (ZIN: M. A. Rjabov); Machatschkala (Rjabov 1956). (I).
326. *Dichagyris melanura* (Kollar, 1846) – Kaptchugaj (ZIN: M. A. Rjabov); Machatschkala (Rjabov 1956). (I, II).
327. *Dichagyris renigera* (Hübner, [1808]) – Gunib (A. V. Nekrasov); Kezenoy-am; Kurush; Upper Gakvary, 12–14.07.2000. (IV, V).
328. *Dichagyris eureteocles* Boursin, 1940 – Kaptchugaj (ZIN: M. A. Rjabov). (II).
329. *Dichagyris forficula* (Eversmann, 1851) – Kezenoy-am. (V).
330. *Yigoga celsicola* (Bellier, 1859) – Kurush. (V).
331. *Yigoga flavina* (Herrich-Schaffer, 1852) – Lower Djengutaj, 07.07.1926 (ZIN: M. A. Rjabov); Kaiakent, 18.06.1998. (II).
332. *Yigoga forcipula* ([Denis & Schiffermüller], 1775) – Kaiakent, 18.06.1998; Machatschkala (Rjabov 1956); Upper Gakvary, 12–14.07.2000. (I, II, V).
333. *Yigoga signifera* ([Denis & Schiffermüller], 1775) – Machatschkala, 10.07–20.08.1999. (I).
334. *Ledereragrotis multifida* (Lederer, 1870) – Kezenoy-am; Kurush; Chirag, 11.08.2000; Burshag, 7–9.08.2000; Agvali, 10.07.2000. (IV, V).
335. *Agrotis obesa* (Boisduval, 1829) – Machatschkala (Rjabov 1956). (I).
336. *Agrotis crassa* (Hübner, 1803) – Machatschkala (Rjabov 1956). (I).
337. *Agrotis ipsilon* (Hufnagel, 1766) – Samur, 1–3.05.1999; Kosob, 2.06.1999; Termenlik, 19.06.1998; Kezenoy-am; Machatschkala (Rjabov 1956); Gunib, 10–15.07.1975 (M. P. Kornelio); Agvali, 10.07.2000. (I, III, IV, V).
338. *Agrotis exclamationis* (Linnaeus, 1758) – Leninaul 18–22.05.1999; Kosob, 22.06.1999; Berikey, 03.07.1999; Kaiakent, 18.06.1998; Turag, 16.06.1998;



- Machatschkala (Rjabov 1956); Upper Gakvary, 12–14.07.2000; Burshag, 7–9.08.2000; Kezenoy-am. (I, II, III, V).
339. *Agrotis clavis* (Hufnagel, 1766) – Kosob, 13.06.1998; ); Upper Gakvary, 12–14.07.2000; Burshag, 7–9.08.2000; Kurush; Kezenoy-am. (V).
340. *Agrotis segetum* ([Denis & Schiffmüller], 1775) – Leninaul 18-22.05.1999; Kosob, 22.06.1999; Machatschkala (Rjabov 1956); Burshag, 7–9.08.2000; Kezenoy-am. (I, V).
341. *Agrotis vestigialis* (Hufnagel, 1766) – Machatschkala (Rjabov 1956). (I).
342. *Agrotis cinerea* ([Denis & Schiffmüller], 1775) – Levashi, 04.07.1923 (ZIN: M. A. Rjabov); Kezenoy-am; Kurush. (III, V).
343. *Agrotis fatidica* (Hübner, [1824]) – Burshag, 7–9.08.2000. (V).

### Discussion

Of the 343 Noctuidae species listed above, 139 species are mentioned in this paper for the first time for Daghestan Republic and another 62 species were collected only during 1998–2000. Undoubtedly, this is not an exhaustive regional fauna. The Republic's territory, especially its mountain area, is the great natural refuge of the rich faunistic nucleus in the Northern Caucasus noctuids.

For the comparison of Noctuidae faunas diversity: 335 species are known from the Chechen and Ingush Republics (Herczig *et al.* 1990); 213 species from the North Ossetia Republic (Poltavsky & Ribin 1980); 195 species from the Kabardino-Balkaria (Poltavsky & Barsov 1985); 109 species from Karachai-Cherkess Republic (Poltavsky 1981). Thus, the noctuid species diversity increases from West to East in the region of North Caucasus.

Table 1: Relative similarity of the Noctuidae fauna of the 5 natural zones of Daghestan (Czekanowski-Sørensen index).

	I	II	III	IV
I				
II	0,095			
III	0,180	0,096		
IV	0,110	0,012	0,107	
V	0,096	0,038	0,207	0,135

The zonal distribution of the Noctuidae-moths in Daghestan is as follows: 114 species in Lowlands; 72 species in Foothills; 74 species in the Front mountain ranges; 59 species in the Central mountain area, and 169 species in the Highlands. The relation of the zonal faunas with the index of Czekanowski (1909) is shown in Table 1. It is very low, supposedly because of the lack of information about the regional Noctuidae-fauna. It looks like each natural zone of Daghestan has a rather peculiar fauna of noctuids. Actually, despite of collecting during 3 years in many localities, the study of the Noctuidae fauna of Daghestan is far from complete. The seasonal aspects of moths were not controlled during all periods of the flight period in each natural zone of the republic. Nevertheless, already now the noctuid fauna diversity at the North-East

Caucasus is greater, as compared to the North, Central and North-West Caucasus. Further expeditions must bring additional information.

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