

DATA TO THE KNOWLEDGE OF LEPIDOPTERA FAUNA  
AT MÁRTÉLY—KÖRTVÉLYES ENVIRONMENT PROTECTION  
AREA. I

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**Abstract**

The paper contains the check list of Macrolepidoptera species collected with light-traps functioning with 250 W mercury vapour lamp in Mártély in 1971, with 125 W mercury vapour lamp in Körtvélyes in 1979/80, the species collected with Malaise-trap operating seriatim set up on the meadow of Körtvélyes holm and those collected with day-netting and special candling (Maxim, propane-butane lamp) in this area with quantitative data giving full systematical particulars. It indicates the occurrence of *Gortyna borelii lunata* Pierret (*Hydroecia leucographa* Bkh.) in Mártély and it contains the short review of some typical and atypical species on the basis of their ecological and zoogeographical affiliation.

**Introduction**

Although flora and fauna of Mártély—Körtvélyes environment protection area have been examined by many research workers but during the last 10 years these investigations have been accelerating and widening out. Specialists of numerous groups put to press their results of research and observations but lepidopterological work hasn't been published yet from this area.

**The examined area**

The examined area consists of two holms which are bordered by living Tisza and its dead arms. Once a year it is generally covered by water. Its flora is hygrophilic. On the higher relief of Mártély there are Canadian poplars (*Populus canadensis*) meadows with *Chrysanthemum serotinum*, *Lythrum salicaria* and *Symphytum officinale*. Fen windows with reed-grass change with patches of sedge (*Thyphoidetum arundinaceae*) (GY. CSONGOR, by word of mouth). Körtvélyes is white willow gallery with *Urtica urens*, *Rubus idaeus*, *Lythrum* and *Iris pseudacorus* in it. Among the trees of the gallery *Fraxinus americana* and *Amorpha fruticosa* can be found (GY. CSONGOR, by word of mouth). The plant-community of flood-plain meadow — where the Malaise-trap was standing — was marsh-meadow rich in species (*Alopecuretum pratensis*; *Carici-Thyphoidetum arundinaceae*; *Glycerietum maximae*) (ANDÓ—BODROGKÖZY—MARIÁN 1974).

Table 1. The author applied to the denomination of species the names of Boursin-system

| Species                                 | Mártély | Körtvélyes |
|---|---------|------------|
| <b>Hepialidae:</b>                      |         |            |
| <i>Hepialus sylvina</i> L.              | —       | 18         |
| <b>Cossiidae:</b>                       |         |            |
| <i>Cossus cossus</i> L.                 | 4       | 7          |
| <i>Zuzera pyrina</i> L.                 | 3       | —          |
| <i>Phragmataecia castaneae</i> HBN.     | 15      | 12         |
| <b>Geometridae:</b>                     |         |            |
| <i>Chlorissa viridata</i> L.            | 11      | 8          |
| <i>Euchloris smaragdaria</i> F.         | 10      | 18         |
| <i>Thalera fimbrialis</i> SCOP.         | 18      | 13         |
| <i>Rhodostrophia vibicaria</i> CL.      | 7       | —          |
| <i>Aplasta ononaria</i> FUESSL          | —       | 2          |
| <i>Calothysanis amata</i> L.            | 9       | 11         |
| <i>Scopula immorata</i> L.              | —       | 20         |
| <i>Scopula rubiginata</i> HUFN.         | 4       | 8          |
| <i>Scopula immutata</i> L.              | 7       | 4          |
| <i>Scopula corrivalaria</i> KRETSCHM.   | 10      | —          |
| <i>Scopula flaccidaria</i> Z.           | 6       | —          |
| <i>Scopula ternata</i> SCHRK.           | —       | 1          |
| <i>Sterrhia rusticata</i> SCHIFF.       | 5       | —          |
| <i>Sterrhia muricata</i> HUFN.          | 10      | 8          |
| <i>Sterrhia dimiata</i> HUFN.           | 5       | —          |
| <i>Sterrhia seriata</i> SCHRK.          | 4       | —          |
| <i>Sterrhia fuscovenosa</i> GOEZE       | 2       | —          |
| <i>Sterrhia nitidata</i> H.             | 10      | —          |
| <i>Sterrhia aversata</i> L.             | 16      | 4          |
| <i>Sterrhia sericeata</i> HBN.          | 4       | 5          |
| <i>Lythria purpuraria</i> L.            | 3       | —          |
| <i>Mesotype virgata</i> HUFN.           | 6       | —          |
| <i>Lithostege farinata</i> HUFN.        | 7       | 2          |
| <i>Lithostege griseata</i> SCHIFF.      | 8       | —          |
| <i>Philereme vetulata</i> SCHIFF.       | 2       | —          |
| <i>Xanthorhoe fluctuata</i> L.          | 6       | —          |
| <i>Xanthorhoe ferrugata</i> CL.         | 16      | 8          |
| <i>Nycterosea obstipata</i> F.          | —       | 2          |
| <i>Euphya rubidata</i> SCHIFF.          | 3       | —          |
| <i>Mesoleuca albicillata</i> L.         | —       | 1          |
| <i>Epirrhoe alterbata</i> MÜLL.         | 2       | 6          |
| <i>Pelurga comitata</i> L.              | 15      | —          |
| <i>Eupithecia centaureata</i> SCHIFF.   | 13      | 7          |
| <i>Eupithecia absinthiata</i> CL.       | —       | 2          |
| <i>Lomaspilis marginata</i> L.          | 14      | 39         |
| <i>Lomographa dilectaria</i> HBN.       | —       | 4          |
| <i>Bapta bimaculata</i> F.              | 2       | —          |
| <i>Cabera exanthenata</i> SCOP.         | 2       | 3          |
| <i>Ennomos autumnaria</i> WERNB.        | 3       | 7          |
| <i>Ennomos fuscantaria</i> STPH.        | —       | 2          |
| <i>Selenia lunaria</i> SCHIFF.          | 5       | 5          |
| <i>Epione repandaria</i> HUFN.          | 3       | 7          |
| <i>Eilicrinia cordiaria</i> HBN.        | —       | 16         |
| <i>Macaria alterbaria</i> HBN.          | 10      | 15         |
| <i>Chiasmia clahrata</i> L.             | 28      | 37         |
| <i>Tephrina murinaria</i> SCHIFF.       | —       | 9          |
| <i>Tephrina arenacearia</i> SCHIFF.     | 3       | 49         |
| <i>Lycia hirtaria</i> CL.               | 1       | 3          |
| <i>Biston stratarius</i> HUFN.          | —       | 1          |
| <i>Peribatodes rhomboidaria</i> SCHIFF. | 15      | —          |

| Species                            | Mártély | Körtvélyes |
|------------------------------------|---------|------------|
| <i>Serraca punctinalis</i> SCOP.   | 7       | —          |
| <i>Ascotis selenaria</i> SCHIFF.   | 14      | 10         |
| <i>Ectropis bistortata</i> GOEZE   | 16      | —          |
| <i>Ematurga atomaria</i> L.        | 11      | —          |
| Noctuidae:                         |         |            |
| <i>Chytolitha cribrumalis</i> HBN. | —       | 4          |
| <i>Zanclognatha lunaris</i> SC.    | 7       | —          |
| <i>Rivula sericealis</i> SC.       | 16      | 60         |
| <i>Ectypa glyphica</i> L.          | 8       | —          |
| <i>Aedia funesta</i> ESP.          | 2       | 2          |
| <i>Catocala elocata</i> ESP.       | 1       | —          |
| <i>Catocala electa</i> VIEW.       | —       | 3          |
| <i>Scoliopteryx libatrix</i> L.    | 2       | —          |
| <i>Plusia chrysitis</i> L.         | 2       | 17         |
| <i>Macdunnoughia confusa</i> STPH. | 4       | —          |
| <i>Chryspasidia festucae</i> L.    | 3       | —          |
| <i>Autographa gamma</i> L.         | 8       | 6          |
| <i>Abrostola trigemina</i> WERNB.  | —       | 3          |
| <i>Bena prasinana</i> L.           | —       | 2          |
| <i>Earias clorana</i> L.           | 4       | 11         |
| <i>Nycteola asiatica</i> KRUL.     | —       | 3          |
| <i>Tarache luctuosa</i> ESP.       | 28      | 27         |
| <i>Emmelia trabealis</i> SC.       | 40      | 39         |
| <i>Eustrotia bankiana</i> F.       | 7       | —          |
| <i>Eustrotia candidula</i> SCHIFF. | 20      | 8          |
| <i>Eustrotia uncula</i> CL.        | —       | 4          |
| <i>Jaspidia pygarga</i> HUFN.      | —       | 13         |
| <i>Porphyria purpurina</i> SCHIFF. | 16      | —          |
| <i>Axylia putris</i> L.            | 14      | 47         |
| <i>Periphanes delphinii</i> L.     | 3       | —          |
| <i>Pyrrhia umbra</i> HUFN.         | 7       | —          |
| <i>Chloridea viriplaca</i> HUFN.   | 4       | 3          |
| <i>Chloridea maritima</i> GRASL.   | 8       | —          |
| <i>Athetis fuvula</i> HBN.         | 46      | 10         |
| <i>Athetis gluteosa</i> TR.        | 15      | 8          |
| <i>Athetis lepigone</i> MÖSCHL.    | 13      | 6          |
| <i>Caradrina morpheus</i> HUFN.    | 7       | 10         |
| <i>Caradrina clavipalpis</i> SCOP. | —       | 4          |
| <i>Meristis trigrammica</i> HUFN.  | 3       | —          |
| <i>Archanara sparganii</i> ESP.    | —       | 5          |
| <i>Archanara cannae</i> ESP.       | —       | 2          |
| <i>Celaena leucostigma</i> HBN.    | 1       | 4          |
| <i>Calamia tridens</i> HUFN.       | 3       | —          |
| <i>Gortyna borelii</i> PIERR.      | 2       | —          |
| <i>Hydraecia micacea</i> ESP.      | —       | 5          |
| <i>Luperina testacea</i> SCHIFF.   | 9       | 2          |
| <i>Oligia latruncula</i> SCHIFF.   | 2       | —          |
| <i>Apamea sordens</i> HUFN.        | 1       | —          |
| <i>Cosmia pyralina</i> SCHIFF.     | —       | 2          |
| <i>Cosmia trapesina</i> L.         | 3       | —          |
| <i>Ipimorpha retusa</i> L.         | —       | 1          |
| <i>Ipimorpha subtusa</i> SCHIFF.   | —       | 2          |
| <i>Eucarta virgo</i> TR.           | 4       | —          |
| <i>Eucarta amethystina</i> HBN.    | —       | 9          |
| <i>Phlogophora meticulosa</i> L.   | —       | 4          |
| <i>Trachea atriplicis</i> L.       | 3       | —          |
| <i>Dipterygia scabriuscula</i> L.  | —       | 1          |
| <i>Apatele rumicis</i> L.          | 17      | 4          |
| <i>Apatele tridens</i> SCHIFF.     | —       | 5          |

| Species                             | Mártély | Körtvélyes |
|-------------------------------------|---------|------------|
| <i>Apatele megacephala</i> SCHIFF.  | —       | 3          |
| <i>Symira albovenosa</i> GOEZE      | 2       | 1          |
| <i>Atethmia centrago</i> HAW.       | —       | 1          |
| <i>Agrochola lychnidis</i> SCHIFF.  | 5       | —          |
| <i>Xylena vetusta</i> HBN.          | 2       | —          |
| <i>Aporophyla lutulenta</i> SCHIFF. | —       | 7          |
| <i>Derthisa glaucina</i> ESP.       | —       | 2          |
| <i>Calophasia casta</i> BKH.        | —       | 4          |
| <i>Calophasia lunula</i> HUFN.      | 2       | —          |
| <i>Cucullia chamomillae</i> SCHIFF. | —       | 1          |
| <i>Senta flammea</i> CURT.          | 7       | —          |
| <i>Mythimna obsoleta</i> HBN.       | 4       | 5          |
| <i>Mythimna l-album</i> L.          | 8       | 10         |
| <i>Mythimna vitellina</i> HBN.      | —       | 9          |
| <i>Mythimna albipuncta</i> SCHIFF.  | 4       | 12         |
| <i>Mythimna conigera</i> SCHIFF.    | 9       | —          |
| <i>Mythimna turca</i> L.            | 7       | 16         |
| <i>Mythimna pallens</i> L.          | 32      | 24         |
| <i>Monima incerta</i> L.            | 17      | 6          |
| <i>Orthosia gothica</i> L.          | 17      | —          |
| <i>Orthosia munda</i> SCHIFF.       | 14      | —          |
| <i>Hyssia cavernosa</i> EV.         | 4       | 4          |
| <i>Xylomiges conspicillaris</i> L.  | 45      | —          |
| <i>Panalis flammea</i> SCHIFF.      | 5       | —          |
| <i>Tholera decimalis</i> PODA       | 16      | 15         |
| <i>Tholera cespitis</i> SCHIFF.     | 24      | 11         |
| <i>Hadena luteago</i> SCHIFF.       | 4       | 7          |
| <i>Mamestra dysodea</i> SCHIFF.     | 1       | —          |
| <i>Mamestra aliena</i> HBN.         | 27      | 14         |
| <i>Mamestra suasa</i> HBN.          | 12      | —          |
| <i>Mamestra thalassina</i> HUFN.    | 7       | —          |
| <i>Mamestra brassicae</i> L.        | 9       | 8          |
| <i>Mamestra oleracea</i> L.         | 14      | 10         |
| <i>Polia nebulosa</i> HUFN.         | 1       | —          |
| <i>Discestra dianthi</i> TAUSCH.    | 3       | —          |
| <i>Discestra trifolii</i> HUFN.     | 14      | 11         |
| <i>Cerastis rubricosa</i> SCHIFF.   | 2       | 3          |
| <i>Amathes c-nigrum</i> L.          | 32      | 48         |
| <i>Peridroma saucia</i> HBN.        | 8       | —          |
| <i>Noctua fimbrialis</i> SCHREB.    | 3       | 7          |
| <i>Noctua pronuba</i> L.            | 2       | 8          |
| <i>Ochropleura plecta</i> L.        | 3       | 14         |
| <i>Scotia ipsilon</i> HUFN.         | 2       | —          |
| <i>Scotia exclamationis</i> L.      | 29      | 39         |
| <i>Scotia segetum</i> SCHIFF.       | 62      | 13         |
| <i>Scotia vestigialis</i> HUFN.     | 7       | 10         |
| <i>Euxoa aquilina</i> SCHIFF.       | 17      | 15         |
| <i>Euxoa obelisca</i> SCHIFF.       | 2       | —          |
| Nolidae:                            |         |            |
| <i>Nola cuculatella</i> L.          | 2       | 1          |
| <i>Roeselia albula</i> SCHIFF.      | 8       | 12         |
| <i>Celama centonalis</i> HBN.       | —       | 7          |
| Lymantriidae:                       |         |            |
| <i>Dasychira pudibunda</i> L.       | 9       | —          |
| <i>Orgyia antiqua</i> L.            | 4       | —          |
| <i>Laelia coenosa</i> HBN.          | 11      | 14         |
| <i>Leucoma salicis</i> L.           | 7       | 3          |

| Species                             | Mártély | Körtvélyes |
|-------------------------------------|---------|------------|
| <b>Arctiidae:</b>                   |         |            |
| <i>Lythosia quadra</i> L.           | 4       | 10         |
| <i>Pelosia muscerda</i> HUFN.       | 1       | 27         |
| <i>Ocnogyna parasita</i> HBN.       | 11      | —          |
| <i>Phragmatobia fuliginosa</i> L.   | 29      | 33         |
| <i>Spilosoma lubriciperda</i> L.    | 1       | 6          |
| <i>Spilosoma menthastri</i> ESP.    | 18      | 12         |
| <i>Spilosoma urticae</i> ESP.       | 8       | 6          |
| <i>Hyphantria cunea</i> DRURY       | 26      | 47         |
| <i>Diacrisia sannio</i> L.          | 3       | —          |
| <b>Ctenuchidae:</b>                 |         |            |
| <i>Dysauxes ancilla</i> L.          | 1       | —          |
| <b>Notodontidae:</b>                |         |            |
| <i>Cerura erninea</i> ESP.          | —       | 2          |
| <i>Gluphisia crenata</i> ESP.       | —       | 6          |
| <i>Notodonta ziczac</i> L.          | 2       | —          |
| <i>Notodonta phoebe</i> SIEB.       | 3       | —          |
| <i>Pterostoma palpinum</i> CL.      | 5       | 8          |
| <i>Phalera bucephala</i> L.         | —       | 1          |
| <i>Clostera anastomosis</i> L.      | —       | 4          |
| <i>Clostera curtula</i> L.          | —       | 1          |
| <i>Clostera pigra</i> L.            | 3       | 1          |
| <b>Sphingidae:</b>                  |         |            |
| <i>Herse convolvuli</i> L.          | 1       | 2          |
| <i>Celerio euphorbiae</i> L.        | 4       | 4          |
| <i>Smerinthus ocellata</i> L.       | 6       | 2          |
| <i>Amorpha populi</i> L.            | 3       | 8          |
| <i>Pergesa elpenor</i> L.           | —       | 2          |
| <i>Pergesa porcellus</i> L.         | —       | 9          |
| <i>Macroglossum stellatarum</i> L.  | —       | 3          |
| <b>Thyatiridae:</b>                 |         |            |
| <i>Habrosyne pyritoides</i> HUFN.   | —       | 2          |
| <i>Tethea</i> or F.                 | 7       | 3          |
| <b>Drepanidae:</b>                  |         |            |
| <i>Cilix glaucata</i> SCOP.         | 2       | —          |
| <b>Lasiocampidae:</b>               |         |            |
| <i>Malacosoma neustria</i> L.       | 7       | —          |
| <i>Macrothylacia rubi</i> L.        | 9       | —          |
| <i>Gastropacha quercifolia</i> L.   | 2       | 1          |
| <i>Gastropacha populifolia</i> ESP. | 1       | 15         |
| <i>Odonestis pruni</i> L.           | 1       | 1          |
| <b>Hesperiidae:</b>                 |         |            |
| <i>Carcharodus alceae</i> ESP.      | —       | 3          |
| <i>Ochlodes venatus</i> BREM.       | —       | 10         |
| <b>Pieridae:</b>                    |         |            |
| <i>Leptidea sinapis</i> L.          | —       | 3          |
| <i>Colias croceus</i> FOURC.        | —       | 14         |
| <i>Colias hyale</i> L.              | —       | 4          |
| <i>Pontia daplicide</i> L.          | —       | 12         |
| <i>Pieris napi</i> L.               | —       | 7          |

| Species  | Mártély | Körtvélyes |
|--|---------|------------|
| <b>Papilionidae:</b>                                   |         |            |
| <i>Iphiclides podalirius</i> L.                        |         | 2          |
| <b>Lycaenidae:</b>                                     |         |            |
| <i>Thersamonia thersamon</i> HAW.                      |         | 3          |
| <i>Everes argiades</i> PALL.                           |         | 12         |
| <i>Glaucopsyche alexis</i> PODA                        |         | 3          |
| <i>Plebejus argus</i> L.                               |         | 17         |
| <i>Polyommatus icarus</i> ROTT.                        |         | 11         |
| <i>Cyaniris semiargus</i> ROTT.                        |         | 2          |
| <i>Lysandra bellargus</i> ROTT.                        |         | 1          |
| <b>Nymphalidae:</b>                                    |         |            |
| <i>Clossiana dia</i> L.                                |         | 4          |
| <i>Mellicta athalia</i> ROTT.                          |         | 2          |
| <i>Comma c-album</i> L.                                |         | 3          |
| <i>Nymphalis polychloros</i> L.                        |         | observed   |
| <i>Aglais urticae</i> L.                               |         | 5          |
| <i>Vanessa atalanta</i> L.                             |         | 3          |
| <i>Cynthia cardui</i> L.                               |         | 2          |
| <i>Apatura ilia</i> SCHIFF.                            |         | 6          |
| <b>Satyridae:</b>                                      |         |            |
| <i>Coenonympha pamphilus</i> ssp. <i>nephele</i> HUFN. |         | 3          |

(The author used the works of GOZMÁNY, KOCH, KOVÁCS and VOJNITS indicated in the literature-list to the determination of the material.)

### Methods of collection

The author publishes in this paper the data of collections in Mártély in 1971 with 250 W mercury vapour lamp, in Körtvélyes in 1979/80 with 125 W mercury vapour lamp and the data of material collected with special candling (Maxim and propane-butane lamp) and netting. The author was entrusted with the determination of Macrolepidoptera caught by Malaise-trap of Systematical and Ecological Group of Zoological Department of József Attila University, which was used to examine flying insects. The author publishes these data here too with the permission of professor László Móczár.

### Results

The author found 224 Macrolepidoptera species in the course of collections carried out with various instruments in Mártély—Körtvélyes environment protection area since 1971, one of them was only observed (*Nymphalis polychloros* L.). The data were established on the basis of determination of 2677 imagos among them 119 individuals of 24 species are diurnal (Table 1). The material of light-trap at Mártély — which is only partly mounted — was placed in the Zoological Department of Móra Ferenc Museum in Szeged.

The flora and fauna of Mártély and Körtvélyes — despite of their similar natural characters — show significant differences. In order to demonstrate the difference in their butterfly-fauna we can compare the first 20 species on the basis of most frequent individual numbers from the material of light-trap at Mártély (1971) with the similarly first 20 species from the material of light-trap at Körtvélyes (1979) (Table 2.).

Table 2. *The first 20-20 species of material of light-traps at Mártély (1971) and Körtvélyes (1979) in order of occurred most individualnumber*

| Mártély                                 | Individualnumber |
|---|------------------|
| 1. <i>Scotia segetum</i> SCHIFF.        | 62               |
| 2. <i>Athetis furvula</i> HBN.          | 46               |
| 3. <i>Xylomiges conspicularis</i> L.    | 45               |
| 4. <i>Axylia putris</i> L.              | 41               |
| 5. <i>Emmelia trabealis</i> SC.         | 40               |
| 6. <i>Amathes c-nigrum</i> L.           | 32               |
| 7. <i>Mythimna pallens</i> L.           | 32               |
| 8. <i>Scotia exclamationis</i> L.       | 29               |
| 9. <i>Phragmatobia fuliginosa</i> L.    | 29               |
| 10. <i>Tarache luctuosa</i> ESP.        | 28               |
| 11. <i>Chiasmia clathrata</i> L.        | 28               |
| 12. <i>Mamestra aliena</i> HBN.         | 27               |
| 13. <i>Mamestra suasa</i> SCHIFF.       | 27               |
| 14. <i>Hyphantria cunea</i> DRURY       | 26               |
| 15. <i>Tholera cespitis</i> SCHIFF.     | 24               |
| 16. <i>Eustrotia candidula</i> SCHIFF.  | 20               |
| 17. <i>Spilosoma menthastri</i> ESP.    | 18               |
| 18. <i>Apatele rumicis</i> L.           | 17               |
| 19. <i>Monima incerta</i> L.            | 17               |
| 20. <i>Othosia gothica</i> L.<br>resp.  | 17               |
| Körtvélyes                              |                  |
| 1. <i>Rivula sericealis</i> SC.         | 60               |
| 2. <i>Thephrina arenacearia</i> SCHIFF. | 49               |
| 3. <i>Amathes c-nigrum</i> L.           | 48               |
| 4. <i>Hyphantria cunea</i> DRURY        | 47               |
| 5. <i>Axylia putris</i> L.              | 41               |
| 6. <i>Scotia exclamationis</i> L.       | 39               |
| 7. <i>Lomaspilis marginata</i> L.       | 39               |
| 8. <i>Emmelia trabealis</i> SC.         | 39               |
| 9. <i>Chiasmia clathrata</i> L.         | 37               |
| 10. <i>Phragmatobia fuliginosa</i> L.   | 33               |
| 11. <i>Pelosia muscerda</i> HUFN.       | 27               |
| 12. <i>Tarache luctuosa</i> ESP.        | 27               |
| 13. <i>Mythimna pallens</i> L.          | 24               |
| 14. <i>Scopula immorata</i> L.          | 20               |
| 15. <i>Euchloris smaragdaria</i> F.     | 18               |
| 16. <i>Hepialus sylvinus</i> L.         | 18               |
| 17. <i>Thalera fimbrialis</i> SCOP.     | 18               |
| 18. <i>Plusia chrysitis</i> L.          | 17               |
| 19. <i>Mythimna turca</i> L.            | 16               |
| 20. <i>Eilicrinia cordiaria</i> HBN.    | 16               |

The 8 years passed between the two examinations can't be reason of this difference. We can find 1 common species from the first 5 species, 5 from the first 10, 8 from the first 20 species. From the 198 nocturnal species of the full list 147 are collected from Mártély 115 are collected from Körtvélyes. The number of common species is only 66, which is 30,3% of the full material.

*Tephрина arenacearia* SCHRIF. was on the 91st place in Mártély in 1971 with 3 individuals, while in Körtvélyes in 1979 it was on the second place with 49 individuals. Another outstanding example: *Xylomiges conspicillaris* L. was on the third place in Mártély in 1971 with 45 individuals, while in Körtvélyes in 1979 not a single of them was caught. Such changes can be observed in the case of more species, the reason of them is extremely combined, their origin can be in weather, in the changes of waterlevel of Tisza, in the vapour content of air, in the direction and strength of aircurrent during the time of function of traps, in the degree of cloudiness, its lastingness, occasionally in cold- or warm frontal passage, but they are influenced by the composition of culturflora being out of flood plain, moreover by agrochemical works. First of all the differences are explained with the differences in the flora of the two areas although all of the first 20 species are of wide ecological degree of tolerance not at all bound to plant communities, mostly polyphagous species.

From the enclosed check-list (Table 1) we can see, that a great part of the material is from the Euro-Siberian fauna circle from it the euryoecic autotypical genuses. They don't connect to special plant-communities, their degree of tolerance is almost boundless, and they are generally current in the whole area of the country. (For example the polyphagous *Spilosoma* species, which is living generally on annual plants: caterpillars of *Spilosoma fuliginosa* L. can be found on nettles — *Urtica urens* — too in Körtvélyes holm.) The other groups of the mentioned fauna-circle are represented by several species. Their occurrence on the examined area and surroundings shows the existence of living spaces satisfying their demand of humidity. The members of arundiphil group as alluvial community, reedy-bulrushy sedgy fauna elements, are less widespread species (e.g. *Archanara cannae* ESP., *Archanara sparganii* ESP., *Scopula corrivalaria* KRETSCHM., *Celaema leucostigma* HBN.). *Helophil* species originated from the Far East are living in greater number on the area (e.g. *Eucarta amethystina* HB., *Eucarta virgo* TR., *Hyssia cavernosa* HBN., etc). *Pelosia muscerda* HUFN. is a species of gallery and marsh, a typical animal of Euro-Siberian birch-willow-alder fenwoods. The marshy euryoecic species characteristic in our Great Hungarian Plain certainly find suitable living space out of the dams too (e.g. *Eustrofia unculata* L., *Scopula immutata* L., *Hydraecia micacea* ESP.), but *Mellicta athalia* ROTT. can be collected only on river flat holms. *Sterrrha nitidata* H.-SCH. which is of sybilla area-typical hygrophil wood-component finds its characteristic living space in river flat woods. The sub-Mediterranean *Aplasta ononaria* FUESSL. and *Eilicrinia cordiaria* HB. are mentioned by VARGA (1964) as characteristic species of Praeillyricum, from them only 2-2 individuals were caught. Opposite of the mentioned, the similarly sub-Mediterranean, but psammophil *Porphyrinia noctualis* HBN. occurred on the surroundings of the examined area, but it doesn't in Mártély—Körtvélyes. Individuals of *Sterrrha sericeata* HB. from the same group occurred often in the traps. *Mythimna conigera* SCHIFF. one of the typical animals of plant-community also often appeared. We have to mention, that it was known as mountain-species with high demand of humidity, although it was found on the banks of Tisza too. Similarly to the case of *Aplasta ononaria* FUESSL. the possibility of "Bihar-effect" comes up, but it is possible, that it isn't effective in county Csongrád. *Ochnogyna parasita* HB. is ponto-Mediterranean species which is frequent in some places in county Csongrád, East from Tisza



similarly like *Glaucopsyche alexis* PODA., one of the most typical elements of steppe, which were collected on the dam at Körtvélyes, and they enrich the check-list of this area. *Gortyna borelii lunata* PIERR. (*Hydraecia leucographa* BKH.) is a species without zoogeographical classification; it is an ancient element of steppe; because of its sporadic range its proper place hasn't been cleared up yet. Some pieces were collected in Kelenföld, Naphegy, Vérmező, and Vác, but its most wellknown collecting place is Ohat. During the last 10 years it has appeared in several places in Great Hungarian Plain (from county Békés, Újszentmargita, Mártély, Tápé and from the city of Szeged). *Discestra dianthi* TAUSCH. is Aralo-Caspian salt desert-element, only few individuals were caught although it occurs on several places in the county, but nowhere is frequent. Some leafyforest- resp. oakforest-species occur too (*Dasychira pudibunda* L. resp. *Bena prasinana* L., the first is hornbeam-oak-, the last is Southern-Continental oakforest-species). These appear in all of our oakforests. We have to mention here the leaf-eating noxious *Orthosia gothica* L. and *Panolis flammea* SCHIFF. the last is very frequent in the Southern part of the Plain — it occurs in the smallest group of pines already — and they enrich the checklist of Mártély with 17 resp. 5 individuals. Migrant species also were collected, they don't belong to this area, but we have to count with their occurrence as faunaelements (e.g. *Nicterosea obstipata* F., the universal *Scotia ipsilon* HUNFN., *Chloridea viriplaca* HUNFN. etc.).

The permanent Macrolepidoptera of Mártély and Körtvélyes belong to the animals of higher living spaces. The annually subsequent floods cover many times the level of grass and shrub and this causes the total damage of caterpillars living here. The inhabitants of areas situated lower are flying to the river flat from the areas out of the dams (except the species with more generation in which case during the gradation and during the short development-period wasn't flood). In the case of species with one generation it is very small chance for the development of a population while the situation of species with more generation is much more simple. Nevertheless we can find individuals of both groups on the river flat independently from the fact that the living space of very few species can be found on the grass- and shrublevel.

The re-settlement of Lepidoptera onto the river flat is possible only from the outer side of dams except a low per cent (which consists of individuals coming from holms and hills free of water). This mechanism is very complicated and isn't well-known neither in the case of Lepidoptera nor of other orders. During the last some years flood was very incalculable and damaged the population or populations of different species. Because of the ability of quick displacement the survival of Lepidoptera species is ensured in every case. Their number sometimes is decreasing but in the average of several years the balance is re-established.

There are some interesting cases, from them I mention *Celaena leucostigma* HBN. Its caterpillar generally lives in the rhizome of *Iris pseudacorus* but sometimes in sprouts of willow. On the river flat of Tisza certainly the individuals developed in sprouts of white willow (*Salicetum albae-fragilis*) are surviving resp. proliferating because *Iris pseudacorus* doesn't perish during the flood but the caterpillars living in its rhizome presumably die in every case.

Habitat of *Iris pseudacorus* generally is in water or on banks of waters (it is standing in water during the whole year in Ócsa, where *Celaena leucostigma* HBN. is more frequent species) so we can consider the animal living in it as a river flat-type. If this animal can live on another plant too, which hasn't so high demand of water — e.g. the mentioned owl-moth species can live on willow too — this species

can't be considered as typical river flat-species. We can see such cases very often, and we can see, that it is very difficult to determine the idea of the real river flat-species.

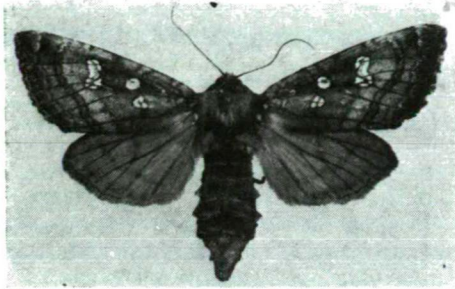


Fig. 1. *Gortyna borelii lunata*  
PIERR. (Mártély, 1971. okt. 6)

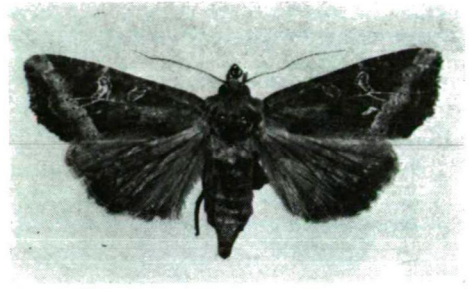


Fig. 2. *Celaena leucostigma*  
HBN. (Körtvélyes, 1979. júl. 27)

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### Adatok a Mártélyi Tájvédelmi Körzet Lepidoptera faunájának ismeretéhez

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### Kivonat

A dolgozat a Tájvédelmi Körzet területén 1971-ben 250 W-os higanygőzlámpával működő, mártélyi és az 1979—80-ban 125 W-os higanygőzlámpával működő körtvélyesi fénycsapdák segítségével gyűjtött anyag feldolgozási eredményét tartalmazza. Ezenkívül a körtvélyesi sziget réjtjén felállított és szakaszosan működtetett Malaise-csapda, továbbá a térségben végzett egyedi lámpázással (Maxim, propán-butánlámpa) valamint nappali hálózással gyűjtött macrolepidoptera fajok nevei, mennyiségi adatokkal kiegészítve, rendszertani felsorolásban kerültek közlésre.

Jelzi a *Gortyna borelii lunata* Pierret (*Hydroecia leucographa* Bkh.) noctuida faj mártélyi előfordulását. Tartalmazza néhány tipikus és atipikus faj rövid ismertetését ökológiai vagy állatföldrajzi hovatartozása alapján.

## Prilog poznavanju faune Lepidoptera zaštićenog okruga Mártély

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U radu je obradjen materijal sakupljen na području zaštićenog okruga Mártély. Materijal je prikupljen živinim svetlosnim klopka od 250 W u 1971. godini na području Mártély, i od 150 W u 1979—80. god. na području Körtvélyes. Osim toga u ritu na ostrvu Körtvélyes povremeno korišćene su klopke tipa Malaise, kao i osobna (Maxim) propan-butan lampa. Dnevni ulov Macrolepidoptera pomoću mreže prikazan je spiskom vrsta po njihovoj sistematskoj pripadnosti sa kvantitativnim podacima.

Utvrđeno je prisustvo noktuidne vrste *Gortina borelii lunata* PIERRET (*Hydroecia leucographa* Вкн.) na području Mártély. Dat je kratak ekološki i zoogeografski prikaz za neke tipične i atipične vrste.

## ДААННЕ К ПОЗНАНИЮ ФАУНЫ ЧАШУЕКРЫЛЫХ ПРИРОДООХРАННОГО РАЙОНА МАРТЕЛЬ

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### Резюме

Работа была нами проведена в 1971 году на территории Природоохранного района, при помощи 250 W-го мертельного ртутепарфонаря, а также в 1979—80 гг. 125 W-ого ртутепарного фонаря. Кроме того на лугах острова Кертвельеш ставили приманки Малаисе с другими осветителями (Максим, пропанбутанфонарь), а также вилловливали мокрочешу-крытых дневным сачным способом. Количественные их состав был дополнен и в систематическом порядке сообщены.

Результаты показали на наличие вида *Cortyna borelii lunata* PIERRET, *Hydrocia leucographa* Вкн. noctuida в мартельском районе. Приводятся также ознакомления с отдельными экологическими и зоогеографическими признаками вида