

CONTRIBUTIONS TO THE KNOWLEDGE OF THE MACROLEPIDOPTERA FAUNA OF HUNEDOARA COUNTY (ROMANIA)

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Abstract. The author presents The Macrolepidoptera species (Lepidoptera) recorded from the hilly zones of Hunedoara County. Personal research was conducted in the hilly area of Deva, Orăștie, Hunedoara, the Strei Couloir, the Mureș Couloir, Hațeg and Brad Depressions. There have been recorded 327 species from the hilly zones of Hunedoara County. Some rare species or species with sporadic appearances in the area are presented.

Keywords: Macrolepidoptera, Hunedoara County, Romania.

Rezumat. Contribuții la cunoașterea faunei de Macrolepidoptere din județul Hunedoara (România). Autorul prezintă speciile de Macrolepidoptere (Lepidoptera) identificate în zonele colinare ale județului Hunedoara. Cercetările personale au fost efectuate în zona colinară a localităților Deva, Orăștie, Hunedoara, Culoarul Streiului, Culoarul Mureșului, Depresiunile Hațeg și Brad. 327 specii sunt semnalate în zonele colinare ale județului Hunedoara. Câteva specii rare sau cu apariție sporadică în județul Hunedoara sunt prezentate.

Cuvinte cheie: Macrolepidoptera, județul Hunedoara, România.

INTRODUCTION

Situated in the western part of Romania, Hunedoara County has a diverse relief. Even if the mountainous area is dominant, the hills are also widespread especially along the Mureș and the Strei Couloir and around Hațeg and Brad Depressions. For example, Hațeg Depression is bordered not only by the Retezat and Poiana Ruscă Mountains but also by hills with 600-800 m altitude. The calcareous hills of the south-western part of Hațeg depression are crossed by many tributaries of the Strei River and form spectacular gorges as Crivadia and Bănița Gorges. Brad Depression is bordered by hills with 500-600 m altitude. The Crișul Alb that crosses this depression has a large meadow with adler and willow associations, pastures and cultivated terrains. Only in the northern part of the depression, the tributaries, the Ribicioara stream and Uibărești stream, cross a calcareous area and form picturesque gorges.

The Mureș River, the most important river of Hunedoara County is bordered by hills that have in some place an arid character with a stepic flora (KÖNIG, 1983). Near Deva locality, the Mureș River has numerous meanders and forms dead branches and bogs with marsh vegetation. The largest part of riverside is very wide, with many pastures and cultivated areas, but near Zam locality, the Mureș River forms a spectacular couloir with steep hill slopes.

The Couloir of the Strei River, a tributary of the Mureș River has a hilly zone (400-500 m altitude), represented by the Hills of Orăștie (in the western part) and The Hills of Hunedoara (in the eastern part of the couloir). These hills are covered by deciduous forests (oak and beech forests). At the edge of the forests, shrub associations as *Pruno spinosae-Crataegum* were identified HUECK (1931).

Adler and willow associations border the river valley but in the riverside and on higher terraces, hygrophilous, mesohygrophilous and mesophilous pastures are widespread.

The climate of the hilly area of Hunedoara County is temperate-continental with an average of temperature of 8-10°C and an average amount of precipitations of 600 mm.

Research studies about the Lepidoptera fauna of the hilly area of Hunedoara County have been conducted by different authors. KÖNIG (1983) has published some general data about the Lepidoptera fauna of Hunedoara County. He has mentioned some rarities recorded from the hilly area of Hunedoara County as *Colias chrysotheme* (in the piedmont area of the Mureș River), *Zerynthia polyxena* (within Brad Depression) and *Tyria jacobaeae* (at Vâlcan Peak – the Metaliferi Mountains). In the first decades of the 20th century, Adriano Ostrogovich also collected some specimens in the area of Hunedoara Hills (POPESCU-GORJ, 1964). BURNAZ SILVIA (1993, 1999, 2002) has studied different hilly areas and published systematic lists of the species.

MATERIAL AND METHODS

Personal research regarding the Macrolepidoptera species characteristic to the hilly zone of Hunedoara County was conducted between 1979 and 2009.

The specimens have been collected in various sites specific to the hilly area of the Mureș River, the Strei River, the Crișul Alb River, Hațeg, Orăștie and Brad Depressions. The most studied sites are:

- The Hills of Deva town, situated in the north-western part of the locality; these hills are the last branches of the Poiana Ruscă Mountains and have an altitude of 400-500 m.
- The Hills of Orăștie town situated in the north-western part of the Șureanu Mountains;
- The Hills of Hunedoara town and especially Chizid Forest, one of the natural reserve;

- The Hills of Hațeg town;
- The Strei Couloir, between Simeria and Călan localities;
- The Couloir of the Mureș, between Deva and Zam localities. Here, the meso-hygrophilous meadows (Ass. *Trifolio repenti-Lolietum* Kripp. 67, Ass. *Agropyretum repentis* Burd. Et al. 56) and the pool and swamp phytocoenoses (Ass. *Scirpo-Phragmitetum* Koch 26, Ass. *Thyphetum angustifoliae-latifoliae* Eggl. 33 Schmale 39) were investigated.

Samples were made using an entomological net for catching butterflies. Light traps (250 Watt) were installed at Deva Fortress Hill, Slivuț Forest (one of the most known hills situated near Hațeg locality, where a natural reserve functions), Costești locality (The Hills of Orăștie) and Sarmizegetusa locality (Hațeg Depression) in order to capture nocturnal species.

RESULTS AND DISCUSSIONS

A total of 327 species has been reported from the natural habitats situated in the hilly zones of Hunedoara County. The number of species varies depending on sites. The largest number of species was registered in the hilly area of Hațeg and Deva localities (Table 1).

The checklist of the Macrolepidoptera and the sites of collecting species is rendered in Table 2.

Table 1. Number of species reported from the collecting sites. / Tabel 1. Numărul de specii raportat la siturile de colectare.

Sites	Number of species
The Hills of Deva	295
The Hills of Hațeg	296
The Hills of Orăștie	284
The Hills of Hunedoara	276
The Strei Couloir	281
The Couloir of the Mureș	274

Table 2. The Checklist of Macrolepidoptera species collected in the hilly zones of Hunedoara County (Romania).

Tabel 2. Lista sistematică a speciilor colectate în zonele colinare ale județului Hunedoara (Romania).

No.	Taxa	Sites					
		HD	HH	HO	HHU	CS	CM
LASIOCAMPIDAE							
1	<i>Poecilocampa populi</i> (LINNAEUS 1758)	+	+	+	+	+	+
2	<i>Trichiura crataegi</i> (LINNAEUS 1758)	+	+	-	+	-	+
3	<i>Poecilocampa populi</i> (LINNAEUS 1758)	+	+	+	+	+	+
4	<i>Macrothylacia rubi</i> (LINNAEUS 1758)	+	+	+	+	+	+
5	<i>Gastropacha quercifolia</i> (LINNAEUS 1758)	-	+	-	+	+	+
6	<i>Odonestis pruni</i> (LINNAEUS 1758)	+	+	+	+	+	+
ENDROMIDIDAE							
7	<i>Endromis versicolora</i> (LINNAEUS 1758)	+	+	-	-	-	-
SPHINGIDAE							
8	<i>Agrius convolvuli</i> (LINNAEUS 1758)	+	+	+	+	+	+
9	<i>Acherontia atropos</i> (LINNAEUS 1758)	+	+	-	-	+	-
10	<i>Smerinthus ocellatus</i> (LINNAEUS 1758)	+	+	-	+	+	+
11	<i>Mimas tiliae</i> (LINNAEUS 1758)	+	+	+	+	+	+
12	<i>Laothoe populi</i> (LINNAEUS 1758)	+	+	+	+	+	+
13	<i>Proserpinus proserpina</i> (PALLAS 1772)	-	-	-	-	+	-
14	<i>Macroglossum stellatarum</i> (LINNAEUS 1758)	+	+	+	+	+	+
15	<i>Hyles euphorbiae</i> (LINNAEUS 1758)	+	+	+	+	+	+
16	<i>Deilephila elpenor</i> (LINNAEUS 1758)	+	+	+	+	+	+
17	<i>Deilephila porcellus</i> (LINNAEUS 1758)	+	+	+	+	+	+
SATURNIIDAE							
18	<i>Saturnia pavonia</i> (LINNAEUS 1758)	-	+	+	-	+	+
HESPERIIDAE							
19	<i>Erynnis tages tages</i> (LINNAEUS 1758)	+	+	+	+	+	+
20	<i>Carcharodus floccifera</i> (ZELLER 1847)	+	-	-	-	-	-
21	<i>Pyrgus carthami</i> (HÜBNER 1813)	+	+	+	+	+	+
22	<i>Pyrgus malvae malvae</i> (LINNAEUS 1758)	+	+	+	+	+	+
23	<i>Carterocephalus palaemon</i> (PALLAS 1771)	+	+	+	+	+	+
24	<i>Thymelicus sylvestris</i> (PODA 1761)	+	+	+	+	+	+
25	<i>Hesperia comma</i> (LINNAEUS 1758)	+	+	+	+	+	+
26	<i>Ochlodes venatus faunus</i> (TURATI 1905)	+	+	+	+	+	+
PAPILIONIDAE							
27	<i>Parnassius mnemosyne distincta</i> BRYK & EISNER 1930	-	+	+	-	-	-
28	<i>Iphiclides podalirius podalirius</i> (LINNAEUS 1758)	+	+	+	+	+	+
29	<i>Papilio machaon machaon</i> (LINNAEUS 1758)	+	+	+	+	+	+
PIERIDAE							
30	<i>Leptidea sinapis sinapis</i> (LINNAEUS 1758)	+	+	+	+	+	+
31	<i>Anthocharis cardamines</i> (LINNAEUS 1758)	+	+	+	+	+	+
32	<i>Aporia crataegi crataegi</i> (LINNAEUS 1758)	+	+	+	+	+	+

33	<i>Pieris brassicae brassicae</i> (LINNAEUS 1758)	+	+	-	+	+	+
34	<i>Pieris rapae</i> (LINNAEUS 1758)	+	+	+	+	+	+
35	<i>Pieris napi napi</i> (LINNAEUS 1758)	+	+	+	+	+	+
36	<i>Pontia edusa</i> (FABRICIUS 1777)	+	+	+	+	+	+
37	<i>Colias croceus</i> (FOURCROY 1785)	+	+	+	+	+	+
38	<i>Colias hyale</i> (LINNAEUS 1758)	+	+	+	+	+	+
39	<i>Gonepteryx rhamni</i> (LINNAEUS 1758)	+	+	+	+	+	+
LYCAENIDAE							
40	<i>Hamearis lucina</i> (LINNAEUS 1758)	+	+	+	+	+	+
41	<i>Lycaena phlaeas phlaeas</i> (LINNAEUS 1761)	+	+	+	+	+	+
42	<i>Lycaena dispar rutila</i> (WERNEBURG 1864)	-	-	-	-	+	+
43	<i>Lycaena virgaureae virgaureae</i> (LINNAEUS 1758)	-	-	-	-	+	+
44	<i>Lycaena thersamon</i> (ESPER 1784)	-	-	-	-	+	-
45	<i>Neozephyrus quercus quercus</i> (LINNAEUS 1758)	-	+	-	-	-	-
46	<i>Callophrys rubi</i> (LINNAEUS 1758)	+	+	+	+	+	+
47	<i>Satyrrium w-album</i> (KNOCH 1782)	+	+	+	-	-	-
48	<i>Satyrrium spini</i> (DENIS & SCHIFFERMÜLLER 1775)	+	-	+	-	-	-
49	<i>Cupido minimus minimus</i> (FUESSLY 1775)	+	+	+	-	-	-
50	<i>Everes argiades</i> (PALLAS 1771)	+	+	+	+	+	+
51	<i>Celastrina argiolus</i> (LINNAEUS 1758)	+	+	+	+	+	+
52	<i>Scoliantides orion lariana</i> FRUHSTORFER 1910	+	-	-	-	-	-
53	<i>Glaucopygma alexis</i> (PODA 1761)	-	-	-	-	-	+
54	<i>Maculinea arion</i> (LINNAEUS 1758)	-	-	-	-	+	+
55	<i>Maculinea alcon</i> (DENIS & SCHIFFERMÜLLER 1775)	-	-	-	-	+	-
56	<i>Plebeius argus argus</i> (LINNAEUS 1758)	+	+	+	+	+	+
57	<i>Plebeius argyrognomon</i> (BERGSTRÄSSER 1779)	+	+	+	+	+	+
58	<i>Aricia agestis agestis</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
59	<i>Polyommatus semiargus semiargus</i> (ROTTEMBERG 1775)	+	+	+	+	+	+
60	<i>Polyommatus icarus</i> (ROTTEMBERG 1775)	+	+	+	+	+	+
NYMPHALIDAE							
61	<i>Argynnis paphia paphia</i> (LINNAEUS 1758)	+	+	+	+	+	+
62	<i>Argynnis aglaja</i> (LINNAEUS 1758)	+	+	+	+	+	+
63	<i>Argynnis adippe</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
64	<i>Argynnis niobe niobe</i> (LINNAEUS 1758)	+	+	+	+	+	+
65	<i>Issoria lathonia</i> (LINNAEUS 1758)	+	+	+	+	+	+
66	<i>Brenthis daphne</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
67	<i>Brenthis hecate</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
68	<i>Boloria euphrosyne</i> (LINNAEUS 1758)	+	+	+	+	+	+
69	<i>Boloria selene</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
70	<i>Boloria dia dia</i> (LINNAEUS 1767)	+	+	+	+	+	+
71	<i>Vanessa atalanta</i> (LINNAEUS 1758)	+	+	+	+	+	+
72	<i>Vanessa cardui</i> (LINNAEUS 1758)	+	+	+	+	+	+
73	<i>Inachis io</i> (LINNAEUS 1758)	+	+	+	+	+	+
74	<i>Aglais urticae</i> (LINNAEUS 1758)	+	+	+	+	+	+
75	<i>Polygonia c-album</i> (LINNAEUS 1758)	+	+	+	+	+	+
76	<i>Araschnia levana</i> (LINNAEUS 1758)	+	+	+	+	+	+
77	<i>Nymphalis antiopa</i> (LINNAEUS 1758)	-	-	-	+	+	+
78	<i>Nymphalis polychloros</i> (LINNAEUS 1758)	-	-	-	+	+	+
79	<i>Euphydryas aurinia aurinia</i> (ROTTEMBERG 1775)	-	-	-	-	-	+
80	<i>Melitaea cinxia</i> (LINNAEUS 1758)	+	+	+	+	+	+
81	<i>Melitaea phoebe</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
82	<i>Melitaea trivialis trivialis</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	-	-	+
83	<i>Melitaea dydima dydima</i> (ESPER 1778)	+	+	+	+	+	+
84	<i>Melitaea athalia athalia</i> (ROTTEMBERG 1775)	+	+	+	+	+	+
85	<i>Limenitis populi</i> (LINNAEUS 1758)	-	-	-	-	+	+
86	<i>Neptis hylas</i> (LINNAEUS 1758)	+	+	+	+	+	+
87	<i>Neptis rivularis</i> (SCOPOLI 1763)	+	+	+	+	+	+
88	<i>Apatura ilia ilia</i> (DENIS & SCHIFFERMÜLLER 1775)	-	-	-	-	+	+
89	<i>Apatura iris iris</i> (LINNAEUS 1758)	-	-	-	-	+	+
90	<i>Pararge aegeria tircis</i> BUTLER 1867	+	+	+	+	+	+
91	<i>Lasiommata megera megera</i> (LINNAEUS 1758)	+	+	+	+	+	+
92	<i>Lasiommata maera maera</i> (LINNAEUS 1758)	+	+	+	+	+	+
93	<i>Lopinga achine achine</i> (SCOPOLI 1763)	+	+	+	-	-	-
94	<i>Coenonympha arcania arcania</i> (LINNAEUS 1761)	+	+	+	+	+	+
95	<i>Coenonympha glycerion</i> (BORKHAUSEN 1788)	+	+	+	+	+	+
96	<i>Coenonympha pamphilus</i> (LINNAEUS 1758)	+	+	+	+	+	+
97	<i>Pyronia tithonus tithonus</i> (LINNAEUS 1767)	+	+	+	+	+	+
98	<i>Aphantopus hyperanthus</i> (LINNAEUS 1758)	+	+	+	+	+	+
99	<i>Maniola jurtina jurtina</i> (LINNAEUS 1758)	+	+	+	+	+	+
100	<i>Erebia ligea nikostrate</i> FRUHSTORFER 1909	+	+	+	+	-	-
101	<i>Erebia aethiops aethiops</i> (ESPER 1777)	+	+	+	+	-	-
102	<i>Melanargia galathea</i> (LINNAEUS 1758)	+	+	+	+	+	+
103	<i>Minois dryas</i> (SCOPOLI 1763)	+	+	+	+	+	+

104	<i>Hipparchia fagi</i> (SCOPOLI 1763)	+	+	+	+	+	+
105	<i>Hipparchia semele semele</i> (LINNAEUS 1758)	+	+	+	+	+	+
106	<i>Brintesia circe pannonica</i> FRUHSTORFER 1911	+	+	+	+	-	-
107	<i>Chazara briseis briseis</i> (LINNAEUS 1764)	+	+	+	+	+	-
DREPANIDAE							
108	<i>Watsonalla binaria</i> (HUFNAGEL 1767)	+	+	+	+	-	-
109	<i>Falcaria lacertinaria</i> (LINNAEUS 1758)	+	+	+	+	-	-
110	<i>Drepana falcataria</i> (LINNAEUS 1758)	+	+	+	+	-	-
111	<i>Cilix glaucatus</i> (SCOPOLI 1767)	+	+	+	+	-	-
112	<i>Thyatira batis</i> (LINNAEUS 1758)	+	+	+	+	-	-
113	<i>Habrosyne pyritoides</i> (HUFNAGEL 1766)	+	+	+	+	+	+
114	<i>Tethea or or</i> (DENIS & SCHIFFERMÜLLER 1775)	-	-	-	-	+	+
115	<i>Polyploca ridens</i> (FABRICIUS 1787)	+	+	+	-	-	-
116	<i>Asphalia ruficollis</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	-	-	-
GEOMETRIDAE							
117	<i>Abraxas grossulariata</i> (LINNAEUS 1758)	+	+	+	+	+	+
118	<i>Lomaspilis marginata</i> (LINNAEUS 1758)	+	+	+	+	+	+
119	<i>Ligdia adustata</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
120	<i>Heliomata glarearia</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	-	-
121	<i>Macaria alternata</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
122	<i>Tephрина arenacearia</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
123	<i>Opisthograptis luteolata</i> (LINNAEUS 1758)	+	+	+	+	+	+
124	<i>Epione repandaria</i> (HUFNAGEL 1767)	+	+	+	+	+	+
125	<i>Pseudopanthera macularia</i> (LINNAEUS 1758)	+	+	+	+	+	+
126	<i>Ennomos autumnarius</i> WERNEBURG 1859	+	+	+	+	+	+
127	<i>Ennomos alniarius</i> (LINNAEUS 1758)	+	+	+	+	+	+
128	<i>Ennomos erosaria</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	-
129	<i>Selenia dentaria</i> (FABRICIUS 1775)	+	+	+	+	+	-
130	<i>Selenia lunularia</i> (HÜBNER 1788)	+	+	+	+	+	-
131	<i>Selenia tetralunaria</i> (HUFNAGEL 1767)	+	+	+	+	+	-
132	<i>Crocallis tusciaria</i> (BORKHAUSEN 1793)	+	+	+	+	+	+
133	<i>Crocallis elinguaris</i> (LINNAEUS 1758)	+	+	+	+	+	+
134	<i>Ourapteryx sambucaria</i> (LINNAEUS 1758)	+	+	+	+	+	+
135	<i>Colotois pennaria</i> (LINNAEUS 1761)	+	+	+	+	+	+
136	<i>Angerona prunaria</i> (LINNAEUS 1758)	+	+	+	+	+	+
137	<i>Biston betularia</i> (LINNAEUS 1758)	+	+	+	+	+	+
138	<i>Agriopis bajaria</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	-
139	<i>Agriopis marginaria</i> (FABRICIUS 1776)	+	+	+	+	+	-
140	<i>Erannis defoliaria</i> (CLERCK 1759)	+	+	+	+	+	+
141	<i>Cleora cinctaria</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
142	<i>Alcis repandatus</i> (LINNAEUS 1758)	+	+	+	+	+	+
143	<i>Hypomecis roboraria</i> (DENIS & SCHIFFERMÜLLER 1775)	-	+	-	-	-	-
144	<i>Hypomecis punctinalis</i> (SCOPOLI 1763)	+	+	+	+	+	+
145	<i>Cleorodes lichenaria</i> (HUFNAGEL 1767)	+	+	-	-	-	-
146	<i>Ematurga atomaria</i> (LINNAEUS 1758)	+	+	+	+	+	+
147	<i>Ectropis crepuscularia</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
148	<i>Cabera pusaria</i> (LINNAEUS 1758)	+	+	+	+	+	+
149	<i>Lomographa bimaculata</i> (FABRICIUS 1775)	+	+	+	+	+	+
150	<i>Siona lineata</i> (SCOPOLI 1763)	+	+	+	+	+	+
151	<i>Perconia strigillaria</i> (HÜBNER 1787)	+	+	+	+	+	+
152	<i>Alsophila aescularia</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
153	<i>Pseudoterpna pruinata</i> (HUFNAGEL 1767)	+	+	+	+	+	+
154	<i>Geometra papilionaria</i> (LINNAEUS 1758)	+	+	+	+	+	+
155	<i>Hemithea aestivaria</i> (HÜBNER 1799)	+	+	+	+	+	+
156	<i>Thalera fimbrialis</i> (SCOPOLI 1763)	+	+	+	+	+	+
157	<i>Hemistola chrysoprasaria</i> (ESPER 1794)	+	+	+	+	+	+
158	<i>Jodis lactearia</i> (LINNAEUS 1758)	+	+	+	+	+	+
159	<i>Cyclophora albipunctata</i> (HUFNAGEL 1775)	+	+	+	+	+	+
160	<i>Timandra comae</i> A. SCHMIDT 1931	+	+	+	+	+	+
161	<i>Scopula ornata</i> (SCOPOLI 1763)	+	+	+	+	+	+
162	<i>Scopula nigropunctata</i> (HUFNAGEL 1767)	+	+	+	+	+	+
163	<i>Scopula immorata</i> (LINNAEUS 1758)	+	+	+	+	+	+
164	<i>Idaea ochrata</i> (SCOPOLI 1763)	+	+	+	+	+	+
165	<i>Idaea aversata</i> (LINNAEUS 1758)	+	+	+	+	+	+
166	<i>Rhodostrophia vibicaria</i> (CLERCK 1759)	+	+	+	+	+	+
167	<i>Cataclisme riguta</i> (HÜBNER 1813)	+	+	+	+	+	+
168	<i>Scotopteryx moeniata</i> (SCOPOLI 1763)	+	+	+	+	+	+
169	<i>Scotopteryx chenopodiata</i> (LINNAEUS 1758)	+	+	+	+	+	+
170	<i>Scotopteryx luridata</i> (HUFNAGEL 1767)	+	+	+	+	+	+
171	<i>Xanthorhoe ferrugata</i> (CLERCK 1759)	+	+	+	+	+	+
172	<i>Xanthorhoe fluctuata</i> (LINNAEUS 1758)	+	+	+	+	+	+
173	<i>Catarhoe cuculata</i> (HUFNAGEL 1767)	+	+	+	+	+	+

174	<i>Epirrhoe alternata</i> (O. F. MÜLLER 1767)	+	+	+	+	+	+
175	<i>Campotogramma bilineatum</i> (LINNAEUS 1758)	+	+	+	+	+	+
176	<i>Anticlea badiata</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
177	<i>Mesoleuca albicollata</i> (LINNAEUS 1758)	+	+	+	+	+	+
178	<i>Cosmorhoe ocellata</i> (LINNAEUS 1758)	+	+	+	+	+	+
179	<i>Ecliptopera silaceata</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
180	<i>Eustroma reticulatum</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
181	<i>Horisme vitalbata</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
182	<i>Melanthia procellata</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
183	<i>Operophtera brumata</i> (LINNAEUS 1758)	+	+	+	+	+	+
184	<i>Perizoma flavofasciatum</i> (THUNBERG 1792)	+	+	+	+	+	+
185	<i>Eupithecia centaureata</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
186	<i>Aplocera plagiata</i> (LINNAEUS 1758)	+	+	+	+	+	+
187	<i>Asthenia albulata</i> (HUFNAGEL 1767)	+	+	+	+	+	+
188	<i>Minoa murinata</i> (SCOPOLI 1763)	+	+	+	+	+	+
NOTODONTIDAE							
189	<i>Clostera curtula</i> (LINNAEUS 1758)	-	-	-	-	+	+
190	<i>Clostera anachoreta</i> (DENIS & SCHIFFERMÜLLER 1775)	-	-	-	-	+	+
191	<i>Cerura vinula</i> (LINNAEUS 1758)	-	-	-	-	+	+
192	<i>Notodonta dromedarius</i> (LINNAEUS 1767)	+	+	+	+	+	+
193	<i>Notodonta tritopha</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	-	-
194	<i>Notodonta ziczac</i> (LINNAEUS 1758)	+	+	+	+	+	+
195	<i>Drymonia ruficornis</i> (HUFNAGEL 1766)	-	+	-	-	-	-
196	<i>Spatialia argentina</i> (DENIS & SCHIFFERMÜLLER 1775)	-	+	+	-	-	-
197	<i>Pterostoma palpina</i> (CLERCK 1759)	+	+	+	+	+	+
198	<i>Phalera bucephala</i> (LINNAEUS 1758)	+	+	+	+	+	+
199	<i>Dicranura ulmi</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	-	-	-	-
200	<i>Stauropus fagi</i> (LINNAEUS 1758)	+	+	+	+	+	+
NOCTUIDAE							
201	<i>Acronicta leporina</i> (LINNAEUS 1758)	+	+	+	+	+	+
202	<i>Acronicta rumicis</i> (LINNAEUS 1758)	+	+	+	+	+	+
203	<i>Acronicta alni</i> (LINNAEUS 1767)	+	+	-	-	-	-
204	<i>Craniophora ligustri</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
205	<i>Cryphia muralis</i> (FORSTER 1771)	+	-	-	-	-	-
206	<i>Polypogon tentacularia</i> (LINNAEUS 1758)	+	+	+	+	+	+
207	<i>Catocala nupta</i> (LINNAEUS 1767)	+	+	+	+	+	+
208	<i>Catocala fulminea</i> (SCOPOLI 1763)	+	+	+	+	+	+
209	<i>Lygephila viciae</i> (HÜBNER 1822)	+	+	+	+	+	+
210	<i>Dysgonia algira algira</i> (LINNAEUS 1767)	+	-	-	-	-	-
211	<i>Catephia alchymista</i> (DENIS & SCHIFFERMÜLLER 1775)	-	+	-	+	-	-
212	<i>Aedia funesta</i> (ESPER 1766)	+	+	+	+	+	+
213	<i>Tyta luctuosa</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
214	<i>Callistege mi</i> (CLERCK 1759)	+	+	+	+	+	+
215	<i>Euclidia glyphica</i> (LINNAEUS 1758)	+	+	+	+	+	+
216	<i>Scoliopteryx libatrix</i> (LINNAEUS 1758)	+	+	+	+	+	+
217	<i>Hypena proboscidalis</i> (LINNAEUS 1758)	+	+	+	+	+	+
218	<i>Hypena rostralis</i> (LINNAEUS 1758)	+	+	+	+	+	+
219	<i>Rivula sericealis</i> (SCOPOLI 1763)	+	+	+	+	+	+
220	<i>Eutelia adalatrix</i> (HÜBNER 1813)	+	-	-	-	-	-
221	<i>Diachrysis chrysitis</i> (LINNAEUS 1758)	+	+	+	+	+	+
222	<i>Macdounoughia confusa</i> (STEPHENS 1850)	+	+	+	+	+	+
223	<i>Autographa gamma</i> (LINNAEUS 1758)	+	+	+	+	+	+
224	<i>Abrostola tripartita</i> (HUFNAGEL 1766)	+	+	+	+	+	+
225	<i>Abrostola triplasia</i> (HUFNAGEL 1766)	+	+	+	+	+	+
226	<i>Emmelia trabealis</i> (SCOPOLI 1763)	+	+	+	+	+	+
227	<i>Acontia lucida</i> (HUFNAGEL 1766)	+	+	+	+	+	+
228	<i>Cucullia fraudatrix</i> (EVERSMANN 1837)	+	+	+	+	-	-
229	<i>Cucullia umbratica</i> (LINNAEUS 1758)	+	+	+	+	+	+
230	<i>Shargacucullia thapsiphaga</i> (TREITSCHKE 1826)	+	+	+	+	+	+
231	<i>Amphipyra pyramidea</i> (LINNAEUS 1758)	+	+	+	+	+	+
232	<i>Amphipyra perflua</i> (FABRICIUS 1787)	+	+	+	+	+	+
233	<i>Asteroscopus sphinx</i> (HUFNAGEL 1766)	+	+	+	+	+	+
234	<i>Diloba caeruleocephala</i> (LINNAEUS 1758)	+	+	-	-	-	-
235	<i>Heliothis virescens</i> (HUFNAGEL 1766)	+	+	+	+	+	+
236	<i>Helicoverpa armigera</i> (HUFNAGEL 1808)	+	+	+	+	+	+
237	<i>Pyrrhia umbra</i> (HUFNAGEL 1766)	+	+	+	+	+	+
238	<i>Caradrina morpheus</i> (HUFNAGEL 1766)	+	+	+	+	+	+
239	<i>Paradrina clavipalpis</i> (SCOPOLI 1763)	+	+	+	+	+	+
240	<i>Hoplodrina blanda</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
241	<i>Hoplodrina respersa</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
242	<i>Charanycha trigrammica</i> (HUFNAGEL 1766)	+	+	+	+	+	+
243	<i>Atypha pulmonaris</i> (ESPER 1790)	+	+	+	-	+	-
244	<i>Mormo maura</i> (LINNAEUS 1758)	+	+	+	+	+	+

245	<i>Polyphaenis sericata</i> (ESPER 1787)	-	-	+	-	-	-
246	<i>Thalpophila matura</i> (HUFNAGEL 1766)	+	+	+	+	+	+
247	<i>Trachea atriplicis</i> (LINNAEUS 1758)	+	+	+	+	+	+
248	<i>Phlogophora meticulosa</i> (LINNAEUS 1758)	+	+	+	+	+	+
249	<i>Eucarta amethystina</i> (HÜBNER 1803)	+	+	-	-	-	-
250	<i>Mesogona acetosellae</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
251	<i>Cosmia pyralina</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
252	<i>Cosmia trapezina</i> (LINNAEUS 1758)	+	+	+	+	+	+
253	<i>Xanthia togata</i> (ESPER 1788)	+	+	+	+	+	+
254	<i>Xanthia aurago</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
255	<i>Xanthia icteritia</i> (HUFNAGEL 1766)	+	+	+	+	+	+
256	<i>Xanthia ocellaris</i> (BORKHAUSEN 1792)	+	+	+	+	+	+
257	<i>Xanthia citrigo</i> (LINNAEUS 1758)	+	+	+	+	+	+
258	<i>Agrochola circellaris</i> (HUFNAGEL 1766)	+	+	+	+	+	+
259	<i>Eupsilia transversa</i> (HUFNAGEL 1766)	+	+	+	+	+	+
260	<i>Conistra erythrocephala</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
261	<i>Lithophane ornitopus</i> (HUFNAGEL 1761)	+	+	+	+	+	+
262	<i>Meganephria bimaculosa</i> (LINNAEUS 1767)	+	+	+	+	+	+
263	<i>Allophyes oxyacanthae</i> (LINNAEUS 1758)	+	+	+	+	+	+
264	<i>Dichonia convergens</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
265	<i>Blepharita satura</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
266	<i>Apamea monoglypha</i> (HUFNAGEL 1766)	+	+	+	+	+	+
267	<i>Oligia strigilis</i> (LINNAEUS 1758)	+	+	+	+	+	+
268	<i>Mesapamea secalis</i> (LINNAEUS 1758)	+	+	+	+	+	+
269	<i>Rhizedra lutosa</i> (HÜBNER 1803)	-	-	-	-	+	+
270	<i>Calamia tridens</i> (HUFNAGEL 1766)	+	-	-	+	+	+
271	<i>Nonagria typhae</i> (THUNBERG 1784)	-	-	-	-	+	+
272	<i>Archanara geminipuncta</i> (HAWORTH 1809)	-	-	-	-	+	-
273	<i>Archanara sparganii</i> (ESPER 1790)	-	-	-	-	-	+
274	<i>Hadula trifolii</i> (HUFNAGEL 1766)	+	+	+	+	+	+
275	<i>Lacanobia w-latinum</i> (HUFNAGEL 1766)	+	+	+	+	+	+
276	<i>Lacanobia oleracea</i> (LINNAEUS 1758)	+	+	+	+	+	+
277	<i>Lacanobia thalassina</i> (HUFNAGEL 1766)	+	+	+	+	+	+
278	<i>Hada plebeja</i> (LINNAEUS 1761)	+	+	+	+	+	+
279	<i>Hadena albimacula</i> (BORKHAUSEN 1792)	+	+	+	-	-	-
280	<i>Sideridis rivularis</i> (FABRICIUS 1775)	+	+	+	+	+	+
281	<i>Heliophobus reticulata</i> (GOEZE 1781)	+	+	+	+	+	+
282	<i>Melanchra persicariae</i> (LINNAEUS 1761)	+	+	+	+	+	+
283	<i>Mamestra brassicae</i> (LINNAEUS 1758)	+	+	+	+	+	+
284	<i>Polia nebulosa</i> (HUFNAGEL 1766)	+	+	+	+	+	+
285	<i>Mythimna conigera</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
286	<i>Mythimna albipuncta</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
287	<i>Mythimna l-album</i> (LINNAEUS 1767)	+	+	+	+	+	+
288	<i>Mythimna pudorina</i> (DENIS & SCHIFFERMÜLLER 1775)	-	-	-	-	+	+
289	<i>Orthosia incerta</i> (HUFNAGEL 1766)	+	+	+	+	+	+
290	<i>Orthosia gothica</i> (LINNAEUS 1758)	+	+	+	+	+	+
291	<i>Orthosia munda</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
292	<i>Egira conspiciilaris</i> (LINNAEUS 1758)	+	+	+	+	+	+
293	<i>Axylia putris</i> (LINNAEUS 1761)	+	+	+	+	+	+
294	<i>Ochroleura plecta</i> (LINNAEUS 1761)	+	+	+	+	+	+
295	<i>Noctua pronuba</i> (LINNAEUS 1758)	+	+	+	+	+	+
296	<i>Noctua fimbriata</i> (SCHREBER 1759)	+	+	+	+	+	+
297	<i>Noctua janthina</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	-	-	-
298	<i>Xestia c-nigrum</i> (LINNAEUS 1758)	+	+	+	+	+	+
299	<i>Xestia triangulum</i> (HUFNAGEL 1766)	+	+	+	+	+	+
300	<i>Anaplectoides prasina</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
301	<i>Agrotis segetum</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
302	<i>Agrotis exclamationis</i> (LINNAEUS 1758)	+	+	+	+	+	+
303	<i>Agrotis ipsilon</i> (HUFNAGEL 1766)	+	+	+	+	+	+
304	<i>Agrotis crassa</i> (HÜBNER 1803)	+	+	+	-	-	-
PANTHEIDAE							
305	<i>Colocasia coryli</i> (LINNAEUS 1758)	+	+	+	+	+	+
LYMANTRIIDAE							
306	<i>Lymantria dispar</i> (LINNAEUS 1758)	+	+	+	+	+	+
307	<i>Euproctis chrysorrhoea</i> (LINNAEUS 1758)	+	+	+	+	+	+
308	<i>Leucoma salicis</i> (LINNAEUS 1758)	+	+	+	+	+	+
309	<i>Arctornis l-nigrum</i> (O. F. MÜLLER 1764)	+	+	+	+	+	+
NOLIDAE							
310	<i>Meganola strigula</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	+	+	+
311	<i>Nola cucullatella</i> (LINNAEUS 1758)	+	+	+	+	+	+
312	<i>Nycteola revayana</i> (SCOPOLI 1772)	+	+	+	+	+	+
313	<i>Earias clorana</i> (LINNAEUS 1761)	+	+	+	+	+	+

314	<i>Bena bicolorana</i> (FUESSLY 1775)	+	+	+	+	+	+
315	<i>Pseudoips prasinana</i> (LINNAEUS 1758)	+	+	+	+	+	+
ARCTIIDAE							
316	<i>Atolmis rubricollis</i> (LINNAEUS 1758)	+	+	+	+	+	+
317	<i>Lithosia quadra</i> (LINNAEUS 1758)	+	+	+	+	+	+
318	<i>Eilema lurideola</i> (ZINCKEN 1817)	+	+	+	+	+	+
319	<i>Miltochrista miniata</i> (FORSTER 1771)	+	+	+	+	+	+
320	<i>Syntomis phegea</i> OBRAZTSOV 1966	+	+	+	+	+	+
321	<i>Spiris striata</i> (LINNAEUS 1758)	+	-	-	-	-	-
322	<i>Phragmatobia fuliginosa</i> (LINNAEUS 1758)	+	+	+	+	+	+
323	<i>Phragmatobia luctifera</i> (DENIS & SCHIFFERMÜLLER 1775)	+	+	+	-	-	-
324	<i>Spilosoma lubricipeda</i> (LINNAEUS 1758)	+	+	+	+	+	+
325	<i>Diaphora mendica</i> (CLERCK 1759)	+	+	+	+	+	+
326	<i>Euplagia quadripunctaria</i> (PODA 1761)	+	+	+	+	+	+
327	<i>Arctia villica</i> (LINNAEUS 1758)	+	+	+	+	+	+

Legend: **HD** - The Hills of Deva locality; **HH** - The Hills of Hațeg locality; **HO** - The Hills of Orăștie locality; **HHU** - The Hills of Hunedoara locality; **CS** - The Couloir of the Strei; **CM** - The Couloir of the Mureș

In the oak forests of Hațeg and Hunedoara Hills (Ass. *Quercus petraeae* – *Carpinetum* SOÓ et PÓCS 1957), some species that develop their larval stage on *Quercus* sp. were recorded. Among the most interesting species we mention *Asphalia ruficollis*, *Polyplocia ridens*, *Catephia alchymista* and *Dichonia convergens*.

Neozephyrus quercus quercus, typical for the edge of the oak forest, is listed as a vulnerable species in the Red List of the Butterflies of Romania and protected by law (RÁKOSY, 2002; SZÉKELY, 2008).

Lymantria dispar, *Watsonalla binaria*, *Hypomecis roboraria*, *Orthosia incerta incerta*, *Orthosia gothica*, *Calymnia trapezina*, *Pseudoips prassinanus*, *Conistra rubiginea*, *Conistra erythrocephala*, *Eupsilia transversa* are some of the species collected in the hilly area of Sarmizegetusa locality (Hațeg Depression).

In the deciduous forests (beech and oak), widespread in the Couloir of the Strei, some polyphagous species were identified as *Lomaspilis marginata*, *Macaria alternata*, *Ennomos erosaria*, *Selenia tetralunaria*, *Selenia lunularia*, *Crocallis elinguaris*, *Colotois pennaria*, *Biston betularia*, *Agriopsis marginaria*, *Ectropis crepuscularia*, *Geometra papilionaria*, *Jodis lactearia*, *Phalera bucephala*, *Amphipyra perflua*, *Asteroscopus sphinx*, *Atypha pulmonaris*, *Mesogona acetosellae*, and *Arctornis l-nigrum*.

In the beech forests of Orăștie Hills (Ass. *Carpino-Fagetum* PAUCĂ 1941), the most frequent species are *Stauropus fagi*, *Aglia tau*, *Epirrita autumnata autumnata*, *Operophtera brummata*, *Ennomos autumnarius autumnarius*, *Colotois pennaria*, *Campaea margaritata*, *Phalera bucephala*, *Elkneria pudibunda*, *Pseudoips fagana fagana*, *Acrionicta aceris*, *Pyramidocampa pyramidea*, *Cosmia affinis*, *Cosmia trapezina*, and *Polia nebulosa*.

The oak and beech forests are interrupted, here and there, by various grasslands (Ass. *Festuco rubrae-Agrostietum capillaris* HORV. (1951) 1952, Ass. *Anthoxantho-Agrostietum capillaris* SILLING., 1933 and Ass. *Arrhenateretum elatioris* BR.-BL. ex SCHERR, 1925). 385 species were recorded from the different grasslands of the hilly area of Hunedoara County. Among the Macrolepidoptera species, *Ematurga atomaria atomaria*, *Polypogon tentacularia*, *Hyles euphorbiae euphorbiae*, *Euclidia glyphica glyphica*, *Autographa gamma*, *Ochropleura plecta*, *Agrotis segetum*, *Agrotis exclamationis*, *Agrotis ipsilon*, *Coenonympha pamphilus pamphilus*, *Polyommatus icarus*, and *Melithaea athalia athalia* are very frequent.

On the southern slopes of the hills, some mesoxerophilous grasslands are widespread. Here, *Pseudoterpna pruinata*, *Rhodostrophia vibicaria*, *Cataclyme riguata*, *Lygephila pastinum*, *Tephрина arenacearia*, *Acontia lucida lucida*, *Tyta luctuosa*, and *Agrotis crassa* are very common species. In this type of habitat, there were recorded some rare species - *Spiris striata* (Deva Hill and its surrounding) and *Chazara briseis* (in all the sites except the Mureș Couloir).

In the valley of the rivers, coenoses of alder trees and various Salicaceae are widespread. Ass. *Alnetum viridis* (RUBEL) BR.-BL. 1918 and Ass. *Stellario nemori - Alnetum glutinosae* (KASTN. 38) LOHM 57 and Ass. *Salicetum albae-fragilis* ISSL. 26 em SOÓ 57 were identified in the Couloir of the Strei and the Mureș Rivers. Here, *Tethea oror*, *Poecilocampa populi*, *Laothoe populi*, *Cerura vinula*, *Clostera curtula*, *Acrionicta megacephala*, *Xanthia icterita*, *Xanthia ocellaris*, *Leucoma salicis* find optimal conditions for their life-cycle.

In the pool and swamp habitats of the Mureș River, *Nonagria typhae*, *Rhizodra lutosa* are very common species (BURNAZ SILVIA, 1999).

In the Mureș and the Strei Couloirs the most widespread meso-hygrophilous lawns are those edified by *Scirpetum sylvatici* RALSKI 1931, MALOCH 1935 em. SCHWICH. 1944 and *Agrostetum stoloniferae* (UJVÁROSI, 1941) BURDUJA et al., 1956 associations. Here, *Lycaena dispar rutila*, *Lycaena virgaureae* and *Euphydryas aurinia aurinia* find optimal conditions of their development.

With regard to the flight period, we have noticed that in spring, the first species are those that hibernate as an imago and become active with the first warm day. For example, at Sarmizegetusa, Călan, Deva and Ilia, at the end of April we have collected *Inachis io*, *Gonepteryx rhamni*, and *Nymphalis antiopa*. In spring, *Polygonia c-album*, *Archieris parthenias* from Geometridae and *Anthocharis cardamines* from Pieridae are also very frequent species. In May, *Araschnia levana*, *Pieris rapae*, *Pieris napi*, *Melitaea athalia*, *Hemeraris lucina*, *Pararge aegeria tircis*, and *Pyrgus malvae* fly at the edge of the forests and within meadows. During the last days of May and the first days of June,

the adults *Euphydryas aurinia* fly especially at the edge of the deciduous forests and in meso-hygrophilous pastures. In July and August, *Argynnis paphia*, *Argynnis adippe*, *Melitaea didyma*, *Maniola jurtina*, *Aphantopus hyperantus*, *Hesperia comma*, *Ochlodes venatus faunus*, and *Coenonympha pamphilus* are very common. In late autumn (November), we have collected *Colotois pennaria*, *Operophtera brumata*, *Erannis defoliaria*, and *Diloba caeruleocephala*.

Among rare or local species in the studied areas we mention:

SPHINGIDAE

Proserpinus proserpina (PALLAS 1772) - It is a rare species in Hunedoara County. One male was collected on June 20, 2008 in the neighbourhood of Călan locality, in the Strei Couloir. It is a species typical for xeric habitats (grasslands and rocks), but it was also collected at the edge of the deciduous forests. The adults fly in May-June. Larvae prefer *Oenothera biennis*, *Chamaenerion angustifolium*, and *Lythrum salicaria*.

NYMPHALIDAE

Euphydryas aurinia (ROTTEMBURG 1775) was recorded in the meso-hygrophilous meadows of the Mureş River, between Gurasada and Zam localities. It is a species with local occurrence in Romania. It is frequent especially in the western and south-western part of Romania. The adults fly in May. Larvae feed on *Scabiosa* sp.

GEOMETRIDAE

Hypomecis roboraria (DENIS & SCHIFFERMÜLLER 1775) – 3♂♂ collected on July 20, 2001 at Sarmizegetusa, in Haţeg Depression. This species is characteristic for oak forests but it is also recorded in mixed forests (beech and oak species). The adults fly in June-August. Larvae feed on different species of *Quercus*.

Cleorodes lichenaria (HUFNAGEL 1767) – This species is a relatively common species found in the oak area of Haţeg Depression (Slivuş Forest). The adults prefer the edge of the forests and bushes. The species was also found in the rocky areas of Deva Hills. The flight period of the adults is from July until August. Larvae feed on lichens on trees or stones.

NOCTUIDAE

Mythimna pudorina (DENIS & SCHIFFERMÜLLER 1775) - It is a hygrophilous species found in bogs and the dead branches of the Strei and the Mureş Couloirs. The adults fly in June-August. Larvae feed on *Phragmites communis* (RÁKOSY, 1996).

We also mention the presence of *Archanara sparganii* (ESPER 1790), recorded from a bog habitat of the Mureş Couloir and *Archanara geminipuncta* (HAWORTH, 1809) recorded from a bog situated near Călan locality, in the area of the Strei Couloir.

The adults of *Archanara sparganii* fly in August-September. Larvae feed on *Typha* sp. and *Iris pseudacorus*. The second species, *Archanara geminipuncta* flies in June-October. Larvae of these species feed on *Phragmites*.

Dysgonia algira (LINNAEUS 1767) – This xerothermophilous species prefers bush areas. The flight period is between June and September. Larvae feed on *Rubus*, *Genista*, *Salix* (RÁKOSY, 1996). 2 ♂♂, 1 ♀ were collected in Fortress Hill of Deva on September 9, 2004.

Catephia alchymista (DENIS & SCHIFFERMÜLLER 1775) – Individuals of these species were collected in Chizid Forest (Hunedoara) and Slivuş Forest (Haţeg). It is a species typical for oak forests. The flight period is between June and July. Larvae feed on *Quercus* sp.

Cryphia muralis (FORSTER 1771) – 1 ♂ collected on July 27, 2007, in the area of the Deva Fortress Hill. It is a rare species in Romania. The adults fly in June-September and prefer to rest on rocky places and walls with lichens. Larvae, oligophagous, feed on various species of lichens (RÁKOSY, 1996).

Polyphaenis sericata (ESPER 1787) - 1 ♂, 1 ♀ collected on July 20, 2006 at Orăştie Hills. It is a West-Asiatic Mediterranean species, with sporadic occurrence in Romania. The adults fly in June-July. Larvae feed on *Lonicera*, *Ligustrum*, *Cornus* (RÁKOSY, 1996).

ARCTIIDAE

Spiris striata (LINNAEUS 1758) – It is a rare species in Hunedoara County. The adults prefer grasslands with mezoxerothermophilous vegetation and fly in June-August. More specimens were seen in June in a small lawn situated near the Hill of Deva Fortress. Larvae feed on *Artemisia campestris*, *Calluna vulgaris*, *Hieracium pilosella*, *Salvia pratensis*, *Plantago lanceolata*. The species was also collected by us at Costeşti and Ohaba de Sub Piatră (Hunedoara County) (BURNAZ SILVIA, 2009).

CONCLUSIONS

The hilly area of Hunedoara County has various habitats in which Lepidoptera species find optimal conditions of life. This situation is due to the mild climate with Mediterranean influences and rich vegetation. Some species are very rare in Hunedoara County as *Cryphia muralis*, *Polyphaenis sericata*, *Proserpinus proserpina*, and

Spiris striata. Protected by Romanian law are *Lycaena dispar rutila*, *Parnassius mnemosyne distincta*, *Euphydryas aurinia*, *Proserpinus proserpina*, *Maculinea arion*, and *Maculinea alcon*.

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