Contribution to the Knowledge of the Balkan Lepidoptera: Nocturnal Lepidoptera of Western Serbia (Lepidoptera)

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**Abstract**

Here are presented all data of the authors from five nights collecting in western Serbia at four localities. 401 species collected at light from 13 families are reported. Six species: Catoptria pauperellus (Treitschke, 1832), Macaria waucaria (Linnaeus, 1758), Charissa ambiguata (Duponchel, 1830), Charissa graeca (Staudinger, 1871), Colostygia aptata (Hübner, 1813) and Eupithecia pimpinellata (Hübner, 1813) are new for Serbia. Seven other species are reported for a second time for the country. With illustrations of moths and their genitalia.

**Key words:** Macrolepidoptera, Crambidae, Psychidae, faunistic, Dinaric Alps.

**Introduction**

All regions of Serbia deserve more comprehensive investigation of moth fauna. In almost every recently published faunistic paper on moths of Serbia new country records are reported. Western Serbia is situated in central part of the Balkan Peninsula and it is characterized by Dinaric Alps and numerous river gorges and canyons, while in its northernmost part there is Peripanonnian lowland. There are many mountains in western Serbia, however only two summits are more than 1800 m high, both on Mt. Golija. Much higher mountains of more than 2000 m height in surrounding areas of Bosnia & Herzegovina and Montenegro received more lepidopterist’s attention.

How moth fauna can be interesting in western Serbia shows a fact that just a few occasional visits can bring interesting results including new country records. Several species recently reported as new for Serbia were found in western Serbia (Beshkov 2017a, b; Stojanović et al. 2014; Stojanović et al. 2018). For five nights collecting there we found 13 new species for Serbia, 11 of which are Macrolepidoptera, published here and in other articles (Beshkov 2017a, b; Beshkov 2020). The number of the new Geometridae is greatest: 10 from 11. Most of them are from difficult genera with numbers of small in size representatives as Eupithecia which are not satisfactorily investigated. The reason for this is very limited number of local researchers on this family, and that for sure identification of many species it is necessary to examine male and female genitalia and sometime elaboration of precise microscopic genitalia slide. On the other hand good results can be achieved only by using modern collecting methods as autonomic source of electricity for the lamps in suitable habitats and ran the traps throughout the night.
Material and Methods

Collecting methodology involved 2 portable light traps with an 8 watt actinic (368 nm) and 8 watt “Blacklight”, both powered by 12 volt 9Ah batteries, as well as a Finnish “tent trap” with a 160 watt MV bulb at the top of the pole and a 20 watt (368 nm) black light over the catching pot below. An additional 20 watt (368nm) lamp was also positioned about 70 meters from the tent trap. Distance between Finnish “tent trap” and light traps, as well as between light traps is sometime more than 1 km as they are deposed in different exposition and habitats if possible. All traps ran throughout the night. In Savina Voda and Vasilin Vrh in July only light traps were used because of the rain.

Collecting localities in chronological order are:

**Savina Voda** (Fig. 1): Prijepolje Region, Jabuka Pass highland, Zvijezda, Savina Voda, 1117m, N43°22'02", E019°33'07", 16.VII.2014, grasslands on limestone rocky area with *Juniperus communis*, etc., S. Beshkov leg., at light traps.

**Karaula** (Fig. 2): Ćetanica Mt., near Karaula Village, 1369m, N43°19'10", E019°49'54", 04.VIII.2015, limestone area, grasslands with *Juniperus communis* and *Picea abies* forest around, S. Beshkov & Ana Nahirnić leg. at lamps and light traps.

**Vasilin Vrh, August** (Fig. 3): Javor Mts, below Vasilin Vrh near Lepojevići Village, 1489m, N43°26'28", E020°03'06", 12.VIII.2015, limestone area with *Juniperus communis* near *Fagus* forest, S. Beshkov & Ana Nahirnić leg.leg. at lamps and light traps.

**Vasilin Vrh, July** (Fig. 4): as above, 02.VII.2019, light traps.

**Mali Jadovnik** (Fig. 5): Jadovnik Mt., Mali Jadovnik, 1505m, N43°18'00", E019°46'40", 03.VII.2019, limestone area with *Juniperus communis* near coniferous forest, S. Beshkov & A. Nahirnić leg. at lamps and light traps.

*Figure 1.* Collecting locality “Savina Voda”.


Figure 2. Collecting locality “Karaula”.

Figure 3. Collecting locality “Vasilin Vrh, August”, light trap place. Red dot indicated “Finish tent” trap.
Figure 4. Collecting locality “Vasilin Vrh, July”.

Figure 5. Collecting locality “Mali Jadovnik”.
All genitalia slides were photographed by S. Beshkov with a Zeiss stereo microscope Stemi 2000-C with axiocam eRc 5s digital camera. Genitalia slides are fixed on glass in Euparal, solitary everted vesicas were photographed in alcohol before mounting on glass. All genitalia were stained with Merbromin solution 2%. Moths and collecting localities are photographed with Sony DSChX400v digital camera. All trips were self-financed by the authors and undertaken in their own time.

Families are arranged according to Aarvik et al. (2017). Sequence and nomenclature of families Erebidæ and Noctuidae follow Yela et al. (2011) with incorporated subsequent changes from recent taxonomic revisions. The Geometridae are arranged according to Hausmann & Sihvonen (2019). When the specimen’s number is indicated, this means that they are in the coll. S. Beshkov in the National Museum of Natural History, Sofia.

Results

Inventory of the species:

**Hepialidæ**
*Triodia sylvina* (Linnaeus, 1761) Karaula; Vasilin Vrh, August, 2 females.

**Psychidæ**
*Bijugis bombycella* ([Denis & Schiffermüller], 1775) Savina Voda, 2 males. Second record for Serbia. First one from Fruška Gora (Stojanović 2012).

**Cossidæ**
*Cossus cossus* (Linnaeus, 1758) Karaula; Mali Jadovnik.

**Crambidæ**
*Catoptria pauperellus* (Treitschke, 1832) Mali Jadovnik, 1 male (Fig. 6a). New species for Serbia. Although, included for Serbia in Plant & Jakšić (2018), references cited therein do not concern Serbia in fact. Rebel (1917) mentioned this species to be collected by Penther on Mt. Žljeb from 1700 to 1850 m. The camp where Penther has been staying was at 1700 m, at the pass on the road from Rožaje to Peć (=Peja). We suppose that he collected around his camping place as that it is hilly area with elevations of 1850 m in close vicinity and give possible approximate coordinates of his camp as N42°46'49", E020°14'10". Moreover, as road goes to Peć elevation is lower than 1700 m. Plant & Jakšić (2018) quotes Slamka (2008), but he mentioned only ex-Yugoslavia. *Catoptria pauperellus* is very rare species in the Balkans. The nearest localities include Žljeb in Montenegro (Rebel, 1917) and mountain areas from 1200 to 1750 m in central B&H (Mt. Trebević, Mt. Bjelašnica, Mt. Treskavica, Kalinovik, Makljen pass) (Rebel, 1904). Plant & Jakšić (2018) cited Rebel (1904) for the Montenegro but there is no such information in mentioned paper and all mountains are situated in B&H.

**Drepanidæ**
*Thyatira batis* (Linnaeus, 1758) Karaula.
*Habrosyne pyritoides* (Hufnagel, 1766) Karaula; Vasilin Vrh, August.
*Teethea or* ([Denis & Schiffermüller], 1775) Savina Voda; Mali Jadovnik.
*Ochropacha duplaris* (Linnaeus, 1761) Vasilin Vrh, August, 2 females; Mali Jadovnik, 1 male. In Serbia known only from there [Vasilin Vrh, August] (Beshkov, 2017a) and from Klisura Detine (Dodok 2007).
*Falcaria lacertinaria* (Linnaeus, 1758) Vasilin Vrh, August, 1 male. In Serbia known only from there (Beshkov 2017a) and from Mt. Jelova Gora (Dodok 2007).
*Watsonalla cultraria* (Fabricius, 1775) Vasilin Vrh, August.
*Cilix glaucata* (Scopili, 1763) Karaula.

**Geometridæ**
Geometrinae
*Aplasta ononaria* (Fuessly, 1783) Vasilin Vrh, July.
Hemistola chrysoprasaria (Esper, 1795) Karaula.

Pseudoterpna pruinata (Hufnagel, 1767) Savina Voda; Mali Jadovnik.

Geometra papilionaria Linnaeus, 1758 Savina Voda.

Chlorissa cloraria (Hübner, 1813) Vasilin Vrh, July, 1 male, genitalia checked.

Ennominae

Ligidia adustata ([Denis & Schiffermüller], 1775) Vasilin Vrh, August.

Odontognophos dumetata (Treitschke, 1827) Vasilin Vrh, August, 1 male. In Serbia known only from there (Beshkov 2017a) and from Užice region (Dodok 2006). The report of Zečević & Radovanović (1974) and Zečević (2002) are omitted because of possible misidentification. Flight period for this autumn species is given for June and July and it is also reported as a numerous species. Moreover, Neognopharmia stevenaria (Boisduval, 1840), which can be confused with O. dumetata, was not reported in Zečević & Radovanović (1974). In Hric & Husarik (2014-2020) illustration of O. dumetata is N. stevenaria indeed. We suspect the same mistake in the reports of Zečević & Radovanović (1974) and Zečević (2002).

Lomaspilis marginata (Linnaeus, 1758) Mali Jadovnik

Heliomata glarearia ([Denis & Schiffermüller], 1775) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Macaria notata (Linnaeus, 1758) Vasilin Vrh, August, 1 male.

Macaria alternata ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August.

Macaria liturata (Clerck, 1759) Mali Jadovnik.

Macaria wauaria (Linnaeus, 1758) Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik, 1 male. New species for Serbia.

Chiasmia clathrata (Linnaeus, 1758) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Ourapteryx sambucaria (Linnaeus, 1758) Savina Voda.

Selenia tetralunaria (Hufnagel, 1767) Savina Voda, 1 male.

Crocallis elinguaria (Linnaeus, 1758) Vasilin Vrh, August.

Campaea margaritaria (Linnaeus, 1761) Vasilin Vrh, July; Mali Jadovnik.

Cabera pusaria (Linnaeus, 1758) Savina Voda; Mali Jadovnik.

Gnophos furvata ([Denis & Schiffermüller], 1775) Karaula.

Charissa obscurata ([Denis & Schiffermüller], 1775) Vasilin Vrh, August, 1 male, genitalia checked.

Charissa pullata ([Denis & Schiffermüller], 1775) Savina Voda (Beshkov 2015); Karaula, 1 male.

Charissa ambiguata (Duponchel, 1830) Mali Jadovnik, 2 males (Fig. 6b), Gen. prep. 2./09.I.2020, S. Beshkov, male genitalia on glass in euparal (Fig. 10a) and another male genitalia on paper. New species for Serbia.

Charissa graecaria (Staudinger, 1871) (=certhiatus Rebel & Zerny, 1931) Vasilin Vrh, August, 4 males (Fig. 6c) and 5 females, Gen. preps 1./26.I.2020 (Fig. 10b) and 2./26.I.2020 (Fig. 10c), male genitalia with everted vesica on glass in euparal; Vasilin Vrh, July, 1 male (Fig. 6d) and 1 female (Fig. 6e). New species for Serbia. Everted vesica has never been illustrated before. Here is illustrated in two different positions, one of which is before to be mounted on glass. Vesica is with small elongate basal diverticula which goes back along aedeagus and main part partially split into two lobes, one with single large cornutus and another with four smaller cornuti.

Siona lineata (Scopoli, 1763) Mali Jadovnik.

Aspilates gilvaria ([Denis & Schiffermüller], 1775) Karaula, 1 male.

Hypomecis roboraria ([Denis & Schiffermüller], 1775) Vasilin Vrh, August.

Biston betularia (Linnaeus, 1758) Karaula; Vasilin Vrh, July; Mali Jadovnik.

Selido Goodsum plumaria ([Denis & Schiffermüller], 1775) Vasilin Vrh, August, 1 male.

Peribatodes secundaria ([Denis & Schiffermüller], 1775) Karaula.

Alcis repandata (Linnaeus, 1758) Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Ascotis selenaria ([Denis & Schiffermüller], 1775) Vasilin Vrh, August.

Bupalus piniaria (Linnaeus, 1758) Savina Voda.

Sterrhinae

Idaea rufaria (Hübner, 1799) Savina Voda, 1 female, genitalia checked.
Figure 6. a - Catoptria pauperellus (Treitschke, 1832), male; b – Charissa ambiguata (Duponchel, 1830), male. Mali Jadovnik; c – Charissa graecaria (Staudinger, 1871), male uperside. Vasilin Vrh, August; d – Charissa graecaria (Staudinger, 1871), male underside. Vasilin Vrh, July; e – Charissa graecaria (Staudinger, 1871), female uperside. Vasilin Vrh, July; f – Thera variata ([Denis & Schiffermüller], 1775), male. Vasilin Vrh, August.

Idaea moniliata ([Denis & Schiffermüller], 1775) Savina Voda, 1 male.
Idaea dilutaria (Hübner, 1799) Savina Voda, 1 male and 1 female, genitalia checked.
Figure 7. a – Colostygia aptata (Hübner, 1813), female, Mali Jadovnik; b – Nebula pirinica (Reisser, 1936), male. Gen. prep. 1/12.1.2020, S. Beshkov, Mali Jadovnik; c – Nebula pirinica (Reisser, 1936), male. Gen. prep. 2/12.1.2020, S. Beshkov, Mali Jadovnik; d – Nebula pirinica (Reisser, 1936), male. Gen. prep. 3/12.1.2020, S. Beshkov, Mali Jadovnik; e – Nebula pirinica (Reisser, 1936), female. Gen. prep. 4/12.1.2020, S. Beshkov, Mali Jadovnik; f – Nebula pirinica (Reisser, 1936), male, Vasilin Vrh, July.

Idaea metohiensis (Rebel, 1900) Karaula, 2 females, Gen. prep. 1/16/IV.2016, S. Beshkov, other specimen checked, genitalia on paper; Vasilin Vrh, August, 1 female, genitalia checked. Reported from Karaula as a new for Serbia (Beshkov 2017b). Second report for Serbia.

Idaea aversata (Linnaeus, 1758) Savina Voda; Karaula; Vasilin Vrh, August.

Idaea deversaria (Herrich-Schäffer, 1847) Savina Voda, 1 male and 1 female, genitalia checked.
Figure 8. a – Nebula pirinica (Reisser, 1936), female. Vasilin Vrh, July; b – Eupithecia pimpinellata (Hübner, 1813), female. Gen. prep. 1./3.II.2020, S. Beshkov, Vasilin Vrh, July; c – Eupithecia icterata (de Villers, 1789), female. Gen. prep. 2./11.I.2020, S. Beshkov, Mali Jadovnik; d – Eupithecia denotata (Hübner, 1813), female. Gen. prep. 2./3.II.2020, S. Beshkov, Vasilin Vrh, July; e – Eupithecia subfuscata (Haworth, 1809), male. Gen. prep. 1./11.I.2020, S. Beshkov, Mali Jadovnik; f – Calliergis ramosa (Esper, 1786), male. Vasilin Vrh, July.

Scopula immorata (Linnaeus, 1758) Vasilin Vrh, August, 1 male; Mali Jadovnik, 1 male.

Scopula incanata (Linnaeus, 1758) Savina Voda, 1 male, sternum checked; Vasilin Vrh, July, 1 male and 1 female; Mali Jadovnik.

Scopula marginepunctata (Goeze, 1781) Karaula.

Rhodostrophia vibicaria (Clerck, 1759) Savina Voda; Karaula; Vasilin Vrh, July; Mali Jadovnik.

Cyclophora linearia (Hübner, 1799) Karaula, 1 male, genitalia checked; Vasilin Vrh, August, 4 males and 1 female, genitalia of 2 males and 1 female checked.

Larentiinae

Shistostege decussata ([Denis & Schiffermüller], 1775) Savina Voda.
Figure 9. a – Caradrina suscianja (von Mentzer, 1981), male, Vasilin Vrh, July; b – Pachetra sagittigera (Hufnagel, 1766), male, aberrant. Vasilin Vrh, July; c – Hadena wehrlii frequens Hacker, 1996, male. Gen. prep. 1./31.I.2020, S. Beshkov, Vasilin Vrh, July; d – Hadena caesia ([Denis & Schiffermüller], 1775) female. Vasilin Vrh, July.

Aplocera praeformata (Hübner, 1826) Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Aplocera simpliciata (Treitschke, 1835) Vasilin Vrh, July.

Scotopteryx mucronata (Scopoli, 1763) Vasilin Vrh, July, 1 male, genitalia checked.

Scotopteryx luridata (Hufnagel, 1767) Savina Voda, 1 male, genitalia checked; Mali Jadovnik, 2 males, genitalia checked.

Scotopteryx ignorata Huemer & Hausmann, 1998 Savina Voda, 1 old female specimen, genitalia checked (Fig. 13a). Second report for Serbia, previously known only from Suva Planina in eastern Serbia (Beshkov 2015).

Scotopteryx bipunctaria ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August; Vasilin Vrh, July, 1 male; Mali Jadovnik, 3 males.

Scotopteryx moeniata (Scopoli, 1763) Karaula, 1 male; Vasilin Vrh, August.

Scotopteryx chenopediata (Linnaeus, 1758) Karaula; Vasilin Vrh, August.

Cataclysmes riguata (Hübner, 1813) Savina Voda; Karaula, Vasilin Vrh, August; Vasilin Vrh, July.

Xanthorhoe fluctuata (Linnaeus, 1758) Karaula; Vasilin Vrh, August.

Xanthorhoe montanata ([Denis & Schiffermüller], 1775) Karaula.

Catarhoe cuculata (Hufnagel, 1767) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Camptogramma bilineata (Linnaeus, 1758) Savina Voda; Vasilin Vrh, August.

Camptogramma scripturata (Hübner, 1799) Vasilin Vrh, August, 1 male, Gen. prep. 3./30.I.2020, S. Beshkov, male genitalia on glass in euparal (Beshkov, 2020). Second record for Serbia, first one is from Peć (Rebel 1917). Localities in Rebel & Zerny (1931) are wrongly incorporated by Tomić et al. (2002) for Serbia: Vunsaj [Vusanje, S of Gusinje] is in Montenegro; Beshtriq (Pashtrik) is a mountain on the border with Albania and the collecting locality is clearly indicated that is in Albania; Zljeb [Mali i Zhlebit] is a
mountain on the border with Montenegro. At Žljeb it was collected at day and attracted by light. Night collecting was conducted only at the camping place at ca. 1700 m for which we assume it was in Montenegro (see our comment for *C. pauperellus*). During the day at the elevation 1450-1700 m it could have been collected in the area from camping place (1700 m) down the road in the East to Serbian border (1450 m). Both localities fall into present borders of Montenegro.

**Figure 10.** a – *Charissa ambiguata* (Duponchel, 1830), male genitalia, Gen. prep. 2./09.I.2020, S. Beshkov, Mali Jadovnik; b –10. *Charissa graecaria* (Staudinger, 1871), male genitalia with everted vesica, Gen. prep. 1./26.I.2020 S. Beshkov, Vasilin Vrh, August; c – *Charissa graecaria* (Staudinger, 1871), male genitalia with everted vesica before covered by glass, Gen. prep. 2./26.I.2020, S. Beshkov, Vasilin Vrh, August.

*Epirhoe tristata* (Linnaeus, 1758) Vasilin Vrh, July, 7 males; Mali Jadovnik, 1 male.

*Epirhoe alternata* (Müller, 1764) Karaula; Vasilin Vrh, August.

*Epirhoe molluginata* (Hübner, 1813) Vasilin Vrh, July, 1 male and 2 females; Mali Jadovnik, 2 males. Second report for Serbia, previously known only from Mt. Tara (Dodok 2006).

*Epirhoe galiata* ([Denis & Schiffermüller], 1775) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July.

*Euphyia adumbraria* (Herrich-Schäffer, 1852) Savina Voda, 1 male, Gen. prep. 1./29.I.2020, S. Beshkov, male genitalia with coremata on glass in euparal (Beshkov 2020).

*Euphyia frustata* (Treitschke, 1828) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

*Hydriomena furcata* (Thunberg, 1784) Karaula, 1 male and 1 female, genitalia checked.

*Pennithera firmata* (Hübner, 1822) Vasilin Vrh, August, 1 female.

*Thera cognata* (Thunberg, 1792) Karaula; Vasilin Vrh, August.

*Thera variata* ([Denis & Schiffermüller], 1775) Vasilin Vrh, August, 2 males (Fig. 6f), antennae checked.

*Cosmorhoe ocellata* (Linnaeus, 1758) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

*Eulithis prunata* (Linnaeus, 1758) Vasilin Vrh, August, 4 males.

*Gandaritia pyraliata* ([Denis & Schiffermüller], 1775) Savina Voda; Karaula; Vasilin Vrh, August.

*Ecliptopera silaceata* ([Denis & Schiffermüller], 1775) Vasilin Vrh, August, 2 males and 1 female.

*Dysstroma citrata* (Linnaeus, 1758) Savina Voda; Vasilin Vrh, August, 1 male.

*Colostygia aptata* (Hübner, 1813) Vasilin Vrh, August, 1 male, genitalia checked; Mali Jadovnik, 1 male and 1 female (Fig. 7a), Gen. prep. 1./09.I.2020, S. Beshkov, female genitalia on glass in euparal (Fig. 13b). New species for Serbia.

*Colostygia pectinataria* (Knoch, 1781) Vasilin Vrh, July; Mali Jadovnik.

*Coenotephria salicata* ([Denis & Schiffermüller], 1775), Karaula, 5 males and 3 females, genitalia of all specimens checked; Vasilin Vrh, August 4 males and 3 females, genitalia of 1 male and 1 female checked.
Nebula pirinica (Reisser, 1936) Karaula, 1 male, Gen. prep. 2./16.IV.2016, S. Beshkov; Mali Jadovnik, 3 males (Figs 7b, c, d) and 1 female (Fig. 7e), Gen. preps 1-3./12.I.2020, S. Beshkov, males (Fig 11), Gen. prep. 4./12.I.2020, S. Beshkov, female (Fig. 13c), on glass in euparal; Vasilin Vrh, July 5 males (Fig. 7f) and 1 female (Fig. 8a), Gen. prep. 1./06.II.2020 S. Beshkov, male genitalia on glass in euparal, female on paper. Second report for Serbia, first one is from Mt. Ćetanica near Karaula Village (Beshkov 2017b). Measurements of palpi, antennae cilia, male and female genitalia fit well to Hausmann & Viidalepp (2012). In Serbia its sister species Nebula nebulata (Treitschke, 1828) has three localities (Stojanović et al. 2019). Nebula pirinica is a species with range from the central and southern Balkan Peninsula, north-eastern Turkey (Hausmann & Viidalepp 2012) and Western and Eastern Caucasus (Beljaev & Mironov 2019). According to Beshkov & Nahirić (2020) probably all reports for Nebula nebulata (Treitschke, 1828) for the Balkans refer to Nebula pirinica.

Figure 11. a – Nebula pirinica (Reisser, 1936), male genitalia. Gen. prep. 1./12.I.2020, S. Beshkov, Mali Jadovnik; b – Nebula pirinica (Reisser, 1936), male genitalia. Gen. prep. 1./12.I.2020, S. Beshkov, Mali Jadovnik; c – Nebula pirinica (Reisser, 1936), male genitalia. Gen. prep. 3./12.I.2020, S. Beshkov, Mali Jadovnik.

Triphosa sabaudiata (Duponchel, 1830) Savina Voda, 1 female.
Triphosa dubitata (Linnaeus, 1758) Vasilin Vrh, August.
Horisme vitalbata ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August; Vasilin Vrh, July.
Horisme corticata (Treitschke, 1835) Karaula.
Horisme tersata ([Denis & Schiffermüller], 1775) Vasilin Vrh, July, 1 male, genitalia checked.
Perizoma alchermillata (Linnaeus, 1758) Vasilin Vrh, July, 1 male and 4 females.
Perizoma blandiata ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, July, 1 male.
Perizoma albulata ([Denis & Schiffermüller], 1775) Mali Jadovnik, 4 males.
Chloroclystis v-ata (Haworth, 1809) Karaula.
Eupithecia linariata ([Denis & Schiffermüller], 1775) Vasilin Vrh, July, 1 female.
Eupithecia alliaria Staudinger, 1870 Karaula, 1 male, Gen. prep. 2./14.IV.2016, S. Beshkov. Third report for Serbia, recently reported as a new for the country from Mt. Stolovi in western Serbia (Stojanović et al. 2019), however it was already published by Stojanović & Pužarević (2008) for Mt. Stol in eastern Serbia.
Eupithecia pusillata ([Denis & Schiffermüller], 1775) Savina Voda, 1 male, genitalia checked; Karaula, 1 male and 3 females, genitalia of all specimens checked; Vasilin Vrh, August, 6 males and 4 females, genitalia of all specimens checked. All records published in Beshkov (2020).
Eupithecia pimpinellata (Hübner, 1813) Vasilin Vrh, July, 1 female (Fig. 8b), Gen. prep. 1./03.II.2020, S. Beshkov, female genitalia on glass in euparal (Fig. 13d). In Tomić et al. (2002) the name pimpinellata Gn., 1857 is presented as a synonym of Eupithecia virgaureata Doubleday, 1861. In Mironov (2003) pimpinellata nec Hübner, 1813 is unvaluable name as a result of misidentification of Eupithecia virgaureata Doubleday. New species for Serbia.
Eupithecia centaureata ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August.
Eupithecia veratraria Herrich-Schäffer, 1848 Karaula, 1 male, Gen. prep. 1./14.IV.2016, S. Beshkov.
Eupithecia icterata (de Villers, 1789) Karaula, 1 female, genitalia checked; Vasilin Vrh, July, 2 males and 2 females, genitalia of all specimens checked; Mali Jadovnik, 1 female (Fig. 8c), Gen. prep. 2./11.I.2020, S. Beshkov, on glass in euparal (Fig. 13e).
Eupithecia denotata (Hübner, 1813) Vasilin Vrh, July, 1 female (Fig. 8d), Gen. prep. 2./03.II.2020, S. Beshkov, female genitalia on glass in euparal (Fig. 13f). Identification is suggested by Dr J. Gelbrecht.
Eupithecia impurata (Hübner, 1813) Karaula (Beshkov 2020).
Eupithecia subfuscata (Haworth, 1809) Mali Jadovnik, 1 male (Fig. 8e), Gen. prep. 1./11.1.2020 S. Beshkov, on glass in euparal (Fig. 12a).

Figure 12. a – Fig. 35. Eupithecia subfuscata (Haworth, 1809), male genitalia with sternum 8, Gen. prep. 1./11.1.2020, S. Beshkov, Mali Jadovnik; b – Eilema paliatella (Scopoli, 1763), male genitalia with everted vesica. Gen. prep. 1./28.1.2020, S. Beshkov, Vasilin Vrh, August; c – Eilema paliatella (Scopoli, 1763), everted vesica before mounting. Gen. prep. 1./28.1.2020, S. Beshkov, Vasilin Vrh, August; d – Apamea syriaca tallosi Kovács & Varga, 1969, male genitalia with everted vesica, Gen. prep. 1./13.1.2020 S. Beshkov, Karaula; e – Hadena wehrlii frequens Hacker, 1996, male genitalia with everted vesica. Gen. prep. 1./31.1.2020, S. Beshkov. Vasilin Vrh, July; f – Rhyacia simulans (Hufnagel, 1766), male genitalia with everted vesica. Vasilin Vrh, July.

Lasiocampidae
Malacosoma neustria (Linnaeus, 1758) Savina Voda; Karaula.
Malacosoma castrensis (Linnaeus, 1758) Savina Voda.
Lasiocampa trifoli (Denis & Schiffermüller, 1775) Vasilin Vrh, August
Macrothylacia rubi (Linnaeus, 1758) Mali Jadovnik
Dendrolimus pini (Linnaeus, 1758) Karaula; Mali Jadovnik.
Gastropacha quercifolia (Linnaeus, 1758) Savina Voda.
Odonestis pruni (Linnaeus, 1758) Vasilin Vrh, July.

Saturniidae
Antheraea yamamai (Guérin-Méneville, 1861) Vasilin Vrh, August (Nahirić & Beshkov 2015).

Sphingidae
Laothoe populi (Linnaeus, 1758) Savina Voda; Mali Jadovnik.
Sphinx pinastri Linnaeus, 1758 Savina Voda; Mali Jadovnik.
Agrius convolvuli (Linnaeus, 1758) Mali Jadovnik.
Hyles euphorbiae (Linnaeus, 1758) Savina Voda, adult and larva last instar.
Hyles gallii (Rottemburg, 1775) Mali Jadovnik, 1 male.
Hyles livornica (Esper, 1780) Karaula.
Deilephila porcellus (Linnaeus, 1758) Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Notodontidae
Furcula furcula (Clerck, 1759) Vasilin Vrh, August.
Stauropus fagi (Linnaeus, 1758) Vasilin Vrh, July.
Drymonia querna [(Denis & Schiffermüller], 1775) Savina Voda.
Notodonta dromedaries (Linnaeus, 1758) Karaula; Vasilin Vrh, August; Vasilin Vrh, July.
Notodonta ziczac (Linnaeus, 1758) Vasilin Vrh, August.
Pheosia tremula (Clerck, 1759) Karaula; Vasilin Vrh, August.
Pheosia gnoma (Fabricius, 1766) Karaula, 2 males. Already reported from there as a second report for Serbia (Beshkov 2017a), first ones are of Dodok (1997) for Mt. Tara and Jelova Gora.
Pterostoma palpina (Clerck, 1759) Vasilin Vrh, August.
Phiodon capucina (Linnaeus, 1758) Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.
Phalera bucephala (Linnaeus, 1758) Vasilin Vrh, July.
Clostera pygra (Hufnagel, 1766) Vasilin Vrh, August.

Erebidae
Hypeninae
Hypona proboscidalis (Linnaeus, 1758) Vasilin Vrh, July.
Herminiinae
Zanclognatha lunalis (Scopoli, 1763) Savina Voda.
Lymantriinae
Leucoma salis (Linnaeus, 1758) Mali Jadovnik.
Lymantria monacha (Linnaeus, 1758)Vasilin Vrh, August.
Euproctis chrysorrhoea (Linnaeus, 1758) Savina Voda; Vasilin Vrh, August.
Calliteara pudibunda (Linnaeus, 1758) Vasilin Vrh, July; Mali Jadovnik.
Gynaephora fasicelina (Linnaeus, 1758) Karaula; Mali Jadovnik
Arctiinae
Spilarctia lutea (Hufnagel, 1766) Vasilin Vrh, July.
Spilosoma lubricipeda (Linnaeus, 1758) Mali Jadovnik.
Watsonarcia deserta (Bartel, 1902) Mali Jadovnik, 3 males.
Diacrisia sannio (Linnaeus, 1758) Vasilin Vrh, August; Mali Jadovnik.
Chelis maculosa maculosa (Gerning, 1780) Savina Voda, 3 males; Vasilin Vrh, July, 3 males; Mali Jadovnik, 37 males.
Euplagia quadripunctaria (Poda, 1761) Karaula, 1 male and 1 female; Vasilin Vrh, August, 1 male and 2 females.
Miltochrista miniata (Forster, 1771) Karaula.
Cybosia mesomella (Linnaeus, 1758) Vasilin Vrh, July; Mali Jadovnik.
Lithosia quadra (Linnaeus, 1758) Savina Voda; Karaula.
Atolmis rubricollis (Linnaeus, 1758) Mali Jadovnik.
Eilema depressa (Esper, 1787) Karaula, 10 males and 1 female.
Eilema lutarella (Linnaeus, 1758) Vasilin Vrh, August, 1 male.
Eilema lurideola (Zincken, 1817) Karaula; Savina Voda; Vasilin Vrh, August; Mali Jadovnik.
Eilema caniola (Hübner, [1808]) Savina Voda; Karaula.
Eilema palliatella (Scopoli, 1763) (=unita [(Denis & Schiffermüller], 1775) Vasilin Vrh, August, 2 males
Gen. prep. 1./28.1.2020, S. Beshkov, male genitalia with everted vesica on glass in Eupalar (Figs 12b), another on paper. Everted vesica before mounting on glass and deformed is shown on Fig. 12c.
Eilema complana (Linnaeus, 1758) Savina Voda; Karaula, 1 male and 2 females; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Eilema pygmaeola pallifrons (Zeller, 1847) Savina Voda, 3 males; Karaula, 4 males; Vasilin Vrh, August, 1 female.

Setina irrorella (Linnaeus, 1758) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Dysauxes ancilla (Linnaeus, 1758) Savina Voda; Karaula.

Calpineae

Calyptera thalictri (Borkhausen, 1790) Karaula, 1 male; Vasilin Vrh, August, 1 male.

Toxocampinae

Lygephila craccae ([Denis & Schiffermüller], 1775) Vasilin Vrh, August; Mali Jadovnik.

Lygephila viciae (Hübner, [1822]) Vasilin Vrh, July; Mali Jadovnik.

Boletobinae

Phytometra viridaria (Clerck, 1759) Savina Voda; Karaula; Vasilin Vrh, August.

Odice suava (Hübner, [1813]) Savina Voda, 2 males.

Noctuidae

Plusiinae

Abrostola tripartita (Hufnagel, 1766) (= triplasia auct. nec Linnaeus, 1758) Savina Voda.

Trichoplusia ni (Hübner, [1803]) Karaula.

Diacrysia chrysitis (Linnaeus, 1758) Vasilin Vrh, July.

Autographa gamma (Linnaeus, 1758) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Autographa pulchrina (Haworth, 1809) Mali Jadovnik, 1 male, genitalia with everted vesica checked, in microvial in glycerol.

Autographa jota (Linnaeus, 1758) Vasilin Vrh, August; Karaula.

Autographa bractea ([Denis & Schiffermüller], 1775) Karaula, 1 female; Vasilin Vrh, July, 1 male; Mali Jadovnik.

Pantheinae

Panthea coenobita (Esper, 1785) Mali Jadovnik, 1 male.

Colocasia coryli (Linnaeus, 1758) Savina Voda; Karaula; Vasilin Vrh, July.

Acrolictinae

Acronicta psi (Linnaeus, 1758) Savina Voda, 1 male; Karaula; Vasilin Vrh, July. Male genitalia checked.

Acronicta auricoma ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August, 1 male.

Acronicta euphorbiae ([Denis & Schiffermüller], 1775) Savina Voda, 1 male; Karaula; Vasilin Vrh, August.

Acronicta rumicis (Linnaeus, 1758) Vasilin Vrh, August.

Acronicta aceris (Linnaeus, 1758) Savina Voda.

Acronicta megacephala ([Denis & Schiffermüller], 1775) Mali Jadovnik.

Craniophora ligustri ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August.

Cucullinae

Cucullia umbratica (Linnaeus, 1758) Vasilin Vrh, July.

Calophasia lunula (Hufnagel, 1766) Vasilin Vrh, July.

Calliergis ramosa (Esper, 1786) Vasilin Vrh, July, 1 male (Fig. 8f); Mali Jadovnik.

Teinoptera olivina (Herrich-Schäffer, 1852) Vasilin Vrh, July.

Amphipyriinae

Amphipyra pyramidea (Linnaeus, 1758) Vasilin Vrh, August.

Amphipyra berbera Rungs, 1949 Karaula, 1 male, uncus checked; Vasilin Vrh, August.

Amphipyra tragopoginis (Clerck, 1759) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Lamprosticta culta ([Denis & Schiffermüller], 1775) Vasilin Vrh, August.

Heliothinae

Pyrrhia umbra (Hufnagel, 1766) Mali Jadovnik.

Heliothis peligera ([Denis & Schiffermüller], 1775) Vasilin Vrh, August.

Bryophilinae

Cryphia algae (Fabricius, 1775) Vasilin Vrh, August.

Bryophila ereptricula Treitschke, 1825) Savina Voda, 1 male; Vasilin Vrh, July.
Bryophila rapticulara ([Denis & Schiffermüller], 1775) Vasilin Vrh, August, 1 female.

Xyleininae

Spodoptera exigua (Hübner, [1808]) Karaula.

Caradrina morpheus (Hufnagel, 1766) Mali Jadovnik.

Caradrina aspersa (Rambur, 1834) Savina Voda; Vasilin Vrh, V August.

Caradrina suscianja (von Mentzer, 1981) Vasilin Vrh, July, 3 males (Fig. 9a) and 2 females. Published as a new for Serbia from Suva Planina Mts. and Mt. Vidlič in eastern Serbia (Beshkov 2015). Second report for Serbia.

Caradrina clavipalpis (Scopoli, 1763) Vasilin Vrh, August; Vasilin Vrh, July.

Hoplodrrina octogenaria (Goze, 1781) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July, 3 males; Mali Jadovnik, 14 males and 2 females.

Hoplodrrina blanda ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August.

Hoplodrrina respersa ([Denis & Schiffermüller], 1775) Savina Voda; Vasilin Vrh, July.

Atypha pulmonaris (Esper, 1790) Karaula.

Charanyca trigrammica (Hufnagel, 1766) Vasilin Vrh, July; Mali Jadovnik.

Charanyca ferruginea (Esper, [1785]) Savina Voda; Vasilin Vrh, July; Mali Jadovnik.

Aethis pallustris (Hübner, [1808]) Mali Jadovnik.

Dypterygia scabriuscula (Linnaeus, 1758) Vasilin Vrh, August.

Thalpophila matura (Hufnagel, 1766) Karaula; Vasilin Vrh, August.

Actinotia polyodon (Clerck, 1759) Karaula; Mali Jadovnik.

Euplexia lucipara (Linnaeus, 1758) Vasilin Vrh, July.

Amphipoea ocelia (Linnaeus, 1761) Vasilin Vrh, August, 2 males, genitalia checked.

Luperina testacea ([Denis & Schiffermüller], 1775) Vasilin Vrh, August, 4 males and 1 female.

Apamea epomidion (Haworth, 1809) Mali Jadovnik, 1 female.

Apamea crenata (Hufnagel, 1766) Vasilin Vrh, July; Mali Jadovnik.

Apamea anceps ([Denis & Schiffermüller], 1775) Vasilin Vrh, July, 1 female.

Apamea sordens (Hufnagel, 1766) Vasilin Vrh, July; Mali Jadovnik.

Apamea monoglypha (Hufnagel, 1766) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Apamea syriaca tallosi Kovács & Varga, 1969 Karaula, 1 old male in poor condition, Gen. prep. 1./13.I.2020, S. Beshkov, male genitalia with everted vesica on glass in Euparal (Fig. 12d). Previously known in Serbia from Crni Vrh (Mt. Vidišće above Pirot (Beshkov 2015) and Trnava above Preševo (Beshkov & Nahirnić 2017). Due to unclear taxonomical problems that time Vasić (2002) reported Apamea sicula (Turati, 1909) (=tallosi Kov. - Varga, 1969) from Mt. Goč. More likely this report concerns Apamea syriaca.

Apamea lithoeylaea ([Denis & Schiffermüller], 1775) Savina Voda.

Apamea sublustris (Esper, [1788]) Vasilin Vrh, July.

Apamea lateritia (Hufnagel, 1766) Vasilin Vrh, July.

Apamea furva ([Denis & Schiffermüller], 1775) Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Mesapamea secalis (Linnaeus, 1758) Mali Jadovnik, 1 female, genitalia checked; Vasilin Vrh, August 3 males and 3 females, all checked, males with everted vesica, in microvials in glycerol; Vasilin Vrh, July 1 male and 1 female, both checked, male with everted vesica, in microvial, female on paper.

Litoligia literosa (Haworth, 1809) Vasilin Vrh, August.

Oligia strigilis (Linnaeus, 1758) Vasilin Vrh, July; Mali Jadovnik.

Oligia latruncula ([Denis & Schiffermüller], 1775) Vasilin Vrh, July; Mali Jadovnik, genitalia checked.

Hyppa rectilinea (Esper, [1788]) Mali Jadovnik, 1 male.

Brachylomia viminalis (Fabricius, 1777) Karaula; Vasilin Vrh, August.

Cosmia trapezina (Linnaeus, 1758) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Dicyela oo (Linnaeus, 1758) Savina Voda.

Mniotype adusta (Esper, [1790]) Vasilin Vrh, July; Mali Jadovnik.

Polia bombycina (Hufnagel, 1766) Savina Voda; Vasilin Vrh, July; Mali Jadovnik.

Polia hepatica (Clerck, 1759) Mali Jadovnik, 1 male.

Polia nebulosa (Hufnagel, 1766) Vasilin Vrh, July; Mali Jadovnik.
Figure 13. a – *Scotopteryx ignorata* Huemer & Hausmann, 1998, female genitalia, Gen. prep. 1./27.I.2020 S. Beshkov, Savina Voda; b – *Colostygia aptata* (Hübner, 1813), female genitalia, Gen. prep. 1./09.I.2020, S. Beshkov, Mali Jadovnik; c – *Nebula pirinica* (Reisser, 1936), female genitalia. Gen. prep. 4./12.I.2020, S. Beshkov, Mali Jadovnik; d – *Eupithecia pimpinellata* (Hübner, 1813), female genitalia. Gen. prep. 1./3.II.2020, S. Beshkov, Vasilin Vrh, July; e – *Eupithecia icterata* (de Villers, 1789), female genitalia. Gen. prep. 2./11.I.2020, S. Beshkov, Mali Jadovnik; f – *Eupithecia denotata* (Hübner, 1813), female genitalia. Gen. prep. 2./3.II.2020, S. Beshkov, Vasilin Vrh, July.
Pachetra sagittigera (Hufnagel, 1766) Vasilin Vrh, July, 1 male aberrant (Fig. 9b); Mali Jadovnik.

Lacanobia w-latinum (Hufnagel, 1766) Vasilin Vrh, July; Mali Jadovnik.

Lacanobia thalassina (Hufnagel, 1766) Mali Jadovnik.

Lacanobia contigua ([Denis & Schiffermüller], 1775) Savina Voda; Vasilin Vrh, July; Mali Jadovnik.

Melanchra persicariae (Linnaeus, 1761) Savina Voda.

Ceramica pisi (Linnaeus, 1758) Vasilin Vrh, July; Mali Jadovnik.

Hada plebeja (Linnaeus, 1761) Savina Voda; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Mamestra brassicae (Linnaeus, 1758) Vasilin Vrh, August.

Sideridis reticulata (Geöze, 1781) Savina Voda, 1 male; Vasilin Vrh, July; Mali Jadovnik.

Hadena compta ([Denis & Schiffermüller], 1775) Savina Voda, 1 male; Mali Jadovnik.

Hadena filograna (Esper, [1788]) Vasilin Vrh, July, 1 male, genitalia checkd, in microvial in glycerol; Mali Jadovnik.

Hadena caesia ([Denis & Schiffermüller], 1775) Vasilin Vrh, July, 1 male and 1 female (Fig. 9d); Mali Jadovnik.

Mythimna conigera ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Mythimna albipuncta ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August; Mali Jadovnik.

Mythimna ferrago (Fabricius, 1787) Karaula; Vasilin Vrh, August; Mali Jadovnik.

Leucania comma (Linnaeus, 1761) Savina Voda; Vasilin Vrh, July; Mali Jadovnik.

Eriopygodes imbecilla (Fabricius, 1794) Mali Jadovnik

Noctuinae

Peridroma saucia (Hübner, [1808]) Vasilin Vrh, August.

Dichagyris musiva (Hübner, [1803]) Karaula, 1 male; Vasilin Vrh, August, 4 males and 1 female. Reported from localities above as a new for Serbia (Beshkov 2017a).

Dichagyris signifera ([Denis & Schiffermüller], 1775) Savina Voda, 1 male.

Euxoa decora ([Denis & Schiffermüller], 1775) Karaula, 7 males; Vasilin Vrh, August, 9 males and 2 females.

Agrotis bigramma (Esper, 1790) (= crassa Hübner, [1803]) Vasilin Vrh, August.

Agrotis clavis (Hufnagel, 1766) Savina Voda; Vasilin Vrh, July.

Agrotis ipsilon (Hufnagel, 1766) Vasilin Vrh, July.

Axylia putris (Linnaeus, 1761) Karaula.

Ochropleura plecta (Linnaeus, 1761) Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Diarsia mendica (Fabricius, 1775) Vasilin Vrh, July; Mali Jadovnik.

Rhyacia simulans (Hufnagel, 1766) Vasilin Vrh, July 1 male genitalia with everted vesica (Fig. 12f) in microvial in glycerol.

Chersotis multangula (Hübner, [1803]) Savina Voda, 4 males and 1 female; Karaula; Vasilin Vrh, August; Vasilin Vrh, July.

Chersotis margaritacea (de Villers, 1789) Karaula; Vasilin Vrh, August.

Chersotis cuprea ([Denis & Schiffermüller], 1775) Vasilin Vrh, August.

Chersotis laeta (Rebel, 1904) Already published from Vasilin Vrh, July in Beshkov & Nahirić (2020).

Noctua pronuba (Linnaeus, 1758) Savina Voda; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Noctua fimbriata (Schreber, 1759) Savina Voda; Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Noctua interposita (Hübner, 1790) Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Noctua janthis (Hübner, 1790) Karaula, 1 male.

Noctua janthe (Borkhausen, 1792) Vasilin Vrh, August, 1 male and 1 female.

Eurois occulta (Linnaeus, 1758) Mali Jadovnik, 1 male.

Anaplectoideis prasina ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, July, 1 male; Mali Jadovnik.

Xestia stigmatica (Hübner, [1813]) (= rhomboidea Esper, [1790]) Vasilin Vrh, August.
Xestia baja ([Denis & Schiffermüller], 1775) Karaula; Vasilin Vrh, August; Vasilin Vrh, July; Mali Jadovnik.

Xestia c-nigrum (Linnaeus, 1758) Karaula; Vasilin Vrh, August; Vasilin Vrh, July.

Xestia triangulum (Hufnagel, 1766) Karaula; Mali Jadovnik.

Eugnorisma depuncta (Linnaeus, 1761) Vasilin Vrh, August.

Spaeotis senna contorta (Rebel & Zerny, 1931) Savina Voda, 1 female.

Nolidae

Meganola strigula ([Denis & Schiffermüller], 1775) Savina Voda, 1 male, genitalia checked.

Pseudoips prasinana (Linnaeus, 1758) Vasilin Vrh, August.

Species arranged to the families:

- Hepialidae - 1
- Psychidae - 1
- Cossidae - 1
- Crambidae - 1
- Drepanidae - 7
- Geometridae - 98
- Lasiocampidae - 7
- Saturniidae - 1
- Sphingidae - 7
- Notodontidae - 11
- Erebidae - 31
- Noctuidae - 117
- Nolidae - 2

Total: 401 species from 13 families

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