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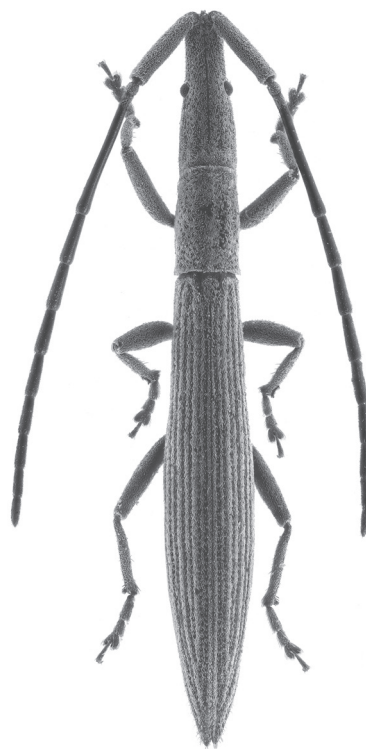


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Faunistical records and annotations for a better knowledge of the Tajikistani moth and butterfly fauna (Lepidoptera: Noctuoidea, Papilionoidea)

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Abstract. On the basis of 3333 specimens, geographical, spatial and temporal records of 225 noctuid and 37 papilionoid Lepidoptera species are given for the better knowledge of the fauna of Tajikistan. The following 25 species are recorded as new for the Tajikistani fauna: *Agrotis golickei* Ershov, 1871, *Amphipyra cancellata* Warren, 1911, *Anapoma riparia* (Boisduval, 1829), *Archanara insoluta* (Warren, 1911), *Autophila einsleri* Amsel, 1935, *A. laetifica* (Staudinger, 1901), *A. maculifera* Staudinger, 1888, *Calloplistria latreillei* (Duponchel, 1827), *Chazaria incarnata* (Freyer, 1838), *Chersotis lehmanni* Varga, Gyulai, Ronkay et Ronkay 2013, *Cirrhia tunicata* (Graeser, 1890), *Conistra pseudopolitina* Hacker, 1990, *Cryphia maeonis* (Lederer, 1865), *Cucullia tecca* Püngeler, 1906, *Dichagyris naumanni* Varga, 1996, *Episema minuta* Boursin et Ebert, 1976, *Eugnorisma cuneiferum* Varga et L. Ronkay, 1994, *Hypena opulenta* (Christoph, 1877), *Lophoterges varians* Ronkay, 2005, *Mniotype dubiosa* (Bang-Haas, 1912), *Namangana cretacea* Staudinger, 1888, *Nonagria puengeleri pringlei* (Wiltshire, 1958), *Orthosia reshoefti* Hrebaly et Plante, 1994, *Oxytrippia orbiculosa* (Esper, 1799) and *Shargacucullia zerkowitzi* (Boursin, 1934). The hitherto unknown female of *Perigrappa heidi* Hrebaly, 1996 and male of *Orthosia reshoefti* are described. The taxonomic and nomenclatorial problems of *Polymixis roehrei* Boursin, 1961 are discussed, resulting the new synonymy *Dasystemum colluta* Draudt, 1934 = *Polymixis roehrei* Boursin, 1961, **syn. n.** New distributional data for *Osthelderia kondara* Varga et Ronkay, 1991 (Darvaz Mts.) are given with some additional comments on the female genitalia characters in comparison with those of *O. minna* Ronkay et Varga, 1994.

Key words: faunistics, nomenclature, Noctuoidea, Papilionoidea, Tajikistan.

Фаунистические находки и замечания к познанию совкообразных и булавоусых чешуекрылых Таджикистана (Lepidoptera: Noctuoidea, Papilionoidea)

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Резюме. На основе 3333 экземпляров приведены сведения о 225 видах совкообразных и 37 видах дневных булавоусых чешуекрылых Таджикистана. Следующие 25 видов зарегистрированы как новые для фауны этой страны: *Agrotis golickei* Ershov, 1871, *Amphipyra cancellata* Warren, 1911, *Anapoma riparia* (Boisduval, 1829), *Archanara insoluta* (Warren, 1911), *Autophila einsleri* Amsel, 1935, *A. laetifica* (Staudinger, 1901), *A. maculifera* Staudinger, 1888, *Calloplistria latreillei* (Duponchel, 1827), *Chazaria incarnata* (Freyer, 1838), *Chersotis lehmanni* Varga, Gyulai, Ronkay et Ronkay 2013, *Cirrhia tunicata* (Graeser, 1890), *Conistra pseudopolitina* Hacker, 1990, *Cryphia maeonis* (Lederer, 1865), *Cucullia tecca* Püngeler, 1906, *Dichagyris naumanni* Varga, 1996, *Episema minuta* Boursin et Ebert, 1976, *Eugnorisma cuneiferum* Varga et L. Ronkay, 1994, *Hypena opulenta* (Christoph, 1877), *Lophoterges varians* Ronkay, 2005, *Mniotype dubiosa* (Bang-Haas, 1912), *Namangana cretacea* Staudinger, 1888, *Nonagria puengeleri pringlei* (Wiltshire, 1958), *Orthosia reshoefti* Hrebaly et Plante, 1994, *Oxytrippia orbiculosa* (Esper, 1799) и *Shargacucullia zerkowitzi* (Boursin, 1934). Описаны неизвестные ранее самка *Perigrappa heidi* Hrebaly, 1996 и самец *Orthosia reshoefti*. Обсуждаются таксономические и номенклатурные проблемы *Polymixis roehrei* Boursin, 1961, установлена новая синонимия: *Dasystemum colluta* Draudt, 1934 = *Polymixis roehrei* Boursin, 1961, **syn. n.** Приведены новые данные о распространении *Osthelderia kondara* Varga et Ronkay, 1991 (Дарвазский хребет), а также комментарии о строении гениталий самок этого вида по сравнению с таковыми *O. minna* Ronkay et Varga, 1994.

Ключевые слова: фаунистика, номенклатура, Noctuoidea, Papilionoidea, Таджикистан.

Introduction

Tajikistan has always been and will be an attractive destination for lepidopterists. Many collecting trips usually targeted the higher regions of the Pamir Mountains (Pamir Autonomous Region) in the summer months, as rare and commercially valuable *Parnassius* species (*autocrator*, *charltonius*, etc.) could be found there [Müting, 1970]. These expeditions sometimes conducted light trapping.

This resulted that the undoubtedly interesting and special summer moth fauna of this area has been far better known than the more diverse western areas [Tshikolovets, 2003]. Another peculiarity of the situation is that early spring and late autumnal periods are seldomly sampled. Especially the moth fauna is less explored.

The most important Tajikistani Lepidoptera material originated from the late Yury Leontievich Shchetkin (1919–1995) [Korolev, Murzin, 1997], whose private

collection unfortunately did not remain intact, because immediately after the collapse of the Soviet Union it was split into parts and had been purchased by various museums and private collectors in Europe. Consequently, large portions of this material are not yet available for scientific investigations. This is particularly unfortunate because it is almost certain, that Schetkin collected intensively in both spring and autumn aspects, so we could get more comprehensive insight of the Tajik butterfly and moth fauna when analyzing the materials originated from his collecting activities.

Regarding noctuid faunistics in Tajikistan, two recent publications have to be mentioned. The first one is Korb [2012], which gives a short account of Tajikistani noctuids collected during a short expedition carried out in the year 2011, between the 13th and 26th of July. Korb records 28 species as new for the country, suggesting that the noctuid fauna of Tajikistan is insufficiently known, indeed. The other one is the most recent book of Radzhabova and Matov [2020], compiled subsequent to the publication of Korb and Bolshakov [2016]. Even in the light of this magnificent compilation our findings testify that there are a lot of to do in Tajikistan regarding the noctuid moth fauna.

The aim of the present paper is to document geographical, spatial and temporal data of papilionoid and noctuid Lepidoptera collected in Tajikistan during three collecting trips conducted in the years of 2015 (early spring), 2017 (early summer) and 2018 (autumn). This contribution is the continuation of our previous faunistic papers on the Lepidoptera fauna of Central Asia [Bálint, Benedek, 2009a, b; Benedek, Bálint, 2013a, b].

Material and methods

Diurnal butterflies, skippers and moths were collected by traditional methods: netting specimens in flight or during nectaring, or searching resting individuals in the vegetation. Night active moths were sampled at light using white sheet illuminated by 125W HgLi mercury bulb plus two semi-automatic portable light traps with 8 or 15W blacklight or ultraviolet tubes. Sometimes an additional 20W ultraviolet tube fed by the car accumulator was also operating in front of a white sheet.

Specimens captured were arranged in cotton layers with indication to the site after the collecting event still in the field; then pinned, set, labelled, identified and inventoried in laboratory. The material is deposited in the private collection of the senior author; voucher specimens will be donated to the Hungarian Natural History Museum (Budapest).

Localities are listed and numbered in chronological order as they appear on the labels. A brief characterisation of each places together with collecting methods is given. The species are listed according to their respective categories (Noctuoidea and Papilionoidea) in alphabetical order with indication to the individual size of the sample. The noctuid genera *Eublemma* Hübner, 1821 and *Victrix* Staudinger, 1879 sometimes posed taxonomic problems and some species could not be identified positively. In these cases the indications 'sp.' were used.

The names of all taxa recorded are given as a systematic list (based on Fibiger and Hermann [2005] for Noctuoidea and Tshikolovets [2003] for Papilionoidea). In this list numbers in parentheses indicate the localities where the species was recorded. Species with special interest are marked with an asterisk (*) and annotated subsequently.

List of localities in Tajikistan with faunistical records

2015, spring:

1. South Hissar Mts., Karatag valley, 16 km N of Karatag village, 38°43.6'N / 68°21.5'E, 1300 m, 9.04.2015 (leg. B. Benedek). River valley of north to south direction getting narrow downstream with luxuriant herbaceous and bushy vegetation on the rocky terraces; 125W bulb and two light traps worked, but the generator stopped after the first operating hour; windy evening (Fig. 1).

Noctuoidea (19 specimens, 4 species): *Drasteria cailino* – 1; *Egira anatolica* – 11; **Orthosia reshoefti* – 1; *Perigrapha centralasiae* – 6.

2. South Hissar Mts., Karatag valley, 13 km N of Karatag village, 38°43.317'N / 68°21.917'E, 1200 m, 10.04.2015 (leg. B. Benedek). The same site as No 1; two light traps operated; better weather.

Noctuoidea (54 specimens, 12 species): *Agrotis puta* – 6; *Autophila einsleri* ssp. – 1; *Caradrina bodenheimeri* – 1; *Conistra pseudopolitina* – 1; *Cucullia tecca* – 2; *Drasteria cailino* – 11; *Egira anatolica* – 13; *Nycteola kuldzhana* – 2; **Orthosia reshoefti* – 2; *Perigrapha centralasiae* – 10; *Shargacucullia verbasci orientalis* – 2; **Shargacucullia zerkowitzi* – 3.

Papilionoidea (10 specimens, 5 species): *Anthocharis cardaminies alexandra* – 1♂; *Aricia agestis* – 3♂; *Callophrys suaveola* – 1♂; *Celastrina argiolus* – 2♂, 2♀; *Tomares fedtschenkoi* – 1♂.

3. South Hissar Mts., Varzob Range, Takob valley, Poshum village, 38°52.333'N / 69°55.783'E, 1700 m, 11–12.04.2015 (leg. B. Benedek). River valley with luxuriant herbaceous and forest vegetation on the steep rocky walls; new generator supported 125W bulb in the valley bottom, plus two light traps in the terraces; excellent weather.

Noctuoidea (437 specimens, 19 species): *Apopetes phantasma centralasiae* – 9; *Conistra pseudopolitina* – 2; *Dasypolia templi centralasiae* – 1; *Drasteria cailino* – 3; *Egira anatolica* – 232; *Eupsilia transversa* – 9; *Exophila rectangularis* – 3; *Harutaeographa akos* – 11; *Himalistra eriophora* – 2; *Lithophane alaina* – 1; **Orthosia reshoefti* – 73; *Perigrapha asymmetrica* – 8; *Perigrapha centralasiae* – 22; **Perigrapha heidi* – 9; *Scoliopteryx aksuana* – 3; *Shargacucullia verbasci orientalis* – 30; *Shargacucullia nekrasovi* – 13; **Shargacucullia zerkowitzi* – 5; *Xylena exsoleta* – 1.

4. Hissar Mts., Romit Nature Reserve, 38°45.15'N / 68°17.8'E, 1300 m, 13.04.2015 (leg. B. Benedek). Wider river valley, camp on the riverbank near the Salix grove; declivous and relatively open site with larger sandy-rocks; luxuriant herbaceous vegetation dominated by *Eremurus*; 125W bulb at the riverbank and two light traps somewhat further on the hills operated; excellent weather (Fig. 2).

Noctuoidea (123 specimens, 21 species): *Acronicta psi iliensis* – 2; *Apopetes phantasma centralasiae* – 1; *Auchmis peterseni* – 1; *Autophila ligaminosa subligaminosa* – 2; *Calophasia lunula* – 5; *Calophasia opalina* – 1; *Dasytopia minuta* – 2; *Drasteria cailino* – 15; *Earias clorana* – 1; *Exophila rectangularis* – 1; *Garella musculana* – 4; *Nycteola asiatica* – 1; **Orthosia reshoeffi* – 16; *Perigrappa asymmetrica* – 1; *Perigrappa centralasiae* – 24; **Perigrappa heidi* – 2; *Scoliopteryx aksuana* – 2; **Shargacucullia zerkowitzi* – 1; *Shargacucullia verbasci orientalis* – 30; *Shargacucullia nekrasovi* – 9; *Xylena exsoleta* – 2.

5. Darvaz Mts., Doshtak village near Kalaikhum, 38°27.5'N / 70°46.733'E, 1320 m, 15.04.2015 (leg. B. Benedek). Staying in the old hotel of the village, from the backyard it was possible for climbing to the hillsides; 125W bulb in the hotel yard and two light traps in the hillside operated; mild rain then cold front arrival.

Noctuoidea (82 specimens, 12 species): *Autophila asiatica* – 1; *Autophila xena* – 1; *Caradrina bodenheimeri* – 6; **Cucullia tecca* – 1; *Dasytopia eberti* – 2; *Drasteria sesquilinea* – 5; *Eicomorpha antiqua* – 56; *Hypena opulenta* – 4; *Lacanobia glaseri* – 2; *Perigrappa centralasiae* – 1; **Shargacucullia zerkowitzi* – 1; *Shargacucullia verbasci orientalis* – 2.

2017, early summer:

6. South Hissar Mts., Varzob Range, Takob valley, above Safed Dara village, 38°51.469'N / 69°00.338'E, 2432 m, 18.05.2017 (leg. B. Benedek, S. Ilniczky). Skiing resort above the village; open subalpine meadow with typical sparse herbaceous vegetation; one 125W mercury vapour lamp and two light traps operated until midnight; cold and rainy weather.

Noctuoidea (3 specimens, 3 species): *Dasytopia danchenkoi* – 1; *Dasytopia shugnana* – 1; *Parexarnis sollers* – 1.

7. Khatlon, Vakhsh River, Tigrovaya Balka Reserve, 37°19.092'N / 68°30.922'E, 366 m, 19.05.2017 (leg. B. Benedek, S. Ilniczky). Open and flat site, saline sandy semidesert with groups of poplars (*Populus euphratica*); one 125W bulb and two light traps operated, plus one 20W UV tube; good weather (Fig. 3).

Noctuoidea (179 specimens, 33 species): *Acantholypes regularis* – 3; *Aegle ochracea* – 10; *Aegle subflava* – 2; *Anarta stigmosa* – 3; *Anumeta cestis* – 2; *Anumeta fractisrigata* – 2; *Archanara insoluta* – 50; *Arenostola unicolor* – 7; *Armada dentata* – 20; *Autophila cerealis* – 5; *Cardepi helix* – 5; *Cardepi irrisoria* – 1; *Catocala neonympha* – 4; *Clytie gracilis* – 1; *Clytie distincta* – 1; *Drasteria aberrans* – 3; *Drasteria flexuosa* – 1; *Drasteria caucasica* – 5; *Drasteria picta* – 3; *Earias clorana* – 2; *Earias turana* – 1; *Eublemma sp.* – 1; *Hadjina cupreipennis* – 1; *Heterographa tumulorum* – 5; *Heteropalpia acrosticta* – 5; *Lacanobia praedita* – 1; *Leucania palestinensis* – 10; *Metopoceras eylandti* – 1; *Nola squalida* – 1; *Paraegle tessellata* – 4; *Pericyma albidentaria* – 10; *Tarachepia hueberi* – 3; *Zekelita ravalis* – 6.

Papilionoidea (38 specimens, 4 species): *Cigaritis epargyros* – 1♂; *Lachides galba* – 2♂; *Lycaeides christophi* – 24♂, 5♀; *Pontia daplidice* – 6.

8. Khatlon, Vakhsh River, Tigrovaya Balka Reserve, 37°23.001'N / 68°30.147'E, 327 m, 20.05.2017

(leg. B. Benedek, S. Ilniczky). Close to the previous site, but with denser (almost closed) shrubby vegetation dominated by *Haloxylon*, *Tamarix* and *Populus euphratica*; 125W lamp, one 20W UV tube and two light traps operated, also baiting in the Turanga grove; good weather; the bait worked well for *Amphipyra cancellata*, *Catocala timur* and *Heterographa tumulorum*.

Noctuoidea (169 specimens, 30 species): *Aegle ochracea* – 1; *Amphipyra cancellata* – 5; *Anapoma riparia* – 2; *Anarta eremistis* – 11; *Anarta stigmosa* – 3; *Archanara insoluta* – 24; *Arenostola unicolor* – 3; *Autophila cerealis* – 3; *Capsula sparganii* – 1; *Cardepi helix* – 6; *Catocala optima* – 1; *Catocala timur* – 10; *Clytie gracilis* – 6; *Clytie terrulenta* – 5; *Conisania vidua* – 1; *Drasteria aberrans* – 2; *Drasteria flexuosa* – 2; *Dysgonia rogenhoferi* – 1; *Eublemma marginula* – 3; *Gonospielia munita* – 7; *Heterographa tumulorum* – 15; *Hydredes shchetkini* – 5; *Lacanobia praedita* – 8; *Leucania palestinensis* – 9; *Metachrostis djakonovi* – 3; *Nola silvicola* – 3; *Nonagria puengeleri pringlei* – 14; *Paraegle tessellata* – 9; *Symira albovenosa saepestriata* – 2; *Zekelita ravalis* – 4.

Papilionoidea (17 specimens, 3 species): *Arcia agestis* – 1♂; *Hypermnestrea helios* – 8♂, 5♀; *Polyommatus (icarus) bienerti* – 2♂, 1♀.

9. Khatlon, Karatoy Range, 15 km S of Pobeda village, 37°18.538'N / 69°20.283'E, 760 m, 22.05.2017 (leg. B. Benedek, S. Ilniczky). Warm and dry meadows with luxuriant herbaceous vegetation on sandy rock; good weather; because of safety reasons it was not possible to camp and collect for the night there.

Papilionoidea (4 specimens, 2 species): *Muschampia lutulenta* – 3♀; *Thymelicus lineola* – 1♂.

10. 20 km E of Kulab, 7 km NW of Shuroobad, 37°53.070'N / 69°59.588'E, 1870 m, 22.05.2017 (leg. B. Benedek, S. Ilniczky). Meandering rivulet valley with steep hillsides covered by luxuriant herbaceous and shrubby vegetation; 125W lamp, 20W UV tube plus two light traps operated; somewhat cool night, low activity of moths (Fig. 4).

Noctuoidea (46 specimens, 16 species): *Acronicta angustimacula* – 15; *Albocosta ulrici* – 3; *Auchmis peterseni* – 1; *Autophila asiatica* – 1; *Cucullia argentina* – 1; *Cucullia grandpeteri* – 1; *Dichagyris devota turana* – 1; *Drasteria langi* – 3; *Eicomorpha antiqua* – 7; *Eublemma melabela* – 1; *Lophoterges radians* – 5; *Lygephila cracciae centralasiae* – 1; *Lygephila alaica* – 2; *Shargacucullia naumannii* – 1; *Symira nervosa* – 1; *Xestia erschoffi* – 1.

Papilionoidea (14 specimens, 6 species): *Arcia agestis* – 6; *Coenonympha nolckenii* – 3♂; *Lycaena thersamon* – 1♂; *Melitaea chitralensis enarea* – 1♂, 1♀; *Polyommatus icarus* – 1♂; *Polyommatus (icarus) icadius* – 1♂.

11. South Darvaz Mts., Pianj River, Ravnob River valley, 1.5 km N of Zhag village, 38°14.316'N / 70°31.753'E, 1057 m, 23.05.2017 (leg. B. Benedek, S. Ilniczky). Wide river valley in a semidesert with luxuriant herbaceous vegetation on the hillsides dominated by *Prunus tenella*; camp at the foot of the hills; 125W bulb and 20W UV tube in the camp site and two light traps in the hillsides operated; good weather; one of the best collecting sites, the thecline and polyommata lycaenids were collected almost exclusively on flowering *Tamarix*.



Figs 1–9. Sampling sites in Tajikistan (for characterization of the localities and the list of collected species see the main text).

1 – South Hissar Mts., Karatag River valley, 16 km N of Karatag village, 1300 m, 9.04.2015 (photo by B. Benedek); 2 – Hissar Mts., Romit Nature Reserve, 1300 m, 13.04.2015 (photo by B. Benedek); 3 – Khatlon, Vakhsh River, Tigrovaya Balka Reserve, 366 m, 19.05.2017 (photo by S. Ilniczky); 4 – 20 km E of Kulab, 7 km NW of Shuroobad, 1870 m, 22.05.2017 (photo by S. Ilniczky); 5 – Darvaz Mts., down of Khaburabod Pass, near Safedoron village, 2592 m, 24.05.2017 (photo by S. Ilniczky); 6 – Peter the First Range, Khingob River valley, 7 km E of Tavildara town, 1712 m, 25.05.2017 (photo by S. Ilniczky); 7 – South Hissar Mts., Varzob Range, Takob River valley, above Safed-Dara, 2389 m, 26.05.2017 (photo by S. Ilniczky); 8 – Khujand, Mogoltau Range, 904 m, 28.05.2017 (photo by S. Ilniczky); 9 – Khatlon, Vakhsh River valley, 5 km NNE of Tojikabad village, 363 m, 1.04.2017 (photo by B. Benedek).

Рис. 1–9. Места сборов в Таджикистане (характеристики местонахождений и списки собранных видов приведены в тексте).

1 – Южный Гиссар, долина р. Каратаг, 16 км С с. Каратаг, 1300 м, 9.04.2015 г. (фото Б. Бенедэка); 2 – Гиссарский хребет, заповедник «Рамит», 1300 м, 13.04.2015 (фото Б. Бенедэка); 3 – Хатлон, р. Вахш, заповедник «Тигровая балка», 366 м, 19.05.2017 (фото С. Ильнички); 4 – 20 км В Куляба, 7 км СЗ с. Шурубада, 1870 м, 22.05.2017 (фото С. Ильнички); 5 – Дарвазский хребет, спуск с перевала Хабурабад, близ с. Сафедорон, 2592 м, 24.05.2017 (фото С. Ильнички); 6 – хр. Петра Первого, долина р. Хингоб, 7 км В с. Тавильдара, 1712 м, 25.05.2017 (фото С. Ильнички); 7 – Южный Гиссар, Варзобский хребет, долина р. Такоб, выше Сафед-дары, 2389 м, 26.05.2017 (фото С. Ильнички); 8 – Худжанд, Моголтау, 904 м, 28.05.2017 (фото С. Ильнички); 9 – Хатлон, долина р. Вахш, 5 км СВ с. Тоджикабад, 363 м, 1.04.2017 (фото Б. Бенедэка).

Noctuoidea (94 specimens, 26 species): *Acrionicta psi iliensis* – 10; *Apopetes phantasma centralasiae* – 1; *Apterogeton ypsillon* – 1; *Autophila maculifera* – 1; *Bryophilopsis roederi* – 1; *Calophasia opalina* – 2; *Caradrina bodenheimeri* – 2; *Dichagyris devota turana* – 3; *Enterpia alpherakyi* – 22; *Eublemma melabela* – 2; *Eublemma polygramma* – 1; *Euchalcia hissarica* – 3; *Eutelia adulatrix* – 1; *Hadena bactriana* – 1; *Hadena bicruris* – 1; *Hadena wiltshirei* – 22; *Hecatera cappa* – 2; *Hypena opulenta* – 1; *Lophoterges varians* – 8; *Lygephila alaica* – 1; *Periphanes delphinii* – 1; *Resapamea hedeni* – 1; *Sesamia cretica* – 1; *Shargacucullia verbasci orientalis* – 1; *Zethes monotonus* – 1; *Zethes pistazina* – 3.

Papilionoidea (42 specimens, 7 species): *Lycaena margelanica* – 20♂, 2♀; *Nymphalis xanthomelas ferveescens* – 1♂; *Polyommatus dagmara* – 2♂, 1♀;

Polyommatus icarus – 1♂; *Polyommatus (icarus) bienerti* – 1♂, 1♀; *Pseudophilotes vicrama astabene* – 1♀; *Satyrium sassanides* – 12.

12. Darvaz Mts., Khaburabod Pass, 38°37.644'N / 70°43.056'E, 3258 m, 24.05.2017 (leg. B. Benedek, S. Ilniczky). In the head of a mountain pass, open alpine meadows; cold and cloudy weather.

Papilionoidea (1 specimen, 1 species): *Pontia callidice kalora* – 1♂.

13. Darvaz Mts., down of Khaburabod Pass, near Safedoron village, 38°40.157'N / 70°44.393'E, 2592 m, 24.05.2017 (leg. B. Benedek, S. Ilniczky). Extremely vast mountain steppe with declivities and steep rocky hillsides and a rivulet in the vicinity of the campsite dominated by a high-growing *Ferula*. 125W bulb and two light traps operated; cool night due to the high altitude (Fig. 5).

Noctuoidea (27 specimens, 10 species): *Cucullia umbratica* – 1; *Dasytopia akbar* – 1; *Dasytopia danchenkoi* – 1; *Dasytopia eberti* – 1; *Dasytopia shugnana* – 4; *Dasytopia templi centralasiae* – 4; *Megahadena megaptera* – 1; *Mniotype dubiosa* – 1; *Shargacucullia naumanni* – 3; *Symira nervosa* – 10.

14. Peter the First Range, Khingob River valley, 7 km E of Tavildara town, 38°43.512'N / 70°32.679'E, 1712 m, 25.05.2017 (leg. B. Benedek, S. Ilniczky). Rocky and stony declivous site covered by alluvium of the river with luxuriant herbaceous and shrubby vegetation, plus *Populus* stands; 125W bulb and two light traps operated; evening storm then rain what resulted low moth activity (Fig. 6).

Noctuoidea (28 specimens, 13 species): *Agrotis semivirens* – 1; *Auchmis peterseni* – 4; *Autophila ligaminosa subligaminosa* – 1; *Cucullia grandpeteri* – 1; *Cucullia umbratica* – 1; *Drasteria caucasica* – 1; *Earias clorana* – 2; *Hadena bicruris* – 1; *Hadena strouhali* – 1; *Hadjina eremita* – 3; *Lophoterges radians* – 7; *Raphia approximata* – 4; *Shargacucullia verbasci orientalis* – 1.

Papilionoidea (8 specimens, 4 species): *Glaucopsyche alexis* – 1♂; *Melitaea chitralensis enarea* – 1♂; *Metaporina leucodice* – 5♂; *Pontia daplidice* – 1♂.

15. South Hissar Mts., Varzob Range, Takob valley, above Safed Dara village, 38°51.739'N / 69°00.466'E, 2389 m, 26.05.2017 (leg. B. Benedek, S. Ilniczky). Skiing resort above the village; open subalpine meadow with typical sparse herbaceous vegetation; 125W bulb and two light traps operated until midnight; cold weather (Fig. 7).

Noctuoidea (13 specimens, 6 species): *Dasytopia danchenkoi* – 1; *Drasteria langi* – 1; *Hadena afghana* – 1; *Mniotype juldussica* – 5; *Shargacucullia naumanni* – 4; *Shargacucullia nekrasovi* – 1.

16. Hissar Mts., 5 km SSE of Anzob Tunnel, 39°03.190'N / 68°44.797'E, 2206 m, 27.05.2017 (leg. B. Benedek, S. Ilniczky). Mountain steppe in a side valley of a rivulet with steep hillsides covered by luxuriant herbaceous vegetation.

Papilionoidea (8 specimens, 4 species): *Arcia agestis* – 2; *Euchloe ausonia daphalis* – 1♀; *Metaporina leucodice* – 4♂; *Parnassius mnemosyne gigantea* – 1♂.

17. Hissar Mts., Iskander Darya River valley, 3 km E of Iskanderkul Lake, 39°05.884'N / 68°24.129'E, 2137 m, 27.05.2017 (leg. B. Benedek, S. Ilniczky). Dry, rocky area with steep hillsides covered by *Juniperus*; 125W bulb, 20W UV tube and two light traps operated; good weather.

Noctuoidea (107 specimens, 33 species): *Albocosta ulrici* – 1; *Anarta armata* – 3; *Anarta farnhami palaeartica* – 3; *Anarta nekrasovi* – 3; *Autophila asiatica* – 1; *Caradrina albina* – 1; *Chazarina incarnata* – 1; *Chersotis sordescens* – 1; *Conisania oxyptera* – 1; *Ctenoceratoda thermolimna* – 1; *Cucullia aksuana* – 3; *Cucullia argentina* – 1; *Dichagyris devota turana* – 7; *Dichagyris orientis* – 1; *Drasteria langi* – 3; *Drasteria sesquilina* – 7; *Egira anatolica* – 1; *Eublemma ochreola* – 1; *Hadena afghana* – 1; *Hadena aureomixta* – 10; *Hadena canescens* – 4; *Hadena strouhali* – 3; *Lacanobia praedita* – 1; *Lithophane alaina* – 1; *Lophoterges centralasiae* – 3; *Lophoterges radians* – 26; *Mniotype juldussica* – 5; *Mniotype lama* – 6; *Polymixis acharis afghana* – 2; *Rhyacia electra* – 1; *Sideridis peculiaris* – 1; *Xenophysa pseudopocila* – 2; *Xestia erschoffi* – 1.

Papilionoidea (7 specimens, 2 species): *Metaporina leucodice* – 6; *Plebejus ferganus* – 1♀.

18. Khujand, Mogoltau Range, 40°20.024'N / 69°33.761'E, 904 m, 28.05.2017 (leg. B. Benedek, S. Ilniczky). Rocky semidesert isolated basin in the hilly region with several side-valleys, luxuriant herbaceous vegetation with many plants in flowers; 125W lamp and two light traps operated; good weather; strong papilionid activity during the day but moths were far less active in the night (Fig. 8).

Noctuoidea (7 specimens, 6 species): *Autophila cerealis* – 1; *Cryphia maeonis* – 1; *Dichagyris devota turana* – 1; *Dichagyris eremicola* – 1; *Dichagyris umbrifera* – 2; *Victrix* sp. – 1.

Papilionoidea (83 specimens, 10 species): *Arcia agestis* – 7; *Carcharodus alceae* – 4♂, 1♀; *Hyponephele dysdora dysdorina* – 4♂; *Hyponephele korshunovi* – 1♂, 3♀; *Lycaena dimorpha imphera* – 1♀; *Melitaea didyma turkestanica* – 16♂, 8♀; *Muschampia lutulenta* – 6♂, 2♀; *Papilio machaon centralis* – 1♂, 3♀; *Pieris krueperi deva* – 12; *Satyrrium acuadatum* – 15.

19. Khujand area, near Khamirabot village, 40°24.505'N / 69°38.954'E, 645 m, 29.05.2017 (leg. B. Benedek, S. Ilniczky). Heavily grazed, barren, declivous hilly area, camping in the dry bed of a rivulet; 20W UV tube and two light traps operated; storm, wind and rain.

Noctuoidea (1 specimen, 1 species): *Metopoceras eylandti* – 1.

20. South Hissar Mts., Varzob Range, Takob valley, Poshum village, 38°52.201'N / 68°55.471'E, 1700 m, 30.05.2017 (leg. B. Benedek, S. Ilniczky). River valley with steep rocky hillsides with luxuriant herbaceous and woody vegetation; one light trap operated (because of late arrival); bad weather.

Noctuoidea (4 specimens, 1 species): *Eicomorpha antiqua* – 4.

21. Khatlon, Vakhsh River valley, Aruktoy Range, 5 km SW of Komsomol village, 37°40.795'N / 68°32.604'E, 512 m, 31.05.2017 (leg. B. Benedek, S. Ilniczky). Open area with rock stands at foothill; 125W MV lamp, 20W UV tube and two light traps operated; good weather.

Noctuoidea (77 specimens, 16 species): *Aegle ochracea* – 8; *Armada clio* – 1; **Autophila laetifica* – 6; *Autophila ligaminosa subligaminosa* – 1; *Bryophilopsis roederi* – 3; *Clytie distincta* – 3; *Dichagyris celebrata* – 14; *Dichagyris devota turana* – 2; *Dichagyris grisescens* – 2; *Dichagyris glaucescens* – 3; *Drasteria saisani* – 2; *Euxoa aquilina* – 1; *Namangana cretacea* – 2; *Paraegle tessellata* – 22; *Plusia festucae* – 1; *Zethes pistazina* – 6.

22. Khatlon, Vakhsh River valley, 5 km NNE of Tojikabad village, 37°35.780'N / 68°32.330'E, 363 m, 1.06.2017 (leg. B. Benedek, S. Ilniczky). Camping site on the narrow belt running between the main road and the river bank in opposite to an island with Turanga grove; 125W bulb, 20W UV tube and two light traps operated; butterflies were collected on *Tamarix* flowers; good weather (Fig. 9).

Noctuoidea (65 specimens, 22 species): *Amphipyra cancellata* – 3; *Anarta stigmata* – 1; *Autophila gracilis* – 1; **Autophila laetifica* – 1; *Cardeppia helix* – 3; *Catocala timur* – 3; *Clytie distincta* – 1; *Dichagyris celebrata* – 6;



Figs 10–12. Sampling sites in Tajikistan (for characterization of the localities and the list of collected species see the main text).

10 – Peter the First Range, Khingob River valley, 7 km E of Tavildara town, 1712 m, 4.10.2018 (photo by B. Benedek); 11 – Darvaz Mts., 15 km S of Khaburabod Pass, rocky gorge, 2916 m, 6.10.2018 (photo by B. Benedek); 12 – South Darvaz Mts., Pianj River, Ravnob River valley, 1.5 km N of Zhag village, 1057 m, 7.10.2018 (photo by B. Benedek).

Рис. 10–12. Места сборов в Таджикистане (характеристики местонахождений и списки собранных видов приведены в тексте).

10 – хр. Петра Первого, долина р. Хингоб, 7 км В с. Тавильдара, 1712 м, 4.10.2018 (фото Б. Бенедэка); 11 – Дарваз, 15 км Ю перевала Хабурабод, скалистое ущелье, 2916 м, 6.10.2018 (фото Б. Бенедэка); 12 – Южный Дарваз, р. Пянж, долина р. Равноб, 1.5 км С с. Жаг, 1057 м, 7.10.2018 (фото Б. Бенедэка).

Dichagyris glaucescens – 2; *Dichagyris naumanni* – 1; *Drasteria caucasica* – 5; *Earias clorana* – 2; *Gonospielia munita* – 8; *Heterographa tumulorum* – 2; *Heteropalpia acrosticta* – 2; *Lacanobia praedita* – 4; *Mesoplus contrita* – 4; *Namangana cretacea* – 2; *Paraegle tessellata* – 4; *Pericyma albidentaria* – 3; *Plusia festucae* – 1; *Zekelita ravalis* – 5.

Papilionoidea (21 specimens, 3 species): *Cigaritis epargyros* – 5♂, 5♀; *Lycaeides christophi* – 7♂, 3♀; *Polyommatus (icarus) bienerti* – 1♂.

23. Khatlon, Vakhsh River valley, Aruktoy Range, 3.5 km S of Sambuli village, 37°47.060'N / 68°35.134'E, 505 m, 2.06.2017 (leg. B. Benedek, S. Illiczky). Semidesert with narrow canyons with steep walls of rocksand, sparse vegetation in the valley bottoms and dry rivulet-beds; 125W bulb, 20W UV tube and two light traps operated; good weather.

Noctuoidea (54 specimens, 11 species): *Aegle ochracea* – 25; *Autophila cerealis* – 2; *Clytie distincta* – 4; *Cosmia subtilis* – 1; *Dichagyris celebrata* – 4; *Dichagyris glaucescens* – 3; *Drasteria saisani* – 1; *Eutelia adalatrix* – 1; *Namangana cretacea* – 2; *Paraegle tessellata* – 4; *Zethes pistazina* – 8.

2018, autumn:

24. Hissar Mts., Varzob valley, Kondara Botanical Garden, 38°48.310'N / 68°49.051'E, 1100 m, 2.10.2018 (leg. B. Benedek). Narrow side valley with luxuriant herbaceous and shrub vegetation; 125W bulb operated, plus sugar-roping; extremely good weather; (this is one of the classical moths collecting sites in Tajikistan).

Noctuoidea (135 specimens, 25 species): *Agrotis golickei* – 3; *Agrotis lupinus* – 1; *Agrotis obesa* – 2; *Caradrina sogdiana* – 3; *Caradrina warnecke* – 6; *Catasema vulpina* – 2; *Catocala afghana* – 2; *Catocala desiderata* – 2; *Cryphia maeonis* – 3; *Dichagyris amoena* – 9; *Dichagyris singularis* – 4; *Enargia staudingeri* – 2; *Eugnorisma insignata* – 1; *Eugnorisma mikkolai* – 3; *Eugnorisma trigonica* – 1; *Eugnorisma variago xanthi*ago – 12; *Goniographa gyulaipeteri* – 15; *Leucochlaena muscosa* – 24; *Maraschia hissarensis* – 1; *Metopodicha longicornis* – 7; *Oncocnemis asema* – 3; *Osthelderia kondara* – 15; *Oxytripia orbiculosa* – 1; *Polymixis trisignata* – 3; *Xestia xanthographa* – 10.

25. South Hissar Mts., Varzob Range, Takob valley, Poshum village, 38°52.201'N / 68°55.471'E, 1700 m, 3.10.2018 (leg. B. Benedek). River valley with steep rocky walls covered by luxuriant herbaceous and woody vegetation; 125W bulb operated; somewhat chilly weather with soft but permanent wind.

Noctuoidea (46 specimens, 12 species): *Catocala desiderata* – 1; *Catocala neglecta* – 1; *Catocala pudica* – 6; *Cryphia maeonis* – 1; *Dichagyris amoena* – 2; *Dichagyris singularis* – 2; *Enargia staudingeri* – 1; *Eugnorisma mikkolai* – 14; *Eugnorisma variago xanthi*ago – 1; *Metopodicha longicornis* – 10; *Nekrasovia crassicornis* – 1; *Oncocnemis asema* – 6.

26. Peter the First Range, Khingob River valley, 7 km E of Tavildara town, 38°43.512'N / 70°32.679'E, 1712 m, 4.10.2018 (leg. B. Benedek). Alluvial formed declivous area with stony-rocky ground covered by luxuriant herbaceous and shrubby vegetation with poplar groves; 125W bulb and two light traps operated, plus sugar-roping; good weather; (extremely good site) (Fig. 10).

Noctuoidea (325 specimens, 30 species): *Agrotis obesa* – 5; *Amphipyra sergei* – 20; *Amphipyra tragopoginis turcomana* – 4; *Arcilasisa sobrina* – 1; *Cryphia maeonis* – 5; *Caradrina fergana* – 1; *Catocala desiderata* – 1; *Catocala neglecta* – 13; *Catocala pudica* – 22; *Cirrhia lunaki* – 4; *Cirrhia tunicata* – 6; *Dasytopia akbar* – 3; *Dasytopia templi centralasiae* – 2; *Enargia staudingeri* – 4; *Eugnorisma cuneiferum* – 43; *Eugnorisma mikkolai* – 20; *Eugnorisma insignata* – 2; *Eugnorisma trigonica* – 1; *Eugnorisma variago xanthi*ago – 4; *Euxoa hypochlora afghanica* – 1; *Euxoa subeucta* – 4; *Goniographa gyulaipeteri* – 8; *Lygephila craccae centralasiae* – 13; *Metopodicha longicornis* – 115; *Mniotype juldussica* – 1; *Nycteola asiatica* – 2; *Oncocnemis asema* – 13; *Opigena polygona obscurata* – 5; *Osthelderia kondara* – 6; *Polymixis trisignata* – 2.

27. Darvaz Mts., down of Khaburabod Pass, near Safedoron village, 38°40.157'N / 70°44.393'E, 2592 m, 5.10.2018 (leg. B. Benedek). Open and vast mountain steppe with declivities and steeper rocky hillsides with a rivulet in the vicinity of the campsite; luxuriant vegetation dominated by a high growing *Ferula*; 125W bulb in the campsite and two light traps in the hillsides operated;

chilly night due to the high altitude, but relatively good moth activity.

Noctuoidea (189 specimens, 13 species): *Catasema vulpina* – 50; *Dasypolia akbar* – 3; *Dasypolia danchenkoi* – 29; *Dasypolia eberti* – 7; *Dasypolia psathyra* – 1; *Dasypolia shugnana* – 16; *Dasypolia templi centralasiae* – 64; *Dasypolia tertia* – 1; *Enargia staudingeri* – 6; *Euxoa melanochoera* – 1; *Metopodicha longicornis* – 1; *Nekrasovia crassicornis* – 1; *Polymixis rosinae* – 9.

28. Darvaz Mts., 15 km S of Khaburabod Pass, rocky gorge, 38°37.10'N / 70°45.18'E, 2916 m, 6.10.2018 (leg. B. Benedek). Narrow side valley with mountain steppe dominated by *Ferula*; 125W bulb and two light traps operated; good weather but frosty morning; extremely good moth activity (Fig. 11).

Noctuoidea (204 specimens, 15 species): *Albocosta lasciva* – 1; *Catasema vulpina* – 29; *Dasypolia akbar* – 30; *Dasypolia danchenkoi* – 44; *Dasypolia diva schetkini* – 4; *Dasypolia eberti* – 5; *Dasypolia shugnana* – 27; *Dasypolia psathyra* – 1; *Dasypolia templi centralasiae* – 47; *Enargia staudingeri* – 4; *Eugnorisma eminens* – 1; *Euxoa subeucta* – 4; *Goniographa discussa* – 1; *Himalistra nekrasovi* – 1; *Polymixis rosinae* – 15.

29. South Darvaz Mts., Pianj River, Ravnob River valley, 1.5 km N of Zhag village, 38°14.316'N / 70°31.753'E, 1057 m, 7.10.2018 (leg. B. Benedek). Wide river valley in a semidesert with luxuriant herbaceous vegetation dominated by *Prunus tenella* on the steep hillside above the campsite; 125W bulb and two light traps operated; strong wind in the evening, dust storm and cold front (one of the best collecting sites) (Fig. 12).

Noctuoidea (322 specimens, 29 species): *Amphipyra tragopoginis turcomana* – 1; *Apamea furva* – 1; *Autophila depressa* – 1; *Callopietria latreillei* – 1; *Caradrina bodenheimeri* – 32; *Caradrina clavipalpis* – 12; *Catasema vulpina* – 1; *Catocala afghana* – 1; *Chersotis lehmanni* – 3; *Cryphia maeonis* – 1; *Dichagyris amoena* – 7; *Dichagyris singularis* – 23; *Enargia staudingeri* – 7; *Episema minuta* – 8; *Eugnorisma insignata* – 7; *Eugnorisma spodia psammochrea* – 25; *Eugnorisma mikkolai* – 20; *Eugnorisma variago xanthiogo* – 15; *Euxoa obelisca* – 1; *Goniographa gyulaipeteri* – 35; *Leucochlaena muscosa* – 4; *Maraschia hissarensis* – 6; *Metopodicha longicornis* – 2; *Oncocnemis asema* – 2; **Osthelderia kondara* – 46; *Polymixis pamiridia* – 5; **Polymixis colluta* – 51; *Polymixis rosinae* – 1; *Polymixis trisignata* – 3.

30. Hissar Mts., Varzob valley, Kondara Botanical Garden, 38°48.310'N / 68°49.051'E 1100 m, 8.10.2018 (leg. B. Benedek). Narrow side valley with luxuriant herbaceous and shrub vegetation; two light traps operated; rain and coldness.

Noctuoidea (5 specimens, 2 species): *Polymixis rosinae* – 1; *Polymixis trisignata* – 4.

31. Hissar Mts., Iskander Darya River valley, 3 km E of Iskanderkul Lake, 39°05.884'N / 68°24.129'E, 2137 m, 9.10.2018 (leg. B. Benedek). Dry rocky area, steep hillsides with *Juniperus*; 125W bulb and two light traps operated; cold night (Fig. 13).

Noctuoidea (19 specimens, 9 species): *Catocala afghana* – 6; *Dasypolia rjabovi* – 1; *Dasypolia shugnana* – 1;



Figs 13–14. Sampling sites in Tajikistan (for characterization of the localities and the list of collected species see the main text).

13 – Hissar Mts., Iskander Darya River valley, 3 km E of Iskanderkul Lake, 2137 m, 9.10.2018 (photo by B. Benedek); 14 – Khatlon, Vakhsh River, Tigrovaya Balka Reserve, 11.10.2018 (photo by B. Benedek).

Рис. 13–14. Места сборов в Таджикистане (характеристики местонахождений и списки собранных видов приведены в тексте).

13 – Гиссар, долина р. Искандердарья, 3 км В оз. Искандеркуль, 2137 м, 9.10.2018 (фото Б. Бенедэка); 14 – Хатлон, р. Вахш, заповедник «Тигровая балка», 11.10.2018 (фото Б. Бенедэка).

Dasypolia templi centralasiae – 2; *Eugnorisma eminens* – 1; *Margelana flavidior* – 1; *Polymixis atossa* – 5; *Polymixis rosinae* – 1; *Standfussiana socors* – 1.

32. Khatlon, Vakhsh River, Tigrovaya Balka Reserve, 37°23.001'N / 68°30.147'E, 327 m, 11.10.2018 (leg. B. Benedek). Saline and sandy semidesert with groups of *Populus euphratica*, *Tamarix* and *Haloxylon* and further shrubs; 125W bulb and two light traps operated; cold night (Fig. 14).

Noctuoidea (77 specimens, 4 species): *Eugnorisma tamerlana* – 48; *Euxoa deserta* – 4; *Miniphila miniago* – 20; *Turanica haeretica* – 5.

33. South Hissar Mts., Karatag valley, 16 km N of Karatag village, 38°43.601'N / 68°21.301'E, 1300 m, 12.10.2018 (leg. B. Benedek). Smaller river valley of north to south direction getting narrow downstream with luxuriant herbaceous and bushy vegetation on the rocky terraces; 125W bulb and two light traps operated; baiting; good weather; (*Catocala* spp. visited the bait).

Noctuoidea (223 specimens, 28 species): *Agrochola trapezoides* – 1; *Agrotis golickei* – 1; *Agrotis obesa* – 4;

Caradrina asymmetrica – 4; *Catasema vulpina* – 3; *Catocala afghana* – 9; *Catocala pudica* – 11; *Cryphia maeonis* – 4; *Dasypolia templi centralasiae* – 1; *Dichagyris himalayensis* – 2; *Dichagyris singularis* – 1; *Episema lederi* – 55; *Eugnorisma eminens* – 2; *Eugnorisma mikkolai* – 15; *Eugnorisma variago xanthiagio* – 2; *Euxoa hypochlora afghanica* – 1; *Goniographa discussa* – 1; *Leucochlaena muscosa* – 3; *Margelana flavidior* – 2; *Metopodicha longicornis* – 34; *Mniotype juldussica* – 1; *Nekrasovia crassicornis* – 8; **Osthelderia kondara* – 7; **Polymixis colluta* – 3; *Polymixis rosinae* – 15; *Polymixis trisignata* – 21; *Standfussiana socors* – 2; *Xestia xanthographa* – 10.

Systematic list of species recorded

Noctuoidea

Nolidae

Nolinae

1. *Nola silvicola* Stshetkin, 1957 (8)
2. *Nola squalida* (Staudinger, 1870) (7)

Chloephorinae

1. *Bryophilopsis roederi* (Standfuss, 1892) (11, 21)
2. *Earias clorana* (Linnaeus, 1761) (4, 7, 14, 22)
3. *Earias turana* Grumm-Grzhimalko, 1899 (7)
4. *Garella musculana* (Ershov, 1874) (4)
5. *Nycteola asiatica* (Krulikovsky, 1904) (4, 26)
6. *Nycteola kuldzhana* Obratsov, 1953 (2)

Erebidae

Eubleminae

Eublemini

1. *Eublemma marginula* (Herrich-Schäffer, 1851) (8)
2. *Eublemma melabela* Hampson, 1910 (10, 11)
3. *Eublemma ochreola* Staudinger, 1900 (17)
4. *Eublemma polygramma* (Duponchel, 1842) (11)
5. *Eublemma* sp. (7)
6. *Metachrostis djakonovi* Kononenko et Matov, 2009 (8)

Hypeninae

1. **Hypena opulenta* (Christoph, 1877) (5, 11)
2. *Zekelita ravalis* (Herrich-Schäffer, 1851) (7, 8, 22)

Calpinae

Scoliopterygini

1. *Scoliopteryx aksuana* Sheljuzhko, 1955 (3, 4)

Catocalinae

Toxocampini

1. *Anumeta cestis* (Ménétriés, 1848) (7)
2. *Anumeta fractisrigata* (Alphéraky, 1882) (7)
3. *Apopestes phantasma centralasiae* Warren, 1911 (3, 4, 11)
4. *Exophila rectangularis* (Geyer, 1828) (3, 4)
5. *Lygephila alaica* Remm, 1983 (10, 11)
6. *Lygephila cracca centralasiae* Sheljuzhko, 1955 (10, 26)

Acantholipini

1. *Acantholypes regularis* (Hübner, 1813) (7)
2. *Pericyma albidentaria* (Freyer, 1842) (7, 22)

Melipotini

1. *Drasteria aberrans* Staudinger, 1888 (7, 8)
2. *Drasteria cailino* (Lefébvre, 1827) (1, 2, 3, 4)
3. *Drasteria flexuosa* (Ménétriés, 1847) (7, 8)
4. *Drasteria caucasica* (Kolenati, 1846) (7, 14, 22)
5. *Drasteria langi* (Erschoff, 1874) (10, 15, 17)
6. *Drasteria picta* (Christoph, 1877) (7)
7. *Drasteria saisani* (Staudinger, 1882) (21, 23)
8. *Drasteria sesquilina* Staudinger, 1888 (5, 17)

Euclidini

1. *Gonospielia munita* (Hübner, [1809–1813]) (8, 22)

Ophiuini

1. *Clytie distincta* (Bang-Haas, 1907) (7, 21, 22, 23)
2. *Clytie gracilis* (Bang-Haas, 1907) (7, 8)
3. *Clytie terrulenta* (Christoph, 1893) (8)
4. *Dysgonia rogenhoferi* (Bohatsch, 1880) (8)
5. *Heteropalpia acrosticta* (Püngeler, 1904) (7, 22)
6. *Zethes monotonus* Wiltshire, 1969 (11)
7. *Zethes pistazina* Weisert, 2000 (11, 21, 23)

Catocalini

1. *Catocala afghana* Swinhoe, 1885 (24, 29, 31, 33)
2. *Catocala desiderata* Staudinger, 1888 (24, 25, 26)
3. *Catocala neglecta* Staudinger, 1888 (25, 26)
4. *Catocala neonympha* (Esper, 1805) (7)
5. *Catocala optima* Staudinger, 1888 (8)
6. *Catocala pudica* Moore, 1879 (25, 26, 33)
7. *Catocala timur* (Bang-Haas, 1907) (8, 22)

Eutelinae

1. *Eutelia adulatrix* (Hübner, 1813) (11, 23)

Noctuidae

Plusiinae

Plusiini

Plusiini: Euchalciina

1. *Euchalcia hissarica* Klyuchko, 1983 (11)

Plusiini: Plusiina

1. *Plusia festucae* (Linnaeus, 1758) (21, 22)

Acontiinae

Armadini

1. *Armada clio* (Staudinger, 1884) (21)
2. *Armada dentata* Staudinger, 1884 (7)
3. *Metopoceras eylandti* (Christoph, 1884) (7, 19)
4. *Tarachepia hueberi* (Ershov, 1874) (7)

Raphiinae

1. *Raphia approximata* Alphéraky, 1887 (14)

Acronictinae

1. *Acronicta angustimacula* Kozhantshikov, 1950 (10)
2. *Acronicta psi iliensis* Draudt, 1931 (4, 11)
3. *Symira albovenosa saepestriata* Alphéraky, 1895 (8)

Metoponiinae

1. *Aegle ochracea* (Erschoff, 1874) (7, 8, 21, 23)
2. *Aegle subflava* (Erschoff, 1874) (7)
3. *Paraegle tessellata* Gerasimov, 1931 (7, 8, 21, 23)

Cuculliinae

1. *Cucullia aksuana* Draudt, 1935 (17)
2. *Cucullia argentina* (Fabricius, 1787) (10, 17)
3. *Cucullia grandpeteri* Ronkay et Ronkay, 2009 (10, 14)
4. **Cucullia tecca* Püngeler, 1906 (2, 5)
5. *Cucullia umbratica* (Linnaeus, 1758) (13, 14)
6. *Shargacucullia naumanni* (Ronkay et Ronkay, 1992) (10, 13, 15)
7. *Shargacucullia nekrasovi* Ronkay, Ronkay et Gyulai, 2011 (3, 4, 15)
8. *Shargacucullia verbasci orientalis* Ronkay, Ronkay et Gyulai, 2011 (2, 3, 4, 5, 11, 14)
9. **Shargacucullia zerkowitzi* (Boursin, 1934) (2, 3, 4, 5)

Oncocnemidinae

1. *Calophasia lunula* (Hufnagel, 1766) (4)
2. *Calophasia opalina* (Esper, 1793) (4, 11)
3. *Lophoterges centralasiae* (Staudinger, 1901) (17)
4. *Lophoterges radians* Ronkay, 2005 (10, 14, 17)
5. **Lophoterges varians* Ronkay, 2005 (11)
6. *Oncocnemis asema* Boursin, 1957 (24, 25, 26, 29)

Amphipyriinae

1. **Amphipyra cancellata* Warren, 1911 (8, 22)
2. *Amphipyra sergei* (Staudinger, 1888) (26)
3. *Amphipyra tragopoginis turcomana* Staudinger, 1888 (26, 29)

Psaphidinae

Psaphidini

1. **Ostheldera kondara* Ronkay et Varga, 1991 (24, 26, 29, 33)

Heliothinae

1. **Chazaria incarnata* (Freyer, 1838) (17)
2. *Periphanes delphinii* (Linnaeus, 1758) (11)

Condicinae

1. *Hadjina cupreipennis* (Moore, 1882) (7)
2. *Hadjina eremita* Bang-Haas, 1912 (14)

Eriopinae

1. **Callopietria latreillei* (Duponchel, 1827) (29)

Bryophilinae

1. **Cryphia maeonis* (Lederer, 1865) (18, 24, 25, 26, 29, 33)
2. *Victrix* sp. (18)

Xyleninae

Caradrinini: Caradrinina

1. *Caradrina sogdiana* (Boursin, 1936) (24)
2. *Caradrina asymmetrica* (Boursin, 1936) (33)
3. *Caradrina bodenheimeri* (Draudt, 1934) (2, 5, 11, 29)
4. *Caradrina clavipalpis* (Scopoli, 1763) (29)
5. *Caradrina fergana* Staudinger, 1892 (26)
6. *Caradrina warneckei* Boursin, 1936 (24)

Cosmiini

1. *Enargia staudingeri* Alphéraky, 1882 (24, 25, 26, 27, 28, 29)
2. *Cosmia subtilis* Staudinger, 1888 (23)

Phlogophorini

1. *Auchmis peterseni* (Christoph, 1887) (4, 10, 14)
2. *Nekrasovia crassicornis* (Boursin, 1960) (25, 27, 33)

Apameini: Oxytrypina

1. **Oxytrypia orbiculosa* (Esper, 1799) (*) (24)

Apameini: Apameina

1. *Apamea furva* ([Denis et Schiffermüller], 1775) (29)
2. *Arcilasisa sobrina* Berio, 1955 (26)
3. **Archanara insoluta* (Warren, 1911) (7, 8)
4. *Arenostola unicolor* (Warren, 1911) (7, 8)
5. *Globia leneki* Gaal-Haszler, Lödl, Ronkay, Ronkay et Varga, 2012 (8)
6. *Hydredes shchetkini* Volynkin, Matov et Gyulai, 2014 (8)
7. *Margelana flavidiator* F. Wagner, 1931 (31, 33)
8. **Nonagria puengeleri pringlei* (Wiltshire, 1958) (8)
9. *Resapamea hedeni* (Graeser, 1889) (11)

Apameini: Sesamiina

1. *Sesamia cretica* Lederer, 1857 (11)

Xylenini: Episemina

1. *Catasema vulpina* (Staudinger, 1888) (24, 27, 28, 29, 33)
2. *Episema lederi* (Christoph, 1885) (33)
3. **Episema minuta* Boursin et Ebert, 1976 (29)
4. *Leucochlaena muscosa* (Staudinger, 1892) (24, 29, 33)
5. *Metopodicha longicornis* Boursin, 1957 (24, 25, 26, 29, 33)

Xylenini: Xylenina

1. *Agrochola trapezoides* (Staudinger, 1882) (33)

2. *Apterogenum ypsilon* ([Denis et Schiffermüller], 1775) (11)
3. *Cirrhia lunaki* Gaal-Haszler, Lödl, Ronkay, Ronkay et Varga, 2012 (26)
4. **Cirrhia tunicata* (Graeser, 1890) (26)
5. **Conistra pseudopolitina* Hacker, 1990 (2, 3)
6. *Eupsilia transversa* (Hufnagel, 1766) (3)
7. *Lithophane alaina* Boursin, 1957 (3, 17)
8. *Maraschia hissarensis* Varga et Ronkay, 1991 (24, 29)
9. *Xylena exsoleta* (Linnaeus, 1758) (3, 4)

Xylenini: Antitypina

1. *Dasyptolia tertia* Ronkay et Nekrasov, 1995 (27)
2. *Dasyptolia akbar* Boursin, 1968 (13, 26, 27, 28)
3. *Dasyptolia danchenkoi* Ronkay, Ronkay et Gyulai, 2014 (6, 13, 15, 27, 28)
4. *Dasyptolia diva schetkini* Ronkay, Ronkay et Gyulai, 2014 (28)
5. *Dasyptolia eberti* Boursin, 1967 (5, 13, 27, 28)
6. *Dasyptolia minuta* Ronkay, Varga et Behounek, 1992 (4)
7. *Dasyptolia psathyra* Boursin, 1967 (27, 28)
8. *Dasyptolia rjabovi* (Bundel, 1966) (31)
9. *Dasyptolia shugnana* Varga, 1982 (6, 13, 27, 28, 31)
10. *Dasyptolia templi centralasiae* Hacker, 1993 (3, 13, 26, 27, 28, 31, 33)
11. *Himalistra eriophora* (Püngeler, 1901) (3)
12. *Himalistra nekrasovi* Hacker et Ronkay, 1992 (28)
13. **Mniotype dubiosa* (Bang-Haas, 1912) (13)
14. *Mniotype juldussica* (Draudt, 1934) (15, 17, 26, 33)
15. *Mniotype lama* Christoph, 1884 (17)
16. *Polymixis acharis afghana* (Boursin, 1963) (17)
17. *Polymixis atossa* (Wiltshire, 1941) (31)
18. **Polymixis colluta* (Draudt, 1934) (29, 33)
19. *Polymixis pamiridia* Boursin, 1960 (29)
20. *Polymixis rosinae* (Bohatsch, 1908) (27, 28, 29, 30, 31, 33)
21. *Polymixis trisignata* (Ménétriés, 1848) (24, 26, 29, 33)

Xylenini: Pseudohadenina

1. *Heterographa tumulorum* Boursin, 1936 (7, 8, 22)
2. *Megahadena megaptera* (Boursin, 1970) (13)
3. *Turanica haeretica* (Püngeler, 1902) (32)

Hadeninae Orthosiini

1. *Egira anatolica* (Hering, 1933) (1, 2, 3, 17)
2. *Harutaeographa akos* Hreblay, 1996 (3)
3. **Orthosia reshoefti* Hreblay et Plante, 1994 (1, 2, 3, 4)
4. *Perigrapha asymmetrica* Varga, 1990 (3, 4)
5. *Perigrapha centralasiae* Bartel, 1906 (1, 2, 3, 4)
6. **Perigrapha heidi* Hreblay, 1996 (3, 4)

Hadenini

1. *Anarta armata* (Staudinger, 1888) (17)
2. *Anarta eremistis* (Püngeler, 1904) (8)
3. *Anarta farnhami palaeartica* (Hacker, 1998) (17)
4. *Anarta nekrasovi* Gyulai et Varga, 1998 (17)
5. *Anarta stigmosa* (Christoph, 1887) (7, 8, 22)
6. *Cardepija helix* (Ershov, 1874) (7, 8, 22)
7. *Cardepija irrisoria* (Ershov, 1874) (7)

8. *Conisania oxyptera* Gyulai et Varga, 1998 (17)
9. *Conisania vidua* (Staudinger, 1888) (8)
10. *Ctenoceratoda thermolimna* Boursin, 1964 (17)
11. *Enterpia alpherakyi* Hacker, 1996 (11)
12. *Hadena afghana* Brandt, 1947 (15, 17)
13. *Hadena aureomixta* Draudt, 1934 (17)
14. *Hadena bactriana* Hacker, 1996 (11)
15. *Hadena bicruris* (Hufnagel, 1766) (11, 14)
16. *Hadena canescens* Brandt, 1947 (17)
17. *Hadena strouhali* Boursin, 1955 (14, 17)
18. *Hadena wiltshirei* (Brandt, 1947) (11)
19. *Hecatera cappa* (Hübner, 1809) (11)
20. *Lacanobia praedita* (Hübner, 1813) (7, 8, 17, 22)
21. *Lacanobia glaseri* Gaal-Haszler, Lödl, Ronkay, Ronkay et Varga, 2012 (5)
22. *Mesoplus contrita* Christoph, 1884 (22)
23. **Namangana cretacea* Staudinger, 1888 (21, 22, 23)
24. *Sideridis peculiaris* Staudinger, 1888 (17)

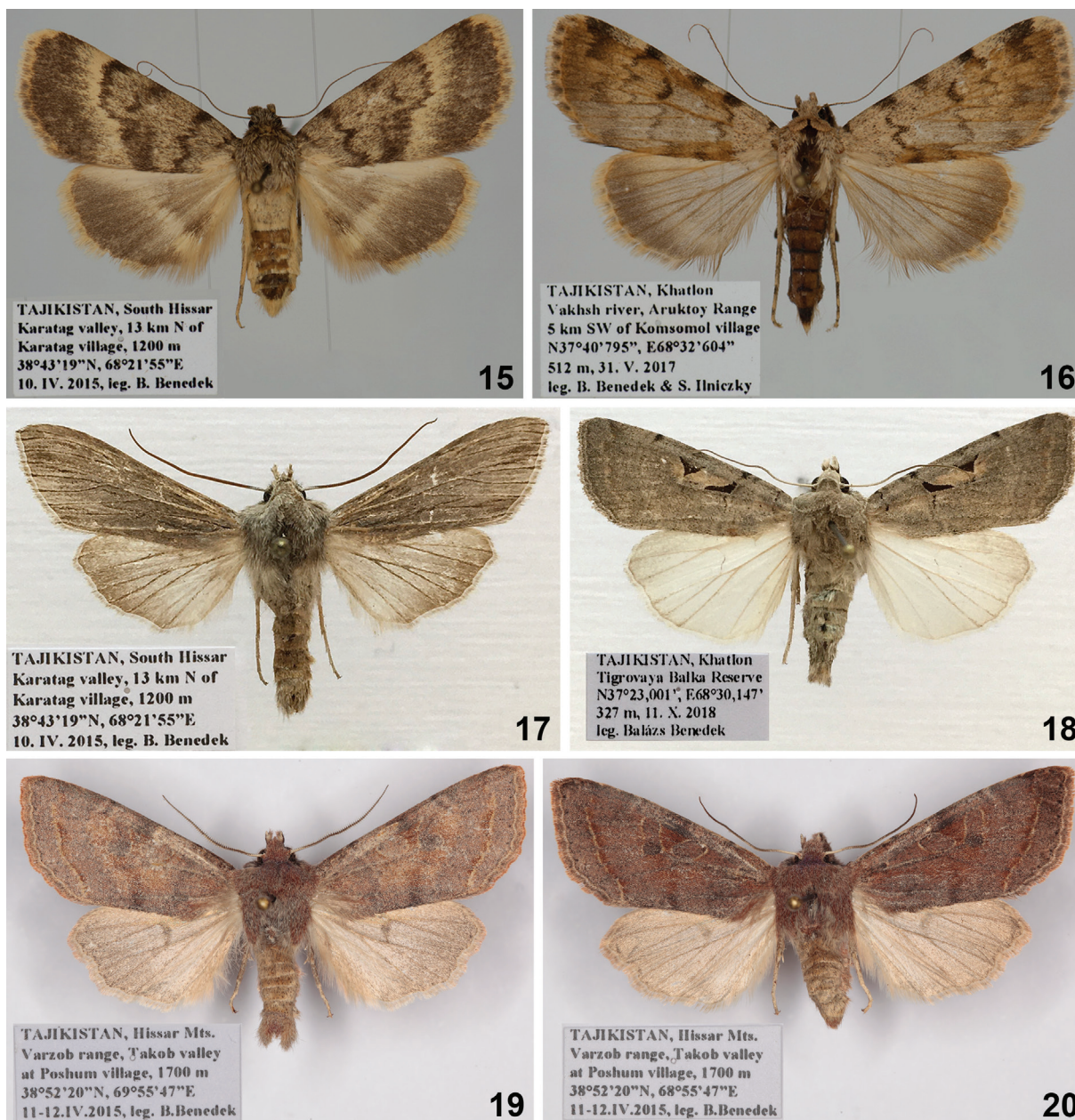
Leucaniini

1. **Anapoma riparia* (Boisduval, 1829) (8)
2. *Leucania palestinensis* (Staudinger, 1897) (7, 8)

Noctuinae

Agrotini: Agrotina

1. **Agrotis golickei* Ershov, 1871 (24, 33)
2. *Agrotis lupinus* Brandt, 1941 (24)
3. *Agrotis obesa* Boisduval, 1829 (24, 26, 33)
4. *Agrotis puta* (Hübner, 1803) (2)
5. *Agrotis semivirens* Kozhanchikov 1937 (14)
6. *Albocosta lasciva* (Staudinger, 1888) (28)
7. *Albocosta ulrici* (Corti et Draudt, 1933) (10, 17)
8. **Chersotis lehmanni* Varga, Gyulai, Ronkay et Ronkay, 2013 (29)
9. *Chersotis sordescens* (Staudinger, 1900) (17)
10. *Dichagyris amoena* Staudinger, 1892 (24, 25, 29)
11. *Dichagyris celebrata* (Alphéraky, 1897) (21, 22, 23)
12. *Dichagyris devota turana* (Staudinger, 1897) (10, 11, 17, 18, 21)
13. *Dichagyris eremicola* (Standfuss, 1888) (18)
14. *Dichagyris glaucescens* (Christoph, 1887) (21, 22, 23)
15. *Dichagyris grisescens* Staudinger, 1879 (21)
16. *Dichagyris himalayensis* Turati, 1933 (33)
17. **Dichagyris naumanni* Varga, 1996 (22)
18. *Dichagyris orientis* (Alphéraky, 1882) (17)
19. *Dichagyris singularis* (Staudinger, 1892) (24, 25, 29, 33)
20. *Dichagyris umbrifera* (Alphéraky, 1882) (18)
21. *Eicomorpha antiqua* Staudinger, 1888 (5, 10, 20)
22. **Eugnorisma cuneiferum* Varga et L. Ronkay, 1994 (26)
23. *Eugnorisma eminens* (Lederer, 1855) (28, 31, 33)
24. *Eugnorisma insignata* (Lederer, 1853) (24, 26, 29)
25. *Eugnorisma mikkolai* Varga, Ronkay, Ronkay et Gyulai, 2015 (24, 25, 26, 29, 33)
26. *Eugnorisma spodia psammochrea* Varga et Ronkay, 1987 (29)
27. **Eugnorisma tamerlana* (Hampson, 1903) (32)
28. *Eugnorisma trigonica* Alphéraky, 1882 (24, 26)
29. *Eugnorisma variago xanthiogo* Varga et Ronkay, 1987 (24, 25, 26, 29)



Figs 15–20. Imagines of noctuid moth species collected in Tajikistan (dorsal view).

15 – *Autophila einsleri* ssp., female; 16 – *Autophila laetifica*, male; 17 – *Cucullia tecca*, male; 18 – *Eugnorisma tamerlana*, male; 19–20 – *Orthosia reshoeffi*: 19 – male, 20 – female.

Рис. 15–20. Совкообразные, собранные в Таджикистане (вид сверху).

15 – *Autophila einsleri* ssp., самка; 16 – *Autophila laetifica*, самец; 17 – *Cucullia tecca*, самец; 18 – *Eugnorisma tamerlana*, самец; 19–20 – *Orthosia reshoeffi*: 19 – самец, 20 – самка.



Figs 21–26. Imagines of noctuid moth species collected in Tajikistan (dorsal view).

21–22 – *Ostheldera kondara*: 21 – male, 22 – female; 23–24 – *Perigrapha heidi*: 23 – male, 24 – female; 25–26 – *Shargacucullia zerkowitzi*: 25 – male, 26 – female.

Рис. 21–26. Совкообразные, собранные в Таджикистане (вид сверху).

21–22 – *Ostheldera kondara*: 21 – самец, 22 – самка; 23–24 – *Perigrapha heidi*: 23 – самец, 24 – самка; 25–26 – *Shargacucullia zerkowitzi*: 25 – самец, 26 – самка.



Fig. 27. *Polymixis colluta*, male, dorsal view.

Рис. 27. *Polymixis colluta*, самец, вид сверху.

30. *Euxoa aquilina* ([Denis et Schiffermüller], 1775) (21)
31. *Euxoa deserta* Staudinger, 1870 (32)
32. *Euxoa hypochlora afghanica* Boursin, 1964 (26, 33)
33. *Euxoa melanothroa* Varga, 1990 (27)
34. *Euxoa obelisca* ([Denis et Schiffermüller], 1775) (29)
35. *Euxoa subeucta* Varga, 2014 (26, 28)
36. *Goniographa discussa* Varga et Ronkay, 2002 (28, 33)
37. *Goniographa gyulaipeteri* Varga et Ronkay, 2002 (24, 26, 29)
38. *Miniphila miniago* (Freyer, 1840) (32)
39. *Opigena polygona obscurata* Sohn-Rethel, 1929 (26)
40. *Parexarnis sollers* (Christoph, 1877) (6)
41. *Rhyacia electra* (Staudinger, 1888) (17)
42. *Standfussiana socors* (Corti, 1925) (31, 33)
43. *Xenophysa pseudopoecila* Varga, 2011 (17)
44. *Xestia erschoffi* Staudinger, 1896 (10, 17)
45. *Xestia xanthographa* ([Denis et Schiffermüller], 1775) (24, 33)

Papilionoidea**Hesperiidae**

Pyrginae

Carcharodini

1. *Carcharodus alceae* (Esper, 1780) (18)
2. *Muschampia lutulenta* (Grum-Grshimailo, 1887) (9, 18)

Thymelicini

1. *Thymelicus lineola* (Ochsenheimer, 1808) (9)

Lycaenidae

Aphnainae

1. *Cigaritis epargyros* (Eversmann, 1854) (7, 22)

Lycaeninae

Lycaenini

1. *Lycaena dimorpha imphera* Nekrutenko, 1984 (18)
2. *Lycaena margelanica* (Staudinger, 1881) (11)
3. *Lycaena thersamon* (Esper, 1874) (10)

Polyommatae

Polyommataini

1. *Aricia agestis* (Denis et Schiffermüller, 1775) (2, 8, 10, 16, 18)
2. *Celastrina argiolus* (Linnaeus, 1758) (2)
3. *Glaucopteryx alexis* (Poda, 1761) (14)
4. *Lachides galba* (Lederer, 1855) (7)
5. *Lycaeides christophi* (Staudinger, 1874) (7, 22)
6. *Plebejus ferganus* (Staudinger, 1881) (17)
7. *Polyommatus dagmara* (Grum-Grshimailo, 1888) (11)
8. *Polyommatus icarus* (Rottemburg, 1775) (10, 11)
9. *Polyommatus (icarus) bienerti* Bálint, 1993 (8, 11, 22)
10. *Polyommatus (icarus) icadius* (Grum-Grshimailo, 1890) (10)
11. *Pseudophilotes vicrama astabene* (Hemming, 1932) (11)

Theclinae

Eumaeini

1. *Callophrys suaveola* (Staudinger, 1881) (2)

2. *Satyrium acuadatum* (Staudinger, 1901) (18)
3. *Satyrium sassanides* (Kollar, 1849) (11)
4. *Tomares fedtschenkoi* (Erschoff, 1874) (2)

Nymphalidae

Nymphalinae

Melitaeini

1. *Melitaea chitralensis enarea* Fruhstorfer, 1916 (10, 14)
2. *Melitaea didyma turkestanica* Sheljuzko, 1929 (18)

Nymphalini

1. *Nymphalis xanthomelas ferveescens* (Stichel, 1908) (11)

Satyrinae

Coenonymphini

1. *Coenonympha nolckenii* (Erschoff, 1874) (10)

Maniolini

1. *Hyponephele dysdora dysdorina* (Heyne, 1894) (18)
2. *Hyponephele korshunovi* Lukhtanov, 1995 (18)

Papilionidae

Parnassiinae

Hypermnestrini

1. *Hypermnestra helios* (Nickerl, 1846) (8)

Papilioninae

Papilionini

1. *Papilio machaon centralis* Staudinger, 1886 (18)
2. *Parnassius mnemosyne gigantea* Staudinger, 1886 (16)

Pieridae

Pierinae: Anthochariini

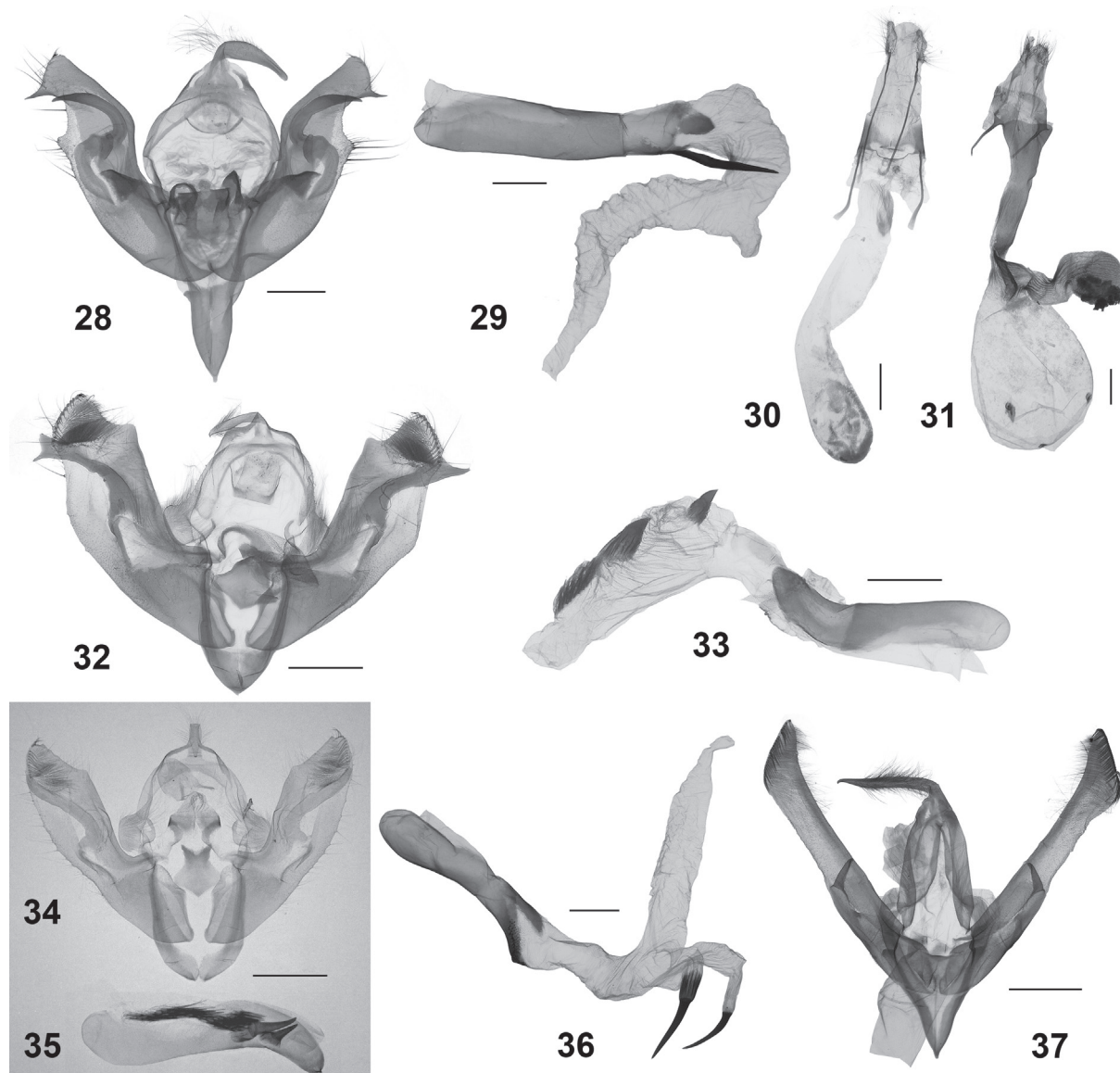
1. *Anthocharis cardaminies alexandra* Hemming, 1933 (2)

Pierinae: Pierini

1. *Euchloe ausonia daphalis* (Moore, 1865) (16)
2. *Metaporia leucodice* (Eversmann, 1843) (14, 16, 17)
3. *Pieris krueperi devta* De Nicéville, 1884 (18)
4. *Pontia callidice kalora* (Moore, 1865) (12)
5. *Pontia daplidice* (Linnaeus, 1758) (7, 14)

Discussion

Autophila einsleri ssp. (Fig. 15) – Syrian-Iranian species with the distribution from Turkmenistan via Levant to Turkey and Cyprus to Iran and Oman [Hacker, 2001; Kravchenko et al., 2007]. The hitherto easternmost known occurrence of the species was in Turkmenistan, Kopet-dag [Ronkay et al., 1998]. In Turkmenistan the subspecies *arnyekolta* has been recorded [Ronkay et al., 1998]. The subspecific status of the Tajikistani population needs to be clarified. New record for the fauna of Tajikistan.



Figs 28–37. Genitalia of noctuid moth species.

28–29 – *Orthosia reshoeffi*, male, Slide No JB2345m (Tajikistan, Hissar Mts., Varzob Range, Takob River valley, Poshum village, 1700 m, 38°52.333'N / 69°55.783'E, 11–12.04.2015, leg. B. Benedek): 28 – genitalia capsula, 29 – aedeagus with everted vesica; 30 – *Ostheldera kondara*, female genitalia, Slide No JB2578f (Tajikistan, South Darvaz Mts., Pianj River, Ravnob River valley, 1.5 km N of Zhag village, 1057 m, 38°14.316'N / 70°31.753'E, 7.10.2018, leg. B. Benedek); 31 – *Perigrapha heidi*, female genitalia, Slide No. JB2377f (Tajikistan, Hissar Mts., Varzob Range, Takob River valley, Poshum village, 1700 m, 38°52.333'N / 69°55.783'E, 11–12.04.2015, leg. B. Benedek); 32–33 – *Polymixis colluta*, male, Slide No JB2593m (Tajikistan, South Darvaz Mts., Pianj River, Ravnob River valley, 1.5 km N of Zhag village, 1057 m, 38°14.316'N / 70°31.753'E, 7.10.2018, leg. B. Benedek): 32 – genitalia capsula, 33 – aedeagus with everted vesica; 34–35 – *Polymixis roehrei*, male, holotype (Afghanistan, Gulbahar): 34 – genitalia capsula, 35 – aedeagus with vesica (not everted); 36–37 – *Shargacucullia zerkowitzi*, male, Slide No JB2378m (Tajikistan, South Hissar, Karatag River valley, 13 km N of Karatag village, 1200 m, 38°43.317'N / 68°21.917'E, 10.04.2015, leg. B. Benedek): 36 – aedeagus with everted vesica, 37 – genitalia capsula. Scale bars 1 mm.

Рис. 28–37. Гениталии Noctuoidea.

28–29 – *Orthosia reshoeffi*, самец, Slide No JB2345m (Таджикистан, Хиссарские горы, Варзобский район, Такобская долина, Посумское село, 1700 м, 38°52.333'N / 69°55.783'E, 11–12.04.2015, лев. В. Бенедек): 28 – генитальная капсула, 29 – эдеагус с вывернутой везикой; 30 – *Ostheldera kondara*, гениталии самки, Slide No JB2578f (Таджикистан, Южный Дарвазские горы, Пианжская река, Равнобская долина, 1,5 км к северу от села Жаг, 1057 м, 38°14.316'N / 70°31.753'E, 7.10.2018, лев. В. Бенедек); 31 – *Perigrapha heidi*, гениталии самки, Slide No. JB2377f (Таджикистан, Хиссарские горы, Варзобский район, Такобская долина, Посумское село, 1700 м, 38°52.333'N / 69°55.783'E, 11–12.04.2015, лев. В. Бенедек); 32–33 – *Polymixis colluta*, самец, Slide No JB2593m (Таджикистан, Южный Дарвазские горы, Пианжская река, Равнобская долина, 1,5 км к северу от села Жаг, 1057 м, 38°14.316'N / 70°31.753'E, 7.10.2018, лев. В. Бенедек): 32 – генитальная капсула, 33 – эдеагус с вывернутой везикой; 34–35 – *Polymixis roehrei*, самец, голотип (Афганистан, Гулбахар): 34 – генитальная капсула, 35 – эдеагус с везикой (не вывернутой); 36–37 – *Shargacucullia zerkowitzi*, самец, Slide No JB2378m (Таджикистан, Южная Хиссар, Караатагская долина, 13 км к северу от Караатагского села, 1200 м, 38°43.317'N / 68°21.917'E, 10.04.2015, лев. В. Бенедек): 36 – эдеагус с вывернутой везикой, 37 – генитальная капсула. Масштабные линейки 1 мм.

Autophila laetifica (Fig. 16) – hitherto it was known to occur only in Turkmenistan (type locality: “Transcaspien, Sumbar” = border of Iran and Turkmenistan, Sumbar River [Ronkay et al., 2014]). New record for the fauna of Tajikistan.

Cucullia tecca (Fig. 17) – known to occur in southern Kazakhstan, Turkmenistan, and from the Caucasus region to Iran [Ronkay, Ronkay, 2009]. New record for the fauna of Tajikistan.

Eugnorisma tamerlana (Fig. 18) – Turanian species, all the known Tajikistani occurrences were based on specimens collected by Schetkin [Radzhabova, Matov, 2020]. During a cold night it was the dominant noctuid at Khatlon (No 32; Fig. 14).

Orthosia reshoefti (Figs 19, 20) – described on the basis of a single female specimen collected in Afghanistan (type locality: Dare Porandey) [Hreblay, Plante, 1994]. New record to the fauna of Tajikistan. Hitherto the male was not known.

Description of male. Habitus as female, but antennae biserrate. Genitalia. Uncus medium-sized, strong, narrow, apically pointed, tegumen low-positioned, hood-like, penicular lobes reduced, fultura quadrangular, shield-like, vinculum long and narrow, V-shaped, sacculus large with strongly sclerotized, triangular apical process, valva narrow, gently S-shaped with small, triangular and setose ventral extension, cucullus oblong, gently setose with thorn-like subapical extension, ampulla strong, falcate, apically pointed, harpe strong, curved and elongated with a small, kidney-shaped process. Aedeagus long, cylindrical, carina with a long, heavily sclerotized ventral thorn and a large and broad, thorn-like dorso-lateral extension. Vesica dorsally everted, tubular and basally broader with one conical diverticulum at the end of its lower-third (Fig. 29: Slide No JB2345m).

Osthelidera kondara (Figs 21, 22) – the species has been described on the basis of the holotype male and the paratype female specimens from Tajikistan (type locality: Tajikistan, Hissar Mts., Kondara valley) [Varga, Ronkay, 1991]. In the Witt Catalogue [Ronkay et al., 2011], it is stated that the species is occurring only in the Hissar mountains. It is extremely similar to *O. minna* Ronkay et Varga, 1994 (type locality: Turkmenistan, Kopet-dag; description is based on the holotype male and 15 (14 males, 1 female) paratypic specimens [Ronkay, Varga, 1994]). According to Ronkay and Varga [1994: 168, figs 212–22g] and Ronkay et al. [2011] *O. minna* can be distinguished on the basis of signa in female genitalia, differing in the size from those of *O. kondara*: two short signa, different in length and situated close to each other in *O. minna*; two somewhat longer signa, with same length and situated further from each other in *O. kondara*. Furthermore, it is remarked that the ostium ring of *O. minna* is deeply incurved, whilst in *O. kondara* the ostium is just slightly curved and that “*minna* has the weakest elongated sclerotised-gelatinous plate at junction of ductus bursae”. Based on our observation, the ductus bursae of *kondara* is two times longer than in *minna*. In the female specimen we examined (collected in South Darvaz) the ostium and ductus show the characteristics of *O. minna*, whilst the signa are typical for *O. kondara*. (Fig. 30: Slide No JB2578f). Consequently, we apply the name *O. kondara* to the specimens we collected.

Perigrapha heidi (Figs 23, 24) – described on the basis of male specimens originating from Tajikistan (type

locality: Tadjikistan Hissarskij mts., Romit [Hreblay, 1996]). Hitherto the female was unknown.

Description of female. Habitus as male, but antennae simple, not pectinate. Genitalia. Papillae anales short and small, oblong in shape, not sclerotized and densely setose. Apophyses anteriores short, thick, apophyses posteriores short and somewhat thicker than apophyses anteriores. Ostium bursae broad, gently arcuate, antrum calyculate, sclerotized. Ductus bursae straight, narrow and sclerotized with gently ribbed surface. Cervix bursae well separated from corpus bursae, its entire surface strongly ribbed, basal and middle third of it tubular, medially strongly turned, terminal third of it globular, strongly sclerotized. Basis of cervix with strongly sclerotized, medium-long, broad and flattened bar. Corpus bursae large, ovoid in shape, membranous with three small signums (Fig. 31: Slide No JB2377f).

Polymixis colluta (Fig. 27) – the species was described from “Askhabad” (= Ashgabat, Turkmenistan). In general, a similar species, *P. roehrei* Boursin, 1961 (type locality: Afghanistan, Gulbahar), has been recorded from Central Asia [Hacker, 2001; Gorbunov, 2011]. The Tajikistani material originates from about 360 km north of the type locality of *P. roehrei*. The holotype of *P. roehrei* is identical in habitus and genitalia configurations with those of *P. colluta* (Figs 32–35: Slide No JB2593m). We consider the two nominal taxa as representatives of a single biological species, consequently *Dasystemum colluta* Draudt, 1934 = *Polymixis roehrei* Boursin, 1961, **syn. n.**

Shargacucullia zerkowitzi (Figs 25, 26) – the type material originated from “Transcaspiya, Arwas” (= Western Turkmenistan, Arvas). It was stated that the species was endemic to Kopet-dag [Ronkay et al., 2011]. The Tajikistani specimens were somewhat larger with darker wing colouration compared to specimens originating from Iran and Turkmenistan, but we were unable to detect any special character in the genital configuration (Figs 36, 37: Slide No JB2378m). New record for the fauna of Tajikistan.

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