

Data about diurnal Lepidoptera fauna (Ord. Lepidoptera, S. ord. Rhopalocera) of the Poiana Ruscă Mountains (Western Carpathians, Romania); the area of Băuțar-Cornișor-Micota Valley (Caraș-Severin County)

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Summary

The author presents the Lepidoptera fauna (Ord. Lepidoptera, S.ord. Rhopalocera) of the hilly area located in the South-eastern part of the Poiana Ruscă Mountains. This area is situated at the contact with the Couloir known as The Iron Gate of Transylvania that connects the counties of Hunedoara and Caraș-Severin. From the administrative point of view, the area belongs to the Băuțar and Cornișor localities. Most of the investigations were made on the Valley of the Micota River, a tributary of the Bistra River. The entire river valley is located in a hilly area with woods, especially beech forests. Mesophilous and mesohygrophilous lawns are scattered on both sides of the river in alternation with agricultural lands. A number of 81 Rhopalocera species was reported from this area. The check list of the species accompanied by data about the ecological exigencies, the fly period and the adult preference for flowering plants is presented. Some species such as *Lycaena dispar rutila*, *Neptis hylas*, *Maculinea arion*, *Hyponephele lycaon*, protected according to national and European legislation, have been identified in the habitats of the Micota Valley.

Keywords: Lepidoptera, Rhopalocera, Poiana Ruscă Mountains, Romania

Introduction

In 2009-2010, butterflies (ord. Lepidoptera, Sord. Rhopalocera) of the South-eastern part of the Poiana Ruscă Mountains (Western Carpathians, Romania) have been researched. This area is located at the contact with the Couloir known as The Iron Gate of Transylvania that connects the counties of Hunedoara and Caraș-Severin. From the administrative point of view the area belongs to the villages of Băuțar and Cornișor (Caraș-Severin County).

The researches have been conducted on the valley of Micota River that cross the south-western part of the Poiana Ruscă Mountains. The whole valley is located in a hilly area with woods, especially deciduous forests of *Carpino-Fagetum* Paucă 1941 Association. At the edge of the forests various shrubs have been identified such as *Prunus spinosa*, *Crataegus monogyna*, *Sambucus racemosa*, *Rubus idaeus*, *Rosa canina*, and *Viburnum lantana*. Mesophilous and mesohygrophilous lawns (Ass. *Agrosteto-Festuceto valesiacae* ARDELEAN 1983; Ass. *Agrosti stoloniferae-Deschampsietum cespitosae* UJVÁROSI 1941; Ass. *Festuco rubrae-Agrostietum capillaris* HORV. 1951, Ass. *Festucetum pratensis* SOÓ

1938, *Anthoxantho-Agrostietum capillaris* SILLING., 1933 and *Arrhenateretum elatioris* BR.-BL. ex SCHERR, 1925) are scattered on both sides of the river in alternation with agricultural lands. Alder and Salix communities (*Stellario nemori-Alnetum glutinosae* (KÄSTNER 1938) LOHM 1957, *Alnetum incanae* (BROCKMAN 1907) AICHINGER ET SIEGRIST 1930, *Salicetum albae* ISSLER 1924) and *Alno-Salicetum cinereae* (POP & all. 2002) are also spread in the Valley of the Cornişor River. This area has a mild climate with annual average temperature of 8°C and an average of preccipitations of 800 mm. The aim of this study is to emphasize the butterflies species collected and identified in the hilly area of the south-eastern part of the Poiana Ruscă Mountains, the area of Băuţar-Cornişor-Micota Valley.

Material and Methods

The species have been collected between May-October 2009-2010.

The butterflies were collected at the forest edge and grassland on both sides of the Micota River.

Results and discussions

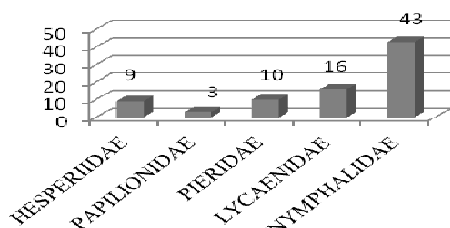


Fig. 1. Number of species related to the families of S.ord. Rhopalocera /Numărul de specii raportat la familiile subordinului

The habitats with different phytocoenoses and local climate offer favourable conditions for butterflies. A total of 81 species of butterflies (S. ord. Rhopalocera) were recorded until present in the hilly area of the South-eastern part of the Poiana Ruscă Mountains. The checklist list of the species, accompanied by data about the habitats, the flying period of the adults and the preference for the flowering plants are presented (Table 1). The systematic and nomenclature used in this checklist follows RÁKOSY 2002 and SZÉKELY 2008. Most of species belong to the family Nymphalidae 43 species, (including Satyrinae) and Lycaenidae (16 species) (Fig. 1).

Regarding the habitats we mention that the most butterflies prefer the edge of the forests and the mesophilous and mesohygrophilous meadows. At the edge of the deciduous and mixed forests frequent species are *Pyrgus carthami*, *Pyrgus malvae*, *Erynnis tages*, *Thymelicus sylvestris*, *Thymelicus lineola*, *Ochlodes venatus faunus*, *Anthocharis cardamines*, *Hamearis lucina*, *Lycaena phlaeas*, *Callophrys rubi*, *Argynnis paphia*, *Polygonia c-album*, *Araschnia levana*, *Aglais urticae*, *Neptis hylas*, *Pararge aegeria tircis*, *Lasiommata megera*, *Hipparchia fagi*, *Erebia aethiops*, *Minois dryas*, *Lasiommata maera*, *Aphantopus hyperantus*. *Apatura iris* and *Apatura ilia* prefer open woodland, forest edges and hedge-rows, feeding on carrion, dung and tree sap. In the mesophilous meadows, the most common species are *Hesperia comma comma*, *Erynnis tages*, *Melanargia galathea*, *Coenonympha arcania*, *Coenonympha pamphilus*, *Polyommatus icarus*, *Melithaea athalia*, *Melithaea phoebe*, *Boloria selene*, *Boloria dia*, *Boloria euphrosyne*, *Melithaea cinxia*, *Leptidea sinapis*, *Pieris rapae*, *Pieris napi*, *Pontia edusa*, *Colias croceus* and *Colias hyale*. *Lycaena dispar rutila*, *Lycaena virgaureae* and *Lycaena tityrus* are frequent species in the mesohygrophilous meadows. In this area, adult butterflies prefer various plants as nectar source which can differ between species. Some species, like *Inachis io*, *Vanessa atalanta*, *Apatura iris*, *Apatura ilia* feed on other substances like: carrion, dump, tree sap, rotting fruits. *Thecla betulae* prefers aphid “honeydew” secretions (STILL 1996).

Table 1- Checklist of the Butterflies identified in the habitats of the the Poiana Rusă Mountains (Western Carpathians); the area of Băutar-Cornișor-Micota Valley/ Lista sistematică a fluturilor diurni identificați în habitate Munții Poiana Rusă (Carpații Occidentali); sectorul Băutar-Cornișor-Valea Micota

| Taxa | H | E.E | APF | F.P. |
|------------------------------------------------------------|---------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| HESPERIIDAE | | | | |
| <i>Erynnis tages</i> (Linnaeus, 1758) | 3,5 | M | <i>Medicago lupulina</i> , <i>Melilotus officinalis</i> , <i>Trifolium campestre</i> , <i>Potentilla erecta</i> | V-VI |
| <i>Pyrgus carthami</i> (Hübner, 1813) | 1,3,5 | Xt | <i>Potentilla erecta</i> , <i>Potentilla reptans</i> , <i>Viola tricolor</i> | VI-VIII |
| <i>Pyrgua alveus alveus</i> (Hübner, 1803) | 1,2,3,5 | M,Mh | <i>Potentilla erecta</i> , <i>Helianthemum</i> | VI-VII |
| <i>Pyrgus malvae malvae</i> (Linnaeus, 1758) | 1,2,3,5 | M | <i>Potentilla reptans</i> , <i>Salvia nemorosa</i> , <i>Galium verum</i> | V-VI; VII |
| <i>Carterocephalus palaemon</i> (Pallas, 1771) | 3,5 | M | <i>Viola tricolor</i> | V-VI |
| <i>Thymelicus lineola</i> (Ochsenheimer, 1808) | 1,3 | M | <i>Salvia pratensis</i> | V-VIII |
| <i>Thymelicus sylvestris</i> (Poda, 1761) | 3 | M | <i>Inula hirta</i> , <i>Senecio vulgaris</i> , <i>Leucanthemum vulgare</i> , <i>Salvia nemorosa</i> , <i>Galium verum</i> , <i>Vicia faba</i> , <i>Tanacetum vulgare</i> , <i>Viola tricolor</i> , <i>Potentilla reptans</i> | V-VIII |
| <i>Hesperia comma</i> (Linnaeus, 1758) | 3,5 | M | <i>Ajuga genevensis</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i> , <i>Viola tricolor</i> , <i>Mentha longifolia</i> , <i>Tanacetum vulgare</i> , <i>Lotus corniculatus</i> , <i>Vicia faba</i> | VI-VII |
| <i>Ochlodes venatus faunus</i> (Turati, 1905) | 3,5 | M | <i>Hypericum perforatum</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i> , <i>Trifolium pratense</i> , <i>Trifolium repens</i> | VI-VIII |
| PAPILIONIDAE | | | | |
| <i>Parnassius mnemosyne transsylvanica</i> (Schmidt, 1930) | 3 | M | <i>Ajuga reptans</i> , <i>Origanum vulgare</i> | VI-VII |
| <i>Papilio machaon</i> (Linnaeus 1758) | 3 | M | <i>Carduus nutans</i> , <i>Cirsium arvense</i> , <i>Dipsacus fullonum</i> | V-VIII |
| <i>Iphiclides podalirius</i> (Scopoli, 1763) | 3 | Mxt | <i>Carduus nutans</i> , <i>Cirsium arvense</i> | V-VIII |
| PIERIDAE | | | | |

| Taxa | H | E.E | APF | F.P. |
|----------------------------------------------------|---------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <i>Leptidea sinapis sinapis</i> (Linnaeus, 1758) | 1,2,3,5 | M | <i>Leucanthemum vulgare</i> , <i>Lotus corniculatus</i> , <i>Salvia pratensis</i> , <i>Trifolium pratense</i> , <i>Aster amellus</i> , <i>Scabiosa columbaria</i> , <i>Eupatorium cannabinum</i> , <i>Mentha longifolia</i> | IV-IX |
| <i>Anthocharis cardamines</i> (Verity, 1908) | 3 | M | <i>Taraxacum officinale</i> , <i>Viola tricolor</i> | IV-V |
| <i>Aporia crataegi crataegi</i> (Linnaeus, 1758) | 3 | M | <i>Dianthus carthusianorum</i> | V-VI |
| <i>Pieris brassicae brassicae</i> (Linnaeus, 1758) | 1,3 | M | <i>Silene vulgaris</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i> , <i>Carduus candicans</i> , <i>Cirsium arvense</i> , <i>Tanacetum vulgare</i> , <i>Dianthus carthusianorum</i> , <i>Crataegus monogyna</i> , <i>Sambucus racemosa</i> | IV-VIII |
| <i>Pieris rapae rapae</i> (Linnaeus, 1758) | 1,2,3,5 | M | <i>Ajuga genevensis</i> , <i>Salvia pratensis</i> , <i>Hypericum perforatum</i> , <i>Leucanthemum vulgare</i> , <i>Linum hirsutum</i> , <i>Inula hirta</i> , <i>Dianthus carthusianorum</i> , <i>Mentha aquatica</i> , <i>Mentha longifolia</i> , <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Lotus corniculatus</i> | IV-IX |
| <i>Pieris napi napi</i> (Linnaeus, 1758) | 1,2,3,5 | M | <i>Eupatorium hirsutum</i> , <i>Leucanthemum vulgare</i> , <i>Linum hirsutum</i> , <i>Inula hirta</i> , <i>Dianthus carthusianorum</i> , <i>Mentha aquatica</i> , <i>Mentha longifolia</i> , <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Lotus corniculatus</i> | IV-V; VI-IX |
| <i>Pontia edusa</i> (Fabricius, 1777) | 1,2,3,5 | M | <i>Trifolium repens</i> , <i>Viola tricolor</i> , <i>Lotus corniculatus</i> | IV-IX |
| <i>Colias hyale</i> (Linnaeus, 1758) | 1,2,3 | M | <i>Lotus corniculatus</i> , <i>Genista sagittalis</i> , <i>Trifolium pratense</i> , <i>Leucanthemum vulgare</i> , <i>Tanacetum vulgare</i> , <i>Dianthus carthusianorum</i> , <i>Telekia speciosa</i> , <i>Digitalis grandiflora</i> | V-IX |
| <i>Colias croceus</i> (Fourkroy, 1785) | 1,2,3,5 | M | <i>Scabiosa columbaria</i> , <i>Telekia speciosa</i> , <i>Leucanthemum vulgare</i> , <i>Senecio arvensis</i> , <i>Dianthus carthusianorum</i> , <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Sanguisorba officinalis</i> , <i>Thymus serpyllum</i> , <i>Lotus corniculatus</i> , <i>Vicia faba</i> , <i>Digitalis grandiflora</i> , <i>Tanacetum vulgare</i> , <i>Sambucus racemosa</i> , <i>Sambucus nigra</i> | IV-IX |

| Taxa | H | E.E | APF | F.P. |
|------------------------------------------------------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <i>Gonepteryx rhamni</i> (Linnaeus, 1758) | 3 | M | <i>Carduus nutans</i> , <i>Origanum vulgare</i> , <i>Solidago virgaurea</i> , <i>Scabiosa columbaria</i> , <i>Centaurea cyanus</i> , <i>Sambucus nigra</i> , <i>Sambucus racemosa</i> | III-IX |
| LYCAENIDAE | | | | |
| <i>Hamearis lucina</i> (Linnaeus, 1758) | 3 | M | <i>Taraxacum officinale</i> , <i>Fragaria vesca</i> , <i>Salvia pratensis</i> | V-I-IX |
| <i>Lycaena phlaeas</i> (Linnaeus, 1761) | 3,5 | M | <i>Mentha longifolia</i> | V-IX |
| <i>Lycaena dispar rutila</i> (Werneburg, 1864) | 3,5 | Tf, Hg | <i>Mentha aquatica</i> , <i>Mentha longifolia</i> | V-I-VII |
| <i>Lycaena virgaureae</i> (Linnaeus, 1758) | 2,3,5 | Mh | <i>Eupatorium cannabinum</i> , <i>Epilobium hirsutum</i> , <i>Mentha longifolia</i> | VII-VIII |
| <i>Lycaena tityrus tityrus</i> (Poda, 1761) | 3,5 | M | <i>Mentha longifolia</i> | V-I-VIII |
| <i>Thecla betulae</i> (Lynnaeus, 1758) | 3 | M | <i>Rarely on leaves of Alnus</i> | VIII-IX |
| <i>Callophrys rubi</i> (Lynnaeus, 1758) | 3,5 | Mt | <i>Lotus corniculatus</i> , <i>Medicago sativa</i> , <i>Trifolium arvense</i> | V-I-VII |
| <i>Satyrion w-album</i> (Knoch, 1782) | 3 | M | <i>Rarely on Sambucus nigra and Sambucus racemosa</i> | V-VII |
| <i>Satyrion pruni</i> (Linnaeus, 1758) | 3 | M | <i>Prunus spinosa</i> , <i>Berberis vulgaris</i> | V-I-VII |
| <i>Everes argiades</i> (Pallas, 1771) | 3 | M | <i>Tanacetum vulgare</i> , <i>Potentilla reptans</i> , <i>Trifolium campestre</i> | V-VIII |
| <i>Celastrina argiolus</i> (Linnaeus, 1758) | 3 | M | <i>Tanacetum vulgare</i> , <i>Potentilla reptans</i> , <i>Trifolium campestre</i> | V-VI; VIII-IX |
| <i>Glaucopsyche alexis</i> (Poda, 1761) | 2,3,4,5 | Mh | <i>Lotus corniculatus</i> , <i>Medicago sativa</i> , <i>Potentilla reptans</i> , <i>Hypericum perforatum</i> | V-VII |
| <i>Maculinea arion</i> (Linnaeus, 1758) | 2 | Mh | <i>Filipendula ulmaria</i> , <i>Agrimonia eupatoria</i> , <i>Leucanthemum vulgare</i> , <i>Linum flavum</i> , <i>Thymus serpyllum</i> | VII-VIII |
| <i>Plebejus argus</i> (Linnaeus, 1758) | 1,3 | M | <i>Lotus corniculatus</i> , <i>Potentilla recta</i> , <i>Viola tricolor</i> , <i>Medicago lupulina</i> , <i>Mentha longifolia</i> | V-VI; VII-VIII |
| <i>Aricia agestis</i> (Denis & Schiffermuller, 1775) | 3 | Mxt | <i>Lotus corniculatus</i> , <i>Medicago sativa</i> , <i>Trifolium pratense</i> , <i>Mentha longifolia</i> | V-VI; VII-VIII |

| Taxa | H | E.E | APF | F.P. |
|-------------------------------------------------------|-----------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <i>Polyommatus icarus</i> (Rottemburg, 1775) | 1,2,3,4,5 | M | <i>Medicago sativa</i> , <i>Hypericum perforatum</i> , <i>Lotus corniculatus</i> , <i>Potentilla reptans</i> , <i>Leucanthemum vulgare</i> , <i>Solidago virgaurea</i> , <i>Senecio vulgaris</i> , <i>Aster amellus</i> | V-IX |
| NYMPHALIDAE | | | | |
| <i>Argynnis paphia</i> (Linnaeus, 1758) | 1,3,4,5 | M | <i>Cirsium arvense</i> , <i>Telekia speciosa</i> , <i>Mentha longifolia</i> | VII-VIII |
| <i>Argynnis aglaja</i> (Linnaeus, 1758) | 1,3,5 | M | <i>Telekia speciosa</i> , <i>Mentha longifolia</i> , <i>Origanum vulgare</i> , <i>Scabiosa ochroleuca</i> | VII-VIII |
| <i>Argynnis adippe</i> (Denis & Schiffermüller, 1775) | 1,3 | M | <i>Telekia speciosa</i> , <i>Mentha longifolia</i> | VII-VIII |
| <i>Argynnis niobe niobe</i> (Linnaeus, 1758) | 1,3,5 | M | <i>Leucanthemum vulgare</i> , <i>Artemisia austriaca</i> , <i>Telekia speciosa</i> , <i>Aster amellus</i> , <i>Senecio nemorensis</i> , <i>Solidago virgaurea</i> , <i>Mentha longifolia</i> , <i>Epilobium montanum</i> , <i>Tanacetum vulgare</i> | VII-VIII |
| <i>Issoria lathonia</i> (Linnaeus, 1758) | 1,3,4,5 | M | <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i> , <i>Aster amellus</i> , <i>Senecio nemorensis</i> , <i>Senecio vulgaris</i> , <i>Solidago virgaurea</i> , <i>Tanacetum vulgare</i> , <i>Dianthus carthusianorum</i> | VI-VIII |
| <i>Brenthis daphne</i> (Denis & Schiffermüller) | 3,5 | M | <i>Aster amellus</i> , <i>Leucanthemum vulgare</i> , <i>Dianthus carthusianorum</i> , <i>Tanacetum vulgare</i> , <i>Linum tenuifolium</i> | VI-VII |
| <i>Brenthis hecate</i> (Denis & Schiffermüller, 1775) | 3,5 | M | <i>Lotus corniculatus</i> , <i>Medicago sativa</i> , <i>Dianthus carthusianorum</i> , <i>Mentha longifolia</i> , <i>M. aquatica</i> , <i>Hypericum perforatum</i> , <i>Ajuga genevensis</i> , <i>Leucanthemum vulgare</i> | VI-VII |
| <i>Boloria euphrosyne</i> (Linnaeus, 1758) | 3 | M | <i>Medicago sativa</i> , <i>Dianthus carthusianorum</i> , <i>Mentha longifolia</i> , <i>Mentha aquatica</i> , <i>Hypericum perforatum</i> , <i>Leucanthemum vulgare</i> | IV-V; VII-VIII |
| <i>Boloria selene</i> (Denis & Schiffermüller, 1775) | 1,3,5 | M | <i>Leucanthemum vulgare</i> , <i>Senecio vernalis</i> , <i>Hesperis tristis</i> , <i>Galium verum</i> , <i>Achillea millefolium</i> , <i>Solidago virgaurea</i> , <i>Vicia cracca</i> , <i>Silene vulgaris</i> , <i>Stellaria holostea</i> | V-VI; VII-VIII |

| Taxa | H | E.E | APF | F.P. |
|-----------------------------------------------------|-----------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <i>Boloria dia dia</i> (Linnaeus, 1767) | 1,3,4,5 | M | <i>Veronica chamaedrys</i> , <i>Potentilla recta</i> , <i>Medicago lupulina</i> , <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Leucanthemum vulgare</i> , <i>Linaria vulgaris</i> , <i>Origanum vulgare</i> , <i>Senecio nemorensis</i> | V-IX |
| <i>Vanessa atalanta</i> (Linnaeus, 1758) | 3 | M | <i>Telekia speciosa</i> | V-IX |
| <i>Vanessa cardui</i> (Linnaeus, 1758) | 3,5 | M | <i>Telekia speciosa</i> , <i>Cirsium arvense</i> | V-IX |
| <i>Inachis io</i> (Linnaeus, 1758) | 1,3,4,5 | M | <i>Telekia speciosa</i> , <i>Leucanthemum vulgare</i> | III-VIII |
| <i>Aglais urticae</i> (Linnaeus, 1758) | 3,5 | M | <i>Telekia speciosa</i> , <i>Carduus nutans</i> , <i>Cirsium arvense</i> , <i>Hypericum perforatum</i> , <i>Urtica dioica</i> | V-VIII |
| <i>Polygonia c-album</i> (Linnaeus, 1758) | 3 | M | <i>Urtica dioica</i> , <i>Mentha longifolia</i> , <i>Ajuga genevensis</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i> , <i>Hieracium pilosella</i> , <i>Dipsacus fullonum</i> , <i>Succisa pratensis</i> | III-VIII |
| <i>Araschnia levana</i> (Linnaeus, 1758) | 3 | Mh | <i>Urtica dioica</i> , <i>Telekia speciosa</i> , <i>Aster amellus</i> , <i>Urtica dioica</i> , <i>Hypericum perforatum</i> | V-VI; VII-VIII |
| <i>Nymphalis antiopa</i> (Linnaeus, 1758) | 3,4 | M | <i>Rarely on Sambucus racemosa and leaves on various trees</i> | III-VI |
| <i>Melitaea cinxia</i> (Linnaeus, 1758) | 1,3,5 | M | <i>Lotus corniculatus</i> , <i>Medicago sativa</i> , <i>Hypericum perforatum</i> , <i>Leucanthemum vulgare</i> , <i>Tanacetum vulgare</i> | V-VII |
| <i>Melitaea phoebe</i> (Denis & Schiffmuller, 1775) | 1,2,3,5 | Mt | <i>Centaurea cyanus</i> , <i>Lotus corniculatus</i> , <i>Medicago sativa</i> , <i>Hypericum perforatum</i> , <i>Leucanthemum vulgare</i> , <i>Tanacetum vulgare</i> | V-IX |
| <i>Melitaea didyma</i> (Esper, 1778) | 1,3,4,5 | M | <i>Trifolium repens</i> , <i>Dianthus carthusianorum</i> , <i>Filipendula ulmaria</i> , <i>Leucanthemum vulgare</i> , <i>Ajuga genevensis</i> | V-IX |
| <i>Melitaea athalia</i> (Rottemburg, 1775) | 1,2,3,4,5 | M | <i>Dianthus carthusianorum</i> , <i>Filipendula ulmaria</i> , <i>Leucanthemum vulgare</i> , <i>Ajuga genevensis</i> , <i>Lotus corniculatus</i> , <i>Medicago sativa</i> , <i>Hypericum perforatum</i> , <i>Tanacetum vulgare</i> | V-VI; VIII-IX |

| Taxa | H | E.E | APF | F.P. |
|---------------------------------------------------------|---------|-----|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <i>Euphydryas aurinia aurinia</i> (Rottemburg, 1775) | 1 | M | <i>Euphorbia cyparissias, Ranunculus acer, various grasses</i> | V |
| <i>Neptis hylas</i> (Linnaeus, 1758) | 3 | M | Some individuals were observed resting on the leaves of <i>Sambucus racemosa</i> and <i>Viburnum lantana</i> | V-VI; VII-VIII |
| <i>Neptis rivularis</i> (Scopoli, 1763) | 3 | M | On the leaves of <i>Sambucus racemosa</i> | V-VII |
| <i>Apatura iris</i> (Linnaeus, 1758) | 4 | Mh | Many individuals observed on the road looking drop-pings | VII |
| <i>Apatura ilia</i> (Denis & Schiffermuller, 1775) | 4 | Mh | Many individuals observed on the road looking drop-pings | VII-VIII |
| <i>Pararge aegeria tircis</i> (Butler, 1867) | 1,3,5 | M | <i>Telekia speciosa, Tanacetum vulgare, Leucanthemum vulgare, Sambucus racemosa</i> | V-IX |
| <i>Lasiommata megera megera</i> (Linnaeus, 1767) | 3 | M | Rarely on <i>Urtica dioica, Leucanthemum vulgare. It prefers the shady places of the edge of forests and rests on the leaves of the trees.</i> | V-IX |
| <i>Lasiommata maera maera</i> (Linnaeus, 1758) | 3 | M | <i>Taraxacum officinale, Ranunculus repens, Dianthus carthusianorum</i> | V-IX |
| <i>Coenonympha arcania arcania</i> (Linnaeus, 1761) | 1,3,5 | M | <i>Trifolium repens, Centaurea cyanus, Medicago lupulina, Lotus corniculatus, Vicia faba, Filipendula hexapetala, Dianthus carthusianorum</i> | VI-IX |
| <i>Coenonympha glycerion</i> (Borkhausen, 1788) | 1,3,4,5 | M | <i>Trifolium repens, Centaurea cyanus, Medicago lupulina, Dianthus carthusianorum</i> | VI-VIII |
| <i>Coenonympha pamphilus</i> (Linnaeus, 1758) | 1,3,4,5 | M | <i>Leucanthemum vulgare, Dianthus carthusianorum, Mentha aquatica</i> <i>Bellis perennis</i> | V-X |
| <i>Pyronia tithonus tithonus</i> (Linnaeus, 1767) | 2,3,4,5 | Mh | <i>Dianthus carthusianorum, Aster amellus, Leucanthemum vulgare</i> | V-VIII |

| Taxa | H | E.E | APF | F.P. |
|----------------------------------------------------|----------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <i>Aphantopus hyperantus</i> Linnaeus, 1758) | 3 | M | <i>Leucanthemum vulgare</i> , <i>Dianthus carthusianorum</i> , <i>Aster amellus</i> , <i>Cirsium arvense</i> , <i>Carduus candicans</i> , <i>Telekia speciosa</i> , <i>Ajuga genevensis</i> , <i>Salvia pratensis</i> | V-X |
| <i>Maniola jurtina</i> (Linnaeus, 1758) | 3,4,5 | M | <i>Epilobium angustifolium</i> , <i>Telekia speciosa</i> , <i>Carduus acanthoides</i> , <i>Centaurea cyanus</i> , <i>Cirsium arvense</i> , <i>Origanum vulgare</i> , <i>Thymus communis</i> , <i>Leucanthemum vulgare</i> , <i>Ajuga genevensis</i> , <i>Salvia pratensis</i> | V-IX |
| <i>Hyponephele lycaon</i> (Rottemburg, 1775) | 3 | M | <i>Telekia speciosa</i> | VII |
| <i>Erebia aethiops aethiops</i> (Esper, 1777) | 3 | M | <i>Telekia speciosa</i> , <i>Senecio nemorensis</i> , <i>Aster amellus</i> | VII-VIII |
| <i>Erebia ligea nikostrate</i> Fruhstorfer, 1909 | 1,2,34,5 | M | <i>Telekia speciosa</i> | VII-VIII |
| <i>Melanargia galathea</i> (Linnaeus, 1758) | 1,2,3,5 | M | <i>Leucanthemum vulgare</i> , <i>Dianthus carthusianorum</i> , <i>Salvia pratensis</i> | VI-VIII |
| <i>Minois dryas</i> (Scopoli, 1763) | 3 | M | <i>Rarely on Sambucus racemosa</i> | VI-VIII |
| <i>Hipparchia fagi</i> (Scopoli, 1763) | 3 | M | <i>Hypericum perforatum</i> , <i>Verbascum phlomoides</i> | VI-IX |
| <i>Hipparchia semele</i> (Linnaeus, 1758) | 3 | M | <i>Telekia speciosa</i> | VI-VIII |
| <i>Brintesia circe pannonica</i> Fruhstorfer 1911) | 3 | M | <i>Rarely on Hypericum perforatum</i> , <i>Telekia speciosa</i> | VI-VIII |

Abbreviations: Habitats: 1: Mesophilous meadows 2. Mesohygrophilous meadows 3. The edge of the deciduous forests 4. Alder and Salix communities 5. Hydrophilous tall-herb fringe communities; E.E.=Ecological exigencies: M-Mesophilous species; Mh: Mesohygrophilous species; Mxt: Mesoxerothermophilous species; Xt: Xerothermophilous species; Tf: Tyrphophilous species; Hg: Hygrophilous species;

A lot of flowering plants were visited by butterflies. In July and August *Mentha aquatica*, *Mentha longifolia*, *Dianthus carthusianorum*, *Origanum vulgare*, *Ajuga genevensis*, *Carduus nutans*, *Cirsium rivulare*, *Telekia speciosa*, *Galium verum* and *Leucanthemum vulgare* were the most visited flowering plants for searching the nectar.

Endemic taxon is *Parnassius mnemosyne transsylvanica* SCHMIDT, 1930 - This subspecies was identified in mesohygrophilous and mesophilous meadows. The adults fly in May-July. Larvae feed on *Corydalis* sp. and develop their stage in May.

Parnassius mnemosyne and its geographical races is protected by law in several countries of Europe. In Romania this taxon is protected by law according 4A Annexe of Emergency Ordinance of Romanian Government 57/2007.

Conclusions

81 species belonging to Rhopalocera were reported from the south-western part of the Poiana Ruscă Mountains.

Some species as *Thecla betulae*, *Lycaena dispar rutila*, *Lycaena alciphron*, *Satyrium w-album*, *Thecla betulae*, *Parnassius mnemosyne transsylvanica*, *Satyrium pruni*, *Brenthis daphne*, *Brenthis hecate*, *Apatura ilia*, *Apatura iris* and *Hyponephele lycaon* are listed as vulnerable, near threatened or endangered species in the Red List of Butterflies of Romania (RÁKOSY 2002). *Parnassius mnemosyne transsylvanica*, *Neptis hylas*, *Euphydryas aurinia*, *Lycaena dispar rutila*, *Maculinea arion* and *Hyponephele lycaon* are listed in the Annexes of the Emergency Ordinance 57/2007 of the Romanian Government as species of national and community interest.

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- xxx Ordonanța de urgență nr. 57 din 20 iunie 2007 privind regimul ariilor naturale protejate, conservarea habitatelor naturale, a florei și faunei sălbatice.

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