

Data on the Butterfly Fauna of the Croatian part of Baranja (Lepidoptera Rhopalocera)

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Abstract

At the foot of the BANSKO BRDO hill, in the stations of BRANJINA (CR 17) and BATINA (CR 38), two butterfly species were sampled, new for the Baranja fauna. These species are *Limenitis reducta* Staudinger, 1901 (Nymphalidae) and *Iolana iolas* (Ochsenheimer, 1816) (Lycaenidae). It is the first time that the species *Iolana iolas* is recorded from the continental part of Croatia. In the Croatian part of Baranja, 63 butterfly species are known. They belong to 7 families which make up 33, 87% of the butterfly fauna of Croatia.

Keywords: Lepidoptera, Rhopalocera, Baranja, Croatia.

Introduction

So far, 186 butterfly species have been identified as belonging to the fauna of Croatia (Lorković 1989, 1993; Lorković *et al.* 1992; Sala & Bollino 1994, Kućinić *et al.* 1999). However, there are some regions in Croatia that have not yet been sufficiently sampled and studied; one of these regions is Baranja. The research carried out on the territory of Baranja so far has resulted in recording 61 species of butterflies (SZENT-IVÁNY, 1944; KRČMAR *et al.* 1996). This is not the final number of species because the fauna of a certain region cannot be considered as completely known as long as new species are found, particularly if they are already known in neighbouring countries. Many new records of butterfly species can therefore be expected in this border region of Croatia. This view is also supported by the results of this research and by other more recent findings.

Material and Methods

Sporadic samplings of butterflies on the territory of Baranja have been carried out between 1998 and 2002 in localities along the forest margins. The butterflies were sampled by means of an entomological net in localities in which mainly horse flies (Tabanidae) were sampled. Some of the species were quickly

identified using the S. Krčmar butterfly collection. This collection came through the occupation of Baranja (1991 - 1997) because it was hidden in a wine cask in one of the wine cellars in Zmajevac. Since 1998, this collection has been exhibited in the Museum of Slavonia in Osijek. Part of the collection was examined and identified by the Academician Z. Lorković. The identification of the butterflies was carried out using the book by HIGGINS & RILEY (1993).

Results and Discussion

During the faunal and ecological research on horse flies on the territory of Baranja, numerous butterflies were sampled also. On 16th May 2002, in the station BRANJINA (CR 17) at the foot of the BANSKO BRDO hill, one specimen of the species *Limenitis reducta* Staudinger, 1901, (Nymphalidae) was caught. This is the first specimen of this species found in the Croatian part of Baranja. *Limenitis reducta* was also caught in the Hungarian part of the Baranja region, in the stations located on the southern slopes of the Villány Hill (UHERKOVICH, 1976). The second new species in the fauna of Baranja and continental part of Croatia is *Iolana iolas* (Ochsenheimer, 1816), (Lycaenidae); it was also caught at the foot of BANSKO BRDO in the station BATINA (CR 38) on 23th May 1990. This species

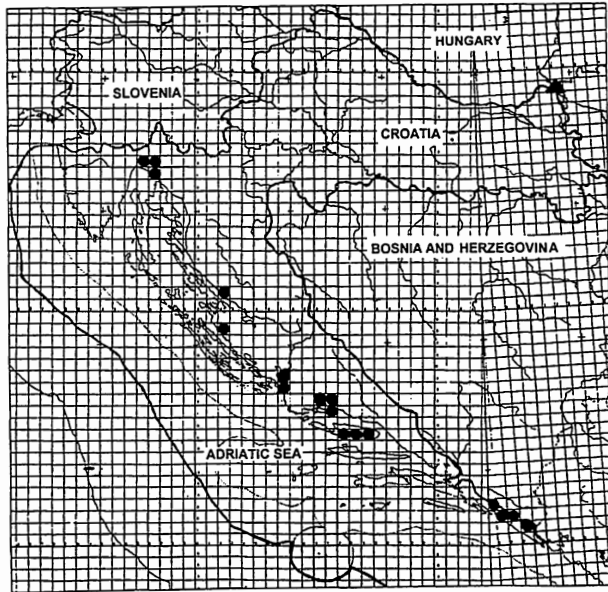


Fig. 1. Distribution of the species *Iolana iolas* in Croatia (UTM grid 10 × 10 km). ● according to the literature, ▲ Batina (CR 38), Baranja, Croatia.

was identified during a reexamination of the S. Krčmar butterfly collection. The final identification was confirmed by the Academician Z. Lorković on 26th March 1998. *Iolana iolas* is very common in the Mediterranean part of Croatia (JAKŠIĆ, 1988). The present record is the first in the continental part of Croatia (Fig. 1). Thanks to these new findings, the family Nymphalidae is now represented by 17 and the family Lycaenidae by 15 species (Table 2). In the course of the above research on the butterfly fauna of Baranja between 1998 and 2002, the presence of most known species of the Baranja butterfly fauna was confirmed. All sampled butterfly specimens were released after their identification, and only the specimens new for the fauna of the sampled area were kept. In the Hungarian part of Baranya, 85 butterfly species were identified, amongst which also the rare species *Limnitis reducta* and *Iolana iolas* (UHERKOVICH, 1975). Due to the great similarity between the Villány hill in Hungary and Banske brdo in Croatia, it is expected that several other new butterfly species will be found in the fauna of Baranja.

Conclusion

During faunistic and ecological research on horse flies (Tabanidae), carried out in Baranja between 1998 and 2002, some butterflies have been sporadically sampled also. Among the sampled butterflies, two new species for the

Table 1. List of the butterflies in Baranja (Lepidoptera: Rhopalocera).

Family	Species
Papilionidae	<i>Papilio machaon</i> L. 1758
	<i>Iphiclides podalirius</i> L. 1758
	<i>Zerynthia polyxena</i> D.-Schifferrmüller 1775
Pieridae	<i>Aporia crataegi</i> L. 1758
	<i>Pieris brassicae</i> L. 1758
	<i>Pieris rapae</i> L. 1758
	<i>Pieris napi</i> L. 1758
	<i>Pontia daplidice</i> L. 1758
	<i>Anthocharis cardamines</i> L. 1758
	<i>Colias myrmidone</i> Esper 1781
	<i>Colias crocea</i> Fourcroy 1785
	<i>Colias hyale</i> L. 1758
	<i>Colias alfacariensis</i> Ribbe, 1905
	<i>Colias erate</i> Esper 1804
Nymphalidae	<i>Gonepteryx rhamni</i> L. 1758
	<i>Leptidea sinapis</i> L. 1758
	<i>Apatura metis</i> Freyer 1829
	<i>Neptis sappho</i> Pallas 1771
	<i>Inachis io</i> L. 1758
	<i>Vanessa atalanta</i> L. 1758
	<i>Vanessa cardui</i> L. 1758
	<i>Aglais urticae</i> L. 1758
	<i>Polygonia c-album</i> L. 1758
	<i>Araschnia levana</i> L. 1758
	<i>Argynnis paphia</i> L. 1758
	<i>Issoria lathonia</i> L. 1758
	<i>Brenthis daphne</i> D. - Schifferrmüller 1775
	<i>Boloria dia</i> L. 1767
	<i>Mellicta athalia</i> Rottemburg 1775
	<i>Nymphalis polychloros</i> L. 1758
	<i>Nymphalis antiopa</i> L. 1758
<i>Limnitis populi</i> L. 1758	
<i>Limnitis reducta</i> Staudinger 1901	
Satyridae	<i>Melanargia galathea</i> L. 1758
	<i>Minois dryas</i> Scopoli 1763
	<i>Maniola jurtina</i> L. 1758
	<i>Aphantopus hyperantus</i> L. 1758
	<i>Coenonympha pamphilus</i> L. 1758
	<i>Coenonympha glycerion</i> Borkhausen 1788
	<i>Pararge aegeria</i> L. 1758
	<i>Lasiommata megera</i> L. 1767
	<i>Lasiommata maera</i> L. 1758
	Riodinidae
Lycaenidae	
	<i>Lycaena phlaeas</i> L. 1761

	<i>Lycaena dispar</i> Haworth 1803
	<i>Lycaena tityrus</i> Poda 1761
	<i>Lycaena thersamon</i> Esper 1784
	<i>Cupido argiades</i> Pallas 1771
	<i>Cupido decoloratus</i> Staudinger 1886
	<i>Cupido alcetas</i> Hoffmannsegg 1804
	<i>Celastrina argiolus</i> L. 1758
	<i>Glaucoopsyche alexis</i> Poda 1761
	<i>Iolana iolas</i> Ochsenheimer 1816
	<i>Plebeius argus</i> L. 1758
	<i>Plebeius argyrognomon</i> Bergsträsser 1779
	<i>Polyommatus icarus</i> Rottemburg 1775
	<i>Thecla betulae</i> L. 1758
Hesperiidae	<i>Pyrgus malvae</i> L. 1758
	<i>Carcharodus alceae</i> Esper 1780
	<i>Erynnis tages</i> L. 1758
	<i>Heteropterus morpheus</i> Pallas 1771
	<i>Ochlodes venata</i> Bremer & Grey 1853
Σ 7	63

Table 2. Number of butterflies species (arranged per family) found in the Croatian part of Baranja.

Family	Species	%
Papilionidae	3	4,76
Pieridae	13	20,63
Nymphalidae	17	26,98
Satyridae	9	14,28
Riodinidae	1	1,58
Lycaenidae	15	23,80
Hesperiidae	5	7,39
Σ 7	63	100

fauna of Baranja were found. The first is *Limenitis reducta* (Nymphalidae) and the second is *Iolana iolas* (Lycaenidae), which has been identified using the S. Krčmar butterfly collection. So far, 63 species of butterflies which belong to 7 families were recorded on the territory of Baranja in Croatia (Table 1, 2), which make up 33.87% of the butterfly fauna of Croatia.

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