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MOTHS AND BUTTERFLIES (LEPIDOPTERA) FOUND IN THE AREA OF THE MLJET NATIONAL PARK – RESULTS OF THE RESEARCH PERFORMED IN 2006

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The paper presents list of 44 species from 11 families of Lepidoptera found on the Croatian island of Mljet in July and August 2006. The research took place mainly in the Mljet National Park in the western part of the island. *Isturgia arenacearia* (Den. & Schiff.) and *Nola chlamitulalis* (Hübn.) are two species from the list which were previously recorded in Croatia only for a few times.

Key words: Lepidoptera, Mljet, Croatia, Dalmatia

Kazimierczak, J.: Danji i noćni leptiri zabilježeni na području NP Mljet – rezultati istraživanja iz 2006. godine. Nat. Croat., Vol. 18, No. 2., 443–447, 2009, Zagreb.

Rad donosi popis 44 vrste iz 11 porodica leptira zabilježenih na otoku Mljetu u srpnju i kolovozu 2006. godine. Istraživanje se uglavnom obavljalo na području NP Mljet na zapadnom dijelu otoka. Vrste *Isturgia arenacearia* (Den. & Schiff.) i *Nola chlamitulalis* (Hübn.) dosad su zabilježene za Hrvatsku tek nekoliko puta.

Ključne riječi: Lepidoptera, Mljet, Hrvatska, Dalmacija

INTRODUCTION

The island of Mljet is situated in the eastern part of the Adriatic Sea. It is the most southern and eastern of larger Adriatic islands. Mljet lies about 8 km south of Pelješac peninsula, 18 km from another big Adriatic island of Korčula and about 30 km from Dubrovnik. It is 36 km long and not wider than 5 km (BOGNAR & CURIĆ, 1995). Forest covers over 72% of 98 km^2. There are five forest types on Mljet, of which the autochthonous primeval Mediterranean forest of Holm Oak is widely replaced by maquis, karst formations and fast-growing Alpine pine forest – *Pinetum halepensis*.

Mljet National Park covers the island's northwestern part with the area of 5.375 ha of protected land and surrounding sea. This area was proclaimed a national park on November 11, 1960 and represents the first institutionalized attempt to protect mainly the original ecosystem in the Adriatic (National Park 'Mljet', 2008).

MATERIAL AND METHODS

This research was performed in July and August 2006. The main site was situated in Kozarica on the border of National Park (see Fig. 1), where specimens were collected using either entomological net or 40 W actinic lamps. On other five sites, moths and butterflies were just observed on flowers, photographed or caught using the entomological net.

Taxonomic determination was done by studing morphology, and genitalia in the case of *Nola chlamitulalis* (Hübn.) and *Phyllophila obliterata* (Rambur). The genitalia determination was based on RAKOSY (1996). Genitalia dissection appeared to be impossible in the case of the only specimen from genus *Leptidea* due to heavily damaged abdomen. All collected butterflies and moths are kept in the author's private collection.

Nomenclature and systematic order follow the one used in the checklist of European Lepidoptera (KARSHOLT & RAZOWSKI, 1996).

RESULTS AND DISCUSSION

As a result of the research 44 species from 11 families of Lepidoptera were found in the Mljet National Park, all of which were previously found in Croatia. However, *Isturgia arenacearia* (Den. & Schiff.) and *Nola chlamitulalis* (Hübn.) are considered to be two species from the list which were previously recorded in Croatia only for a few times. Due to a very limited time and methods, the results of this field research have a preliminary character only, and should be a starting point for further research which may lead to very interesting results in the future.

The list of species is presented in Tab. 1.

Isturgia arenacearia (Den. & Schiff.) – a xerophilous species distributed in southern Palearctic (BUSZKO, 2000), found in many Balkan countries, but there are very few records from Croatia: National Park 'Risnjak', KUČINIĆ *et al*. (1994) and Tijesno, HABELER (1976).

Ocrasa fulvocilialis (Dup) – species widely distributed in southern Europe but rare or extinct in Hungary and Romania. Recorded from Bosnia and Herzegovina, and Albania (SLAMKA, 2006).

Gonepteryx cleopatra (L.) – species generally common in southern Europe, recorded from Greece and European part of Turkey, not recorded in Albania and Macedonia. Records from N Switzerland, Bulgaria and N Greece appear to relate to vagrant specimens only (TOLMAN, 2002). In Dalmatia the species was previously recorded from: Split, GEIGER (1873); 7 sites situated on the central Dalmatian coast, HABELER (1976); and Velebit Nature Park, MIHOCI *et al.* (2007). The species is not listed in other recent papers regarding butterflies of Dalmatia.

Nola chlamitulalis (Hübn.) – Euroasiatic species, distributed in southern Europe and northern Africa (Rakosy, 1996). Rare and local xerophilous species occuring in steppes and forest-steppes (NOWACKI, 1998). In the western Balkans the species was found only once in Serbia (STOJANOVIĆ, 2002) and twice in Croatia (Beshkov, pers. comm.).

Tab. 1. The list of species identified in this research.

	Species	1. Kozarica 2. Valley near Kozarica	3. Pomena	4. Sv. Marija	5. Sutmiholjska	6. Saplunara
	Pterophoridae:					
1.	*Emmelina monodactyla* (L.)	+				
	Pyralidae:					
2.	*Pyralis regalis* (Den. & Schiff.)	+				
3.	*Ocrasa fulvocilialis* (Dup)	+				
4.	*Endotricha flammealis* (Den. & Schiff.)	+				
5.	*Oncocera semirubella* (Scop.)	+				
6.	*Ancylolomia palpella* (Den. & Schiff.)	+				
7.	*Palpita vitrealis* (Rossi)	+				
	Sphingiidae:					
8.	*Agrius convolvuli* (L.)	+		+		
9.	*Macroglossum stellatarum* (L.)	+				
10.	*Hyles livornica* (Esp.)	+				
	Papilionidae:					
11.	*Iphiclides podalirius* (L.)	+	+		+	
	Pieriidae:					
12.	*Leptidae sinapis* (L.)	+				
13.	*Pieris brassicae* (L.)	+				
14.	*Pieris rapae* (L.)	+				+
15.	*Gonepteryx cleopatra* (L.)	+				+
	Lycaenidae:					
16.	*Lycaena phlaeas* (L.)	+				
17.	*Lampides boeticus* (L.)	+				
18.	*Celastrina argiolus* (L.)	+				
19.	*Polyommatus icarus* (Rott.)	+				+
	Nymphalidae:					
20.	*Vanessa atalanta* (L.)	+				
21.	*Vanessa cardui* (L.)	+				+
22.	*Limenitis reducta* Staud.	+				+
23.	*Pararge aegeria* (L.)	+				
24.	*Coenonympha pamphilus lyllus* (Esp.)	+				
25.	*Hipparchia statilinus* (Hufn.)	+				+
	Geometridae:					
26.	*Isturgia arenacearia* (Den. & Schiff.)	+				
27.	*Ascotis selenaria* (Den. & Schiff.)	+				
28.	*Cyclophora puppillaria* (Hbn.)	+				
29.	*Scopula ornata* (Scop.)	+				

Tab. 1. continued

	Species	1. Kozarica 2. Valley near Kozarica	3. Pomena	4. Sv. Marija	5. Sutmiholjska	6. Saplunara
30.	*Scopula imitaria* (Hübn.)	+				
31.	*Idaea aversata* (L.)	+				
	Noctuidae:					
32.	*Phyllophila obliterata* (Rambur)	+				
33.	*Catocala conjuncta* (Esp.)	+				
34.	*Dysgonia algira* (L.)	+				
35.	*Autographa gamma* (L.)	+				
36.	*Trichoplusia ni* (Hübn.)	+				
37.	*Eublemma parva* (Hübn.)	+				
38.	*Heliothis peltigera* (Den. & Schiff.)	+				
39.	*Helicoverpa armigera* (Hübn.)	+				
40.	*Mythimna vitellina* (Hübn.)	+				
41.	*Leucania obsoleta* (Hübn.)	+				
42.	*Agrotis ipsilon* (Hufn.)	+				
	Lymantriidae:					
43.	*Lymantria dispar* (L.)	+				
	Nolidae					
44.	*Nola chlamitulalis* (Hübn.)	+				

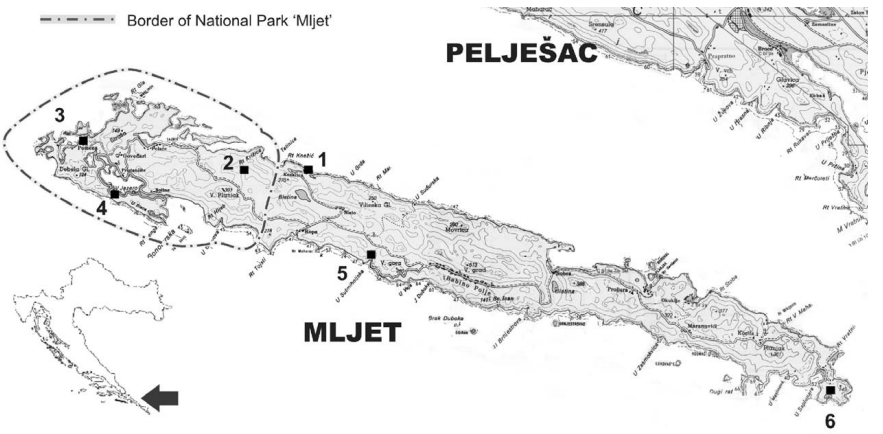

Fig. 1. Sites localities: 1) Kozarica, village and rocky trails nearby; 2) Valey near Kozarica, extensive agricultural area with Mediterranean pine forest; 3) Pomena, sea coast; 4) St. Marija islet; 5) Sutmiholjska, sea coast; 6) Saplunara.

Catocala conjuncta (Esp.) – widely distributed in southern Europe, northern Africa and Turkey. The occurrence of this species is strictly linked to oakwoods. The larvae feed on oaks, principally on *Quercus ilex*, but also *Q. suber* and *Q. robur* are recorded as foodplants (BERTACCINI *et al.*, 2008).

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