

Data concerning the butterflies (Subord Rhopalocera, Ord. Lepidoptera) from the eastern and north-eastern part of the Poiana Ruscă Mountains (Western Carpathians, Romania)

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Rezumat

Date privind fluturii diurni (Subord. Rhopalocera, Ord. Lepidoptera) din partea estică și nord-estică a Munților Poiana Ruscă (Romania, Carpații Occidentali)

Lucrarea prezintă lista sistematică a speciilor de macrolepidoptere diurne (S. ord. Rhopalocera) identificate până în prezent în ecosisteme naturale din partea estică și nord-estică a Munților Poiana Ruscă, masiv mai puțin cercetat din punct de vedere lepidopterologic. Zonele investigate sunt: Măgurile Deveii, Valea Runcului-Govăjdie, Valea Cernei și împrejurimile localității Lunca Cernii, Dealurile Hunedoarei. Lista sistematică elaborată pe baza celor mai recente concepții privind clasificarea și nomenclatura științifică a speciilor de macrolepidoptere este însoțită de date privind stațiunile cercetate, frecvența speciilor, distribuția geografică actuală, exigențele ecologice, baza trofică a larvelor și adulților. Cumulând datele publicate anterior cu cele obținute pe baza investigațiilor personale sunt prezentate 104 specii de macrolepidoptere diurne. Diversitatea specifică variază în funcție de stațiunile cercetate: 88 specii semnalate în zona Măgurilor Deveii, 99 specii în regiunea calcaroasă din Valea Govăjdiei, 91 specii pe Valea Cernii și Lunca Cernii și 74 specii pe Dealurile Hunedoarei. Rare în zona cercetată sunt speciile: *Pararge achine*, *Lycaena helle*, *Satyrium acaciae nostras* și *Colias myrmidone*.

Summary

This work presents the checklist of butterfly species (Lepidoptera: Rhopalocera) identified till now from Eastern and North-Eastern part of Poiana Ruscă Mountains (Western Romania). The list compounds 104 species. Some species: *Pararge achine*, *Lycaena helle*, *Satyrium acaciae nostras* and *Colias myrmidone* are rare in the investigated area.

Keywords: Butterfly, Romania, faunistics

Introduction

The Poiana Ruscă Mountains represent the northern part of the Banat Mountains (Eastern Carpathians, Romania). They are situated between the parallels 45°30' and 45°30' Northern latitude and 22° and 23° meridians Eastern longitude.

The Poiana Ruscă Mountains cover an area of 2640 km², being delimited in the north by the Mureș river which separates them from the Metaliferi Mountains and the Lipova Hills. In the western part the Caransebeș Depression borders them. The Hațeg and Strei Depressions mark the southern and the eastern limits. The difference between the lowest altitude (the Pleșu Hill-334 m) and the highest one (the Padeș Peak-1374 m) is about 1040 m.

The mountainous zone has two principal geomorphological areas. In the western part, between the Caransebeș Depression and the basins of Bega and Cerna rivers, the relief is strongly fragmented. The eastern part of the massif is represented by a large plateau with levels of 900-1000 m on the central area and 400-500 m on the outside. This plateau, known like "The Pădureni County" is characteristic for the Poiana Ruscă Mountains relief. The general aspect of this plateau looks like a large hillocky region. The geological substratum consists on *metamorphic rocks* (crystalline schists, micaschists, gneisses, etc) that are spread in the most part of the mountainous area; *magmatic rocks*, especially andesite corps in the north-eastern part; *sedimentary rocks* (dolomites, gritstones,

etc) in the peripheral zones of the massif.

The annual average temperature diminishes with the altitude: from 9-11°C in the peripheral depressions to 2 - 8°C in the mountainous area.

The annual average precipitations increases from 600 -700 mm in the peripheral depressions to 1200 - 1400 mm in the central area of the massif (KRAUTNER 1984).

As a result of these edapho-oro-climatic conditions, the vegetation is represented almost exclusively of forests. The mixed forests (As. *Pulmonario rubro-Abieti-Fagetum* (KNAPP, 42) SOO, 64) cover the mountainous area (900-1250 m). The inferior and the middle mountain levels (400-900 m) are dominated by the beech forests (As. *Carpino-Fagetum* PAUCĂ, 41) alternating with lawns and rocky grasslands. In the calcareous area of the Poiana Ruscă Mountains (the Runc and Govăjdie Basins) the predominant association is *Phyllitidi-Fagetum* VIDA 63 (DONIȚĂ et al. 1992) alternating with rocky grasslands.

The Macrolepidoptera fauna of the western part of the Poiana Ruscă Mountains was studied by KÖNIG (1975). Adriano OSTROGOVICH has collected some few species in the surroundings of the Hunedoara town

Material and methods

Our studies concerning the butterflies fauna were carried out between 1988-2000 in the Eastern and North-Eastern part of the Poiana Ruscă Mountains.

Four sites of the Eastern and North-Eastern part of the Poiana Ruscă Mountains were investigated:

1. The hills of Deva town; situated in the western part of this locality, in the area of beech and oak forests; the most representative are the natural reserves: The Bejan Forest (420 m), the Cetate Hill (380 m) and Sarheghi (Colțu) Hill (583 m)

2. The Cerna Valley and the surroundings of Lunca Cernii locality (600 - 750 m)

3. The calcareous area of Govăjdie locality (600 m) and the Runcu Valley

4. The hills of Hunedoara town (The Cărpiniș Hill - 437 m, the Forest of Chizid - 432 m).

The specimens were collected in the following types of ecosystems, using the entomological net:

-Mesophylous grasslands (As. *Lolio-Trifolietum repentis* RESMERIȚĂ et al., 1967; As. *Festuco rubrae-Agrostetum capillaris* HORV. (1951) 1952); As. *Poo-*

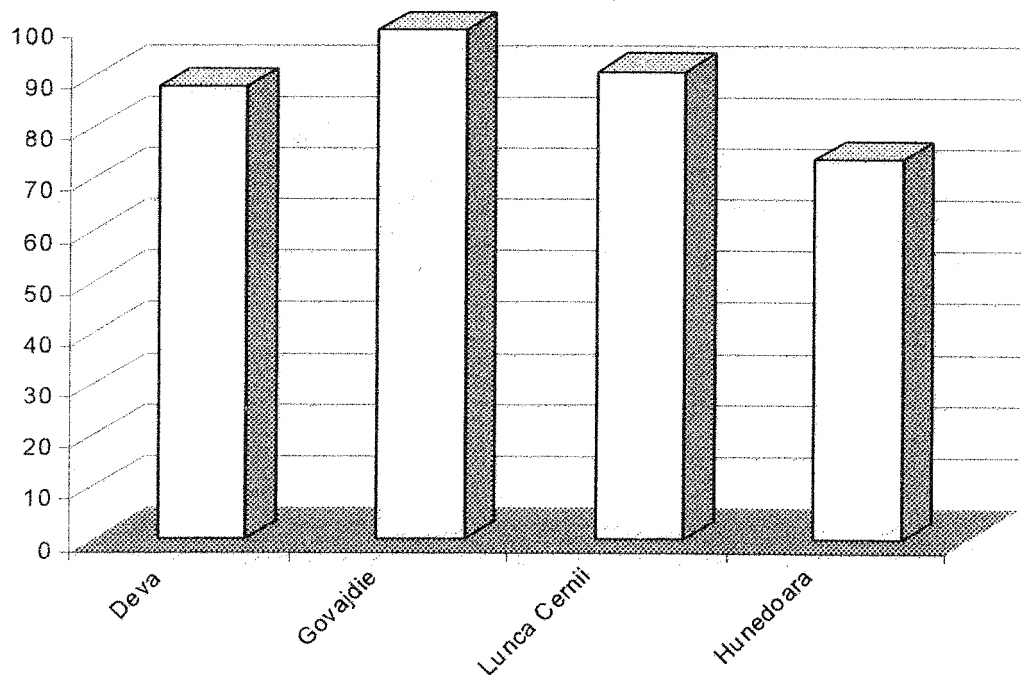


Fig. 1. Count of the Rhopalocera species identified in the studied sites of the Poiana Ruscă Mountains

(POPESCU-GORJ 1964). FOTESCU (1971) published a list of the butterflies species collected in the Basin of Cerna, Govăjdie and the surroundings of Hunedoara town.

Trisetetum flavescens KNAPP, 1951; As. *Arrhenatheretum elatioris* BR.-BL., EX SCHERR, 1925)

-Xerothermophylous grasslands (As. *Medicagini - Festucetum vallesiaca* CAGNER, 1940; As. *Agrosteto - Festucetum sulcatae vallesiaca* SZABO, 1971);

Table 1.

Systematic list of the butterflies (S.ord. Rhopalocera, Ord. Lepidoptera) from the eastern regions of the Poiana Ruscă Mountains

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
HESPERIIDAE												
<i>Carterocephalus palaemon</i>	+	+	+	+	M	Eua	1	V-VII	1, 2, 5	Oligophagous: Poaceae	<i>Cardamine pratensis</i> , <i>Fragaria vesca</i> , <i>Agrimonia eupatoria</i> , <i>Filipendula ulmaria</i> , <i>Chamaesphegium sagittale</i> , <i>Medicago lupulina</i> , <i>M. rigidula</i> , <i>Melilothus officinalis</i> , <i>Trifolium campestre</i> , <i>T. pratense</i> , <i>Anthyllis vulneraria</i> , <i>Lotus corniculatus</i> , <i>Vicia cracca</i> , <i>Linum flavum</i> , <i>Hypericum perforatum</i> , <i>Oenanthe aquatica</i> , <i>Chaerophyllum aromaticum</i> , <i>Orlaya grandiflora</i> , <i>Viola canina</i> , <i>Galium purpureum</i> , <i>Anchusa officinalis</i> , <i>Cynoglossum officinale</i> , <i>Valeriana officinalis</i> , <i>Linaria vulgaris</i> , <i>Veronica chamaedrys</i>	F
<i>Heteropterus morpheus morpheus</i>	-	-	+	+	M	Eua	1	VI-VII	5	Monophagous: Poaceae: <i>Calamagrostis canescens</i>	<i>Galega officinalis</i> , <i>Impatiens noli-tangere</i> , <i>Epilobium angustifolium</i>	VR
<i>Thymelicus sylvestris sylvestris</i>	+	+	+	+	M	Cam	1	V-VIII	1, 4, 5	Oligophagous: Poaceae	<i>Urtica dioica</i> , <i>Spiraea media</i> , <i>Rubus idaeus</i> , <i>R. caesius</i> , <i>Trifolium campestre</i> , <i>T. repens</i> , <i>Genista tinctoria</i> , <i>Lotus corniculatus</i> , <i>Hypericum perforatum</i> , <i>Epilobium angustifolium</i> , <i>Scabiosa columbaria</i> , <i>Cardaminopsis arenosa</i> , <i>Teucrium chamaedrys</i> , <i>Mentha longifolia</i>	F
<i>Thymelicus lineolus lineolus</i>	+	+	+	+	M	Hol	1	V-VIII	1, 2, 4, 5	Oligophagous: Poaceae	<i>Dianthus carthusianorum</i> , <i>Crataegus monogyna</i> , <i>Rubus fruticosus</i> , <i>Potentilla recta</i> , <i>Agrimonia eupatoria</i> , <i>Medicago rigidula</i> , <i>Anthyllis vulneraria</i> , <i>Alyssum petraeum</i> , <i>Vicia grandiflora</i> , <i>Trifolium pratense</i> , <i>Impatiens noli-tangere</i> , <i>Linum flavum</i> , <i>Thymus pulegioides</i> , <i>Scabiosa columbaria</i> , <i>Hieracium pilosella</i> , <i>Leucanthemum vulgare</i> , <i>Prunella vulgaris</i> , <i>Cirsium arvense</i> , <i>Telekia speciosa</i> , <i>Orchis morio</i> , <i>Scilla bifolia</i>	F
<i>Hesperia comma comma</i>	+	+	+	+	M	Hol	1	VII-Ix	1, 2, 3, 4, 5, 6	Polyphagous: <i>Festuca</i> sp., <i>Poa</i> sp., <i>Holcus</i> sp., <i>Triticum</i> sp., <i>Coronilla varia</i>	<i>Silene vulgaris</i> , <i>Dianthus carthusianorum</i> , <i>Berberis vulgaris</i> , <i>Cardamine pratensis</i> , <i>Cardaminopsis arenosa</i> , <i>Sinapis arvensis</i> , <i>Arabis hirsuta</i> , <i>A. turrata</i> , <i>Rorippa sylvestris</i> , <i>Filipendula ulmaria</i> , <i>Lotus corniculatus</i> , <i>Galium verum</i> , <i>Teucrium chamaedrys</i> , <i>Origanum vulgare</i> , <i>Thymus pulegioides</i> , <i>Mentha longifolia</i> , <i>Salvia pratensis</i> , <i>Verbascum phlomoides</i> , <i>Scabiosa columbaria</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i> , <i>Carduus acanthoides</i> , <i>Telekia speciosa</i> , <i>Solidago virgaurea</i>	VF

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Ochlodes venatus faunus</i>	+	+	+	+	Mt	Eua	1	V-VIII	1, 2, 3, 4, 5	Oligophagous: Poaceae	<i>Dianthus carthusianorum</i> , <i>Berberis vulgaris</i> , <i>Sinapis arvensis</i> , <i>Crataegus monogyna</i> , <i>Filipendula ulmaria</i> , <i>Linum flavum</i> , <i>Lotus corniculatus</i> , <i>Galega officinalis</i> , <i>Vicia sepium</i> , <i>V. cracca</i> , <i>V. grandiflora</i> , <i>Lythrum salicaria</i> , <i>Lathyrus niger</i> , <i>L. nissolia</i> , <i>Hypericum perforatum</i> , <i>Gallium purpureum</i> , <i>G. verum</i> , <i>Mentha longifolia</i> , <i>Symphytum officinale</i> , <i>Anchusa officinalis</i> , <i>Scabiosa columbaria</i> , <i>Impatiens noli-tangere</i> , <i>Centaurea scabiosa</i> , <i>C. phrygia</i> , <i>Origanum vulgare</i> , <i>Linaria vulgaris</i> , <i>Digitalis grandiflora</i> , <i>Salvia pratensis</i> , <i>S. nemorosa</i> , <i>Linaria vulgaris</i> , <i>Melitis melissophyllum</i> , <i>Cirsium arvense</i> , <i>C. vulgare</i> , <i>Achillea millefolium</i> , <i>Leucanthemum vulgare</i> , <i>Aster amellus</i> , <i>Telekia speciosa</i>	VF
<i>Erynnis tages tages</i>	+	+	+	+	M	Eua	2	IV-VI; VII-VIII	1, 2, 3, 5	Polyphagous: Eryngium campestre, <i>Lotus corniculatus</i> , <i>Hippocrepis comosa</i> , <i>Medicago lupulina</i> , <i>Coronilla varia</i>	<i>Sisymbrium loeseli</i> , <i>Galium verum</i> , <i>Lotus corniculatus</i> , <i>Lathyrus niger</i> , <i>Heracleum sphondylium</i> , <i>Teucrium chamaedrys</i> , <i>Cephalaria uralensis</i> , <i>Linaria vulgaris</i> , <i>Mentha longifolia</i> , <i>Veronica spicata</i> ssp. <i>orchidea</i> , <i>Leucanthemum vulgare</i> , <i>Tanacetum vulgare</i> , <i>Senecio vernalis</i> , <i>Arctium lappa</i> , <i>Aster amellus</i> , <i>Hypochoeris maculata</i> , <i>Tragopogon dubius</i> , <i>Telekia speciosa</i>	VF
<i>Carcharodus alceae alceae</i>	+	+	+	+	Mt, xt	Eua	3	III, V-VI; VII-VIII	5	Oligophagous: Malvaceae	<i>Sisymbrium officinale</i> , <i>S. loeseli</i> , <i>Lavatera thuringiaca</i> , <i>Malva sylvestris</i>	R
<i>Carcharodus flocciferus flocciferus</i>	+	-	+	+	Mxt	Eua (Pm)	2	VII-VIII	5	Oligophagous: Labiatae	<i>Sisymbrium loeseli</i> , <i>Lamium album</i> , <i>Melissa officinalis</i>	R
<i>Pyrgus malvae malvae</i>	+	+	+	+	M, Eu	Eua	2	IV-VI; VII-VIII	1, 2, 3, 4, 5, 6	Oligophagous: Rosaceae	<i>Epilobium angustifolium</i> , <i>Mentha longifolia</i> , <i>Cynoglossum officinale</i> , <i>Lamium album</i> , <i>L. purpureum</i> , <i>Stachys recta</i> , <i>Salvia nemorosa</i> , <i>S. pratensis</i> , <i>Linum flavum</i> , <i>Galium verum</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i>	VF
<i>Pyrgus alveus alveus</i>	+	+	+	-	M	Eua	1	VII-VIII	1, 2, 3, 4, 5	Monophagous: <i>Helianthemum nummularium</i>	<i>Dianthus carthusianorum</i> , <i>Hesperis sylvestris</i> , <i>Cardamine impatiens</i> , <i>C. pratensis</i> , <i>Sinapis arvensis</i> , <i>Filipendula ulmaria</i> , <i>Chamaespertium sagittale</i> , <i>Vicia grandiflora</i> , <i>Geranium pratense</i> , <i>Linum flavum</i> , <i>Epilobium angustifolium</i> , <i>Heracleum sphondylium</i> , <i>Gallium mollugo</i> , <i>G. verum</i> , <i>Cruciata glabra</i>	F
<i>Pyrgus fritillarius fritillaries</i>	+	-	+	+	M	Eua	1	VI-IX	1, 2, 4, 5	Polyphagous: <i>Potentilla</i> sp., <i>Althaea officinalis</i> , <i>Malva silvestris</i>	<i>Silene vulgaris</i> , <i>Saponaria officinalis</i> , <i>Trifolium pratense</i> , <i>T. repens</i> , <i>Sisymbrium loeseli</i> , <i>Galega officinalis</i> , <i>Eryngium campestre</i> , <i>Galium mollugo</i> , <i>G. verum</i> , <i>Dianthus carthusianorum</i> , <i>Scabiosa columbaria</i> , <i>Filipendula ulmaria</i> , <i>Hypericum perforatum</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i>	F
RIODINIDAE												

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Hamearis lucina lucina</i>	+	-	+	+	M	E	2	IV-VI; VII-IX	1, 4	Oligophagous: Primula sp.	Taraxacum officinale, Bellis perennis, Tanacetum vulgare, Silene vulgaris, Calamintha silvatica, Veronica paniculata, V. spicata ssp. orchidea, Solidago virgaurea, Orchis morio, Urtica dioica, Dianthus carthusianorum, Genista tinctoria, Medicago lupulina, Lotus corniculatus, Chaerophyllum aromaticum, Eryngium campestre, Orlaya grandiflora, Epilobium angustifolium, Teucrium chamaedrys, Marrubium perigrinum, Lamium album, Melissa officinalis, Linaria vulgaris, Valeriana officinalis, Geranium pratense, Hypericum perforatum, Salvia nemorosa, Senecio vernalis, Jurinea mollis	VF
LYCAENIDAE												
<i>Thecla betulae betulae</i>	+	+	+	-	M	Eua	1	VII-IX	5	Oligophagous: Prunus spinosa, Crataegus monogyna	Thymus pulegioides, Ligustrum vulgare, Galium verum, Prunella vulgaris	RF
<i>Neozephyrus quercus quercus</i>	+	-	+	+	Mt	C. Pal	1	VII-VIII	5	Monophagous: Quercus cerris	Linum hirsutum, Lamium purpureum, Stachys recta, Salvia pratensis, Inula helenium, Leucanthemum vulgare	R
<i>Satyrium acaciae nostras</i>	+	-	-	-	Mt	Eua	1	VI-VII	1, 2, 4	Monophagous: Prunus spinosa	Rosa canina, Sambucus nigra, Crucjata glabra, Onosma arenaria, O. heterophylla, Lamium album, Valeriana officinalis	R
<i>Satyrium w-album w-album</i>	+	+	+	-	Mh	Eua	1	VI-IX	1, 3, 4, 5	Rhamnus catharticus, Ulmus glabra	Mentha longifolia, Galega officinalis, Melilotus albus, Thymus pulegioides, Clinopodium vulgare, Valeriana officinalis, Carduus nutans, Leucanthemum vulgare	RF
<i>Fixsenia pruni</i>	+	+	+	-	Mt	Eua	1	VI-VII	5	Monophagous: Prunus spinosa	Sambucus nigra, Origanum vulgare, Thymus pulegioides, Filipendula ulmaria, Hypericum perforatum, Lamium purpureum	RF
<i>Callophrys rubi virgatus</i>	+	+	+	+	Mt	Eua	2	IV-VI; VII-VIII	1, 2, 4, 5	Polyphagous: Herbaceous plants (Potentilla sp.) and shrubs	Fragaria vesca, Agrimonia eupatoria, Genista tinctoria, Chamaespartium sagittale, Medicago lupulina, M. rigidula, Trifolium medium, T. pratense, Filipendula ulmaria, Lotus corniculatus, Linum flavum, Galium verum, Echium vulgare, Lamium album, Salvia pratensis	F
<i>Lycaena helle helle</i>	-	+	-	-	Mh	Eua	2	11-13.07. 2000	3, 6	Oligophagous: Polygonaceae (Polygonum, Rumex)	Mentha longifolia, Eupatorium cannabinum, Galium mollugo, Lamium album	VR
<i>Lycaena phlaeas phlaeas</i>	+	+	+	+	Mxt	Hol	2	IV-VI; VII-IX	1, 2, 4, 5	Oligophagous: Polygonaceae	Bellis perennis, Ajuga reptans, Cardamine pratensis, Medicago rigidula, Astragalus glycyphylus, Trifolium repens, Prunella vulgaris, Stachys recta, Senecio vernalis, Jurinea mollis, Crucjata glabra, Origanum vulgare, Salvia pratensis, Thymus pulegioides, Achillea millefolium, Aster amellus, Leucanthemum vulgare, Telekia speciosa	VF
<i>Thersamonia thersamon thersamon</i>	+	-	+	-	Mt	Eua	2	V-VI; VII-VIII	1, 2, 4	Polyphagous: Herbaceous plants (Dycotyledoneae)	Teucrium chamaedrys, Dianthus carthusianorum, Leucanthemum vulgare, Linum flavum, Inula helenium, Dipsacus fullonum, Senecio vernalis, Aster amellus, Telekia speciosa	F
<i>Lycaena dispar rutila</i>	+	+	+		Hg	E	2	VI; VII-IX	1, 3, 5, 6	Oligophagous: Rumex sp.	Galega officinalis, Mentha longifolia, M. arvensis, Eupatorium cannabinum, Galega officinalis, Epilobium angustifolium, Lythrum salicaria, Linaria vulgaris, Arctium lappa, Telekia speciosa	VF

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Lycaena virgaureae virgaureae</i>	+	+	+	+	Mh	Eua	1	VI-VIII	1, 3, 5, 6	Oligophagous: Rumex sp	Urtica dioica, Mentha arvensis, M. longifolia, Telekia speciosa, Valeriana officinalis, Eupatorium cannabinum, Thymus pulegioides, Epilobium angustifolium, Hypericum perforatum	VF
<i>Lycaena tityrus tityrus</i>	-	+	+	-	M	Eua	2	IV-VII; VI-IX	1,5	Oligophagous: Rumex sp.	Urtica dioica, Aster amellus, Salvia pratensis, Leucanthemum vulgare, Inula helenium, Telekia speciosa	R
<i>Lycaena alciphron alciphron</i>	+	+	+	-	Mt	Eua	1	VI-VII	1, 2, 5	Oligophagous: Rumex sp.	Linaria vulgaris, Origanum vulgare, Dianthus carthusianorum, Alyssum alyssoides, Agrimonia eupatoria, Galium verum, G. mollugo, Lamium album, Telekia speciosa	F
<i>Cupido minimus minimus</i>	+	+	+	+	M	Eua	2	V-VI; VII	1, 2, 4, 5	Oligophagous: Fabaceae	Bellis perennis, Veronica paniculata, V. chamaedrys, Scabiosa columbaria, Salvia pratensis, Senecio vernalis, Centaurea phrygia, Taraxacum officinale	F
<i>Everes argiades</i>	+	+	+	+	Mh	Eua	2	V-VI; VII-IX	1, 2, 4, 5	Oligophagous: Fabaceae	Eupatorium cannabinum, Mentha longifolia, Fragaria vesca, Melilotus albus, Alliaria petiolata, Hesperis tristis, Galium mollugo, Trifolium repens, Onosma arenaria	VF
<i>Celastrina argiolus argiolus</i>	+	+	+	+	M	Hol	2	V-VI; VII-VIII	1, 2, 4, 5	Polyphagous: Herbaceous plants, Shrubs	Trifolium repens, T. pratensis, Cardamine pratensis, C. impatiens, Veronica spicata ssp. orchidea, Linaria vulgaris, Potentilla reptans, Filipendula ulmaria, Sinapis arvensis, Inula helenium, Primula vulgaris, Telekia speciosa	VF
<i>Scoliantides orion orion</i>	+	+	+	+	xt	Eua	2	V-VI; VII-VIII	1, 2, 4	Oligophagous: Sedum sp.	Linum flavum, Taraxacum officinale, Filipendula ulmaria, Galium verum, Linum tenuifolium, Hypericum perforatum, Echium vulgare, Anchusa officinalis, Aster amellus, Telekia speciosa, Vicia cracca, Trifolium pratense, Prunella vulgaris	VF
<i>Glaucopsyche alexis alexis</i>	+	+	+	+	Mh	Eua	1	V-VI	1, 3, 4, 5	Oligophagous: Fabaceae	Roryppa sylvestris, Cardamine pratensis, Chamaecytisus leiocarpus, Lotus corniculatus, Medicago lupulina, Vicia cracca, Galium mollugo, Linum flavum, Cruciana glabra, Ajuga reptans, Leucanthemum vulgare	F
<i>Maculinea alcon alcon</i>	-	-	+	-	Mh	Eua	1	VI-VII	1, 4, 5	Oligophagous: Gentiana sp.	Hesperis sylvestris, Alyssum petraeum, A. murale, Gentiana cruciata ssp. cruciata, Epilobium angustifolium, Eupatorium cannabinum, Salvia nemorosa, Filipendula ulmaria, Agrimonia eupatoria	RF
<i>Maculinea arion arion</i>	+	+	+		Mht	Eua	1	VI-VII	1, 4, 5	Oligophagous: Thymus sp.	Epilobium angustifolium, Mentha arvensis, Leucanthemum vulgare, Lamium album, L. purpureum, Marrubium peregrinum, Echium vulgare, Salvia pratensis, Dipsacus fullonum, Cynoglossum officinale	RF
<i>Plebejus argus argus</i>	+	+	+	+	Mh	Eua	1	VI-VII	1, 2, 3, 4, 5	Oligophagous: Fabaceae	Trifolium repens, T. pratense, Vicia cracca, Lotus corniculatus, Inula helenium, Thymus pulegioides, Arabis hirsuta, Telekia speciosa	VF
<i>Plebejus argyrognomon</i>	+	+	+	+	Mt	Eua	1	VI-VII	1, 2, 4, 5	Oligophagous: Fabaceae	Urtica dioica, Anthyllis vulneraria, Origanum vulgare, Epilobium angustifolium, Prunella vulgaris, Stachys recta, Trifolium repens, Thymus pulegioides, Veronica paniculata, Linum flavum, Centaurea cyanus, C. phrygia, Inula helenium, I. britannica, Solidago virgaurea, Taraxacum officinale, Hypochoeris maculata	VF
<i>Aricia agestis agestis</i>	+	+	+	+	Mxt	Eua	2	V-VI; VII-IX	1, 2, 4, 5	Polyphagous: Geranium sp., Helianthemum sp., Erodium cicutarium	Potentilla recta, Trifolium campestre, Cruciana glabra, Lamium purpureum, Senecio vernalis, Dianthus carthusianorum, Saponaria officinalis, Anthyllis vulneraria, Onosma arenaria, Filipendula ulmaria, Melissa officinalis, Calamintha silvatica, Galega officinalis, Solidago virgaurea, Geranium robertianum	VF

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Cyaniris semiargus semiargus</i>	+	+	+	+	M	Eua	1	VI-VII	1, 2, 4, 5	Oligophagous: Fabaceae	<i>Dianthus carthusianorum</i> , <i>Medicago lupulina</i> , <i>Astragalus onobrychis</i> , <i>Cardamine impatiens</i> , <i>C. pratensis</i> , <i>Alyssum petraeum</i> , <i>Ajuga reptans</i> , <i>Prunella vulgaris</i> , <i>Thymus pulegioides</i> , <i>Solidago virgaurea</i> , <i>Leucanthemum vulgare</i>	VF
<i>Polyommatus daphnis daphnis</i>	-	-	+	-	xt	E. Cas	1	VII-VIII	2, 4, 5	Oligophagous: Fabaceae	<i>Galega officinalis</i> , <i>Vicia grandiflora</i> , <i>Lythrum salicaria</i> , <i>Linum flavum</i> , <i>L. hirsutum</i> , <i>Galium mollugo</i> , <i>Origanum vulgare</i> , <i>Cynoglossum officinale</i> , <i>Marubium perregrinum</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i>	F
<i>Polyommatus coridon coridon</i>	-	-	+	-	xt	E. Cas	1	VII-IX	2, 4	Oligophagous: Fabaceae	<i>Origanum vulgare</i> , <i>Leucanthemum vulgare</i> , <i>Anthylis vulneraria</i> , <i>Hypericum perforatum</i> , <i>Agrimonia eupatoria</i> , <i>Galium verum</i> , <i>Anchusa officinalis</i> , <i>Stachys recta</i> , <i>Cephalaria uralensis</i> , <i>Jurinea mollis</i>	F
<i>Polyommatus bellargus bellargus</i>	+	+	+	+	Mxt	Eua	2	V-VI; VIII-IX	1, 2, 4, 5	Oligophagous: Fabaceae	<i>Coronilla varia</i> , <i>Leucanthemum vulgare</i> , <i>Salvia pratensis</i> , <i>Galium verum</i> , <i>Linaria vulgaris</i> , <i>Solidago virgaurea</i> , <i>Senecio vulgaris</i> , <i>Alyssum petraeum</i> , <i>Calamintha sylvatica</i> , <i>Hypochoeris maculata</i> , <i>Thymus pulegioides</i> , <i>Scabiosa columbaria</i> , <i>Teucrium chamaedrys</i>	VF
<i>Polyommatus icarus icarus</i>	+	+	+	+	M	Eua	2	V-VII; VII-IX	1, 2, 3, 4, 5, 6	Oligophagous: Fabaceae	<i>Saponaria officinalis</i> , <i>Alliaria petiolata</i> , <i>Genista tinctoria</i> , <i>Medicago lupulina</i> , <i>Anthyllis vulneraria</i> , <i>Lotus corniculatus</i> , <i>Galega officinalis</i> , <i>Lathyrus nissolia</i> , <i>L. niger</i> , <i>Thymus pulegioides</i> , <i>Geranium robertianum</i> , <i>Linum flavum</i> , <i>Scabiosa columbaria</i> , <i>Centaurea phrygia</i> , <i>Hypericum perforatum</i> , <i>Aster amellus</i> , <i>Telekia speciosa</i>	VF
SATYRIDAE												
<i>Hipparchia fagi fagi</i>	+	+	+	+	Mt	Eua	1	VI-IX	5	Oligophagous: Poaceae	Occasionally on <i>Sambucus nigra</i> , <i>Rubus idaeus</i> , <i>Sorbus domesticus</i> , <i>Melissa officinalis</i> , <i>Calamintha sylvatica</i> , <i>Verbascum phlomoides</i> , <i>Arctium lappa</i>	RF
<i>Hipparchia semele semele</i>	-	+	+	+	M	Eua	1	VII-IX	5	Oligophagous: Poaceae	Occasionally on <i>Thymus pulegioides</i> , <i>Verbascum phlomoides</i> , <i>Inula helenium</i> , <i>Stipa capillata</i>	R
<i>Brinesia circe pannonica</i>	+	+	+	+	xt	Eua	1	VII-IX	5	Oligophagous: Poaceae	Occasionally on <i>Eupatorium cannabinum</i> , <i>Dipsacus fullonum</i> , <i>Telekia speciosa</i>	RF
<i>Chazara briseis briseis</i>	+	-	+	-	xt	Pal	1	VII-IX	2, 5	Oligophagous: Poaceae	Occasionally on <i>Teucrium chamaedrys</i> , <i>Lamium purpureum</i> , <i>Thymus pulegioides</i> , <i>Stipa capillata</i>	R
<i>Minois dryas drymeia</i>	+	+	+	+	M	Eua	1	VII-IX	5	Oligophagous: Poaceae	Occasionally on <i>Ligustrum vulgare</i> , <i>Inula helenium</i> , <i>Verbascum phlomoides</i> , <i>Telekia speciosa</i>	RF
<i>Maniola jurtina jurtina</i>	+	+	+	+	M	Eua	1	VI-X	1, 2, 4, 5, 6	Oligophagous: Poaceae	<i>Urtica dioica</i> , <i>Dianthus carthusianorum</i> , <i>Filipendula ulmaria</i> , <i>Epilobium angustifolium</i> , <i>Galium verum</i> , <i>Teucrium chamaedrys</i> , <i>Mentha longifolia</i> , <i>Trifolium campestre</i> , <i>T. medium</i> , <i>Verbascum phlomoides</i> , <i>Valeriana officinalis</i> , <i>Hypericum perforatum</i> , <i>Digitalis grandiflora</i> , <i>Scabiosa columbaria</i> , <i>Dipsacus fullonum</i> , <i>Origanum vulgare</i> , <i>Centaurea scabiosa</i> , <i>Eupatorium cannabinum</i> , <i>Thymus pulegioides</i> , <i>Leucanthemum vulgare</i> , <i>Achillea millefolium</i> , <i>Carduus acanthoides</i> , <i>C. nutans</i> , <i>Cirsium arvense</i> , <i>Telekia speciosa</i>	VF
<i>Pironia tithonus</i>	+	+	+	-	xt	Eua	1	VII-IX	1, 2	Oligophagous: Poaceae	<i>Dianthus carthusianorum</i> , <i>Epilobium angustifolium</i> , <i>Galium verum</i> , <i>Mentha longifolia</i> , <i>Salvia pratensis</i> , <i>Centaurea scabiosa</i> , <i>Hypericum perforatum</i> , <i>Telekia speciosa</i>	F

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Aphatopus hyperanthus</i>	+	+	+	+	M	Eua	1	VI-VIII	1, 2, 3, 4, 5, 6	Oligofagous: Poaceae	<i>Urtica dioica</i> , <i>Dianthus carthusianorum</i> , <i>Filipendula ulmaria</i> , <i>Epilobium angustifolium</i> , <i>Thymus pulegioides</i> , <i>Mentha longifolia</i> , <i>Salvia pratensis</i> , <i>Valeriana officinalis</i> , <i>Scabiosa columbaria</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i> , <i>Eupatorium cannabinum</i>	VF
<i>Coenonympha pamphilus</i> <i>pamphilus</i>	+	+	+	+	M	Eua	3	III-VI; VI-Ix; Ix-x	1, 2, 4, 5, 6	Oligofagous: Poaceae	<i>Urtica dioica</i> , <i>Dianthus carthusianorum</i> , <i>Filipendula ulmaria</i> , <i>Genista tinctoria</i> , <i>Lotus corniculatus</i> , <i>Epilobium angustifolium</i> , <i>Galium verum</i> , <i>Thymus pulegioides</i> , <i>Salvia pratensis</i> , <i>Scabiosa columbaria</i> , <i>Cichorium inthybus</i> , <i>Telekia speciosa</i> , <i>Eupatorium cannabinum</i> , <i>Cirsium arvense</i>	VF
<i>Coenonympha arcania</i> <i>arcania</i>	+	+	+	+	Mh	Eua	1	V-VIII	1, 2, 4, 5, 6	Oligofagous: Poaceae	<i>Urtica dioica</i> , <i>Dianthus carthusianorum</i> , <i>Filipendula ulmaria</i> , <i>Genista tinctoria</i> , <i>Trifolium pratense</i> , <i>Epilobium angustifolium</i> , <i>Galium verum</i> , <i>Teucrium chamaedrys</i> , <i>Mentha longifolia</i> , <i>Salvia pratensis</i> , <i>Verbascum phlomoides</i> , <i>Scabiosa columbaria</i> , <i>Leucanthemum vulgare</i> , <i>Cichorium inthybus</i> , <i>Telekia speciosa</i> , <i>Eupatorium cannabinum</i>	VF
<i>Coenonympha glycerion</i> Borkhausen,	+	+	+	+	M	Eua	1	V-VIII	1,2,3,4,5,6	Polyphagous: Poaceae, Cyperaceae	<i>Sinapis arvensis</i> , <i>Alliaria petiolata</i> , <i>Rorippa prolifera</i> , <i>Cardaminopsis arenosa</i> , <i>Trifolium pratense</i> , <i>Anthylis vulneraria</i> , <i>Galega officinalis</i> , <i>Linum hirsutum</i> , <i>Galium mollugo</i> , <i>G. verum</i> , <i>Taraxacum officinale</i> ,	
<i>Pararge aegeria tircis</i>	+	+	+	+	Mh	Eua	2	III-VI; VII-Ix	5	Oligophagous: Poaceae	<i>Rubus fruticosus</i> , <i>Aster amellus</i> , <i>Eupatorium cannabinum</i> , <i>Telekia speciosa</i> ,	VF
<i>Pararge megera megera</i>	+	+	+	+	Mh	Eua	2	IV-VI; VII-VIII	5	Oligophagous: Poaceae	<i>Urtica dioica</i> , <i>Rubus idaeus</i> , <i>Rosa canina</i> , <i>Agrimonia eupatoria</i>	VF
<i>Pararge maera maera</i>	+	+	+	+	M	Eua	2	V-VII; VII-VIII	5	Oligophagous: Poaceae	<i>Aster amellus</i> , <i>Arctium lappa</i> , <i>Leucanthemum vulgare</i> , <i>Inula hirta</i> , <i>Telekia speciosa</i>	VF
<i>P achine achine</i>	-	+	-	-	Mt	Eua	1	20.07. 2000	5	Oligophagous: Poaceae	<i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i>	VR
<i>Melanargia galathea scolis</i>	+	+	+	+	Mx	Eua	1	V- VIII	1, 2, 4, 5	Oligophagous: Poaceae	<i>Dianthus carthusianorum</i> , <i>Hypericum perforatum</i> , <i>Galium verum</i> , <i>Teucrium chamaedrys</i> , <i>Thymus pulegioides</i> , <i>Mentha longifolia</i> , <i>Salvia pratensis</i> , <i>Hieracium pilosella</i> , <i>Verbascum phlomoides</i> , <i>Centaurea phrygia</i> , <i>Leucanthemum vulgare</i> , <i>Carduus achantoides</i> , <i>Cirsium arvense</i> , <i>Telekia speciosa</i>	VF
<i>Erebia ligea carthusianorum</i>	-	+	+	-	M	Eua	1	VII-VIII	1, 2, 5	Polyphagous: Knautia sp., Scabiosa sp., Hieracium sp., Centaurea sp.	<i>Hypericum perforatum</i> , <i>Digitalis grandiflora</i> , <i>Verbascum phlomoides</i> , <i>V. thapsus</i> , <i>Inula helenium</i> , <i>Tanacetum vulgare</i> , <i>Leucanthemum vulgare</i> , <i>Senecio vernalis</i> , <i>Telekia speciosa</i>	VF
<i>Erebia aethiops mesorubria</i>		+	+		M	Eua	1	VII-Ix	1, 2, 5	Oligophagous: Poaceae	<i>Urtica dioica</i> , <i>Filipendula ulmaria</i> , <i>Hypericum perforatum</i> , <i>Epilobium angustifolium</i> , <i>Galium verum</i> , <i>Teucrium chamaedrys</i> , <i>Thymus pulegioides</i> , <i>Mentha longifolia</i> , <i>M arvensis</i> , <i>Salvia pratensis</i> , <i>Verbascum phlomoides</i> , <i>Scabiosa columbaria</i> , <i>Leucanthemum vulgare</i> , <i>Cirsium arvense</i> , <i>C. vulgare</i> , <i>Aster amellus</i> , <i>Telekia speciosa</i>	VF
NYMPHALIDAE												
<i>Clossiana selene selene</i>	+	+	+	+	M	Eua	2	V-VI; VII-Ix	1, 2, 4, 5	Oligophagous: Viola sp.	<i>Urtica dioica</i> , <i>Dianthus carthusianorum</i> , <i>Filipendula ulmaria</i> , <i>Galium verum</i> , <i>Thymus pulegioides</i> , <i>Mentha longifolia</i> , <i>Salvia pratensis</i> , <i>Scabiosa columbaria</i> , <i>Solidago virgaurea</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i>	VF

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Clossiana euphrosyne</i> <i>euphrosyne</i>	+	+	+	+	M	Eua	2	IV-VI; VII- VIII	1, 2, 4, 5	Oligophagous: <i>Viola</i> sp.	<i>Urtica dioica</i> , <i>Dianthus carthusianorum</i> , <i>Hesperis sylvestris</i> , <i>Alyssum petraeum</i> , <i>Centaurea phrygia</i> , <i>Lythrum salicaria</i> , <i>Filipendula ulmaria</i> , <i>Agrimonia eupatoria</i> , <i>Potentilla recta</i> , <i>Hypericum perforatum</i> , <i>Mentha longifolia</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i>	VF
<i>Clossiana dia dia</i>	+	+	+	+	M	Eua	2	V-VII, VIII-IX	1, 2, 4, 5	Oligophagous: <i>Viola arvensis</i> , <i>V. tricolor</i> .	<i>Convolvulus arvensis</i> , <i>Carduus acanthoides</i> , <i>Urtica dioica</i> , <i>Filipendula ulmaria</i> , <i>Lotus corniculatus</i> , <i>Trifolium pratense</i> , <i>Epilobium angustifolium</i> , <i>Hypericum perforatum</i> , <i>Galium verum</i> , <i>Thymus pulegioides</i> , <i>Mentha longifolia</i> , <i>Salvia pratensis</i> , <i>Centaurea scabiosa</i> , <i>C. phrygia</i> , <i>Aster amellus</i> , <i>Taraxacum officinale</i> , <i>Leucanthemum vulgare</i> ,	VF
<i>Argynnis daphne daphne</i>	+	+	+	-	Mt	Eua	1	V-VIII	1, 2, 4, 5	Oligophagous: <i>Rubus</i> sp.	<i>Urtica dioica</i> , <i>Dianthus carthusianorum</i> , <i>Epilobium angustifolium</i> , <i>Galium verum</i> , <i>Leucanthemum vulgare</i> , <i>Senecio vernalis</i> , <i>Telekia speciosa</i>	RF
<i>Argynnis hecate hecate</i>	-	+	+	-	M	E.Cas	1	V-VII	1, 2, 4, 5	Monophagous: <i>Filipendula ulmaria</i>	<i>Dianthus carthusianorum</i> , <i>Thymus pulegioides</i> , <i>Solidago virgaurea</i> , <i>Filipendula ulmaria</i> , <i>Galium verum</i> , <i>Sambucus nigra</i> , <i>Aster amellus</i> , <i>Tanacetum vulgare</i> , <i>Telekia speciosa</i> , <i>Carduus nutans</i>	RF
<i>Argynnis lathonia lathonia</i>	+	+	+	+	Mxt	Eua	3	V; VI-VII; VIII-IX	1, 2, 4, 5	Oligophagous: <i>Viola</i> sp.	<i>Cardamine pratensis</i> , <i>Sinapis arvensis</i> , <i>Chamaespartium sagittale</i> , <i>Medicago lupulina</i> , <i>Anthylis vulneraria</i> , <i>Galega officinalis</i> , <i>Galium verum</i> , <i>Lythrum salicaria</i> , <i>Impatiens noli-tangere</i> , <i>Hypericum perforatum</i> , <i>Heracleum sphondylium</i> , <i>Telekia speciosa</i> , <i>Carduus nutans</i> , <i>Centaurea scabiosa</i> , <i>C. phrygia</i> , <i>Telekia speciosa</i>	VF
<i>Argynnis aglaja aglaja</i>	+	+	+	+	M	Eua	1	VI-VIII	1, 2, 4	Oligophagous: <i>Viola</i> sp.	<i>Rubus hirtus</i> , <i>Galium verum</i> , <i>Valeriana officinalis</i> , <i>Mentha longifolia</i> , <i>Hypericum perforatum</i> , <i>Epilobium angustifolium</i> , <i>Centaurea phrygia</i> , <i>Leucanthemum vulgare</i> , <i>Inula helenium</i> , <i>Senecio vernalis</i> , <i>Hypochoeris maculata</i> , <i>Tragopogon dubius</i> , <i>Telekia speciosa</i>	VF
<i>Argynnis adippe adippe</i>	+	+	+	+	M	Eua	1	VI-VIII	1, 2, 4, 5	Oligophagous: <i>Viola</i> sp.	<i>Rubus hirtus</i> , <i>Mentha longifolia</i> , <i>Valeriana officinalis</i> , <i>Dipsacus fullonum</i> , <i>Geranium pratense</i> , <i>Hypericum perforatum</i> , <i>Linum tenuifolium</i> , <i>Leucanthemum vulgare</i> , <i>Cirsium vulgare</i> , <i>C. arvense</i> , <i>Carduus nutans</i> , <i>Aster amellus</i> , <i>Telekia speciosa</i>	VF
<i>Argynnis niobe niobe</i>	+	+	+	+	M	Eua	1	VI-VIII	1, 2, 4	Monophagous: <i>Viola canina</i>	<i>Rubus hirtus</i> , <i>Carduus nutans</i> , <i>Filipendula ulmaria</i> , <i>Galium verum</i> , <i>Dipsacus fullonum</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i>	VF
<i>Argynnis paphia paphia</i>	+	+	+	+	Mh	Eua	1	VII- VII	1, 2, 4, 5	Oligophagous: <i>Viola</i> sp.	<i>Rubus hirtus</i> , <i>Galium verum</i> , <i>Epilobium angustifolium</i> , <i>Dipsacus fullonum</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i> , <i>Carduus nutans</i> , <i>Centaurea phrygia</i> , <i>C. scabiosa</i>	VF
<i>Nymphalis polychloros</i>	+	+	+		M	Eua	1	VI	5	Polyphagous: <i>Salix</i> sp., <i>Ulmus</i> sp., <i>Populus</i> sp.	Sap trees, dung, rotting fruits, <i>Syringa vulgaris</i> ,	RF
<i>Nymphalis antiopa</i>	+	+	+	+	Mh	Eua	1	VI-VII	5	Oligophagous: Salicaceae	Sap trees, fermenting fruits, occasionally on flowers: <i>Telekia speciosa</i> , <i>Trifolium pratense</i>	F

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Polygonia c-album c-album</i>	+	+	+	+	M, Eu	Eua	2	V-VI; VII-Ix	1, 2, 4, 5, 6	Polyphagous: Herbaceous plants (<i>Urtica dioica</i> , <i>Humulus lupulus</i>), deciduous trees (<i>Salix</i> sp., <i>Ulmus</i> sp.), shrubs (<i>Ribes</i> sp. <i>Corylus avellana</i>)	Sap trees, dung, carrion, <i>Rubus hirtus</i> , <i>Carduus nutans</i> , <i>Mentha longifolia</i> , <i>Eupatorium cannabinum</i> , <i>Urtica dioica</i> , <i>Carduus nutans</i> , <i>Telekia speciosa</i> ,	VF
<i>Vanessa atalanta atalanta</i>	+	+	+	+	M, Mg	Eua	2	VI-VII; VIII-Ix	1, 2, 4, 5, 6	Oliophagous: <i>Urtica</i> sp.	Sap trees, dung, fermenting fruits, seldom on flowers: <i>Sambucus nigra</i> , <i>Eupatorium cannabinum</i> , <i>Aster amellus</i> , <i>Carduus nutans</i> , <i>Cirsium arvense</i> , <i>Dipsacus fullonum</i> , <i>Mentha longifolia</i> , <i>Telekia speciosa</i>	VF
<i>Cynthia cardui</i>	+	+	+	+	M, Mg	Cosm	2	VII-VIII; Ix	1, 2, 4, 5, 6	Polyphagous: Herbaceous plants (Dycotyledoneae)	<i>Rubus hirtus</i> , <i>Carduus acanthoides</i> , <i>Cirsium arvense</i> , <i>Sambucus ebulus</i> , <i>Achillea millefolium</i> , <i>Euphorbia cyparissias</i> , <i>Trifolium repens</i> , <i>Leucanthemum vulgare</i> , <i>Taraxacum officinalis</i> , <i>Telekia speciosa</i> , <i>Centaurea phrygia</i> , <i>Prunella vulgaris</i>	VF
<i>Inachis io io</i>	+	+	+	+	M	Eua	2	VII-VIII; Ix	1, 2, 4, 5	Oligophagous: <i>Urtica</i> sp.	Sap trees, <i>Prunus spinosa</i> , <i>Mentha longifolia</i> , <i>M. arvensis</i> , <i>Eupatorium cannabinum</i> , <i>Scabiosa columbaria</i> , <i>Centaurea phrygia</i> , <i>Cirsium arvense</i> , <i>Aster amellus</i> , <i>Achillea millefolium</i> , <i>Carduus nutans</i> , <i>Telekia speciosa</i>	VF
<i>Aglais urticae urticae</i>	+	+	+	+	M, Mg	Eua	2	V-VII; VII-VIII	1, 2, 4, 5, 6	Oligophagous: <i>Urtica</i> sp.	<i>Urtica dioica</i> , <i>Dianthus carthusianorum</i> , <i>Berberis vulgaris</i> , <i>Spiraea media</i> , <i>Rubus idaeus</i> , <i>Crataegus monogyna</i> , <i>Rosa canina</i> , <i>Hypericum perforatum</i> , <i>Epilobium angustifolium</i> , <i>Galium purpureum</i> , <i>Origanum vulgare</i> , <i>Sambucus nigra</i> , <i>Carduus nutans</i> , <i>Scabiosa columbaria</i> , <i>Centaurea phrygia</i> , <i>Inula hirta</i> , <i>Cirsium arvense</i> , <i>C. vulgare</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i>	VF
<i>Araschnia levana levana</i>	+	+	+	+	Mh	Eua	2	V; VII-VIII	5, 6	Oligophagous: <i>Urtica</i> sp.	<i>Urtica dioica</i> , <i>Leucanthemum vulgare</i> , <i>Eupatorium cannabinum</i> , <i>Telekia speciosa</i>	VF
<i>Limnitis populi bucovinensis</i>	+	+	+	-	Mh	End (Eua)	1	VI-VII	5, 6	Monophagous: <i>Populus tremula</i>	Dung, occasionally on <i>Telekia speciosa</i>	RF
<i>Limnitis camilla camilla</i>	-	+	+	-	Mh	Eua	1	VI-VIII	5, 6	Oligophagous: <i>Lonicera</i> sp.	<i>Mentha longifolia</i> , <i>Eupatorium cannabinum</i>	RF
<i>Neptis rivularis rivularis</i>	+	+	+	+	Mh	Eua	1	VI-VII	5, 6	Oligophagous: Rosaceae	<i>Rubus fruticosus</i> , <i>Mentha longifolia</i> , <i>Eupatorium cannabinum</i>	F
<i>Neptis sappho aceris</i>	+	+	+	+	Mh	E	2	V-VI; VII-VIII	5, 6	<i>Latyrus vernus</i> , <i>Robinia pseudacacia</i>	<i>Rubus caesius</i> , <i>R. idaeus</i> , <i>Crataegus monogyna</i> , <i>Telekia speciosa</i>	F
<i>Apatura iris iris</i>	-	+	+	-	Mh	Eua	1	VII-VIII	5, 6	Oligophagous: <i>Salix</i> sp.	Dung, occasionally on <i>Telekia speciosa</i>	F
<i>Apatura ilia ilia</i>	-	+	+	-	Mh	Eua	1	VI-VIII	5, 6	Oligophagous: Salicaceae (<i>Salix</i> sp., <i>Populus</i> sp.)	Dung, occasionally on <i>Telekia speciosa</i>	RF

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Euphydryas maturna partiensis</i>	-	+	-	-	Mh	Eua	1	V	5	Polyphagous: Herbaceous plants and deciduous trees (Dycotyledoneae)	<i>Ligustrum vulgare</i> , <i>Sambucus nigra</i> , <i>Crataegus monogyna</i> , <i>Potentilla reptans</i> , <i>Taraxacum officinale</i>	R
<i>Melitaea didyma didyma</i>	+	+	+	+	Mxt	Eua	2	V-VII; VIII-IX	1, 2, 4, 5	Polyphagous: Herbaceous plants (Dycotyledoneae)	<i>Silene vulgaris</i> , <i>Dianthus carthusianorum</i> , <i>Fragaria viridis</i> , <i>Lythrum salicaria</i> , <i>Lathyrus nissolia</i> , <i>Linaria vulgaris</i> , <i>Origanum vulgare</i> , <i>Scabiosa columbaria</i> , <i>Carduus nutans</i> , <i>Achillea millefolium</i> , <i>Centaurea scabiosa</i> , <i>Thymus pulegioides</i> , <i>Centaurea phrygia</i> , <i>Senecio vernalis</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i> , <i>Telekia speciosa</i>	VF
<i>Melitaea cinxia cinxia</i>	+	+	+	+	Mt	Eua	2	V-VI; VIII-IX	1, 2, 4, 5	Polyphagous: Herbaceous plants (Dycotyledoneae)	<i>Dianthus carthusianorum</i> , <i>Sisymbrium officinale</i> , <i>Fragaria vesca</i> , <i>Potentilla recta</i> , <i>Agrimonia eupatoria</i> , <i>Genista tinctoria</i> , <i>Anthyllis vulneraria</i> , <i>Linum flavum</i> , <i>L. hirsutum</i> , <i>Hypericum perforatum</i> , <i>Epilobium angustifolium</i> , <i>Viola canina</i> , <i>V. tricolor</i> , <i>Galium mollugo</i> , <i>Cruciata glabra</i> , <i>Onosma heterophylla</i> , <i>Echium vulgare</i> , <i>Anchusa officinalis</i> , <i>Teucrium chamaedrys</i> , <i>Stachys recta</i> , <i>Salvia pratensis</i> , <i>Origanum vulgare</i> , <i>Mentha arvensis</i> , <i>Veronica spicata</i> ssp. <i>orchidea</i> , <i>V. officinalis</i> , <i>V. chamaedrys</i> , <i>Aster amellus</i> , <i>Hieracium pilosella</i> , <i>Achillea millefolium</i> , <i>Leucanthemum vulgare</i> , <i>Senecio vernalis</i>	VF
<i>Melitaea phoebe phoebe</i>	+	+	+	+	Mt	Eua	1	V-VI; VII- VIII	1, 2, 4, 5	Polyphagous: Herbaceous plants (Dycotyledoneae)	<i>Fragaria viridis</i> , <i>Cardamine pratense</i> , <i>Sinapis arvensis</i> , <i>Hesperis sylvestris</i> , <i>Alyssum petraeum</i> , <i>A. murale</i> , <i>Ajuga reptans</i> , <i>Taraxacum officinale</i> , <i>Carduus nutans</i> , <i>Sambucus nigra</i> , <i>Salvia pratensis</i> , <i>Leucanthemum vulgare</i> , <i>Eryngium campestre</i> , <i>Aster amellus</i> ,	VF
<i>Melitaea trivia trivia</i>	+	+	+	+	Mxt	A- Med	2	V-VI; VII- VIII	1, 2, 4	Oligophagous: <i>Verbascum</i> sp.	<i>Lotus corniculatus</i> , <i>Carduus nutans</i> , <i>Eryngium campestre</i> , <i>Cirsium arvense</i> , <i>Scabiosa columbaria</i>	VF
<i>Melitaea athalia athalia</i>	+	+	+	+	M	Eua	2	V-VI; VII- IX	1, 2, 3, 4, 5, 6	Polyphagous: Herbaceous plants (Dycotyledoneae)	<i>Saponaria officinalis</i> , <i>Silene arvensis</i> , <i>Dianthus carthusianorum</i> , <i>Cardamine pratensis</i> , <i>C. impatiens</i> , <i>Hesperis sylvestris</i> , <i>Erysimum repandum</i> , <i>Arabis hirsuta</i> , <i>Sinapis arvensis</i> , <i>Sambucus nigra</i> , <i>Lychnis flos-cuculi</i> , <i>Geranium robertianum</i> , <i>Impatiens noli-tangere</i> , <i>Ajuga reptans</i> , <i>Taraxacum officinale</i> , <i>Cirsium arvense</i> , <i>Achillea millefolium</i> , <i>Thymus pulegioides</i>	VF
<i>Melitaea britomartis britomartis</i>	+	+	+	+	M	Eua	1	VII	1	Polyphagous: Herbaceous plants: <i>Plantago</i> sp., <i>Veronica</i> sp., <i>Linaria</i> sp. (Dycotyledoneae)	<i>Dianthus carthusianorum</i> , <i>Agrimonia eupatoria</i> , <i>Linum flavum</i> , <i>Leucanthemum vulgare</i>	RF
PAPILIONIDAE												
<i>Papilio machaon machaon</i>	+	+	+	+	M	Eua (Hol)	2	V-VI; VII- VIII	1, 4, 5	Oligophagous: Umbelliferae	<i>Spiraea media</i> , <i>S. chamaedryfolia</i> , <i>Cotoneaster integerrimus</i> , <i>Eupatorium cannabinum</i> , <i>Leucanthemum vulgare</i> , <i>Mentha longifolia</i> , <i>Epilobium angustifolium</i> , <i>Telekia speciosa</i>	F
<i>Iphiclides podalirius podalirius</i>	+	+	+	+	Mxt	Eua	2	V-VI; VII- VIII	1, 4, 5	Oligophagous: Rosaceae	<i>Crataegus monogyna</i> , <i>Rubus hirtus</i> , <i>R. idaeus</i> , <i>Sambucus nigra</i> , <i>S. racemosa</i> , <i>Filipendula ulmaria</i> , <i>Telekia speciosa</i>	F
<i>Adoritis mnemosyne distincta</i>	+	+	+	+	Mh	Eua	1	V-VI	3, 5	Oligophagous: <i>Corydalis</i> sp.	<i>Oenanthe aquatica</i> , <i>Filipendula ulmaria</i> , <i>Lythrum salicaria</i> , <i>Rorippa silvestris</i> , <i>Valeriana officinalis</i>	

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
PIERIDAE												
<i>Leptidea sinapis sinapis</i>	+	+	+	+	M	Eua	2	IV-VI; VII-VIII	1, 2, 3, 4, 5, 6	Oligophagous: Fabaceae	<i>Urtica dioica</i> , <i>Cardamine pratensis</i> , <i>C. impatiens</i> , <i>Arabis hirsuta</i> , <i>Fragaria vesca</i> , <i>F. viridis</i> , <i>Agrimonia eupatoria</i> , <i>Genista tinctoria</i> , <i>Medicago lupulina</i> , <i>Melilotus officinalis</i> , <i>Trifolium campestre</i> , <i>T. pratense</i> , <i>Anthyllis vulneraria</i> , <i>Galega officinalis</i> , <i>Astragalus onobrychis</i> , <i>A. glycyphyllus</i> , <i>Linum flavum</i> , <i>Hypericum perforatum</i> , <i>Eryngium campestre</i> , <i>Primula vulgaris</i> , <i>Galium purpureum</i> , <i>Echium vulgare</i> , <i>Cynoglossum officinale</i> , <i>Stachys recta</i> , <i>Salvia nemorosa</i> , <i>Melissa officinalis</i> , <i>Mentha longifolia</i> , <i>Veronica spicata</i> , ssp. <i>orchidea</i> , <i>Bellis perennis</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i> , <i>Tussilago farfara</i> , <i>Centaurea phrygia</i> , <i>Taraxacum officinale</i> , <i>Telekia speciosa</i>	VF
<i>Leptidea morsei major</i>	+	-	+	-	M	Eua	2	V-VI; VII- VIII	1,5	Oligophagous: Lathyrus sp.	<i>Anthyllis vulneraria</i> , <i>Vicia cracca</i> , <i>Galega officinalis</i> , <i>Trifolium campestre</i> , <i>Leucanthemum vulgare</i> , <i>Salvia nemorosa</i>	VR
<i>Aporia crataegi crataegi</i>	+	-	+	-	M	Eua	1	V-VII	5	Oligophagous: Rosaceae	<i>Berberis vulgaris</i> , <i>Spiraea media</i> , <i>S. chamaedryfolia</i> , <i>Rosa canina</i> , <i>R. arvensis</i> , <i>Ligustrum vulgare</i> , <i>Syringa vulgaris</i> , <i>Ajuga reptans</i> , <i>Stachys recta</i> , <i>Thymus pulegioides</i> , <i>Dianthus carthusianorum</i>	VF
<i>Pieris brassicae brassicae</i>	+	+	+	+	M, Mg	Eua	2	IV-VI; VI- Ix	1, 2, 4, 5	Oligophagous: Brassicaceae	<i>Alliaria petiolata</i> , <i>Hesperis sylvestris</i> , <i>Rorippa sylvestris</i> , <i>Arabis turrata</i> , <i>A. hirsuta</i> , <i>Sinapis arvensis</i> , <i>Rosa canina</i> , <i>Origanum vulgare</i> , <i>Telekia speciosa</i> , <i>Scabiosa columbaria</i> , <i>Senecio vernalis</i> , <i>Hypericum perforatum</i> , <i>Geranium robertianum</i> , <i>Tanacetum vulgare</i> , <i>Eupatorium cannabinum</i>	F
<i>Pieris rapae rapae</i>	+	+	+	+	M, Mg	Hol	3	IV-VI; VI- VII; VIII- Ix	1, 2, 3, 4, 5, 6	Oligophagous: Brassicaceae	<i>Silene vulgaris</i> , <i>Dianthus carthusianorum</i> , <i>Sisymbrium officinale</i> , <i>S. loeseli</i> , <i>Alliaria petiolata</i> , <i>Erysimum repandum</i> , <i>Hesperis tristis</i> , <i>H. sylvestris</i> , <i>Rorippa pyrenaica</i> , <i>R. prolifera</i> , <i>R. sylvestris</i> , <i>Cardamine pratensis</i> , <i>Cardaminopsis arenosa</i> , <i>Arabis turrata</i> , <i>Alyssum petraeum</i> , <i>A. murale</i> , <i>Rosa canina</i> , <i>Filipendula ulmaria</i> , <i>Chamaecytisus leiocarpus</i> , <i>Trifolium repens</i> , <i>T. pratense</i> , <i>T. campestre</i> , <i>Linum flavum</i> , <i>L. hirsutum</i> , <i>Malva sylvestris</i> , <i>Hypericum perforatum</i> , <i>Epilobium angustifolium</i> , <i>Chamaerophyllum aromaticum</i> , <i>Heracleum sphondylium</i> , <i>Cruciata glabra</i> , <i>Galium purpureum</i> , <i>G. mollugo</i> , <i>Onosma heterophylla</i> , <i>Pulmonaria officinalis</i> , <i>Symphytum officinale</i> , <i>Anchusa officinalis</i> , <i>Teucrium chamaedrys</i> , <i>Marrubium peregrinum</i> , <i>Prunella vulgaris</i> , <i>Lamium purpureum</i> , <i>L. album</i> , <i>Salvia nemorosa</i> , <i>Mentha longifolia</i> , <i>Origanum vulgare</i> , <i>Thymus pulegioides</i> , <i>Calamintha sylvatica</i> , <i>Verbascum phlomoides</i> , <i>Eupatorium cannabinum</i> , <i>Scabiosa columbaria</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i> , <i>Tanacetum vulgare</i> , <i>Tussilago farfara</i> , <i>Arctium lappa</i> , <i>Taraxacum officinale</i> , <i>Hypochoeris maculata</i> , <i>Telekia speciosa</i>	VF

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Pieris napi meridionalis</i>	+	+	+	+	M, Eu, Mg	Hol	3	IV-VI; VII-VII; VIII-IX	1, 2, 3, 4, 5, 6	Oligophagous: Brassicaceae	<i>Urtica dioica</i> , <i>Silene vulgaris</i> , <i>Dianthus carthusianorum</i> , <i>Sisymbrium officinale</i> , <i>Alliaria petiolata</i> , <i>Erysimum repandum</i> , <i>Hesperis tristis</i> , <i>Rorippa silvestris</i> , <i>Cardamine pratensis</i> , <i>Sorbus torminalis</i> , <i>Crataegus monogyna</i> , <i>Rubus idaeus</i> , <i>R. caesius</i> , <i>Fragaria vesca</i> , <i>Filipendula ulmaria</i> , <i>Rosa canina</i> , <i>Chamaecytisus leiocarpus</i> , <i>Melilotus officinalis</i> , <i>M. albus</i> , <i>Trifolium campestre</i> , <i>T. repens</i> , <i>T. pratense</i> , <i>Anthyllis vulneraria</i> , <i>Lotus corniculatus</i> , <i>Vicia cracca</i> , <i>V. grandiflora</i> , <i>Lythrum salicaria</i> , <i>Geranium pratense</i> , <i>Impatiens noli-tangere</i> , <i>Linum hirsutum</i> , <i>Frangula alnus</i> , <i>Hypericum perforatum</i> , <i>Epilobium angustifolium</i> , <i>Eryngium campestre</i> , <i>Orlaya grandiflora</i> , <i>Pulmonaria officinalis</i> , <i>Anchusa officinalis</i> , <i>Ajuga reptans</i> , <i>Prunella vulgaris</i> , <i>Stachys recta</i> , <i>Salvia pratensis</i> , <i>S. nemorosa</i> , <i>Melissa officinalis</i> , <i>Mentha longifolia</i> , <i>M. arvensis</i> , <i>Aster amellus</i> , <i>Bellis perennis</i> , <i>Telekia speciosa</i> , <i>Leucanthemum vulgare</i> , <i>Taraxacum officinale</i>	VF
<i>Pontia daplidice daplidice</i>	+	+	+	+	Mt	Eua	3	IV-VI; VI-VIII; VIII-IX	1, 2, 4, 5	Oligophagous: Brassicaceae	<i>Sisymbrium loeselii</i> , <i>S. officinale</i> , <i>Erysimum repandum</i> , <i>Hesperis tristis</i> , <i>H. sylvestris</i> , <i>Cardamine pratensis</i> , <i>Sinapis arvensis</i> , <i>Medicago lupulina</i> , <i>Ajuga reptans</i> , <i>Trifolium pratense</i> , <i>T. medium</i> , <i>T. repens</i> , <i>Astragalus onobrychis</i> , <i>Scabiosa columbaria</i> , <i>Carduus nutans</i> , <i>Jurinea mollis</i> , <i>J. transsilvanica</i> , <i>Anthyllis vulneraria</i> , <i>Onosma heterophylla</i> , <i>Senecio vernalis</i> , <i>Prunella vulgaris</i> , <i>Telekia speciosa</i> , <i>Taraxacum officinale</i> .	VF
<i>Anthocharis cardamines meridionalis</i>	+	+	+	+	M	Eua	1	IV-V	1, 2, 4, 5	Oligophagous: Brassicaceae	<i>Urtica dioica</i> , <i>Cardamine pratensis</i> , <i>Rorippa sylvestris</i> , <i>Arabis hirsuta</i> , <i>Alyssum petraeum</i> , <i>Medicago lupulina</i> , <i>Sinapis arvensis</i> , <i>Anemone ranunculoides</i> , <i>Viola odorata</i> , <i>V. canina</i> , <i>Primula veris</i> , <i>P. elatior</i> , <i>Trifolium campestre</i> , <i>Lamium purpureum</i> , <i>L. album</i> , <i>Bellis perennis</i> , <i>Tussilago farfara</i> , <i>Taraxacum officinale</i>	VF
<i>Colias hyale hyale</i>	+	+	+	+	M, Mg	Eua	3	V-VI; VI-VII; IX	1, 2, 4, 5	Oligophagous: Fabaceae	<i>Dianthus carthusianorum</i> , <i>Agrimonia eupatoria</i> , <i>Sisymbrium loeseli</i> , <i>Chamaecytisus leiocarpus</i> , <i>Medicago lupulina</i> , <i>M. rigidula</i> , <i>Melilotus officinalis</i> , <i>M. alba</i> , <i>Trifolium campestre</i> , <i>T. repens</i> , <i>T. pratense</i> , <i>Astragalus glycyphylus</i> , <i>Lotus corniculatus</i> , <i>Galega officinalis</i> , <i>Vicia sepium</i> , <i>V. grandiflora</i> , <i>V. cracca</i> , <i>Lythrum salicaria</i> , <i>Lathyrus nissolia</i> , <i>L. niger</i> , <i>Cruciata glabra</i> , <i>Mentha longifolia</i> , <i>Origanum vulgare</i> , <i>Eupatorium cannabinum</i> , <i>Hypericum perforatum</i> , <i>Anchusa officinalis</i> , <i>Galium purpureum</i> , <i>Inula helenium</i> , <i>Centaurea cyanus</i> , <i>Bellis perennis</i> , <i>Tanacetum vulgare</i> , <i>Taraxacum officinale</i> , <i>Telekia speciosa</i> , <i>Leucanthemum vulgare</i> , <i>Aster amellus</i> , <i>Centaurea scabiosa</i> ,	VF
<i>Colias crocea crocea</i>	+	+	+	+	Mxt Mg	Eua	2	IV-VI; VII-IX	1, 2, 4, 5	Oligophagous: Fabaceae	<i>Urtica dioica</i> , <i>Dianthus carthusianorum</i> , <i>Cardamine impatiens</i> , <i>C. pratensis</i> , <i>Arabis turrata</i> , <i>Filipendula ulmaria</i> , <i>Chamaespartium sagittale</i> , <i>Trifolium pratense</i> , <i>T. medium</i> , <i>Lathyrus nissolia</i> , <i>Lythrum salicaria</i> , <i>Linum hirsutum</i> , <i>Epilobium angustifolium</i> , <i>Orlaya grandiflora</i> , <i>Galium verum</i> , <i>Cynoglossum officinale</i> , <i>Lamium purpureum</i> , <i>Mentha longifolia</i> , <i>Telekia speciosa</i> , <i>Verbascum thapsus</i> , <i>Aster amellus</i> , <i>Leucanthemum vulgare</i>	VF
<i>Colias myrmidone myrmidone</i>	-	-	+	-	Mt	Eua	2	V-VI; VII-IX	1, 2	Oligophagous: Cytisus sp.	<i>Cardamine pratensis</i> , <i>Trifolium pratense</i> , <i>T. campestre</i> , <i>Aster amellus</i> , <i>Taraxacum officinale</i>	VR

Taxon	D	C	G	H	E.E.	R.G.	Gen nr.	Flight Period	Ecosyst.	Host plants	Adult resources	Freq.
<i>Gonepteryx rhamni meridionalis</i>	+	+	+	+	M, Mg	Eua (Pm)	1	V-VII	1, 2, 4, 5	Oligophagous: Rhamnaceae	<i>Crataegus monogyna</i> , <i>Rosa canina</i> , <i>Corydalis bulbosa</i> , <i>Trifolium pratense</i> , <i>T. repens</i> , <i>Frangula alnus</i> , <i>Syringa vulgaris</i> , <i>Lamium purpureum</i> , <i>Ajuga reptans</i> , <i>Salvia pratensis</i> , <i>Mentha longifolia</i> , <i>Verbascum thapsus</i> , <i>Dipsacus fullonum</i> , <i>Telekia speciosa</i> , <i>Leucanthemum vulgare</i> , <i>Carduus nutans</i> , <i>Cirsium arvense</i> , <i>Telekia speciosa</i> , <i>Taraxacum officinale</i>	VF

Legend: Sites: D: The hills of Deva town; C: Cerna Valley and the surrounding of Lunca Cernii locality; G: Govăjdie and Runcu Valley; H: The hills of Hunedoara town; E.E.= Ecological exigencies: M: Mesophylous species; Mh: Mesohigrophylous species; Mt: Mesothermophylous species; Mxt: Mesoxerothermophylous species; Mx: Mesoxerophylous species; Mht: Mesohigrothermophylous species; xt: xerothermophylous species; Hg: Higrophylous species; G.S. – Geographical Spreading: Eua: Euroasiatic species; Hol: Holarctic species; Cam: Cestasiaticmediterranean species; E- European species; E.Cas- Eurowestasiatic species; Nr. Gen.- Number of generation; Ecosystems: 1. Mesophylous grasslands; 2. xerothermophylous grasslands; 3. Higrophylous grasslands; 4. Rocky grasslands; 5 Shrubs; skirts of the forests; 6 River meadows.

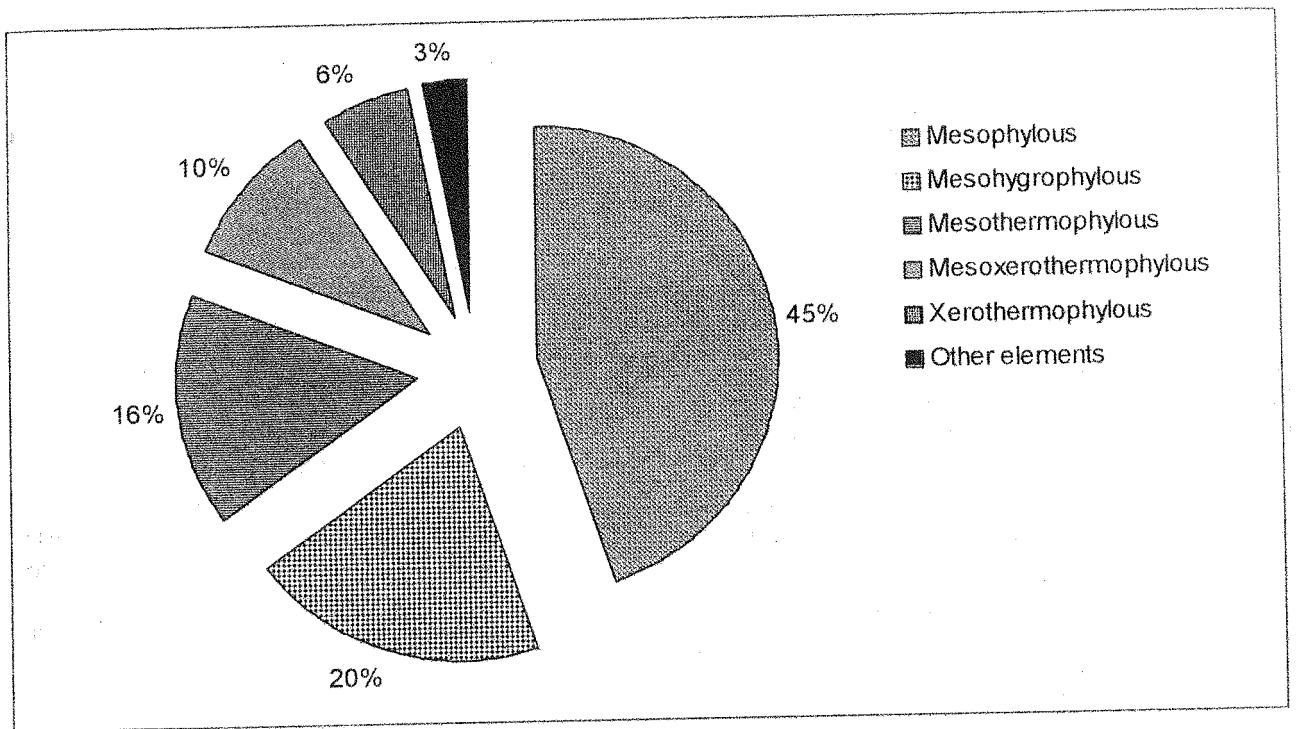


Fig. 2. Ecological character of the Rhopalocera species from the Poiana Ruscă Mountains

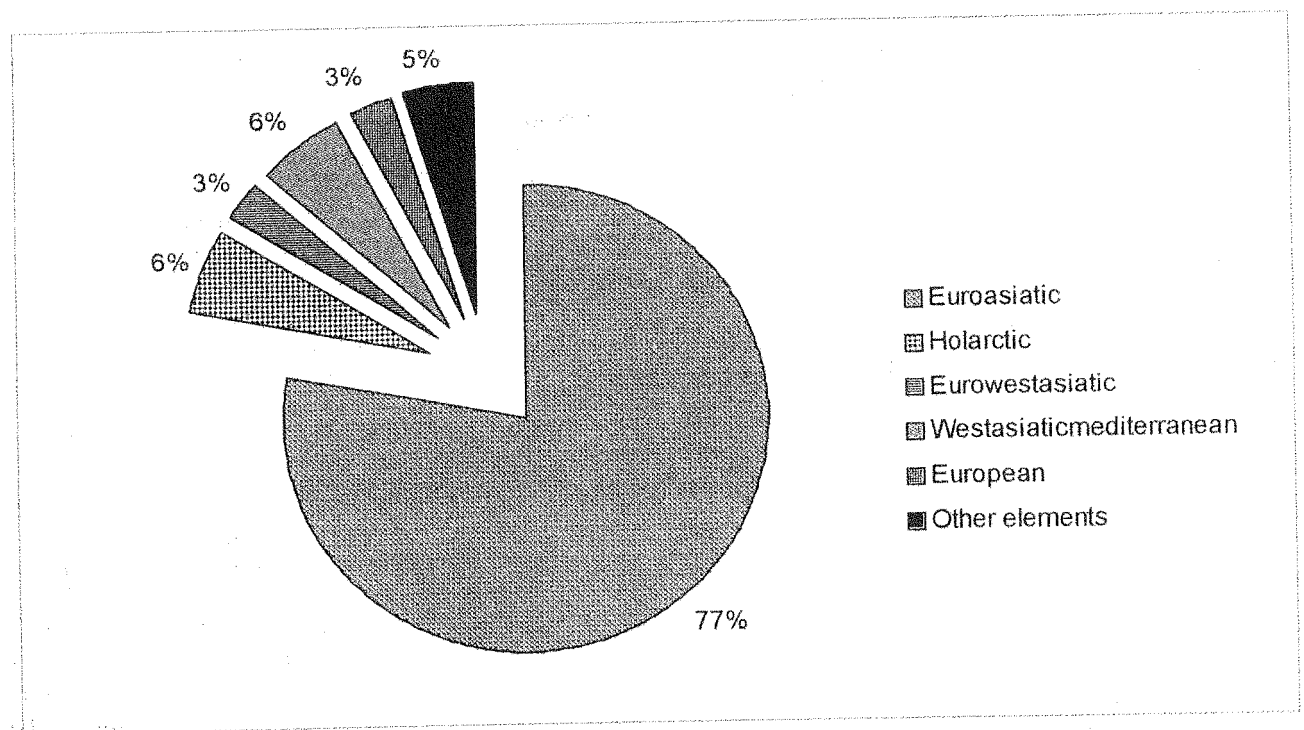


Fig. 3. Zoogeographical structure of the Rhopalocera species from the Poiana Ruscă Mountains

-Higrophylous grasslands (As. *Festucetum pratensis* Soo, 1928, 1936)

-Rocky grasslands (As. *Cleistogeno-Festucetum rupicolae* (Soo, 1930) ZOLYOMI, 1958; As. *Stipetum eriocaulis* DIHORU et al., 1973; As. *Thymocomosi - Festucetum rupicolae* (CSUROS, 1959) Pop et HODIŞAN, 1985)

-Shrubs; skirts of the forest (As. *Pruno*

spinosae-Crataegetum (Soo, 1930) HUCK, 1931

-River meadows (As. *Telekio-Alnetum incanae* COLDEA, 1992)

- Results and discussion

A taxonomical list of the Rhopalocera species, based on the latest systematic and taxonomic conceptions is presented (Table 1). The classification used is

after LERAUT (1980), POPESCU-GORJ (1987), RÁKOSY (1993, 1995, 1997), MIHUȚ (2000). It is also shown the distribution of the species in the studied sites, the frequency of the species, the ecological exigences of the adults, the characteristic ecosystems, the geographical spreading of the species, the host plant species and the adult resources (RÁKOSY 1984, 1993, 1997). For the collecting sites and localities, the following abbreviations are used: D (the hills of Deva town; LC (Cerna valley and the surroundings of Lunca Cerni locality); G (the surroundings of Govăjdie locality and the limestone habitats of the Runc Valley); H (the hills of Hunedoara town).

A number of 104 Rhopalocera species have been identified in four sites of the Eastern and North-Eastern part of the Poiana Ruscă Mountains:

The species diversity varies among the sites: 88 species were recorded from the hills of Deva town, 99 species from the Runcu Valley and the calcareous area of Govăjdie, 91 species from the Cerna Valley and the surroundings of Lunca Cernii locality and 74 species from the hills of Hunedoara town (Fig. 1).

Concerning the ecological exigences, in Poiana Ruscă butterfly fauna 45% are mesophylous species, followed by mesohigrophylous species (20%), mesothermophylous species (16%) and mesoxerothermophylous species (10%). Species are xerothermophylous (about 6%) (Fig. 2). The occurrence of the xerothermophylous and thermophylous species, especially in Govăjdie area is connected to the presence of the habitats with special edaphic and microclimatic conditions: rocky grasslands on limestone, warm mixed oak forests.

The analysis of the geographical spreading points out the predominance of the Euroasiatic (82%), followed by Holarctic (6%), Eurowestasiatic (3%), European (3%) and Eastasiaticmediterranean species (Fig. 3).

The butterflies' larvae, except some Lycaenidae species that are myrmecophilous, eat seed-bearing plants (monocotyledons and dicotyledons).

The monocotyledons eaten by butterflies are: Liliaceae, Poaceae, Juncaceae, Cyperaceae. Satyridae and some Hesperidae especially eat Poaceae, Cyperaceae and Juncaceae.

Hesperidae, Lycaenidae, Riodinidae, Papilionidae, Nymphalidae and Pieridae prefer the dicotyledons.

In the area of the Poiana Ruscă Mountains, most species are polyphagous, which select unrelated spontaneous plants in their trophic spectrum.

Eighteen species are oligophagous, which are feeding on different species of the same genera or family plants. Eight species are monophagous (*Heteropterus morpheus morpheus*, *Pyrgus alveus alveus*, *Thecla quercus quercus*, *Satyrus acaciae*

nostras, *Fixsenia pruni*, *Argynnis hecate hecate*, *Argynnis niobe niobe* and *Limenitis populi bucovinensis*), limited to a single host plant and particular habitats.

Adult butterflies are especially known like flowers visitors and feed on flower nectar. Other species like *Apatura iris iris*, *Apatura ilia ilia*, *Lymenitis populi bucovinensis*, *Nymphalis polychloros*, *Nymphalis antiopa*, *Vanessa atalanta*, feed primarily on nonfloral foods such as tree sap, dung, rotting fruits, carrion. Some species like *Polygonia c-album*, *Aglais urticae*, visit flowers when their preferred food is unavailable, especially during very dry conditions.

The flower-visitation patterns shown by butterflies are conditioned by the following factors (OPLER & KRIZEK 1984; TOMESCU 1985; LANGE & PREUSSING 1995):

1. The nectar flowers available to butterflies vary with time of year and from site to site;

2. The species of butterflies display different propensities for flower visitation during different seasons. The proportion of individuals observed at flowers is lowest in spring and greatest during the summer, when energy demands are greatest;

3. The majority of the species has a very broad spectrum of flowers they visit. In the site of Cerna Valley, where we found the most abundant populations of different Rhopalocera species, a large spectrum of the visited-flowers present: *Ochlodes venatus faunus*, *Melitaea cinxia cinxia*, *Maniola jurtina jurtina*, *Hamearis lucina lucina*, *Colias hyale hyale*, *Colias crocea crocea*, *Pieris napi meridionalis*, *Pieris rapae rapae*. Other species dominantly visit only some flowers, like: *Heteropterus morpheus morpheus*, *Lycaena helle helle*, *Thecla betulae betulae*, *Pararge achine*, *Hipparchia semele*, *Brintesia circe pannonica* (Table 1).

4. The length of the flower tube (corolla) is one of the main restrictions in flower choice. The evolution of the morphology of the mouthparts and of the feeding behavior of insects is taking place in correlation with the evolution of the shape and color of flowers and of their nectar contents. A mutual influence has also determined the structure of flowers and of the mouthparts of insects. The insects having short mouthparts pollinate the opened cup-like flowers while the insects having prolonged mouthparts pollinate the tubular flowers (TOMESCU 1985). *Ochlodes venatus faunus*, with a long proboscis (16 mm) is a visitor of numerous plants with long tubular corolla, like *Gymnaedia conopaea* (LANGE & PREUSSING 1995);

5. The most species show little color preference. Most butterflies favor white, blue, pink, red and yellow flowers.

6. *Telekia speciosa*, *Leucanthemum vulgare*, *Taraxacum officinale*, *Aster amellus*, *Scabiosa columbaria*, *Origanum vulgare*, *Cirsium arvense*, *Carduus nutans*, *C. acanthoides*, *Hypericum perforatum*, *Salvia pratensis*, *Thymus pulegioides*,

Dianthus carthusianorum, *Mentha arvensis*, *Mentha longifolia*, *Eupatorium cannabinum*, *Epilobium angustifolium*, *Filipendula ulmaria*, *Galium verum*, are the most important plant species visited by butterflies.

Two species identified in this area are rare for the Romanian fauna:

Lycaena helle (DENIS & SCHIFFERMÜLLER, 1775): 3 ♂♂ Cerna Valley (Lunca Cernii de Jos), 11-13. 07. 2000

Geographical distribution: Euroasiatic, in Northern, Central and Eastern Europe, Siberia and Amur Basin. In Romania it is a very rare species, recorded from Satu-Mare, Băile Herculane, Cerna Valley (Mehedinti Mountains) (BALINT & SZABO 1981; SZABO 1982; 1990; RAKOSY & NEUMANN 1997; SZEKELY et al., 2000). The presence of this species in the Poiana Ruscă Montains is surprising and shows that their distribution is insufficiently known in Romanian fauna.

Habitat: mesohigrophylous grasslands, wet meadows.

Voltnism: bivoltine species, in May and July-August.

Larval host plant: *Polygonum bistorta*

Adult resources: the adults of *Lycaena helle* especially visit *Mentha longifolia*, *Eupatorium cannabinum*, *Telekia speciosa*.

Pararge achine SCOPOLI, 1763:

1 ♂ Cerna Valley (Lunca Cernii de Jos), 20. 07. 2000

Geographical distribution: Euroasiatic. In Romania it is a rare and localized species, in the hilly zone of the Carpathian Mountains.

Habitat: opened deciduous forests (oak forests, beech forests), shrubs.

Voltnism: monovoltine, in June-July.

Larval host plants: oligophagous species in Poaceae, especially *Poa annua*, *Dactylis glomerata*, *Deschampsia cespitosa*, *Carex* sp., *Lolium* sp.

Adult resources: the adults' nectar of *Telekia speciosa*.

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