

UDC: 595.78.082.5:069.51(497.113) ; 929:59 Радовановић С.

COLLECTION OF BUTTERFLIES BY STANKO RADOVANOVIĆ AT THE NATIONAL MUSEUM IN KIKINDA (SERBIA)

LJUBICA VOJVODIĆ

National Museum in Kikinda, 23 300 Kikinda, Trg srpskih dobrovoljaca 21,
Serbia, e-mail: ljubicavojvodic@yahoo.co.uk

The Collection of Butterflies at the National Museum in Kikinda is part of the legacy of Stanko Radovanović, renowned amateur entomologist from Jazovo. The material was collected in the period 1961-1971 at 15 localities, most in the region of ex Yugoslavia.

Key words: Butterflies, catalogue, locality, National Museum, Kikinda

INTRODUCTION

According to the Legacy Agreement signed on June 1970 with the National Museum in Kikinda, Stanko Radovanović bequeathed a legacy of his “complete, unique collection of butterflies and insects of Yugoslavia to his people, while the care of the collection after his death [would] be performed by the National Museum in Kikinda”. Unfortunately, due to numerous circumstances, only a small part of this legacy is presently stored at the National Museum in Kikinda. After the author’s death in 1982, most of the collection was transferred to the Institute for Nature Conservation of Serbia, Working Unit of Novi Sad.

The insect collection includes 13 boxes ($50 \times 42 \times 6$ cm) with representatives of the following genera: Odonata, Orthoptera, Dictyoptera, Hemiptera, Coleoptera, Diptera, Trichoptera, Lepidoptera and Hymenoptera. The collection with the greatest number of specimens is the Collection of Butterflies, with seven boxes.

The species list (catalogue) of this collection is the first step in presenting the Kikinda-based collection of butterflies by Stanko Radovanović to the broader expert audience, and it was processed as part of the Habilitation Thesis for the museum title Senior Curator.

Biography of Stanko Radovanović

Stanko Radovanović (Fig. 1) was born in Zagreb on October 3rd 1910. His father Mate, professor of physics and mathematics, instilled in him a love of the natural sciences. As a child Stanko was fascinated by the scout movement of E. T. Setton. He often brought injured birds and small animals home and released them back into the wild after they were healed. He also inherited artistic talent from his mother Jelena (Helena Amalija Kramer) who became ill at childbirth and died when he was five months old.



Fig. 1. - Stanko Radovanović at field work.

He graduated from Realna Gimnazija High School in Zagreb where his science teacher, Dr Samuel Štajner, both instructed him and initiated the practical application of his knowledge of butterflies by giving him his first board for butterfly mounting. However, because his High School did not offer Latin as a course, he was not allowed to enroll as a science major in the then Philosophy Faculty.

Probably due to disappointment or perhaps out of spite for the societal situation at the time, he enrolled in the Nautical Military Academy in Dubrovnik. Professor Dr Zdravko Lorković, his long-time friend and mentor, says Radovanović had hoped that “while sailing on the seas he would at least come into contact with remains of ancient human settlements and peoples, where he would see at least a part of solution to the question that had started to occupy his thoughts increasingly: the puzzling origin and leap of the human branch from the eternally diverse world of animal beings where its origin was hidden” (Lorković& Jakšić 1983). After finishing the four-year programme, which at the time combined college and four-year officer service, and having passed exams in Latin, he enrolled in Art and Culture History with Archaeology at the Philosophy Faculty at Zagreb. In addition, he studied Hebrew and Arabian at the Religion Faculty and passed Anatomy labs at the Faculty of Medicine. He also studied in a private school of painting and ceramic work, and at a community college in Commerce where he passed exams for two semesters, and studied one year of Czech by long-distance learning as well!

By the end of 1940 he had acquired the title of professor, and according to the military schedule was soon placed at Prespa Lake, where he was at the beginning of Second World War. In the meantime he married and survived mostly by translating belletristic literature and science fiction. Stanko Radovanović was a polyglot. He spoke and wrote German, English, French and Czech, understood Italian, Bulgarian, Hungarian and Arabic, and read in Spanish, Russian and Polish.

After the war, in 1946, he became Director of a poultry farm at Jankomir, then a small town near Zagreb. From 1953 to 1954 he worked at the Pioneer Valley in Sarajevo, leading naturalist and art groups, and occasionally also photographic and toy making groups. For the group “Teaching tools” he prepared for the press some pictures of the development of several species of domestic animals. From Sarajevo he was sent to Jazovo, a small town near Kikinda. In the agricultural collectives at Jazovo and Sajan he worked until his retirement in 1960s. Stanko Radovanović continued to be active as an educator while in Banat: in late 1956 he prepared an exhibition of healthy and sustainable production and food consumption, together with his son Hrvoje. In Kikinda he returned to the

scout movement and was among the founders of the Scout Unit “Proka Sredojev” where for a long time he was an instructor of all aspects of living in nature.

Although he was interested in entomology from an early age, he returned to collecting butterflies only after he arrived in Banat. According to his documentation, he prepared 12 exhibitions of butterflies throughout Serbia from 1966-1970, and they were usually followed by lectures that attracted a large audience (Fig. 2).



Fig. 2. - Lecture at exhibition of butterflies collected by S. Radovanović, at Bor.

Research on butterfly migration monitoring was intensified in Europe in the early 1960s. At that time Radovanović was newly retired so he became actively involved in the project of butterfly migration monitoring (Radovanović 1967a, 1967b, 1971c, Zečević & Radovanović 1968, 1974). At first he started to record migrating butterflies in his local area, and later on, in cooperation with professor Radovan Kranjčević from Koprivnica and Momčilo Zečević from Zaječar, he founded a network with about two dozen members from all areas of former Yugoslavia. From 1970 to 1976 he sent annual reports on records of butterfly migrations from three areas of ex-Yugoslavia to the journal “Atalanta” (Radovanović 1970, 1971a, 1971b, 1973, 1974, 1975a, 1975b, 1976) as well as to the “Research Central for Butterfly Migration in Germany” (Deutsche Forschungszentrale für Schmetterlings wanderungen, München), of which he was a member.

At the annual assembly of the Yugoslav Entomological Society at Oteševo (Macedonia) in 1974, Radovanović formed the official Section for Butterfly Monitoring and became a Secretary of the Section. In cooperation

with Zečević he contributed to the study of Macrolepidoptera fauna of the Timok region. Their results were published in a special monograph (Zečević, Radovanović 1974).

Stanko Radovanović continued his entomological work until 1976 when he became seriously ill; his work is best represented by a bibliography of his papers (Lorković & Jakšić 1983). He died on January 14th 1982

MATERIAL AND METHODS

When the Collection by Stanko Radovanović was brought to the Museum in 1970, there were no curators of natural sciences. All material was stored at the depot and was not exhibited until 1998, when the Permanent Exhibition of the Natural History Department was established; this exhibition included nine boxes of insects from Radovanović's collection. Data on specimens were given on the old labels and in accordance with the Legacy Agreement from June 17th 1970 included a list of species in each box. One box of butterflies was proclaimed unusable due to visible damage caused by museum pests before the curator-biologist was employed. There was no other documentation.

During 2008 and 2009, the collection was (re)inventoried, and new labels were added to the old ones. Lack of documentation by Radovanović created a challenge during the recording of data on specimens, as certain labels had faded so much that they were difficult or impossible to decode. The data were included in the inventory book and Microsoft Office Access database which can be used to print inventory cards. The regular protection of material from museum pests was performed by placing a piece of TUS tape in each box. The collection as a whole is considered to be well-preserved, while mechanical damage was recorded in several specimens (for example, a wing that fell off).

The collection includes records of fifteen localities in ex-Yugoslavia: Jazovo, Čoka, Ostojićevo, Đala, Banatsko Arandelovo, Stol, Zaječar, Paraćin, Gamzigrad, Zlot, Koprivnica, Zagreb: Medvednica, Zelina, Montenegro (site not recorded), as well as two localities in Austria: Stockerau and Königstetten. Most specimens were collected by Stanko Radovanović, while some were legacies donated by Momčilo Zečević, Radovan Kranjčević, Klodman and Waller.

The classification used in this paper is according to Jakšić (1998) and Novak (1980). During the activities of systematic listing of specimens we have also used the newest edition of Catalogue of Butterflies from the Collections of Natural History Museum in Belgrade (Anđus 2008).

RESULTS

Catalogue of Butterfly Collection by Stanko Radovanović

In this catalogue overview, the data on species and specimens are listed in the following order: inventory number (the number in front of slash, while the number behind the slash is the number of the box containing the specimen), followed by site and date of collecting (catch), legacy donor or collector, sex of the specimen and remark. For the specimens lacking data on date and site of collecting it is assumed that they are from the region of ex-Yugoslavia, like most material from the collection of Stanko Radovanović.

Familia HesperIIDae

1. *Pyrgus malvae* (Linnaeus, 1758)
285/4 leg. R. Kranjčević (specimen without a label)
2. *Ochlodes venata* (Bremer & Grey, 1853)
286/4 Srbija, Ostojicevo, 15.06. 1970., leg. S. Radovanović, ♂
287/4 Srbija, Timočka krajina, 21. 06. 1969., leg. S. Radovanović, ♀

Familia PapilionIDae

3. *Iphiclides podalirius* (Linnaeus, 1758)
288/5 *gen. aest. zanclaeides vrty*, Srbija, Jazovo, 04.06. 1966., leg. S. Radovanović, ♂
289/5 *gen. aest. zanclaeides vrty*, Srbija, Jazovo, 07.07. 1966., leg. S. Radovanović, ♀
4. *Parnassius apollo* (Linnaeus, 1785) (Fig. 3a)
300/5 Srbija, Stol, 29.06. 1969., leg. R. Kranjčević
5. *Parnassius mnemosyne* (Linnaeus, 1758)
301/5 Srbija, Zaječar, 07.05. 1967., leg. R. Kranjčević, ♂
302/5 Srbija, Zaječar, 05. 1967., leg. M. Zečević, ♀
6. *Zerynthia polyxena* (Fabricius, 1777)
303/5 Srbija, Zaječar, 10.05. 1967., leg. S. Radovanović
7. *Papilio machaon* (Linnaeus, 1758) (Fig. 3b)
Papilio machaon gorganus Fruhst
304/5 Srbija, Jazovo, 18.07. 1968., leg. S. Radovanović, ♂
305/5 Srbija, Jazovo, 18.07. 1968., leg. S. Radovanović, ♀

Familia PierIDae

8. *Gonepteryx rhamni* (Linnaeus, 1758)
306/5 Srbija, Stol, 18.08. 1966., leg. S. Radovanović, ♂
307/5 Srbija, Stol, 20.08. 1966., leg. S. Radovanović, ♀
9. *Pieris brassicae* (Linnaeus, 1758)
290/5 Srbija, Jazovo, 18.07. 1963., leg. S. Radovanović, ♂

- 291/5 Srbija, Jazovo, 23.07. 1963., leg. S. Radovanović, ♀
10. ***Pieris rapae*** (Linnaeus, 1758)
292/5 *gen. vern. metra Stph.*, Srbija, Jazovo, 04. 04. 1965., leg. S. Radovanović, ♂
293/5 *gen. vern. metra Stph.*, Srbija, Jazovo, 03. 04. 1965., leg. S. Radovanović, ♀
294/5 *gen. vern. metra Stph.*, Srbija, Jazovo, 12. 07. 1965., leg. S. Radovanović, ♂
295/5 *gen. vern. metra Stph.*, Srbija, Jazovo, 30. 08. 1964., leg. S. Radovanović, ♀
11. ***Pieris napi*** (Linnaeus, 1758)
296/5 Srbija, Jazovo, 24.07. 1968., leg. S. Radovanović, ♂, damaged specimen
297/5 Hrvatska, Koprivnica, 14.06. 1969., leg. S. Radovanović, ♀, damaged specimen
12. ***Aporia crataegi*** (Linnaeus, 1758)
298/5 Srbija, Čoka, 08. 06. 1964., leg. S. Radovanović, damaged specimen
13. ***Leptidea sinapis*** (Linnaeus, 1758)
299/5 Srbija, Paraćin, 08. 1970., leg. S. Radovanović
14. ***Colias hyale*** (Linnaeus, 1758)
308/5 *gen. vern. vernalis*, Srbija, Jazovo, 06.05. 1966., leg. S. Radovanović, ♂
309/5 *gen. vern. vernalis*, Srbija, Jazovo, 18.06. 1964., leg. S. Radovanović, ♀
310/5 *gen. aest. hyale*, Srbija, Čoka, 30.08. 1966., leg. S. Radovanović, ♂
311/5 *gen. aest. hyale*, Srbija, Jazovo, 13. 09. 1965., leg. S. Radovanović, ♀
15. ***Colias croceus*** (Fourcroy, 1758)
312/5 *gen. aest.*, Srbija, Jazovo, 17.07. 1969., leg. S. Radovanović, ♂
313/5 *gen. aest.*, Srbija, Jazovo, 28.06. 1964., leg. S. Radovanović, ♀
16. ***Anthocharis cardamines*** (Linnaeus, 1758)
314/5 Srbija, Gamzigrad, 02.05. 1967., leg. S. Radovanović, ♂, damaged specimen
315/5 leg. S. Radovanović, ♀ (specimen without a label)
17. ***Pontia edusa*** (Linnaeus, 1758)
316/5 *gen. vern. belidice O.*, Srbija, Jazovo, 18.04. 1964., leg. S. Radovanović, ♂

317/5 *gen. vern. belidice* O., Srbija, Jazovo, 19.04. 1964., leg. S. Radovanović, ♂

318/5 *gen. vern. belidice* O., leg. S. Radovanović cocoon (specimen without a label)

319/5 *gen. aest.*, Srbija, Jazovo, 04.07. 1963., leg. S. Radovanović, ♂

320/5 *gen. aest.*, Srbija, Jazovo, 13.08. 1965., leg. S. Radovanović, ♂

321/5 *gen. aest.*, Srbija, Jazovo, 20.08. 1965., leg. S. Radovanović, ♀

322/5 *gen. aest.*, Srbija, Jazovo, 18.08. 1965., leg. S. Radovanović, ♀

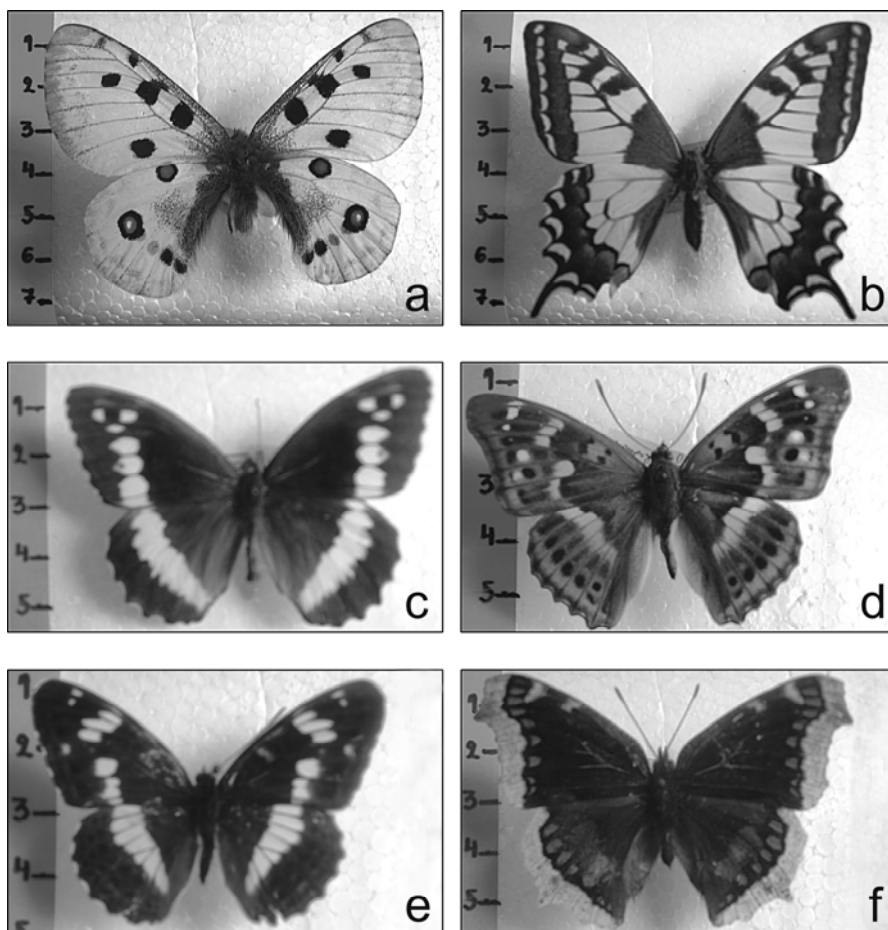


Fig. 3. - *Parnassius apollo* (a), *Papilio machaon* (b), *Brintesia circe* (c), *Apatura ilia* (d), *Limenitis camilla* (e), *Nymphalis antiopa* (f).

Familia **Nymphalidae**

18. *Chazara briseis* (Linnaeus, 1764)
257/4 Srbija Stol, 20.08. 1966., leg. S. Radovanović, ♂
19. *Pararge aegeria* (Linnaeus, 1758)
258/4 Srbija Paraćin, 08. 1970., leg. S. Radovanović
20. *Brintesia circe* (Fabricius, 1775) (Fig. 3c)
259/4 Srbija, Stol, 10.07. 1967., leg. S. Radovanović
21. *Arethusana arethusa* (Denis & Schiffermüller, 1775)
260/4 Srbija, Stol, 20.08. 1966., leg. S. Radovanović
22. *Melanargia galathea* (Linnaeus, 1758)
Agapetes galathea (Linnaeus, 1758)
261/4 Srbija, Zaječar, 22.06. 1969., leg. S. Radovanović
23. *Maniola jurtina* (Linnaeus, 1758)
262/4 Srbija, Zaječar, 11.07. 1966. leg. M. Zečević, ♂
263/4 Srbija, Zaječar, 11.07. 1966., leg. M. Zečević, ♂
24. *Coenonympha arcania* (Linnaeus, 1761)
264/4 Srbija, Stol, 06.07. 1961., leg. S. Radovanović
25. *Coenonympha pamphilus* (Linnaeus, 1758)
265/4 leg. S. Radovanović, ♂ (specimen without a label)
266/4 leg. S. Radovanović, ♀ (specimen without a label)
26. *Apatura ilia* (Denis & Schiffermüller, 1775) (Fig. 3d)
323/6 Austrija, Stockerau, 23 06. 1966., leg. Klodman
27. *Neptis hylas* (Linnaeus, 1758)
324/6 ssp. *aceris* F., Hrvatska, Zagreb: Medvednica, 09.08.
1967., leg. S. Radovanović
28. *Nymphalis polychloros* (Linnaeus, 1758)
325/6 Srbija, Zaječar, 11.08. 1966., leg. M. Zečević
29. *Limenitis camilla* (Linnaeus, 1764) (Fig. 3e)
326/6 Austrija, Stockerau, 18.06. 1966., leg. Klodman
30. *Argynnis pandora* (Denis and Schiffermüller, 1775)
Pandoriana maja (Cramer, 1776)
327/6 Srbija, Jazovo, 30. 08. 1964., leg. S. Radovanović
31. *Argynnis aglaja* (Linnaeus, 1758)
Mesoacidalia charlotta Haw.
328/6 Srbija, Jazovo, 09. 07. 1971., leg. S. Radovanović
329/6 Srbija, Jazovo, 06. 07. 1971., leg. S. Radovanović
32. *Brenthis hecate* (Denis & Schiffermüller, 1775)
330/6 Srbija, Jazovo, 09. 07. 1971., leg. S. Radovanović
331/6 Srbija, Jazovo, 05. 07. 1971., leg. S. Radovanović

33. *Nymphalis antiopa* (Linnaeus, 1758) (Fig. 3f)
332/6 Srbija, Stol, 07. 1966. leg. S. Radovanović
333/6 Srbija, Zaječar, 10. 05. 1967., leg. S. Radovanović
34. *Araschnia levana* (Linnaeus, 1758)
334/6 *gen vern. levana*, leg. S. Radovanović (specimen without a label)
335/6 *gen vern. prorsa*, Hrvatska, Zagreb: Medvednica, 9. 08. 1967., leg. S. Radovanović, ♂
35. *Polygonia c – album* (Linnaeus, 1758)
Polygonia c-album ab. *variegata* (Tutt, 1896)
336/6, leg. S. Radovanović (specimen without a label)
36. *Issoria lathonia* (Linnaeus, 1758)
337/6, leg. S. Radovanović (specimen without a label)
338/6, leg. S. Radovanović (specimen without a label)
339/6 1966., leg. S. Radovanović, ventral side
37. *Vanessa cardui* (Linnaeus, 1758)
340/6 leg. S. Radovanović (specimen without a label)
341/6 leg. S. Radovanović, ♂ (specimen without a label)
342/6 Srbija, Jazovo, 05.05. 1969., leg. S. Radovanović, ♀
38. *Vanessa atalanta* (Linnaeus, 1758)
343/6 Srbija, Zaječar, 16.07. 1971., leg. S. Radovanović
344/6 Srbija, Jazovo, 03.07. 1965., leg. S. Radovanović
39. *Argynnis niobe* (Linnaeus, 1758)
Fabriciana niobe (Linnaeus, 1758)
345/6 Srbija, Stol, 09.08. 1971., leg. S. Radovanović
346/6 Srbija, Stol, 28. 06. 1971., leg. S. Radovanović
40. *Argynnis paphia* (Linnaeus, 1758)
347/6 Srbija, Stol, 12.08. 1971., leg. S. Radovanović, ♂
348/6 Srbija, Stol, 21.08. 1971., leg. S. Radovanović, ♀
41. *Inachis io* (Linnaeus, 1758) (Fig. 4a)
349/6 Srbija, Jazovo, 02. 07. 1966., leg. S. Radovanović, ♂
350/6 Srbija, Jazovo, 01. 07. 1966., leg. S. Radovanović, ♀
351/6 S. Radovanović, cocoon (specimen without a label)
42. *Melitaea phoebe* (Denis & Schiffermüller, 1775)
352/6 Hrvatska, Zelina, 05.08. 1967., leg. S. Radovanović, ♂
353/6 leg. S. Radovanović, ♀ (specimen without a label)
43. *Melitaea didyma* (Esper, 1778) (Fig. 4b)
354/6 26.06.1971., leg. S. Radovanović, ♂ (specimen without a label)
355/6 8.07.1971., leg. S. Radovanović., ♀ (specimen without a label)

44. *Melitaea cinxia* (Linnaeus, 1758).
356/6 19.05.1964., leg. S. Radovanović
45. *Melitaea athalia* (Rottemburg, 1775)
357/6 Srbija, Stol, 02.07. 1967., leg. M. Zečević

Familia **Lycaenidae**

46. *Polyommatus coridon* (Poda, 1761)
267/4 Srbija, Zlot, 15.07. 1970., leg. S. Radovanović
47. *Lycaena dispar* (Haworth, 1802)
Polyommatus dispar var. *rutilus* Warnb.
268/4 Hrvatska, Zelina, 05.08. 1967., leg. S. Radovanović, ♂
269/4 Hrvatska, Zelina, leg. S. Radovanović, ♀
48. *Lycaena thersamon* (Esper, 1784)
270/4 *gen. vern.*, leg. S. Radovanović, ♂
271/4 *gen. vern.*, Srbija, Jazovo, 04.05. 1964., leg. S. Radovanović, ♀
274/4 *gen. aest. omphale*, Klug, Srbija, Jazovo, 27.08. 1964.,
leg. S. Radovanović, ♂
275/4 *gen. aest. omphale*, Klug, Srbija, Jazovo, 27.08. 1964.,
leg. S. Radovanović, ♀
49. *Lycaena alciphron* (Rottemburg, 1775)
Heodes alciphron (Rottemburg, 1775)
272/4 Srbija, Zaječar, 09.07. 1970., leg. S. Radovanović
50. *Lycaena virgaureae* (Linnaeus, 1758) (Fig. 4c)
276/4 leg. S. Radovanović, ♂ (specimen without a label)
277/4 Srbija, Zlot, 12.07. 1971., leg. S. Radovanović, ♀
51. *Arcia agestis* (Denis & Schiffermüller, 1775)
273/4 Hrvatska, Zagreb-Medvednica, 09. 08. 1967., leg. S. Radovanović
52. *Polyommatus daphnis* (Denis & Schiffermüller, 1775) (Fig. 4d)
278/4 Srbija, Zaječar, 20. 07. 1969., leg. S. Radovanović
53. *Polyommatus icarus* (Rottemburg, 1775)
279/4 Srbija, Jazovo, 20. 05. 1964., leg. S. Radovanović, ♂
280/4 Srbija, Jazovo, 31.08. 1964., leg. S. Radovanović, ♂
281/4 Srbija, Jazovo, 04.09. 1965., leg. S. Radovanović, ♂
54. *Plebeius argus* (Linnaeus, 1758)
282/4 Srbija, Jazovo, 29.05. 1964., leg. S. Radovanović, ♂
283/4 Srbija, Jazovo, 31.08. 1964., leg. S. Radovanović, ♂
284/4 Srbija, Jazovo, ♀ (specimen without a label)

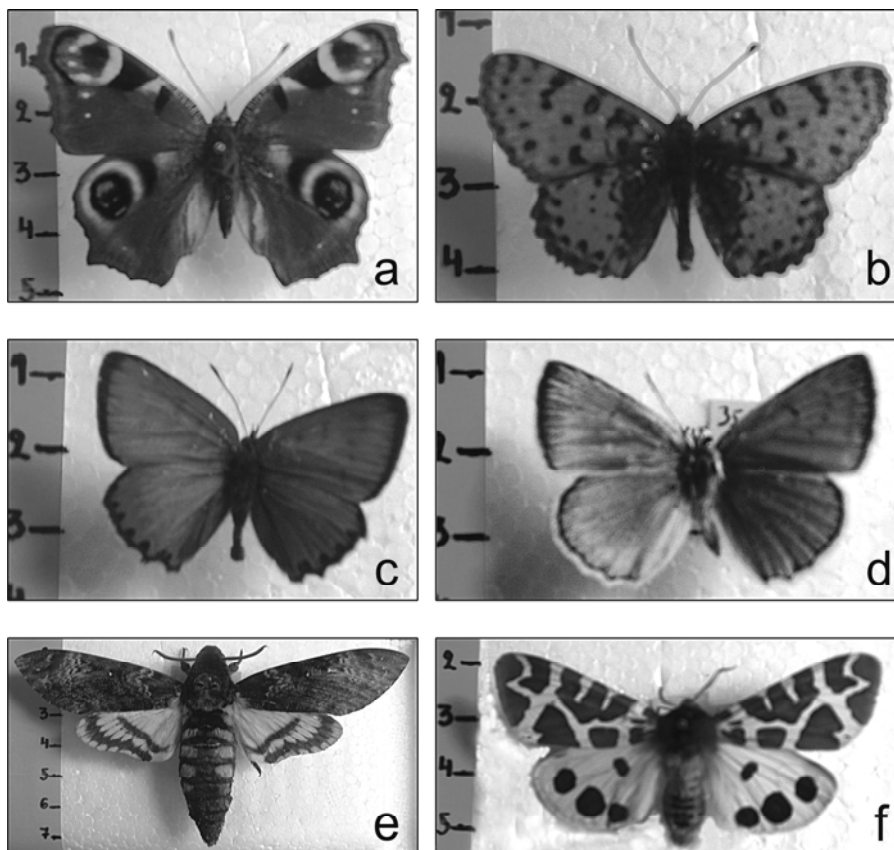


Fig. 4. - *Inachis io* (a), *Melitaea didyma* (b), *Lycaena virgaureae* (c), *Polyommatus daphnis* (d), *Acherontia atropos* (e), *Arctia caja* (f).

Familia Arctiidae

55. *Euplagia quadripunctaria* (Poda, 1761)
Panaxia quadripunctaria (Poda, 1761)
 382/8 (specimen without a label)
 383/8 (specimen without a label)
56. *Callimorpha dominula* (Linnaeus, 1758)
Panaxia dominula (Linnaeus, 1758)
 384/8 Hrvatska, Koprivnica, 22. 06. 1971., leg. R. Kranjčević
57. *Spilosoma urticae* (Esper, 1789)
 385/8 Srbija, Jazovo, 31. 07. 1965., leg. S. Radovanović, ♂
 386/8 Srbija, Jazovo, 05.07. 1967., leg. S. Radovanović, ♀
58. *Spilosoma lubricipeda* (Linnaeus, 1758)
Spilosoma menthastri (Esper, 1790)
Spilosoma menthastri (Denis & Schiffermüller, 1775)

- 387/8 leg. S. Radovanović, ♂ (specimen without a label)
59. *Arctia caja* (Linnaeus, 1758) (Fig. 4f)
390/8 Srbija, Jazovo, 29.08. 1965., leg. S. Radovanović, ♂
391/8 leg. S. Radovanović, ♀ (specimen without a label)
392/8 leg. S. Radovanović, l, cocoon (specimen without a label)
60. *Amata phegea* (Linnaeus, 1758)
395/8 Srbija, Stol, 20.08. 1966., leg. S. Radovanović, damaged specimen
61. *Amata marjana* (Stauder, 1913)
396/8 Srbija, Timočka krajina, 17. 06. 1963., leg. S. Radovanović
62. *Lithosia quadra* (Linnaeus, 1758)
397/8 Hrvarska, Koprivnica, 11.09. 1970., leg. R. Kranjčević
398/8 Hrvatska, Zagreb, 05.08. 1967., leg. S. Radovanović
63. *Hyphantria cunea* (Drury, 1773)
399/8 *gen vern.*, Srbija, Đala, 01.05. 1966., leg. S. Radovanović, ♂
400/8 *gen vern.*, Srbija, Jazovo, 03.05. 1961., leg. S. Radovanović, ♀
401/8 *gen vern.*, Srbija, Jazovo, 04.05. 1966., leg. S. Radovanović, ♂
402/8 *gen vern.*, Srbija, Ban. Arandelovo, 01.05. 1966., leg. S. Radovanović, ♀
403/8 *gen vern.*, Srbija, Jazovo, 07.08. 1964., leg. S. Radovanović, ♂
404/8 *gen vern.*, Srbija, Jazovo, 02.08. 1965., leg. S. Radovanović, ♀
405/8 Srbija, Jazovo, 15.03. 1966., leg. S. Radovanović
406/8 leg. S. Radovanović, cocoon (specimen without a label)
407/8 leg. S. Radovanović, natural position (specimen without a label)
408/8 leg. S. Radovanović, cocoon removed from the shell (specimen without a label)
64. *Dysauxes famula* (Freyer, 1836)
409/8 Srbija, Jazovo, 08. 1965., leg. S. Radovanović
65. *Phragmatobia fuliginosa* (Linnaeus, 1758)
412/8 Srbija, Jazovo, 26. 08. 1967., leg. S. Radovanović, ♂
413/8 Srbija, Jazovo, 3.07. 1967., leg. S. Radovanović, ♀
414/8 Srbija, Jazovo, 31.07. 1967., leg. S. Radovanović, natural position

Familia **Lymantriidae**

66. *Leucoma salicis* (Linnaeus, 1758)
Stilpnotia salicis (Linnaeus, 1758)
 388/8 Srbija, Jazovo, 26. 08. 1967., leg. S. Radovanović, ♂
 389/8 Srbija, Jazovo, 28. 08. 1967., leg. S. Radovanović, ♀
67. *Phalaena morio* (Linnaeus, 1767)
Bombyx morio (Linnaeus, 1767)
Hipogymna morio (Linnaeus, 1767)
 411/8 Srbija, Zaječar, leg. M. Zečević

Familia **Notodontidae**

68. *Cerura vinula* (Linnaeus, 1758)
Dicranura vinula (Linnaeus, 1758)
Cerura diuramajor (Retzius, 1783)
 415/9 leg. S. Radovanović, ♂ (specimen without a label)
 416/9 leg. S. Radovanović, ♀ (specimen without a label)
 417/9 leg. S. Radovanović, eggs (specimen without a label)
 418/9 leg. S. Radovanović, cocoon (specimen without a label)
69. *Phalera bucephala* (Linnaeus, 1758)
 419/9 Hrvatska, Koprivnica, 07. 08. 1969., leg. R. Kranjčević, ♀
70. *Pheosia tremula* (Clerck, 1759)
 420/9 Srbija, Jazovo, 23. 08. 1966., leg. S. Radovanović, ♀
71. *Spatalia argentina* (Denis & Schiffermüller, 1775)
 421/9 Hrvatska, Koprivnica, 14. 08. 1969., leg. S. Radovanović
72. *Pterostoma palpina* (Clerck, 1759)
 422/9 leg. S. Radovanović, ♂ (specimen without a label)
73. *Harpyia hermelina* (Goeze, 1781)
 423/9 Srbija, Jazovo, 27. 05. 1967., leg. S. Radovanović
 424/9 leg. S. Radovanović (specimen without a label)
74. *Clostera curtula* (Linnaeus, 1758)
 424/9 Srbija, Jazovo, 22. 08. 1968., leg. S. Radovanović, ♂

Familia **Sphingidae**

75. *Agrius convolvuli* (Linnaeus, 1758)
Herse convolvuli (Linnaeus, 1758)
 358/7 Srbija, Jazovo, 22. 07. 1964., leg. S. Radovanović, ♂
 359/7 Srbija, Jazovo, 22. 09. 1967., leg. S. Radovanović, ♂
 360/7 Srbija, Jazovo, 22. 07. 1964., leg. S. Radovanović, ♀
76. *Acherontia atropos* (Linnaeus, 1758) (Fig. 4e)
 361/7 Srbija, Jazovo, 05.10. 1970., leg. S. Radovanović, ♂
 362/7 leg. S. Radovanović, ♀ (specimen without a label)
 363/7 leg. S. Radovanović, cocoon (specimen without a label)

77. *Laothoe populi* (Linnaeus, 1758)
364/7 Srbija, Jazovo, 04.08. 1963., leg. S. Radovanović
365/7 Srbija, Jazovo, 23.08. 1966., leg. S. Radovanović
366/7 Srbija, Jazovo, 1963., leg. S. Radovanović
78. *Celerio euphorbiae* (Linnaeus, 1758)
367/7 Srbija, Jazovo, 25.06. 1963., leg. S. Radovanović
368/7 Srbija, Jazovo, 25.06. 1963., leg. S. Radovanović
79. *Deilephila elpenor* (Linnaeus, 1758)
369/7 Austrija, Königstetten, 10. 08. 1963., leg. Waller
80. *Sphinx ligustri* (Linnaeus, 1758) (Fig. 5a)
370/7 Srbija, Ostojićevo, 26.06. 1965., leg. S. Radovanović
81. *Smerinthus ocellatus* (Linnaeus, 1758) (Fig. 5b)
371/7 Srbija, Zaječar, 12. 05. 1968., leg. M. Zečević
372/7 Srbija, Zaječar, 06. 08. 1968., leg. M. Zečević
82. *Macroglossa stellatarum* (Linnaeus, 1758)
373/7 Srbija, Jazovo 27.07. 1963., leg. S. Radovanović

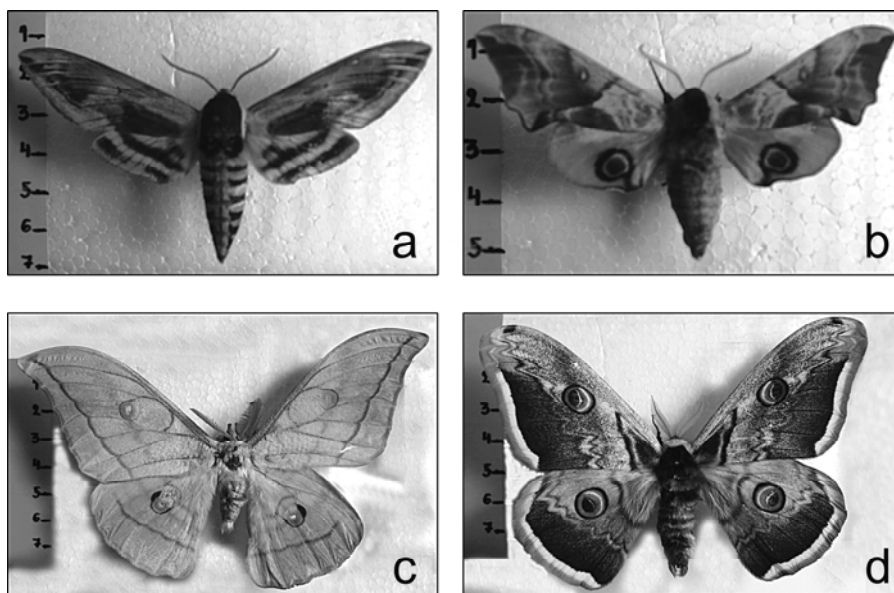


Fig. 5. - *Sphinx ligustri* (a), *Smerinthus ocellatus* (b), *Antheraea yamamai* (c), *Saturnia pyri* (d).

Familia Saturniidae

83. *Antheraea yamamai* (Guérin-Méneville, 1861) (Fig. 5c)
374/8 Hrvatska, Koprivnica, 20.08. 1970., leg. R. Kranjčević, ♂

84. *Saturnia pyri* (Denis & Schiffermüller, 1775) (Fig. 5d)
 375/8 Srbija, Jazovo, 03. 05. 1967., leg. S. Radovanović, ♂
 376/8 Srbija, Jazovo, 10.10. 1966., leg. S. Radovanović, ♀
 377/8 leg. S. Radovanović eggs (specimen without a label)
 378/8 leg. S. Radovanović, larva (specimen without a label)
 379/8 leg. S. Radovanović, cocoon (specimen without a label)
85. *Saturnia pavonia* (Linnaeus, 1758)
Eudia pavonia (Linnaeus, 1758)
 380/8 Srbija, Jazovo, 25. 04. 1970., leg. S. Radovanović, ♂
 381/8 Srbija, Jazovo, 22. 04. 1970., leg. S. Radovanović, ♀

Familia **Lasiocampidae**

86. *Gastropacha quercifolia* (Linnaeus, 1758)
 440/9 Srbija, Jazovo, 28. 08. 1967., leg. S. Radovanović, ♂
 441/9 Srbija, Jazovo, 28. 06. 1967., leg. S. Radovanović, ♀
 442/9 Srbija, Jazovo, 27. 08. 1967., leg. S. Radovanović, ♂
 443/9 Srbija, Jazovo, 15. 08. 1967., leg. S. Radovanović
87. *Euthrix potatoria* (Linnaeus, 1758)
Phalaena potatoria (Linnaeus, 1758)
 444/9 Hrvatska, Koprivnica, 20.08. 1971., leg. S. Radovanović
88. *Lasiocampa trifolii* (Denis & Schiffermüller, 1775)
Pachygastris trifolii (Denis & Schiffermüller, 1775)
 445/9 leg. S. Radovanović, ♂ (specimen without a label)
 446/9 Hrvatska, Koprivnica, 24.08. 1971., leg. S. Radovanović, ♀
89. *Odonestis pruni* (Linnaeus, 1758)
 447/9 Srbija, Jazovo, leg. S. Radovanović, ♂
 448/9 Srbija, Jazovo, 05. 08. 1963., leg. S. Radovanović, ♀
90. *Malacosoma neustria* (Linnaeus, 1758)
Clisiocampa neustria (Linnaeus, 1758)
 449/9 Srbija, Stol, 1307. 1971., leg. S. Radovanović, ♂
 450/9 Hrvatska, Koprivnica, 19.06. 1970., leg. R. Kranjčević, ♀
 451/9 Srbija, Jazovo, 12. 06. 1964., leg. S. Radovanović, ♀

Familia **Bombycidae**

91. *Bombyx mori* (Linnaeus, 1758)
 432/9 Srbija, Jazovo, 20. 06. 1967., leg. S. Radovanović
 433/9 Srbija, Jazovo, leg. S. Radovanović, cocoon

Familia **Lemoniidae**

92. *Lemonia taraxaci* (Denis & Schiffermüller, 1775)
 410/8 Crna Gora (specimen without a label)

Familia **Drepanidae**

93. *Drepana curvatula* (Borkhausen, 1790)
393/8 Hrvatska, Koprivnica, 08.08.1970., leg. S. Radovanović
94. *Cilix glaucata* (Scopoli, 1763)
394/8 Srbija, Jazovo, 11. 05. 1970., leg. S. Radovanović
95. *Tethea ocellaris* (Linnaeus, 1767)
428/9 Srbija, Zaječar, 10. 05. 1967., leg. S. Radovanović
96. *Habrosyne pyritoides* (Hufnagel, 1766)
429/9 Srbija, Timočka krajina, 1967., leg. S. Radovanović
97. *Thyatira batis* (Linnaeus, 1758)
430/9 Srbija, Stol, 13.07. 1971., leg. S. Radovanović

Familia **Geometridae**

98. *Hypomecis robaria* (Denis & Schiffermueller, 1775)
Boarmia robaria (Denis & Schiffermueller, 1775)
452/10 Srbija, Jazovo, 27. 05. 1971., leg. S. Radovanović
99. *Hypomecis punctinalis* (Scopoli, 1763)
Boarmia punctinalis (Scopoli, 1763)
453/10 Srbija, Jazovo, 12. 05. 1971., leg. S. Radovanović
100. *Ascotis selenaria* (Denis & Schiffermueller, 1775)
Boarmia selenaria (Denis & Schiffermueller, 1775)
454/10 Srbija, Jazovo, 12. 05. 1966., leg. S. Radovanović
455/10 Srbija, Jazovo, 13. 06. 1967., leg. S. Radovanović
456/10 Srbija, Jazovo, 07. 07. 1967., leg. S. Radovanović
101. *Hypomecis roboraria* (Denis & Schiffermüller, 1775)
457/10 Srbija, Jazovo, 30.08. 1967., leg. S. Radovanović
102. *Colotois pennaria* (Linnaeus, 1761)
458/10 Hrvatska, Koprivnica, 04.09. 1969., leg. R. Kranjčević
103. *Selenia lunularia* (Hübner, 1788)
459/10 Srbija, Jazovo, 10. 08. 1969., leg. S. Radovanović
104. *Angerona prunaria* (Linnaeus, 1758)
460/10 Hrvatska, Koprivnica, 13.08. 1970., leg. S. Radovanović
105. *Horisme vitalbata* (Denis & Schiffermüller, 1775)
461/10 leg. S. Radovanović (specimen without a label)
106. *Ematurga atomaria* (Linnaeus, 1758)
462/10 Srbija, Stol, 01.07. 1971., leg. S. Radovanović
107. *Pseudopanthera macularia* (Linnaeus, 1758)
463/10 Srbija, Jazovo, 10. 07. 1970., leg. S. Radovanović
108. *Crocallis elinguaris* (Linnaeus, 1758)
464/10 leg. S. Radovanović (specimen without a label)

109. *Rhodostrophia tabidaria* (Zeller, 1847)
465/10 Srbija, Zaječar, 28.06. 1967., leg. M. Zečević
110. *Hylaea fasciaria* (Linnaeus, 1758)
466/10 leg. S. Radovanović (specimen without a label)
111. *Chlorissa pulmentaria* (Guenée, 1857)
467/10 Srbija, Jazovo, 1962., leg. S. Radovanović
112. *Thetidia smaragdaria* (Fabricius, 1787)
Antonechloris smaragdaria (Fabricius, 1787)
Euchloris smaragdaria (Fabricius, 1787)
468/10 Srbija, Jazovo, 08.08.1969., leg. S. Radovanović
113. *Ennomos autumnaria* (Werneburg, 1859)
469/10 Srbija, Jazovo, 27.07. 1963., leg. S. Radovanović
114. *Timandra amata* (Linnaeus, 1758)
470/10 Srbija, Jazovo, 28.06. 1967., leg. S. Radovanović
471/10 Srbija, Jazovo, 22.08. 1966., leg. S. Radovanović
115. *Idaea consolidata* (Lederer, 1853)
Ptychopoda consolidata (Lederer, 1853)
472/10 Srbija, Jazovo, 28. 06. 1964., leg. S. Radovanović
116. *Therapis flavicaria* (Denis & Schiffermüller, 1775)
473/10 Srbija, Jazovo, 06.05. 1966., leg. S. Radovanović
117. *Eupithecia centaureata* (Denis & Schiffermüller, 1775)
474/10 Srbija, Jazovo, 19.08. 1965., leg. S. Radovanović
118. *Idaea rusticata* (Denis & Schiffermüller, 1775)
Ptychopoda rusticata (Denis & Schiffermüller, 1775)
475/10 Srbija, Jazovo, 22.08. 1964., leg. S. Radovanović
119. *Cidaria fulvata* (Forster, 1771)
478/10 Srbija, Jazovo, 03. 05. 1965., leg. S. Radovanović, ♂
479/10 Srbija, Jazovo, 22. 04. 1967., leg. S. Radovanović, ♀
120. *Epirrhoe tristata* (Linnaeus, 1758)
Cidaria tristata (Linnaeus, 1758)
480/10 Hrvatska, Zagreb, 12.08. 1967., leg. S. Radovanović
121. *Macaria alternata* (Denis & Schiffermüller, 1775)
481/10 Srbija, Jazovo, 11.08. 1965., leg. S. Radovanović
482/10 Srbija, Jazovo, 02.05. 1964., leg. S. Radovanović
122. *Isturgia arenacearia* (Denis & Schiffermüller, 1775)
483/10 Srbija, Jazovo, 04.08. 1964., leg. S. Radovanović, ♀
484/10 Srbija, Jazovo, 28.06. 1964., leg. S. Radovanović, ♂
485/10 Srbija, Jazovo, 25.05. 1965., leg. S. Radovanović
486/10 Srbija, Jazovo, 04.05. 1966., leg. S. Radovanović
487/10 Srbija, Jazovo, 19.05. 1966., leg. S. Radovanović

123. *Chiasmia clathrata* (Linnaeus, 1758)
488/10 Srbija, Jazovo, SR, damaged specimen
489/10 Srbija, Jazovo, 26.08. 1967., leg. S. Radovanović
490/10 Srbija, Jazovo, leg. S. Radovanović
124. *Eilicrinia cordiaria* (Hübner, 1790)
491/10 Srbija, Jazovo, 11.05. 1970., leg. S. Radovanović
125. *Chlorissa viridata* (Linnaeus, 1758)
492/10 Srbija, Jazovo, 07.05. 1966. leg. S. Radovanović
493/10 Srbija, Jazovo, 11.06. 1966., leg. S. Radovanović, damaged specimen
126. *Anaitis praeformata* (Hübner, 1826)
Aplocera praeformata (Hübner, 1826)
494/10 leg. S. Radovanović (specimen without a label)
127. *Lithostege griseata* (Denis & Schiffermüller, 1775)
495/10 Srbija, Jazovo, 20.04. 1966., leg. S. Radovanović, ♀
496/10 Srbija, Jazovo, 01.05. 1965., leg. S. Radovanović, ♂
497/10 Srbija, Jazovo, 02.05. 1964., ♀
128. *Lithostege farinata* (Hufnagel, 1767)
498/10 Srbija, Jazovo, 14.05. 1964., leg. S. Radovanović, ♂, damaged specimen
129. *Lythria purpuraria* (Linnaeus, 1758)
499/10 Srbija, Jazovo, 25.05. 1968., leg. S. Radovanović

Familia Zygaenidae

130. *Zygaena filipendulae* (Esper, 1780)
Polymorpha filipendulae (Esper, 1780)
425/9 Srbija, Jazovo, 05.06. 1966., leg. S. Radovanović
426/9 Srbija, Jazovo, 05.06. 1966., leg. S. Radovanović

Familia Cossidae

131. *Cossus cossus* (Linnaeus, 1758)
434/9 Srbija, Čoka, 19.07. 1966., leg. S. Radovanović
132. *Zeuzera pyrina* (Linnaeus, 1761)
435/9 Srbija, Jazovo, 03. 07. 1967., leg. S. Radovanović, ♂
436/9 Srbija, Jazovo, 23. 07. 1967., leg. S. Radovanović, ♀
133. *Phragmataecia castaneae* (Hübner, 1790)
437/9 Srbija, Jazovo, 05. 06. 1964., leg. S. Radovanović, ♂
438/9 Srbija, Jazovo, 28. 06. 1967., leg. S. Radovanović, ♀
134. *Dyspessa ulula* (Borkhausen, 1790)
439/9 Srbija, Jazovo, 13. 05. 1964., leg. S. Radovanović

Familia **Hepialidae**135. *Hepialus sylvina* (Linnaeus, 1761)

431/9 Srbija, Jazovo, 07.09. 1964., leg. S. Radovanović

DISCUSSION AND CONCLUSIONS

The Catalogue of Collection of Butterflies by Stanko Radovanović stored at the National Museum in Kikinda includes 241 specimens from 135 species and 18 families (Table 1). Best represented families are Geometridae and Nymphalidae, while four families are represented with single specimens: Lemoniidae, Bombycidae, Zygaenidae and Hepialidae.

Table 1. - Overview of representation of families and species.

Familia	Number of species	Number of specimens
Hesperiidae	2	3
Papilionidae	6	10
Pieridae	9	25
Lycaenidae	9	18
Nymphalidae	28	45
Arctiidae	11	27
Lymantridae	2	3
Notodontidae	7	11
Sphingidae	8	16
Saturniidae	3	8
Lasiocampidae	5	12
Bombycidae	1	2
Lemoniidae	1	1
Drepanidae	5	5
Geometridae	32	46
Zygaenidae	1	2
Cossidae	4	6
Hepialidae	1	1
Total	135	241

The goal of this paper is to process museologically the butterfly specimens from the legates of Stanko Radovanović, including conservation, identification and inventory and writing catalogues.

The material was collected from 1961-1974. During a calendar year specimens were collected from March to October, mostly in summer

months and primarily in August (Fig. 6), in direct correlation with the life cycle of butterflies.

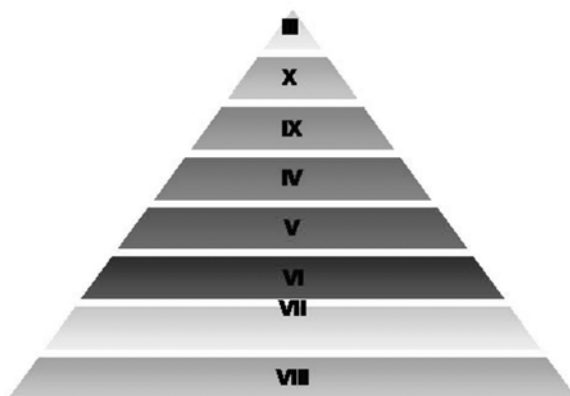


Fig. 6 - Abundance of collected butterfly species by month.

There are 15 localities recorded in the Catalogue. Besides the three butterfly specimens from Austria (*Apatura ilia* Denis & Schiffermüller; *Limenitis camilla* Linnaeus; *Deilephila elpenor* Linnaeus), all specimens originated in ex Yugoslavia. The best represented localities are in Banat (Jazovo, Čoka, Ostojićevo, Đala and Banatsko Arandelovo), followed by central Serbia (Stol, Zaječar, Paraćin, Gamzigrad and Zlot). Croatia is represented with three localities (Koprivnica, Zagreb and Zelina) and Montenegro with one specimen - *Lemonia taraxaci* Denis & Schiffermüller.

Most of the Collection was collected by Stanko Radovanović, but the diversity of this collection was also contributed to by other collectors: Momčilo Zečević, Radovan Kranjčević, Klodman and Waller.

Plans for further storing and conservation of Collection of Insects by Stanko Radovanović at the National Museum in Kikinda include translocation of the collection to new boxes to enable easier handling and more efficient protection from museum pests, and thereby mitigate the lack of conservators – preparators in the Natural History Department.

Acknowledgements

I am grateful to my mentor, Museum Advisor Dr Ljiljana Protić, as well as Museum Advisor Dr Ljiljana Andus of the Natural History Museum in Belgrade for their selfless expert help and support during the preparation of this paper.

I am particularly grateful to Hrvoje and Mirna Radovanović for their help in collecting data on the biography of Stanko Radovanović.

REFERENCES

- Andus, Lj. (2008): Butterflies (Lepidoptera, Hesperioidea and Papilionoidea) from the collection of The Natural History Museum in Belgrade. - **Natural History Museum, Belgrade, Special issue 40**: 1-94.
- Jakšić, P. (1998): Male genitalia of Butterflies on Balkan peninsula with a Check-list (Lepidoptera: Hesperioidea and Papilionoidea). – František Slamka publ., Bratislava.
- Lorković, Z., Jakšić, P. (1983): In memoriam. Stanko Radovanović. - **Acta entomologica Jugoslavica 1982 18(1-2)**: 119-121.
- Novák, I. (1980): A Field Guide in Colour to Butterflies and Moths. – Artia, Prague.
- Radovanović, S. (1967a): Leptiri selci. - **Priroda 5/1967**: 135-138.
- Radovanović, S. (1967b): Leptiri selci. - **Priroda 6/1967**: 165-170.
- Radovanović, S. (1970): Jahresbericht 1969 über Wanderschmetterlinge in Jugoslawien. - **Atalanta 3(1)**: 5-11.
- Radovanović, S. (1971a): Bericht 1970 über Wanderschmetterlinge in Jugoslawien. - **Atalanta 3(5)**: 292-299.
- Radovanović, S. (1971b): Beobachtungen über die Wanderschmetterlinge im jugoslawischen Nordbanat 1955 - 1970. - **Atalanta 3(5)**: 300-309.
- Radovanović, S. (1971c): Pojava rijetke Noctuidae *Gorgyna borelli* Pierr. u Jugoslaviji. - **Acta entomologica Jugoslavica 7(2)**: 71-72.
- Radovanović, S. (1973): Jahresbericht 1972 über Wanderschmetterlinge in Jugoslawien. - **Atalanta 4(5)**: 305-309.
- Radovanović, S. (1974): Jahresbericht 1973 über Wanderschmetterlinge in Jugoslawien. - **Atalanta 5(4)**: 219-231.
- Radovanović, S. (1975a): Bericht über die Jahreshauptversammlung der Jugoslawischen entomologischen Gesellschaft. - **Atalanta 6(1)**: 10-11.
- Radovanović, S. (1975b): Jahresbericht 1974 über Wanderschmetterlinge in Jugoslawien. - **Atalanta 6(3)**: 180-188.
- Radovanović, S. (1976): Jahresbericht 1975 über Wanderschmetterlinge in Jugoslawien. - **Atalanta 7(4)**: 219-232.

ЗБИРКА ЛЕПТИРА СТАНКА РАДОВАНОВИЋА У НАРОДНОМ МУЗЕЈУ У КИКИНДИ (СРБИЈА)

Љубица Војводић

РЕЗИМЕ

У оквиру природњачког одељења Народног музеја у Кикинди постоје минералозна, ботаничка, зоолошка и збирка учила и цртежа. У зоолошкој збирци поред орнитолошке, мамолошке и ихтиолошке збирке посебно се истиче колекција инсеката аматера - ентомолога Станка Радовановића (1910-1982) из Јазова, коју је Музеј преузео 1970. године.

Збирка инсеката се састоји од 13 кутија $50 \times 42 \times 6$ cm у којима су смештени представници следећих редова: *Odonata*, *Orthoptera*, *Dic-tyoptera*, *Hemiptera*, *Coleoptera*, *Diptera*, *Trichoptera*, *Lepidoptera* и *Hymenoptera*.

Овај рад је први корак у представљању кикиндске збирке лептира Станка Радовановића широј стручној јавности, а обрађена је као Хабилитациони рад за музејско звање виши кустос.

Каталог обухвата 241 примерака лептира, односно 135 врста разврстаних у 18 породица. Класификација је дата према Јакшићу (1998) и Новаку (1980). Највећи део колекције сакупио је С. Радовановић, међутим разноврсности збирке допринели су и сакупљачи Момчило Зечевић, Радован Крањчевић, Klodman и Waller. Материјал је сакупљен у периоду од 1961. до 1971. године, и то у највећој мери у летњим месецима, првенствено августу, што је у директној вези са животним циклусом лептира.

У каталогу је заступљено 15 локалитета. Најзаступљенији локалитети су из Баната (Јазово, Чока, Остојићево, Бала и Банатско Ар-анђелово), а потом из уже Србије (Стол, Зајечар, Параћин, Гамзиград и Злот). Хрватска је заступљена са три локалитета Аустрија са два а Црна Гора са једним локалитетом.

У погледу даљег чувања и заштите колекције инсеката Станка Радовановића у Народног музеју у Кикинди планира се измештање збирке у нове кутије како би се олакшало руковање истом и њена ефикаснија заштита од музејских штеточина. На тај начин би се надоместио и недостатак конзерватора – препаратора природњачког одељења.

Register of species¹

- aegeria* (Linnaeus, 1758) (*Pararge*), 19, 139
agestis (Denis & Schiffermüller, 1775) (*Arcia*), 51, 141
aglaja (Linnaeus, 1758) (*Argynnis*), 31, 139
alciphron (Rottemburg, 1775) (*Lycaena* (*Heodes*)), 49, 141
alternata (Denis & Schiffermüller, 1775) (*Macaria*), 121, 148
amata (Linnaeus, 1758) (*Timandra*) 114, 148
antiopa (Linnaeus, 1758) (*Nymphalis*) 33, 140
apollo (Linnaeus, 1785) (*Parnassius*) 4, 136
arcania (Linnaeus, 1761) (*Coenonympha*) 24, 139
arenacearia (Denis & Schiffermüller, 1775) (*Isturgia*) 122, 148
arethusa (Denis & Schiffermüller, 1775) (*Arethusana*) 21, 139
argus (Linnaeus, 1758) (*Plebeius*) 54, 141
atalanta (Linnaeus, 1758) (*Vanessa*) 38, 140
athalia (Rottemburg, 1775) (*Melitaea*) 45, 141
argentina (Denis & Schiffermüller, 1775) (*Spatalia*) 71, 144
atropos (Linnaeus, 1758) (*Acherontia*) 76, 144
atomaria (Linnaeus, 1758) (*Ematurga*) 106, 147
autumnaria (Werneburg, 1859) (*Ennomos*) 113, 148

brassicae (Linnaeus, 1758) (*Pieris*) 9, 136
batis (Linnaeus, 1758) (*Thyatira*) 97, 147
briseis (Linnaeus, 1764) (*Chazara*) 18, 139
bucephala (Linnaeus, 1758) (*Phalera*) 69, 144

caja (Linnaeus, 1758) (*Arctia*) 59, 143
c – album (Linnaeus, 1758) (*Polygonia*) 35, 140
camilla (Linnaeus, 1764) (*Limenitis*) 29, 139
cardamines (Linnaeus, 1758) (*Anthocharis*) 16, 137
cardui (Linnaeus, 1758) (*Vanessa*) 37, 140
castaneae (Hübner, 1790) (*Phragmataecia*) 134, 149
centaureata (Denis & Schiffermüller, 1775) (*Eupithecia*) 117, 148
cinxia (Linnaeus, 1758) (*Melitaea*) 44, 141
charlotta (Haw.) (*Mesoacidalia*), 31, 139
circe (Fabricius, 1775) (*Brintesia*) 20, 139
clathrata (Linnaeus, 1758) (*Chiasmia*) 123, 149
crataegi (Linnaeus, 1758) (*Aporia*) 12, 137
croceus (Fourcroy, 1758) (*Colias*) 15, 137
consolidata (Lederer, 1853) (*Idaea* (*Ptychopoda*)) 115, 148
coridon (Poda, 1761) (*Polyommatus*) 46, 141
convolvuli (Linnaeus, 1758) (*Agrius* (*Herse*)) 75, 144
cossus (Linnaeus, 1758) (*Cossus*) 131, 149
cordiaria (Hübner, 1790) (*Eilicrinia*) 124, 149
cunea (Drury, 1773) (*Hyphantria*) 63, 143
curtula (Linnaeus, 1758) (*Clostera*) 74, 144
curvatula (Borkhausen, 1790) (*Drepana*) 93, 147

¹ The penultimate number in each row is the serial number of each species in the catalogue, while the ultimate number is page number within the catalogue.

- daphnis* (Denis & Schiffermüller, 1775) (*Polyommatus*) 52, 141
didyma (Esper, 1778) (*Melitaea*) 43, 140
dispar (Haworth, 1802) (*Lycaena*) 47, 141
dominula (Linnaeus, 1758) (*Callimorpha* (*Panaxia*)) 56, 142
diuramajor (Retzius, 1783) *Cerura* 68, 144

edusa (Linnaeus, 1758) (*Pontia*) 17, 137
elinguaria (Linnaeus, 1758) (*Crocallis*) 108, 147
elpenor (Linnaeus, 1758) (*Deilephila*) 9, 145
euphorbiae (Linnaeus, 1758) (*Celerio*) 78, 145

famula (Freyer, 1836) (*Dysauxes*) 64, 143
farinata (Hufnagel, 1767) (*Lithostege*) 128, 149
fasciaria (Linnaeus, 1758) (*Hylaea*) 110, 148
filipendulae (Esper, 1780) (*Zygaena* (*Polymorpha*)) 130, 149
flavicaria (Denis & Schiffermüller, 1775) (*Therapis*) 116, 148
fuliginosa (Linnaeus, 1758) (*Phragmatobia*) 65, 143
fulvata (Forster, 1771) (*Cidaria*) 119, 148

galathea (Linnaeus, 1758) (*Melanargia* (*Agapetes*)) 22, 139
glaucata (Scopoli, 1763) (*Cilix*) 94, 147
griseata (Denis & Schiffermüller, 1775) (*Lithostege*) 127, 149

hecate (Denis & Schiffermüller, 1775) (*Brenthis*) 32, 139
hermelina (Goeze, 1781) (*Harpyia*) 73, 144
hyale (Linnaeus, 1758) (*Colias*) 14, 137
hylas (Linnaeus, 1758) (*Neptis*) 27, 139

icarus (Rottemburg, 1775) (*Polyommatus*) 53, 141
ilia (Denis & Schiffermüller, 1775) (*Apatura*) 26, 139
io (Linnaeus, 1758) (*Inachis*) 41, 140

jurtina (Linnaeus, 1758) (*Maniola*) 23, 139

lathonia (Linnaeus, 1758) (*Issoria*) 36, 140
levana (Linnaeus, 1758) (*Araschnia*) 34, 140
ligustri (Linnaeus, 1758) (*Sphinx*) 80, 145
lubricipeda (Linnaeus, 1758) (*Spilosoma*) 58, 142
lunularia (Hübner, 1788) (*Selenia*) 103, 147

machaon (Linnaeus, 1758) (*Papilio*) 7, 136
machaon gorganus (Fruhst) (*Papilio*) 7, 136
macularia (Linnaeus, 1758) (*Pseudopanthera*) 107, 147
malvae (Linnaeus, 1758) (*Pyrgus*) 1, 136
marjana (Stauder, 1913) (*Amata*) 61, 143
menthastris (Denis & Schiffermüller, 1775) (*Spilosoma*) 58, 142
mnemosyne (Linnaeus, 1758) (*Parnassius*) 5, 136
mori (Linnaeus, 1758) (*Bombyx*) 91, 146
morio (Linnaeus, 1767) (*Phalaena* (*Bombyx*) (*Hipogymna*)) 67, 144

napi (Linnaeus, 1758) (*Pieris*) 11, 137
neustria (Linnaeus, 1758) (*Malacosoma* (*Clisiocampa*)) 90, 146
niobe (Linnaeus, 1758) (*Argynnis* (*Fabriciana*)) 39, 140

ocellatus (Linnaeus, 1758) (*Smerinthus*) 81, 145
ocularis (Linnaeus, 1767) (*Tethea*) 95, 147

- palpina* (Clerck, 1759) (*Pterostoma*) 72, 144
pamphilus (Linnaeus, 1758) (*Coenonympha*) 25, 139
pandora (Denis and Schiffermüller, 1775) (*Argynnis*) 30, 139
paphia (Linnaeus, 1758) (*Argynnis*) 40, 140
pavonia (Linnaeus, 1758) (*Saturnia* (*Eudia*)) 85, 146
pennaria (Linnaeus, 1761) (*Colotois*) 60, 147
phegea (Linnaeus, 1758) (*Amata*) 60, 143
phoebe (Denis & Schiffermüller, 1775) (*Melitaea*) 42, 140
polyxena (Fabricius, 1777) (*Zerynthia*) 6, 136
populi (Linnaeus, 1758) (*Laothoe*) 77, 145
potatoria (Linnaeus, 1758) (*Euthrix* (*Phalaena*)) 87, 146
prunaria (Linnaeus, 1758) (*Angerona*) 104, 147
pruni (Linnaeus, 1758) (*Odonestis*) 89, 146
podalirius (Linnaeus, 1758) (*Iphiclides*) 3, 136
polychloros (Linnaeus, 1758) (*Nymphalis*) 28, 139
praeformata (Hübner, 1826) (*Anaitis* (*Aplocera*)) 126, 149
pulmentaria (Guenée, 1857) (*Chlorissa*) 111, 148
punctinalis (Scopoli, 1763) (*Hypomecis* (*Boarmia*)) 99, 147
purpuraria (Linnaeus, 1758) (*Lythria*) 129, 149
pyri (Denis & Schiffermüller, 1775) (*Saturnia*) 84, 146
pyrina (Linnaeus, 1761) (*Zeuzera*) 132, 149
pyritoides (Hufnagel, 1766) (*Habrosyne*) 96, 147
quadra (Linnaeus, 1758) (*Lithosia*) 62, 143
quadripunctaria (Poda, 1761) (*Euplagia* (*Panaxia*)) 55, 142
quercifolia (Linnaeus, 1758) (*Gastropacha*) 86, 146
rapae (Linnaeus, 1758) (*Pieris*) 10, 137
rhamni (Linnaeus, 1758) (*Gonepteryx*) 8, 136
robaria (Denis & Schiffermüller, 1775) (*Hypomecis* (*Boarmia*)) 98, 147
roboraria (Denis & Schiffermüller, 1775) (*Hypomecis*) 101, 147
rusticata (Denis & Schiffermüller, 1775) (*Idaea* (*Ptychopoda*)) 118, 148
salicis (Linnaeus, 1758) (*Leucoma* (*Stilpnotia*)) 66, 144
selenaria (Denis & Schiffermüller, 1775) (*Ascotis* (*Boarmia*)) 100, 147
sinapis (Linnaeus, 1758) (*Leptidea*) 13, 137
smaragdaria (Fabricius, 1787) (*Thetidia* (*Antonechloris*) (*Euchloris*)) 112, 148
stellatarum (Linnaeus, 1758) (*Macroglossa*) 82, 145
sylvina (Linnaeus, 1761) (*Hepialus*) 135, 150
taraxaci (Denis & Schiffermüller, 1775) (*Lemonia*) 92, 146
tabidaria (Zeller, 1847) (*Rhodostrophia*) 109, 148
thersamon (Esper, 1784) (*Lycaena*) 48, 141
tremula (Clerck, 1759) (*Pheosia*) 70, 144
trifolii (Denis & Schiffermüller, 1775) (*Lasiocampa* (*Pachygastrina*)) 88, 146
tristata (Linnaeus, 1758) (*Epirrhoe* (*Cidaria*)) 120, 148
ulula (Borkhausen, 1790) (*Dyspessa*) 134, 149
urticae (Esper, 1789) (*Spilosoma*) 57, 142
yamamai (Guérin-Ménéville, 1861) (*Antheraea*) 83, 145
venata (Bremer & Grey, 1853) (*Ochlodes*) 2, 136
vinula (Linnaeus, 1758) (*Cerura* (*Dicranura*)) 68, 144
virgaureae (Linnaeus, 1758) (*Lycaena*) 50, 141
viridata (Linnaeus, 1758) (*Chlorissa*) 124, 149
vitalbata (Denis & Schiffermüller, 1775) (*Horisme*) 105, 147