



THE REDISCOVERED LEPIDOPTERA COLLECTION OF VANDA KOCHANSKY-DEVIDÉ

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Abstract - The discovery of the previously unknown entomological collection of the academician Vanda Kochansky-Devidé is presented. The specimens were collected in the beginning of the 20th century across Croatia and Slovenia, when she was only 10–14 years of age. The collection contains 341 specimens belonging to 174 species. 191 specimens belong to butterflies (Rhopalocera), while 150 belong to moths (Heterocera). Probably the most notable specimens are that of *Parnassius apollo* (Linnaeus, 1758) from Slovenia. Several species collected within Zagreb are nowadays very local and rare, and no longer occur within the city itself.

KEY WORDS: butterflies, moths, Zagreb, entomological collection

Izvleček - ODKRITA ZBIRKA METULJEV VANDE KOCHANSKY-DEVIDÉ

Predstavljamo odkritje do sedaj nepoznane entomološke zbirke, ki je delo akademikinje Vande Kochansky-Devidé. Primerki so bili zbrani v začetku 20. stoletja na območju Republike Hrvaške in Republike Slovenije. Z zbiranjem je pričela med 10. in 14. letom starosti, zbirka vsebuje 341 osebkov, ki pripadajo 174 vrstam. Najštevilčnejši so dnevni metulji (Rhopalocera), ki so v zbirki zastopani s 191 osebkami, ostalih 150 osebkov pa pripada skupini nočnih metuljev (Heterocera). Najbolj izstopajoča vrsta v zbirki je zagotovo gorski apolon (*Parnassius apollo*) iz Republike Slovenije, prisotnih pa je tudi veliko vrst iz okolice Zagreba, ki so danes tam zelo redke in se v samem mestu ne pojavljajo več.

KLJUČNE BESEDE: metulji, nočni metulji, Zagreb, entomološka zbirka

Introduction

The late academician Vanda Kochansky-Devidé was a Croatian geologist and palaeontologist (Ravlić, 2017). She was a pioneer of micropalaeontology in Croatia, an excellent teacher and she published over 100 scientific papers (Gušić et al., 1990). In 1964 she authored the first palaeontology textbook in Croatia, which is still in use (Gušić et al., 1990), and was the first woman to be accepted as a full-time member of the Yugoslavian Academy of Sciences and Arts (today's Croatian Academy of Sciences and Arts) in 1973 (Ravlić, 2017). Exhibiting a love for nature already from an early age, her first love was botany, which she enjoyed practicing even in her later years (Gušić et al., 1990). However, she appears to have had a fondness for entomology as well, a fact which seems to have been forgotten and she was not mentioned in the review of entomologists from Croatia (Durbetić, 2012).

On Sunday, 29 August 2016, several entomological boxes were seen by Nikica Vuletić at a local Zagreb flea market. He obtained the seller's contact information and forwarded it to us. Three days later we got in touch with the seller and arranged to meet at his location. Upon arrival, the seller had only four of the original ten boxes left. Three of them contained butterflies and moths (Lepidoptera), while the fourth contained members of other insect orders and two scorpions.

Materials and methods

All four boxes belonging to the Vanda Kochansky-Devidé collection were purchased from a local seller in Zagreb. With the purchase, a portrait of the author was also donated to us (Fig. 2). After the purchase, the three boxes containing Lepidoptera were photographed (Fig. 1).

Afterwards, specimens were removed from each box, and the boxes were cleaned of dust and the remains of the destroyed specimens. All the specimens were identified using standard identification keys for butterflies (Tolman and Lewington, 2008) and moths (Nowacki, 1998, 2009). The collection is currently stored in Association Hyla (Zagreb). For each specimen, all available data from the labels is provided, and additional discussion is given for some of the more interesting finds.

Results and discussion

The analysed collection Kochansky-Devidé contains 341 specimens belonging to 174 species. 191 specimens belong to butterflies (Rhopalocera) while 150 belong to moths (Heterocera). The examined species originate from Croatia and Slovenia. The specimens are prepared and labelled with the locality, sometimes the smaller toponym and even the altitude. Altogether 226 specimens have complete labels with locality and date, while 115 specimens have no label at all, but were included in order to present the full species account of the Kochansky-Devidé collection.

The specimens in this collection were collected between 1925 and 1929, when Vanda Kochansky-Devidé was only 10–14 years old. At the time, she lived in Zagreb



Figure 1: One of the entomological boxes from the Kochansky-Devidé collection containing the families Papilionidae, Pieridae and Nymphalidae collected in Croatia and Slovenia.

Slika 1: Ena od entomoloških škatev iz zbirke Kochansky-Devidé z metulji družin Papilionidae, Pieridae in Nymphalidae zbranih na območju Hrvaške in Slovenije.



Figure 2: The oil portrait of the academician Vanda Kochansky-Devidé, a well-known geologist and palaeontologist.

Slika 2: Oljni portret akademikinje Vande Kochansky-Devidé, znane geologinje in paleontologinje.

and collected frequently in the city in the localities Cmrok, Črnomerec, Maksimir, Okrugljak, Pešćenica, Podsused, Šestine, and nearby areas like Medvednica Mt. (Zagrebačka Gora, Sljeme, Sljeme 1035 m), Stubičke Toplice or Samobor.

She also visited nearby Slovenia, probably during the summer school breaks, and collected in the montane areas like Gozd Martuljek; Ravne na Koroškem (Guštanj); Jezersko; Jezersko at 1200 m; Kamniška Bistrica; Kotlje; Kranjska Gora, Vožica at 1400 m; Kranjska Gora, Vožica at 1700 m; Planica; Podkoren; Srednji Vrh; Planina Sveti Križ, now Planina pod Golico and Vintgar. Here it is necessary to mention that the locality “Vožica” does not exist near Kranjska Gora, but it probably refers to the peak Vošča (1737 m), located west of Trupejevo poldne.

While this collection is small, it is interesting to note that Kochansky-Devidé collected a great variety of species. This is best seen in her visits to Slovenia, where she collected species belonging to the Alpine faunal elements that do not occur in Croatia, like *Boloria pales* and *Pieris bryonae*.

Probably the most notable specimens are those of *Parnassius apollo* (Linnaeus, 1758). This species has suffered one of the biggest declines in Slovenia (Verovnik et al., 2012). The two specimens present in the collection originate from the locality Jezersko, located north-west from Kranj. In the area, historical records of this species are known, but no recent sightings exist not just for that area, but for the whole Karavanke range (Verovnik et al., 2012). Another interesting record from Slovenia is that of *Hipparchia semele* (Linnaeus, 1758) from Kamniška Bistrica. In the past it was widespread on southern slopes of Karavanke, but no records were known from Kamniška Bistrica (Verovnik et al., 2012).

Especially interesting are the species records from Zagreb, especially for *Zerynthia polyxena* (Denis & Schiffermüller, 1775). Numerous historical records of this species exist for the city and the nearby areas (e.g. Grund, 1916; Gussich, 1916; Mladinov, 1973; Vukotinović, 1879 etc.). In the recent times, it seems that the species has disappeared from all the historical localities within the city, and is nowadays very rare and confined to the outskirts of the city. Some other species like *Boloria selene* (Denis & Schiffermüller, 1775) and *Pyronia tithonus* (Linnaeus, 1767), nowadays very local and rare in northern Croatia, no longer occur within Zagreb City. The historical occurrence of *Erebia aethiops* (Esper, 1777) within Maksimir was already known (Mladinov, 1973) and is only additionally confirmed with the collection Kochansky-Devidé.

Conclusions

Vanda Kochansky-Devidé was a remarkable woman, working and contributing to numerous fields of the natural sciences. The discovery of her previously unknown entomological collection from the beginning of the 20th century is at least outstanding. Specimens collected when she was only 10–14 years of age are prepared and labelled in a very professional way, indicating a greater insight into the matter. While the butterfly collection seems to be complete, the moth collection is only partial, which was confirmed also by the seller who already sold six boxes of “larger and prettier” moths.

Nevertheless, the existing specimens give us a better insight into the distribution and patterns of species collected almost a century ago. Especially in urban Zagreb, changes within the city and urbanization completely changed the species diversity, and many of the species collected at the time cannot any more be found within the city's limits.

Acknowledgments

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References

- Durbešić, P.**, 2012. Hrvatska entomofauna iz sadašnjosti pogled unatrag i planovi za budućnost. - *Entomologia Croatica* 16: 5-88.
- Grund, A.**, 1916. Beiträge zur kroatischen Lepidopteren-Fauna. - *Glasnik Hrvatskog prirodoslovnog društva* 28: 95-105 & 114-168.
- Gušić, I., Sremac, J., Magaš, B.**, 1990. Akademik Vanda Kochansky-Devidé. - *Geološki vjesnik* 43: 217-218.
- Gussich, B.**, 1916. Ein Beitrag zur Schmetterlingsfauna Kroatiens. - *Glasnik Hrvatskog prirodoslovnoga društva* 28-29: 209-225.
- Mladinov, L.**, 1973. Lepidoptera (Rhopalocera) zbirki Hrvatskog narodnog zoološkog muzeja u Zagrebu. *Hrvatski narodni zoološki muzej*, Zagreb.
- Nowacki, J.**, 1998. The noctuids (Lepidoptera, Noctuidae) of Central Europe. František Slamka, Bratislava, 51 pp.
- Nowacki, J.**, 2009. The Noctuids of Central Europe. Coronet Books, Bratislava, 144 pp.
- Ravlić, S. (Ed.)**, 2017. Kochansky-Devidé, Vanda. Hrvatska enciklopedija, mrežno izdanje. URL: <http://www.enciklopedija.hr/natuknica.aspx?id=32174#top>, accessed 20.09.2017.
- Tolman, T., Lewington, R.**, 2008. Collins butterfly guide the most complete field guide to the butterflies of Britain and Europe. Collins, London, 384 pp.
- Verovnik, R., Rebeušek, F., Jež, M.**, 2012. Atlas dnevnih metuljev (Lepidoptera: Rhopalocera) Slovenije. Center za kartografijo favne in flore, Ljubljana.
- Vukotinović, L.**, 1879. Fauna leptira u okolišu Zagrebačkom. *Jugoslavenska akademija znanosti i umjetnosti*, Zagreb, 129 pp.

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Table 1: Lepidoptera specimens from the Kochansky-Devidé collection.

Species	Locality	Date	N
Papilionidae			
<i>Iphiclus podalirius</i> (Linnaeus, 1758)	Črnomerec	6.7.1929	1
	Zagreb	8.7.1929	1
	Zagreb	19.7.1929	1
<i>Papilio machaon</i> Linnaeus, 1758	Ravne na Koroškem (Guštanj)	9.8.1927	1
	Samobor	21.6.1929	1
<i>Parnassius apollo</i> (Linnaeus, 1758)	Jezersko, 1200 m	26.7.1929	1
<i>Parnassius mnemosyne</i> (Linnaeus, 1758)	Sljeme	13.6.1929	2
<i>Zerynthia polyxena</i> (Denis & Schiffermüller, 1775)	Zagreb	2.5.1926	1
Pieridae			
<i>Anthocharis cardamines</i> (Linnaeus, 1758)	Kranjska Gora	25.6.1926	2
	Zagreb, Maksimir, na Šumskom putu	28.5.1928	1
	Zagreb, Maksimir, na Šumskoj čistini	31.5.1928	1
	Vintgar	23.6.1928	1
	Maksimir	19.5.1929	1
<i>Aporia crataegi</i> (Linnaeus, 1758)	Kranjska Gora	22.6.1928	1
	/		1
<i>Colias croceus</i> (Fourcroy, 1785)	Ravne na Koroškem (Guštanj)	23.7.1927	1
	Kranjska Gora	22.6.1928	1
	Kranjska Gora	24.6.1928	1
	Maksimir	19.7.1928	1
	Zagreb	26.7.1928	1
<i>Colias hyale</i> (Linnaeus, 1758)	Ravne na Koroškem (Guštanj)	8.7.1927	1
	Ravne na Koroškem (Guštanj)	16.7.1927	1
<i>Gonepteryx rhamni</i> (Linnaeus, 1758)	Ravne na Koroškem (Guštanj)	9.8.1927	1
	Zagrebačko Gorje, 1035 m	12.7.1928	1
	Zagreb	3.7.1929	1
<i>Leptidea sinapis/juvernica</i> complex	/		2
<i>Pieris brassicae</i> (Linnaeus, 1758)	Zagreb	2.7.1926	1
	/		1
<i>Pieris bryoniae</i> (Hübner, 1806)	Gozd Martuljek	27.6.1926	1
	Kranjska Gora	23.6.1928	1
<i>Pieris napi/balcanica</i>	/		2
<i>Pieris rapae</i> (Linnaeus, 1758)	Zagreb	5.7.1929	1
	/		1
<i>Pontia edusa</i> (Fabricius, 1777)	Zagreb	13.7.1929	1
	/		1
Lycaenidae			
<i>Callophrys rubi</i> (Linnaeus, 1758)	Maksimir	19.5.1929	1
	Šestine	6.7.1929	1
<i>Celastrina argiolus</i> (Linnaeus, 1758)	Okrugljak	21.7.192?	1
<i>Cupido minimus</i> (Fuessly, 1775)	/		1
<i>Cupido argiades</i> (Pallas, 1771)	Zagreb	26.7.1927	1
	Kotlje	23.8.1927	1

Species	Locality	Date	N
<i>Cyaniris semiargus</i> (Rottemburg, 1775)	Planica	23.6.1928	2
<i>Favonius quercus</i> (Linnaeus, 1758)	Zagreb	8.7.1928	1
	Zagreb	14.7.1929	1
<i>Glauopsyche alexis</i> (Poda, 1761)	Sljeme	13.6.1929	1
<i>Lycaena hippothoe</i> (Linnaeus, 1761)	Kotlje	25.8.1927	1
	Kotlje	27.8.1927	1
	Kranjska Gora	20.6.1928	1
<i>Lycaena phlaeas</i> (Linnaeus, 1761)	Kotlje	28.8.1927	1
	Maksimir	19.7.1928	1
	/		2
<i>Lycaena tityrus</i> (Poda, 1761)	Ravne na Koroškem (Guštanj)	14.8.1927	1
	Kotlje	25.8.1927	1
	Maksimir	9.8.1928	1
	Maksimir	19.5.1929	1
	/		1
<i>Plebejus argus</i> (Linnaeus, 1758)	Planica	27.5.1926	1
	Planica	24.6.1928	1
	Planina Sveti Križ (Planina pod Golico)	25.6.1928	1
<i>Polyommatus bellargus</i> (Rottemburg, 1775)	Planica	21.6.1928	1
	/		1
<i>Polyommatus coridon</i> (Poda, 1761)	Samobor	2.8.1928	2
	/		1
<i>Polyommatus icarus</i> (Rottemburg, 1775)	Zagreb	26.7.1927	2
	Kranjska gora	20.6.1928	1
	Zagreb	25.7.1928	1
	/		3
<i>Satyrium ilicis</i> (Esper, 1779)	Stubičke Toplice	13.6.1929	3
<i>Satyrium spini</i> (Denis & Schiffermüller, 1775)	Samobor	21.6.1929	1
<i>Thecla betulae</i> (Linnaeus, 1758)	Cmrok (Smrok)	3.8.1926	1
	Zagreb	26.7.1928	1
Riodinidae			
<i>Hamearis lucina</i> (Linnaeus, 1758)	Kranjska Gora	17.6.1928	1
	/		
Nymphalidae			
<i>Aglais io</i> (Linnaeus, 1758)	Zagrebačko Gorje, 1035 m	12.7.1928	1
	Zagrebačko Gorje, 1035 m	6.7.1929	1
	/		1
<i>Aglais urticae</i> (Linnaeus, 1758)	Sljeme	19.6.1929	1
	/		1
<i>Apatura iris</i> (Linnaeus, 1758)	Kamniška Bistrica	24.7.1929	1
	Jezersko	25.7.1929	1
<i>Aphantopus hyperantus</i> (Linnaeus, 1758)	Zagrebačka Gora, 1035m	12.7.1928	2
<i>Araschnia levana</i> (Linnaeus, 1758)	Ravne na Koroškem (Guštanj)	22.8.1927	1
	Kamniška Bistrica	24.7.1929	1
<i>Argynnis paphia</i> (Linnaeus, 1758)	Samobor	2.8.1928	1
	Maksimir	9.8.1928	1
	Samobor	8.8.1929	1
<i>Argynnis niobe</i> (Linnaeus, 1758)	Jezersko	26.7.1929	1

Species	Locality	Date	N
<i>Argynnis aglaja</i> (Linnaeus, 1758)	Jezersko, 1200 m	26.7.1929	1
	Kranjska Gora, Vožica, 1700m	30.7.1929	1
	Srednji Vrh	30.7.1929	1
<i>Boloria pales</i> (Denis & Schiffermüller, 1775)	Kranjska Gora, Vožica, 1700m	30.7.1929	1
	Kranjska Gora, Vožica, 1700m	2.8.1929	1
<i>Boloria dia</i> (Linnaeus, 1767)	Ravne na Koroškem (Guštanj)	19.8.1927	1
	/		1
<i>Boloria euphrosyne</i> (Linnaeus, 1758)	Kranjska Gora	18.6.1928	1
	/		2
<i>Boloria selene</i> (Denis & Schiffermüller, 1775)	Maksimir	19.5.1929	1
<i>Coenonympha arcania</i> (Linnaeus, 1761)	Podkoren	23.6.1926	1
	Kranjska Gora	29.6.1928	1
<i>Coenonympha pamphilus</i> (Linnaeus, 1758)	Zagreb	27.7.1927	1
	Zagreb, Peščenica, na livadi	19.5.1928	1
<i>Erebia aethiops</i> (Esper, 1777)	Ravne na Koroškem (Guštanj)	8.8.1927	1
	Ravne na Koroškem (Guštanj)	15.8.1927	1
	Sljeme, 1035m	24.7.1928	3
	Maksimir	9.8.1928	1
	Maksimir	19.7.1928	1
	/		
<i>Erebia ligea</i> (Linnaeus, 1758)	Ravne na Koroškem (Guštanj)	10.8.1927	1
	/		5
<i>Euphydryas aurinia</i> (Rottemburg, 1775)	Gozd Martuljek	24.6.1928	2
<i>Hipparchia fagi</i> (Scopoli, 1763)	Samobor	2.8.1928	1
	Samobor	8.8.1929	1
<i>Hipparchia semele</i> (Linnaeus, 1758)	Kamniška Bistrica	24.7.1929	1
	Jezersko	26.7.1929	1
	/		2
<i>Issoria lathonia</i> (Linnaeus, 1758)	Ravne na Koroškem (Guštanj)	19.8.1927	2
	Ravne na Koroškem (Guštanj)	21.8.1927	1
<i>Lasiommata maera</i> (Linnaeus, 1758)	Kranjska Gora	27.6.1928	1
	Kranjska Gora	28.6.1928	2
	Zagreb, Peščenica, na livadi u 13h	14.5.1927	1
<i>Lasiommata megera</i> (Linnaeus, 1767)	Zagreb	13.7.1929	1
<i>Lasiommata petropolitana</i> (Fabricius, 1787)	Kranjska Gora	19.6.1928	1
	Kranjska Gora	21.6.1928	1
<i>Limenitis reducta</i> Staudinger, 1901	Maksimir	19.7.1928	1
	Samobor	2.8.1928	1
<i>Lopinga achine</i> (Scopoli, 1763)	Samobor	21.6.1929	1
<i>Maniola jurtina</i> (Linnaeus, 1758)	Maksimir	9.8.1928	1
	Zagreb	19.8.1929	1
	/		3
<i>Melanargia galathea</i> (Linnaeus, 1758)	Samobor	21.6.1929	1
	Šestine	6.7.1929.	1
<i>Melitaea athalia</i> (Rottemburg, 1775)	Gozd Martuljek	24.6.1928	3
	/		1
<i>Melitaea cinxia</i> (Linnaeus, 1758)	/		1
<i>Melitaea didyma</i> (Esper, 1778)	Kranjska Gora	29.6.1928	1

Species	Locality	Date	N
	/		1
<i>Melitaea phoebe</i> (Denis & Schiffermüller, 1775)	Maksimir, na livadu, u 10h	28.5.1928	1
	Maksimir	9.8.1928	1
<i>Minoia dryas</i> (Scopoli, 1763)	Samobor	2.8.1928	1
	Samobor	8.8.1929	1
<i>Neptis rivularis</i> (Scopoli, 1763)	Samobor	21.6.1929	1
	Jezersko	26.8.1929	1
<i>Neptis sappho</i> (Pallas, 1771)	/		3
<i>Nymphalis antiopa</i> (Linnaeus, 1758)	Zagreb	30.6.1929	1
	Zagreb	14.7.1929	1
<i>Nymphalis polychloros</i> (Linnaeus, 1758)	/		1
<i>Pararge aegeria</i> (Linnaeus, 1758)	Kranjska Gora	23.6.1928	1
<i>Polygonia c-album</i> (Linnaeus, 1758)	Zagreb	10.8.1929	1
	/		1
<i>Pyronia tithonus</i> (Linnaeus, 1767)	Maksimir	9.8.1928	1
	Zagreb	14.7.1929	1
<i>Vanessa atalanta</i> (Linnaeus, 1758)	Zagreb	5.9.1927	1
	Zagreb	18.7.1928	1
<i>Vanessa cardui</i> (Linnaeus, 1758)	Ravne na Koroškem (Guštanj)	12.7.1927	1
	/		1
Hesperiidae			
<i>Carterocephalus palaemon</i> (Pallas, 1771)	/		1
<i>Hesperia comma</i> (Linnaeus, 1758)	Ravne na Koroškem (Guštanj)	13.8.1927	1
<i>Ochlodes sylvanus</i> (Esper, 1777)	/		1
<i>Pyrgus malvae</i> (Linnaeus, 1758)	Zagreb	26.7.1927	1
	Zagreb	28.7.1928	1
	/		1
Cossidae			
<i>Zeuzera pyrina</i> (Linnaeus, 1761)	Zagreb	25.5.1945	1
Crambidae			
<i>Nomophila noctuella</i> (Denis & Schiffermüller, 1775)	Zagreb	17.8.1928	1
Drepanidae			
<i>Cilix glaucata</i> (Scopoli, 1763)	Zagreb	18.8.1926	1
	Zagreb	2.9.1929	1
<i>Habrosyne pyritoides</i> (Hufnagel, 1766)	/		3
<i>Ochropacha duplaris</i> (Linnaeus, 1761)	/		1
<i>Thyatira batis</i> (Linnaeus, 1758)	/		1
Erebidae			
<i>Amata phegea</i> (Linnaeus, 1758)	Zagrebačka Gora, 1035m	12.7.1928	2
	/		1
<i>Arctia caja</i> (Linnaeus, 1758)	Kranjska Gora	30.7.1929	1
<i>Arctia villica</i> (Linnaeus, 1758)	Stubičke Toplice	14.6.1929	2
<i>Callimorpha dominula</i> (Linnaeus, 1758)	Zagrebačka Gora, 1035m	24.7.1928	1
	Kranjska Gora	27.7.1929	1
<i>Catocala elocata</i> (Esper, 1787)	Zagreb	9.8.1929	1
	Zagreb	10.8.1929	1
	/		2
<i>Catocala nupta</i> (Linnaeus, 1767)	Podsused	21.8.1928	1

Species	Locality	Date	N
<i>Diacrisia sannio</i> (Linnaeus, 1758)	Kranjska Gora	29.6.1928	1
<i>Euplagia quadripunctaria</i> (Poda, 1761)	Samobor	2.8.1928	1
	Maksimir	9.8.1928	1
	/		2
<i>Herminia grisealis</i> (Denis & Schiffermüller, 1775)	/		2
<i>Phragmatobia fuliginosa</i> (Linnaeus, 1758)	/		3
<i>Spilosoma lubricipeda</i> (Linnaeus, 1758)	Kranjska Gora	29.6.1929	1
	/		3
<i>Spilosoma lutea</i> (Hufnagel, 1766)	/		1
<i>Tyria jacobaeae</i> (Linnaeus, 1758)	Maksimir	19.7.1928	1
Geometridae			
<i>Agriopis marginaria</i> (Fabricius, 1776)	/		1
<i>Alcis repandata</i> (Linnaeus, 1758)	Zagrebačka Gora, 1035m	24.8.1928	1
<i>Angerona prunaria</i> (Linnaeus, 1758)	Zagreb	15.8.1926	1
	/		1
<i>Bupalus piniaria</i> (Linnaeus, 1758)	Zagreb, Maksimir, na šumskoj čistini u 12h	28.5.1928	2
	Zagreb, Maksimir, na šumskoj čistini u 3h	31.5.1929	1
	/		1
<i>Cabera pusaria</i> (Linnaeus, 1758)	Kranjska Gora	19.6.1928	1
	/		1
<i>Campaea margaritaria</i> (Linnaeus, 1761)	/		1
<i>Camptogramma bilineata</i> (Linnaeus, 1758)	Kotlje	22.7.1924	1
	/		1
<i>Camptogramma scripturata</i> (Hübner, 1799)	/		1
<i>Chiasmia clathrata</i> (Linnaeus, 1758)	Kranjska Gora	20.6.1928	1
	/		1
<i>Crocallis elinguaria</i> (Linnaeus, 1758)	/		1
<i>Cyclophora linearia</i> (Hübner, 1799)	Kranjska Gora	19.6.1928	1
<i>Cyclophora annularia</i> (Fabricius, 1775)	/		2
<i>Cyclophora pupillaria</i> (Hübner, 1799)	Zagreb, Peščenica, na travi u 12h	14.5.1927	1
	Zagreb	10.8.1928	1
<i>Ematurga atomaria</i> (Linnaeus, 1758)	Zagreb, Maksimir, na livadi	28.5.1928	1
	Maksimir	19.5.1929	1
<i>Ennomos fuscantaria</i> (Haworth, 1809)	/		1
<i>Epirrhoe tristata</i> (Linnaeus, 1758)	Maksimir	19.5.1929	1
<i>Erannis defoliaria</i> (Clerck, 1759)	/		1
<i>Eulithis prunata</i> (Linnaeus, 1758)	Vožica, 1700m	2.8.1929	1
<i>Fagivorina arenaria</i> (Hufnagel, 1767)	Zagrebačka Gora, 1035m	12.7.1928	1
<i>Gandaritis pyraliata</i> (Denis & Schiffermüller, 1775)	Jezersko	26.7.1929	1
<i>Hydria undulata</i> (Linnaeus, 1758)	/		1
<i>Idaea degeneraria</i> (Hübner, 1799)	Zagreb	10.6.1929	1
<i>Ligdia adustata</i> (Denis & Schiffermüller, 1775)	/		1
<i>Lomaspilis marginata</i> (Linnaeus, 1758)	/		1
<i>Lycia hirtaria</i> (Clerck, 1759)	/		1
<i>Macaria alternata</i> (Denis & Schiffermüller, 1775)	Zagreb, Maksimir, na šumskoj cesti	31.5.1928	1

Species	Locality	Date	N
<i>Mesoleuca albicillata</i> (Linnaeus, 1758)	Kranjska Gora	12.6.1928	1
<i>Opisthograptis luteolata</i> (Linnaeus, 1758)	/		1
<i>Pareulype berberata</i> (Denis & Schiffermüller, 1775)	/		1
<i>Peribatodes rhomboidaria</i> (Denis & Schiffermüller, 1775)	Zagreb	4.9.1929	1
	Zagreb, Peščenica	24.5.1928	1
<i>Plagodis pulveraria</i> (Linnaeus, 1758)	Kranjska Gora	22.6.1928	1
<i>Pseudopanthera macularia</i> (Linnaeus, 1758)	Zagreb, Maksimir, na šumskoj čistini	28.5.1928	1
	/		3
<i>Rhodostrophia vibicaria</i> (Clerck, 1759)	Stubičke Toplice	14.6.1929	1
	Samobor	21.6.1929	1
	/		1
<i>Scopula immorata</i> (Linnaeus, 1758)	Zagreb, Maksimir, na livadi	28.5.1928	1
	/		1
<i>Scopula nigropunctata</i> (Hufnagel, 1767)	/		1
<i>Scopula ornata</i> (Scopoli, 1763)	Zagreb	10.7.1928	1
	/		1
<i>Scotopteryx bipunctaria</i> (Denis & Schiffermüller, 1775)	Jezersko	26.7.1929	1
<i>Scotopteryx chenopodiata</i> (Linnaeus, 1758)	Ravne na Koroškem (Guštanj)	8.8.1927	1
	Jezersko	27.7.1929	1
<i>Scotopteryx luridata</i> (Hufnagel, 1767)	/		2
<i>Selenia dentaria</i> (Fabricius, 1775)	Zagreb	14.7.1929	1
<i>Selenia lunularia</i> (Hübner, 1788)	Zagreb	24.5.1929	1
<i>Triphosa dubitata</i> (Linnaeus, 1758)	Jezersko	26.7.1929	1
	/		1
<i>Xanthorhoe fluctuata</i> (Linnaeus, 1758)	Kranjska Gora	22.6.1928	1
Noctuidae			
<i>Acontia trabealis</i> (Scopoli, 1763)	Zagreb	4.6.1929	1
	/		1
<i>Acronicta aceris</i> (Linnaeus, 1758)	/		1
<i>Agrotis segetum</i> (Denis & Schiffermüller, 1775)	Zagreb	5.7.1928	1
	Zagreb	11.7.1928	1
	Zagreb	5.8.1928	1
<i>Anarta trifolii</i> (Hufnagel, 1766)	/		2
<i>Apamea lithoxylaea</i> (Denis & Schiffermüller, 1775)	/		1
<i>Apamea monoglypha</i> (Hufnagel, 1766)	Zagreb	18.6.1928	1
	/		2
<i>Autographa gamma</i> (Linnaeus, 1758)	/		1
<i>Axylia putris</i> (Linnaeus, 1761)	Zagreb	23.5.1929	1
<i>Diachrysia chrysitis</i> (Linnaeus, 1758)	Zagreb	15.9.1926	1
<i>Dypterygia scabriuscula</i> (Linnaeus, 1758)	/		1
<i>Euclidia glyphica</i> (Linnaeus, 1758)	Kranjska Gora	28.6.1926	1
	Kranjska Gora	24.6.1927	1
<i>Euplexia lucipara</i> (Linnaeus, 1758)	Zagreb	14.8.1926	1
	Zagreb, Peščenica, u sobi	2.6.1928	1
<i>Hecatera dysodea</i> (Denis & Schiffermüller, 1775)	Samobor	21.6.1929	1
<i>Heliothis viresplaca</i> (Hufnagel, 1766)	Maksimir	19.7.1928	1
<i>Lacanobia oleracea</i> (Linnaeus, 1758)	/		2

Species	Locality	Date	N
<i>Lacanobia w-latinum</i> (Hufnagel, 1766)	Zagreb	20.7.1927	1
<i>Mamestra brassicae</i> (Linnaeus, 1758)	Zagreb	25.7.1927	1
	Zagreb	8.8.1928	1
<i>Mythimna albipuncta</i> (Denis & Schiffermüller, 1775)	Zagreb	25.5.1929	1
<i>Mythimna l-album</i> (Linnaeus, 1767)	/		2
<i>Mythimna pallens</i> (Linnaeus, 1758)	Zagreb	4.8.1928	1
	/		1
<i>Mythimna turca</i> (Linnaeus, 1761)	Zagreb	20.8.1926	1
<i>Ochropleura plecta</i> (Linnaeus, 1761)	Zagreb	15.7.1927	1
	/		1
<i>Peridroma saucia</i> (Hübner, 1808)	Zagreb	14.8.1929	1
<i>Phlogophora meticulosa</i> (Linnaeus, 1758)	/		1
<i>Scoliopteryx libatrix</i> (Linnaeus, 1758)	Zagreb	23.12.1927	1
	/		1
<i>Tyta luctuosa</i> (Denis & Schiffermüller, 1775)	Zagreb	4.8.1928	1
	/		2
<i>Xestia c-nigrum</i> (Linnaeus, 1758)	/		1
<i>Xylena vetusta</i> (Hübner, 1813)	/		1
Nolidae			
<i>Pseudoips prasinana</i> (Linnaeus, 1758)	/		1
Notodontidae			
<i>Pterostoma palpina</i> (Clerck, 1759)	Zagreb	20.7.1926	1
Pyralidae			
<i>Oncocera semirubella</i> (Scopoli, 1763)	Prekrižje	16.8.1928	1
	Zagreb	17.8.1928	1
Zygaenidae			
<i>Zygaena carniolica</i> (Scopoli, 1763)	Samobor	2.8.1928	1
	/		1