

Microlepidoptera Pannoniae meridionalis, IX. Data to the knowledge of micro-moths from Dombóvár, No. 2 (SW Hungary) (Lepidoptera)

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FAZEKAS, I. & SCHREURS, A.: *Microlepidoptera Pannoniae meridionalis, IX. Data to the knowledge of micro-moths from Dombóvár, No. 2 (SW Hungary) (Lepidoptera)*.

Abstract: 46 species of Microlepidoptera are recorded as new to the fauna of Dombóvár-Gunaras area (SW Hungary). Specimens are deposited in the private collections of A. Schreurs (NL-Kerkade) and in Regiograf Institute (H-Komló). *Bucculatrix humiliella* Herrich-Schäffer, [1855] and *Epermenia falciformis* (Haworth, 1828) is new species in Hungary. *Pelochrista modicana* (Zeller, 1847), *Caloptilia cuculipennella* (Hübner, 1796), *Prays fraxinella* (Bjerkander, 1784), *Blastobasis huemeri* Sinev, 1993, *Ancylis tineana* (Hübner, 1799), *Cydia exquisitana* (Rebel, 1889) and *Ancylosis oblitella* (Zeller, 1848) new to the fauna of the Transdanubian Hills. Biological data and habitats of the species are presented. Distribution is shown on maps. Structure of genitalia and morphological characteristic of wings are illustrated with color figures and distributed map. With 7 figures.

Keywords: Lepidoptera, Microlepidoptera, faunistic, new distribution data, biology, Hungary.

Introduction

This study presents a list of 46 new micro-moths species recorded from the area around Dombóvár–Gunaras. We published our first study in 2010 (FAZEKAS & SCHREURS 2010), and included a list of 436 species of micro-moth recorded from the Dombóvár area. Dombóvár is in SW Hungary, 30 km from Kaposvár (Somogy County) and 50 km from Pécs (Baranya County). Many of the species recorded so far in the Transdanubian Hills are known in only one or two localities, so the new data are useful additions to our knowledge of the distribution of species in Hungary.

The account is based on material collected mainly by Arnold Schreurs (NL-Kerkade) and by Imre Fazekas (H-Komló, Regiograf Institute). The arrangement of the species is based on the classification still followed in Hungarian literature (FAZEKAS 2002, 2008; FAZEKAS & SCHREURS 2010; PASTORÁLIS 2011).

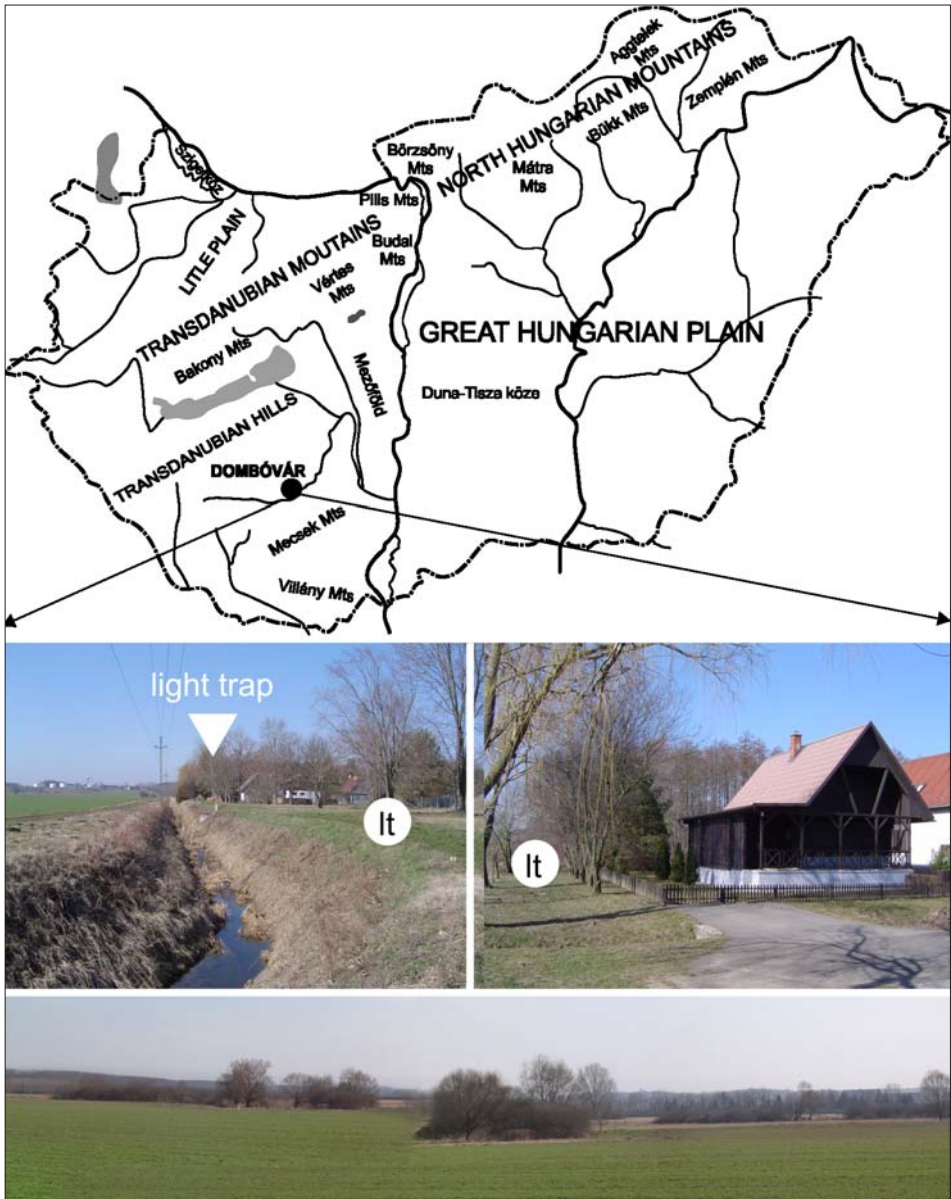


Fig. 1: Study area in Dombóvár, with landscape regions in Hungary (It= light trap)

Material and Methods

The moths were sampled using light trap and hand collecting. The collected specimens by the second author are preserved in his collection. A Breukhoven stereo microscope type BMS (140 Bino Zoom) was used for the investigations of the adult and genital

slides were made. The photographs and drawings of the genitalia were made with an Olympus microscope with a drawing tube and BMS digital camera (type: Eyepiece & C-mount camera 3 megapixels). Terminology for the morphological structures follows the references. If not stated otherwise, measurements of the forewing include the fringe. The photographs of the adults were made with an Sony camera type DSC-HX100V. The microscopic investigations and photographs were made by Imre Fazekas. Some photos were made by Frans Groenen (e. g. Fig. 4.).

New and confirmed records for the Dombóvár area

(The species are listed alphabetically within the family. Abbreviations in text: HNHM= Hungarian Natural History Museum, Budapest)

NEPTICULIDAE

Stigmella aceris (Frey, 1857) – Material examined: Dombóvár, Gunaras, 20 mines on *Acer campestre*, 26.07.2010 and 06.08.2010; 2 moths ex larva, 14.09.2010. Rare and very local in Transdanubian Hills: Bükkösd, Cserkút, Pécs, Szederkény (FAZEKAS 2002). Widely distributed in Hungary.

TINEIDAE

Cephimallota angusticostella (Zeller, 1839) – Material examined: Dombóvár, Gunaras, 2♂ and 1♀, 5-15.06.2003. The species is known in the Transdanubian Hills in the southern part of the Villány Hills and Somogy county (Kaposvár). Additional localities in Hungary: Aggtelek National Park, Szigetköz area, Vértes Mountains.

Monopis obviella ([Denis & Schiffermüller], 1775) – Material examined: Dombóvár, Gunaras, 1♂, 5-15.06.2003. Sporadically in the Transdanubian Hills: Komló, Pécs, Nagyarsány (Szársomlyó) Barcs (FAZEKAS 2001, 2002). Distribution in Hungary: Aggtelek- and Bükk National Park just as Sikfőkút.

Nemapogon variatella (Clemens, 1859) (= *personella* Pierce & Metcalfe, 1934) – Material examined: Dombóvár, Gunaras, 2♂, 26.07.2010 and 06.08.2010, gen. prep. Schreurs, No. 1014. Very local in Transdanubian Hills: documented by a single old specimen from in Somogy county (FAZEKAS 2001), but possibly overlooked and therefore careful search is required. Known sporadically in some habitats in the Hungarian mountains at medium altitude: Bakony Mts, Vértes Mts, Budai Mts, Bükk Mts. The moth flies from April to August.

Neurothaumasia ankerella (Mann, 1867) – Material examined: Dombóvár, Gunaras, 1♂, 7-5.08.2000; 1♂, 2-14.07.2004. Not rare in Transdanubian Hills mostly in the Mecsek Mountains (FAZEKAS 2002). Widely distributed throughout from lowland to of the Hungarian mountains at medium altitude. The moth flies from June to September. Limited information available about habitat preference.

Niditinea fuscella (Linnaeus, 1758) (= *fuscipunctella* Haworth, 1828) – Material examined: Dombóvár, Gunaras, 1♂, 26.07.2010; 1♂, 06.08.2010, gen. prep. Schreurs, No.1017. Disjunct in Transdanubian Hills: one locality in Mecsek Mountains and with locally in Somogy County (FAZEKAS 2001, 2002). Elsewhere frequent in Hungary from May to September; larva on detritus of various kinds.

BUCCULATRICIDAE

Bucculatrix bechsteinella (Bechstein & Scharfenberg, 1805) – Material examined: Dombóvár, Gunaras, 1♂, 5-15.06.2003, gen. prep. Schreurs. No. 1020. A rare species with very isolated populations in the Transdanubian Hills (Kaposvár, Kisvaszar, Komló, Pécs) but widely distributed elsewhere in the country in two generations from end April to August.

Bucculatrix humiliella Herrich-Schäffer, [1855] – Material examined: Dombóvár, Gunaras, 1♀, Hungary, Dombóvár–Gunaras, 10.06.2003., gen. prep. Schreurs, No. 1020; ♀, 06.08.2010, leg. et coll. A. Schreurs. UTM: BS84; N 46°24'03", E 18°10'24". This was the first record from Hungary. The species was collected again in 2010 in Gunaras, near Dombóvár (SW Hungary). There are no previous illustrations of the adult and genitalia in Hungary. Typical habitat of the species in Hungary is in arable land with fine soil, often low-intensity agriculture, tree lines and small woods, young afforestation with embedded surviving native grassland vegetation. According to literature, two generations per year have been observed. Adults from the second generation hibernate. Oligophagous, the larva feeds on *Achillea millefolium* and *Tanacetum vulgare*. Distribution: Spain (Granada), France, England, Scotland, Germany, ?Austria, Hungary, Czechia, Slovakia, Poland, Norway, Sweden, Finland, Latvia and Transbaikalia. Not known from the Benelux countries (MEY 2012).



Fig. 2: Adult of *Bucculatrix humiliella* (indicated)

Bucculatrix noltei Petry, 1912 – Material examined: Dombóvár, Gunaras, 1♂, 12-24.07.2004, gen. prep. Schreurs, No. 1019. Records from Somogy county are unconfirmed (FAZEKAS 2001). More important localities in Hungary: Börzsöny Mts, Pilis Mts, Budai Mts, Vértes Mts, Szigetköz area, Mezőföld and “Duna-Tisza köze”. The moth flies two generations from June to August. Larva monophagous on *Artemisia vulgaris* from June to July and from September to October (Szócs 1977).

GRACILLARIIDAE

Caloptilia cuculipennella (Hübner, 1796) – Material examined: Dombóvár, Gunaras, 1♀, 28.07.- 08.08.2008, gen. prep. Schreurs, No. 1023. The name known in old Hungarian literature: “*Coriscium cuculipennellum* Hb.”. Only two localities known in Hungary: Budapest and Aggtelek National Park. New species to the Transdanubian Hills fauna. The moth flies in two generations from June to August. Larva polyphagous on *Jasminum*, *Ligustrum* and *Syringa* (Szócs 1977).

Catoptilia fidella (Reutti, 1853) – Material examined: Dombóvár, Gunaras, 3 moths ex larva, 01.09.2003; 6 mines on *Humulus lupulus*, 26.07.2010 and 06.08.2010. Known from very limited localities in Transdanubian Hills: Kaposvár, Pécs, Simontornya. Local in Hungarian lowland areas from June to August and September. The adults hibernate.

Caloptilia fribergensis (Fritzsche, 1871) – Material examined: Dombóvár, Gunaras, 1♀, 5-15.06.2003; 2♂, 14-28.07.2007; 1♂, 28.07.2008; 1♂, 08.08.2008; 2♂, 1♀, 20.07.2011; gen. prep. Schreurs, No. 1015, 1016, 1018. Rather infrequent in Hungarian colline and montane areas. Very limited data from Transdanubian Hills: Kisvaszar and Pécs (FAZEKAS 2002).

Catoptilia hemidactylella (Denis & Schiffermüller, 1775) – Material examined: Dombóvár, Gunaras, 3 mines on *Acer campestre*, 26.07.2010 and 06.08.2010; 2 moths ex larva, 12.08.2010. Widespread distributed in Hungary; in two generation from April to October. The moths hibernate. Occurrence in Transdanubian Hills documented by only reared specimens from Kaposvár (SZABÓKY 1983) and Vókány (FAZEKAS 2002).

Calybites quadrisignella (Zeller, 1839) – Material examined: Dombóvár, Gunaras, 4 ex, 5-15.06.2003; 14-16.07.2007; 26.07.2010; 06.08.2010, gen. prep. Schreurs. No. 997. In Transdanubian Hills given only by FAZEKAS (2002) from Mecsek Mountains areas: Pécs and Szederkény. These very old and vague data in the literature have not been confirmed, nor vouchers re-examined (leg. et in coll. I. Balogh; Hungarian Nat. Hist. Mus. Budapest). Sporadic and very rare on the Hungarian hills and uncharacteristically in the mountains of medium height.

Micrurapteryx kollariella (Zeller, 1839) – Material examined: Dombóvár, Gunaras, 1♂, 25-31.08.1998. Sporadic and in few localities from Transdanubian Hills: Kaposvár, Komló, Kövágószőlős, Pécs–Cserkút (FAZEKAS 2002, SZABÓKY 1983).

Parornix petiolella (Frey, 1863) – Material examined: Dombóvár, Gunaras, 1♂, 12-23.07.1999, gen. prep. Schreurs, No.1022. Not rare in Transdanubian Hills. Widely distributed in Hungary.

Phyllonorycter issikii (Kumata, 1963) – Material examined: Dombóvár, Gunaras, 25 mine on *Tilia*, 26.07.2010; 6 moths ex larva, 12.08.2010 and 18.08.2010. Species originating from Japan, Korea and Asiatic Russia. Adventives species which appeared on Hungary in 2002 (SZABÓKY 2002); it reached northern areas in 2003, and within a year was already very widely distributed in SW Hungary.

YPONOMEUTIDAE

Paraswammerdamia albicapitella (Scharfenberg, 1805) – Material examined: Dombóvár, Gunaras, 4 ex, 26.07.2010; 06.08.2010. – European species, widely distributed in Hungary, frequent in lowland areas (BUSCHMANN, FAZEKAS & PASTORÁLIS 2011). Bivoltine, flight from April to end June and in August. Footplants: *Prunus spinosa* and *Crataegus* spp.

PRAYDIDAE

Prays fraxinella (Bjerkander, 1784) – Material examined: Dombóvár, Gunaras, 1 ex, 28.07. – 08.08.2008. New species to the Transdanubian Hills fauna. Local and rare in Hungarian mountainous areas: in the Aggtelek, Bükk, Mátra and Vértes Mts. Known from a few specimens from the Jászság and Szigetköz (at Győr), but one of the subdominants in the alder woods at Ócsa (Kiskunság National Park), also the unicolorus form occurs not infrequently. According to ÁCS and SZABÓKY (1993) a characteristic species of *Alnus* woods and *Fraxinus* trees. Remarks: A record of the species at Győr (NW Hungary) published by HORVÁTH (1993) is unconfirmed.

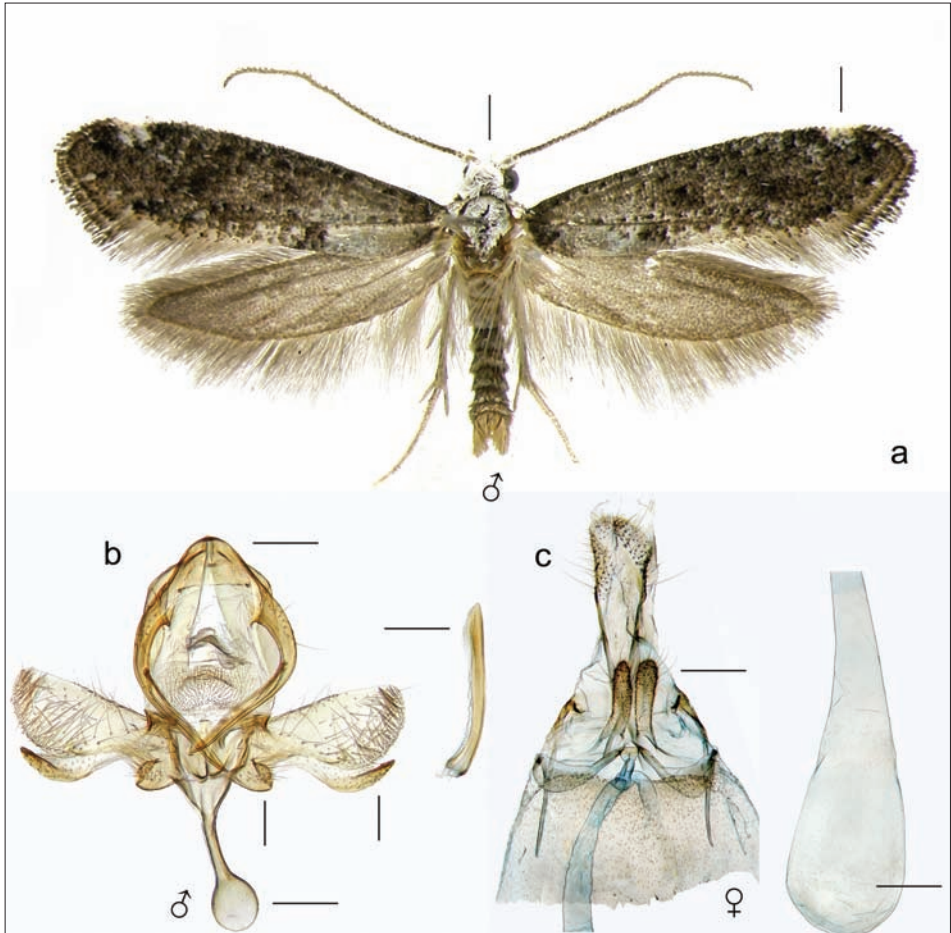


Fig. 3: *Paraswammerdamia albicapitella*: a) adult, b) male genitalia, c) female genitalia (indicated)

BLASTOBASIDAE

Blastobasis huemeri Sinev, 1993 – Examined material: Dombóvár, Gunaras, 1♂, 02.09.2003, gen. prep. A. Schreurs, No.1074; 1♀, 19.07.2004; 1♂, 15.07.2007; 1♂, 26.07.2010, gen. prep. A. Schreurs, No.1075; 1♂, 01.08.2010; 2♂ and 3♀, 20.07.2011. In coll. A. Schreurs. UTM: BS84; N 46°24'03", E 18°10'24". The species was collected again in 2003 in Gunaras, near Dombóvár (SW Hungary). This is the first record from Transdanubian Hills. *Blastobasis huemeri* was described from Croatia (locus typicus: Insel Krk, Punat) and northern Italy (SINEV 2003). The species was later found in Hungary (PASTORALIS & al. 2000). The first known record from Hungary is from Csákberény (Bucka-hegy): Vértes Mountains 31.07.1999, leg. et coll. Ivan Richter (SK-Prievidza), det. and gen. prep. Zdenko Tokár, No.5543. It is found very locally and sporadically in Hungary: Bakony Mts, Vértes Mts and Mátra Mts, from 200 m up to 400 m above sea level. Based on present information, *B. huemeri* has not been collected on the Great Hungarian Plain.

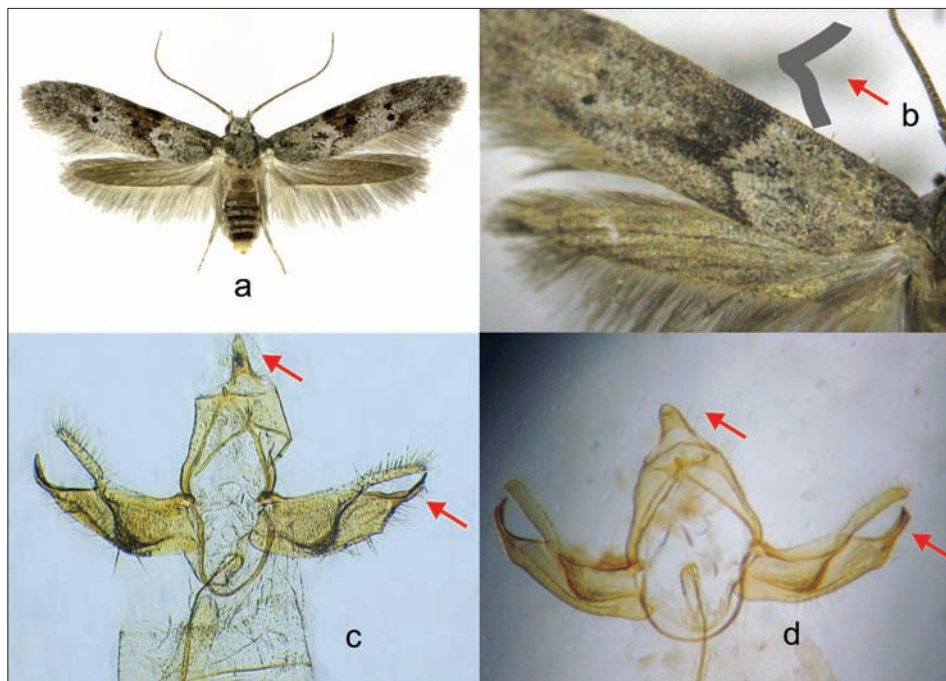


Fig. 4: *Blastobasis huemeri*: a) adult, b) forewing pattern, c) male genitalia from Bohemia, d) male genitalia from Dombóvár-Gunaras

In Hungary, populations of *B. huemeri* occupy mostly xerothermic and sun-exposed habitats in hilly regions, where it is often very rare. Present knowledge suggests that *B. huemeri* occurs only on the European continent: Austria, Chechia, Croatia, France, Germany (sand region), Hungary, Italian mainland, Slovenia and Slovakia (Lepiforum e. V. 2012; LESAR & GOVEDIĆ 2010; PERRETTTE & SPILL 2008; SINEV 2012). Recent investigation has indicated a northerly extension of its range from southern Europe into central Europe.

The developmental stages, host plants and bionomics of *B. huemeri* are apparently unknown. A German website (Lepiforum e. V. 2012) gave illustrations of the larva and pupa. Moths have been collected from May to August (limited data available). Probably univoltine. According to Gábor Pastorális (pers. comm.), the female wingspan is rather variable. Adults strongly attracted to light.

Remarks: Further study is needed to clarify the localities of the populations of *B. huemeri* in Hungary. Similar species: *Blastobasis phycidella* (Zeller, 1847) and *B. roscidella* (Zeller, 1847). Position of Hungarian range within this species group of blastobasids is uncertain.

ELACHISTIDAE

Elechista serricornis Stainton, 1854 – Material examined: Dombóvár, Gunaras, 1♀, 28.07.2010, leg. et gen. prep. Schreurs, No. 1062. Identification confirmed by J. Liška (CZ-Praha), L. Kaila (FI-Helsinki). Occurrence of *Elechista serricornis* is documented by a single specimen from the Kaposvár in southwest Hungary, collected in 1923 (SZÓCS 1973): “63. *E. serricornis* Stt.: Kaposvár 1923.VII.2. PAZSICKY“. From the first Hungarian locality (Kaposvár) to the east, approximately 31 km, the species was found

again in 2010. It is found from Fennoscandia and northern Russia to northern Italy and from Ireland to Poland and Hungary. According to literature the larva feeds on *Carex elata*, *Carex ericetorum*, *Carex ferruginea*, *Carex sylvatica*, *Carex vesicaria*, *Eriophorum angustifolium*, *Eriophorum latifolium*, *Eriophorum vaginatum* and *Scirpus sylvaticus*. Young larvae make a long, brown corridor, and hibernate in this. In spring, the larva makes a new mine in another leaf, starting near the base of the blade. The mine widens upwards and forms an blotch at the end. Pupation takes place outside the mine.

OECOPHORIDAE

Batia internella Jäckh, 1972 – Material examined: Dombóvár, Gunaras, 1♂, 13-23.06.2006, gen. prep. Schreurs, No.1028. The species is rather frequent in Hungary, but very local and rare in Transdanubian Hills (Kaposvár: VI-VII.); furthermore, it is unknown in Mecsek Mountains and Villány Hills.

Batia lambdella (Donovan, 1793) – Material examined: Dombóvár, Gunaras, 1♂, 12-23.07.1999; 1♂, 14-28.07.2007. Widely distributed in Hungary, sporadically in Transdanubian Hills (e. g. Mecsek Mts, Villány Hills).

Borkhausenia minutella (Linnaeus, 1758) – Material examined: Dombóvár, Gunaras, 2 ex, 26.07.2008 and 08.08.2008. Only known localities in Hungary.

GELECHIIDAE

Anarsia lineatella Zeller, 1839 – Material examined: Dombóvár, Gunaras, 1♂, 05-15.06.2003, gen. prep. Schreurs, No. 910. Known from a few specimens in Transdanubian Hills: Mecsek Mountains, Villány Hills and near Kaposvár. A notorious pest of apricots in Hungary.

Bryotropha affinis (Haworth, 1828) – Material examined: Dombóvár, Gunaras, 1♂, 26.07. - 08.08.2008, gen. prep. Schreurs, No. 1027. According to GOZMÁNY and SZABÓKY (1986) the species is characteristic of the sandy plains in Hungary, but this is very disputable. It is ubiquitous, found in colline hay meadows, dry and semi-dry closed grasslands, semi natural, often secondary woodland-grassland mosaics. Altitude from 90 m to 300 m. Very local and rare in Transdanubian Hills: Kaposvár, from end May to early August. Distribution in Hungary: Ágasegyháza, Fülöpháza, Izsák, Orgovány, Kecskemét, Keszthely, Kaposvár, Dombóvár-Gunaras.

Monochroa divisella (Douglas, 1850) (= *lepidolampra* Gozmány, 1952) – Material examined: Dombóvár, Gunaras, 1♂, 5-15.06.2003, leg. Wolschijn, gen. prep. Schreurs. No. 977, det. O. Karsholt. Distribution in Hungary: Ócsa, Izsák, near Velencei-tó [tó=lake], Pécsely (Bakony Mts.), Kis-Balaton, Fonyód, Barcs [“Old”] Juniper Woodland, Dombóvár-Gunaras. Remarks: The Barcs [“Old”] Juniper Woodlands between Barcs and Darány is a nature conservation area of special interest in the Transdanubian Hills; it is an arenaceous region, poor in chalk, with woods and several marshy or boggy depressions.

Scrobipalpa ocellatella (Boyd, 1858) – Material examined: Dombóvár, Gunaras, 1♀, 1-15. 08. 1997; 2♂, 1-10. 09. 2002; 1♀, 1-12.09.2003., gen. prep. Schreurs. No. 931, 932, 1001, 1002. A widely distributed species in Hungary but has never been collected in such large numbers as in this region.

PTEROPHORIDAE

Stenoptilia zophodactyla (Duponchel, 1840) – Material examined: Dombóvár, Gunaras, 1 ex, 7-15.08.2000; 1 ex, 1-10.09.2002, det. C. Gielis; 1♂, 06.08.2011 [trampled swards], leg. et det. I. Fazekas). Known only from eight diverse localities in Hungary (FAZEKAS 2006): Sárkeresztúr, Bátorliget, Kárász, Komló, Budapest, Doba,

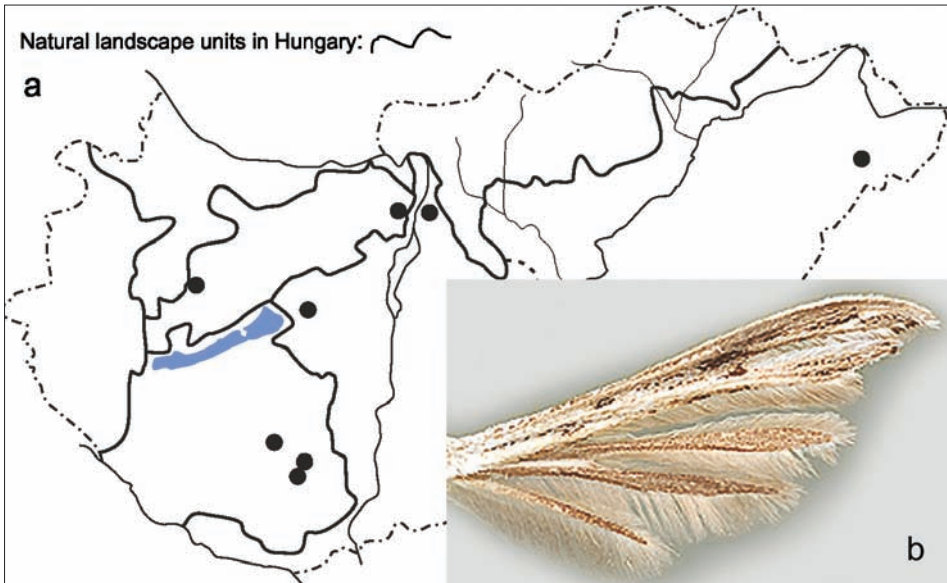


Fig. 5: Known distribution of *Stenoptilia zophodactyla* in Hungary (a), with forewing pattern of adult (b)

Fót, but available data are very limited. Known from the warmer zone in the Hungarian region. According to FAZEKAS (2006) “Eriökes Taxon. In Ungarn es in feuchten Wiesen, in Sumpfböden, entlang der Hügellandschaftsflüsse, am Rande von Eichenwald-Lichtungen, in Felsenrasen-Steppen und Sodaboden-gebieten vor.” In Hungary the species occurs altitude from 90 m to 350 m. The moth flies in Hungary from April to October in two generations. Polyphagous, recorded foodplants are in the following families: *Asteraceae*, *Gentianaceae*, *Orobanchaceae* and *Plantaginaceae* (MATTHEWS & LOTT 2005). In Hungary, the larva has been recorded on *Centaurea erythraea* Rafn., *C. littorale* Roth. and *Brachypodium* spp.. The moth is known from Palaearctic, South Africa, DR Congo, as well as from the Nearctic and Neotropical regions and Australia.

EPERMENIIDAE

Epermenia falciformis (Haworth, 1828) – Examined material: Dombóvár, Gunaras, 1♀, 10.06.2003, gen. prep. Schreurs, A. No.1071; 1♀, 11.06.2003, gen. prep. Schreurs, A. No.1078. In coll. A. Schreurs. UTM: BS84; N 46°24'03”, E 18°10'24”. This is the first record from Hungary. The species was collected again in 2003 in Gunaras, near Dombóvár (SW Hungary). The wingspan is 9–14 mm. *Epermenia falciformis* is treated as a species separate from *E. illigerella*, with which it has previously been synonymised. According to literature, the larvae feed on *Angelica sylvestris* and also *Aegopodium podagraria*, but this record probably refers to *E. illigerella*. Bred specimens should be re-examined.

The adult moths are on the wing in two generations, from May to July and again in August and September. Larvae of the second generation live in the umbels of the same plants. Pupation takes place in an open network cocoon amongst detritus on the ground (see http://www.ask.com/wiki/Epermenia_falciformis).

Distribution in Palaearctic: The species was re-established as valid by SCHOLZ (1996), having been previously regarded as a synonym of *E. illigerella*. Since this time recorded

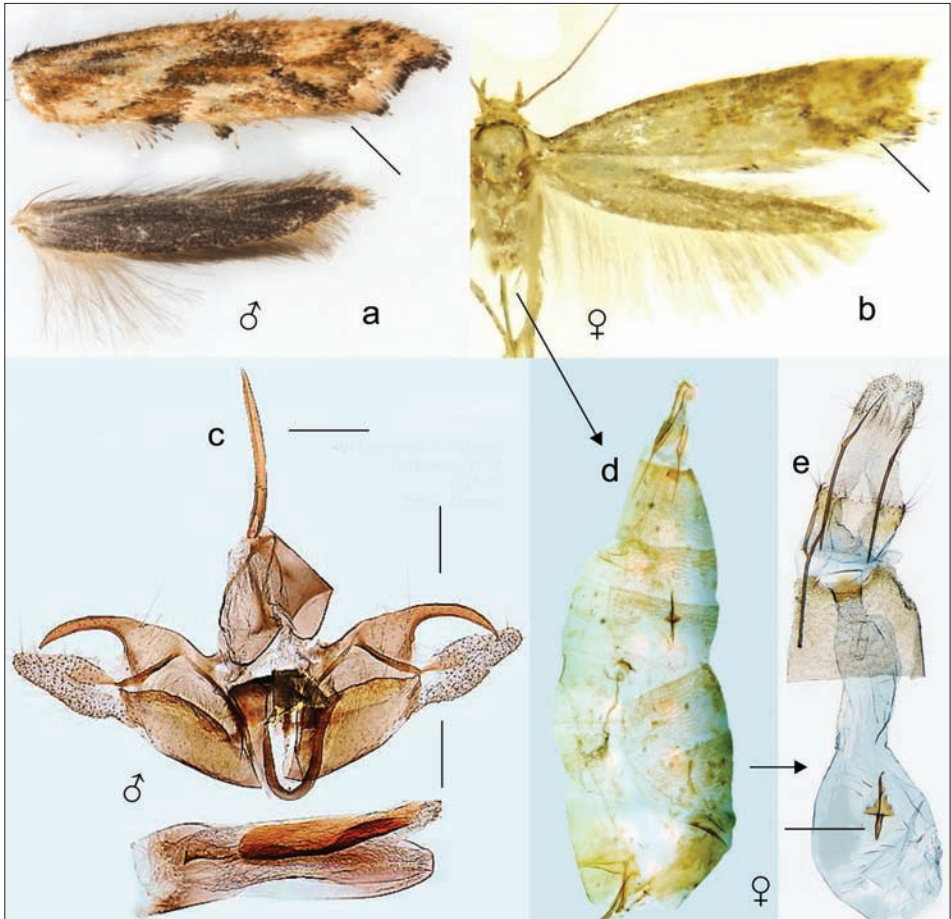


Fig. 6: Diagnostic characters (indicated) of *Epermenia falciformis*: a) wing pattern, b) specimen from Dombóvár–Gunaras, c) male genitalia, d) abdomen, e) female genitalia

only from British Isles, some parts of Middle and North Europe; outside Europe from Russia; Ural Mountains, Irkutsk and East Ussurijsk areas (BUDASHKIN & GAEDIKE 2005).

Range in Europe: Austria, Belgium, British Isles, Czechia, Denmark, Finland, Germany, Hungary (new record), Latvia, Slovakia, Sweden (GAEDIKE 2012). According to SCHOLZ (1996): “Schweiz” and “Holland”.

Remarks: The family Epermeniidae contains nearly 100 described species in eight genera, and is known from all faunal regions. Data on taxonomy, distribution, and biology were compiled by GAEDIKE (1979, 1996a). According to BUDASHKIN and GAEDIKE (2005) the life histories indicate that the larvae live in mines in leaves, or that they skeletonise leaves or feed on seeds, mainly of *Apiaceae*. There are a few host records in other plant families: *Araliaceae*, *Celastraceae*, *Epacridaceae*, *Fabaceae*, *Loranthaceae*, *Oleaceae*, *Pittosporaceae* and *Santalaceae*.

TORTRICIDAE

Acleris rhombana ([Denis & Schiffermüller], 1775) – Material examined: Dombóvár, Gunaras, 1♂, 7-15.08.2000, gen. prep. Schreurs. No. 888. This species is known only in a few localities in Transdanubian Hills (FAZEKAS 2002: Mecsek Mts, Villány Hills). *Distribution in Hungary*: North Hungarian Mountains, Transdanubian Mountains (local and rare), Little Plain (Szigetköz), Great Hungarian Plain; frequent at Peszér, but only a single specimen captured at Bugac (see GOZMÁNY & SZABÓKY 1986). Know from North Iran to Scandinavia, British Isles and Iberian Peninsula. Introduced to North America.

Ancylis tineana (Hübner, 1799) – Material examined: Dombóvár, Gunaras, 2♂, 26.07.2010; 06.08.2010. New species for the fauna of the Transdanubian Hills. Local in Hungary: North Hungarian Mountains, Transdanubian Mountains, Little Plain (Szigetköz) and Great Hungarian Plain (Jászfelsőszentgyörgy, Nagykáta). Widely distributed in Palaearctic and Nearctic regions. Polyphagous species on *Betula*, *Crataegus*, *Malus*, *Populus*, *Prunus*, *Pyrus* etc.; sometimes a pest in orchards.

Ancylis unculana (Haworth, [1811]) – Material examined: Dombóvár, Gunaras, 3 ex, 26.07. – 06.08.2010. Found very sporadically in Transdanubian Hills: near Kaposvár, Mecsek Mountains and Villány Hills. Characteristically mountainous species in Hungary but very local in lowlands (e. g. Jászság area). Not recorded from eastern Hungary. Widely distributed from Japan to Europe.

Cochylidia heydeniana (Herrich-Schäffer, 1851) – Material examined: Dombóvár, Gunaras, 1♂, 1-15.08.1997, det. F. Groenen, gen. prep. No 0876. Localities in Hungary: Budapest, “Kiscell”, Kárász, Kecskemét, Vörs, (FAZEKAS 1992, 1994). Very little is known of the habitat preference in Hungary. Typical habitat in Mecsek Mountains (Kárász): riversides in hills or middle mountains with riparian alder or willow woods.

Cochylis epilnana Duponchel, 1842 – Material examined: Dombóvár, Gunaras, 2 ex, 14-28.08.2009; 4 ex, 26.07. – 06.08.2010, det. F. Groenen. The species is known only in a few localities from Transdanubian Hills: Kaposvár, Pécs (Tubes), Villány Hills, Vörs. It occurs in various habitats, including rich fens and mesotrophic meadows, and rarely and locally on sloping steppes in Mecsek Mountains and on rocky steppes in Villány Hills. The distribution area in Hungary: Transdanubian- and North Hungarian Mountains. It has been collected in Hungary only from colline and mountains areas, but only in small numbers. The moth flies from May to August two generations. Distribution is disjunct in West Palaearctic from Ural Mountains to Iberian Peninsula, Canary Is and NW Africa.

Crocidosema plebejana Zeller, 1847 – Material examined: Dombóvár, Gunaras, 1 ex, 5-15.06.2003; 1 ex, 26.07. – 06.08.2010, det. F. Groenen. First recorded from Transdanubian Hills (BALOGH 1978, FAZEKAS 2002): Pécs, (Árpád-tető).

The first habitat is a sylvan environment in a residential area, effectively a sylvan clearing, where there are private gardens and small orchards. The second habitat (Gunaras) an old, spa areas in agricultural country a in which there are some industrial areas. Generally rare and local in Hungary: Aggtelek National Park, Vértes Mts, Bakony Mts. Cosmopolitan, and widely distributed in every Continent.

Cydia exquisitana (Rebel, 1889) – Material examined: Dombóvár, Gunaras, 2 ex, 14-28.07.2007, det. F. Groenen.

New species to the Transdanubian Hills fauna. Our second record from Hungary. According to SPULER (1910) the species occurs in south Hungary (“im südlichen Ungarn”) but the localities are unspecified. Occurrence in Hungary documented only from the middle 20th century (GOZMÁNY 1968) but no recent record from country. It was collected only near Budapest in Hungary (in coll. HNHM; Zs. Bálint pers. comm.): 1 ex,

Csepel sz. | Uhryk, [1]905.VI.18. | exquisit. Rbl. | det. Rbl. | Lasp. | exquisitana Rbl. | V. Kuznesov det. The abdomen lost, there is no genital preparation. The nominotypical subspecies was described from Austria ("Prater bei Wien"); the ssp. *coeruleosparsana* Filipjev, 1925 was described from South Siberia. Distribution in Europe: Austria, France, Germany (only in Bayern), Hungary, Italy, Poland, Romania, Russia South, Slovakia, Switzerland.

Dichrorampha heegerana (Duponchel, 1843) – Material examined: Dombóvár, Gunaras, 1♂, 06.08.2010, det. F. Groenen. Known in only two localities from Transdanubian Hills: Komló, Pécs (FAZEKAS 2002). Sporadically distributed in Hungary: Bakony Mts, Vértes Mts, Aggtelek karst landscape, Jászság area.

Dichrorampha flavidorsana Knaggs, 1867 – Material examined: Dombóvár, Gunaras, 1 ex, 26.07. – 06.08.2010, det. F. Groenen. GOZMÁNY (1968) also mentioned the species under this name, although no voucher specimens are deposited in the collection of the Hungarian Natural History Museum. Data of the specimens in coll. HNHM (with original labels): Budapest, Farkasvölgy, 1912.VI.6., leg. Uhrik; Kaposvár, 1925.VIII.10., leg. Pazsicky; Eger, Tihamér, 1946.VII.2., leg. Reskovits; Makkoshotyka, 1961.VII.28., fénycsapda [light trap]; Tompa, Alsósáskalapos, 1974.VII.14., fénycsapda (coll. Szócs); Budakeszi, ERTI-telep, 1974.VII.30., fénycsapda (coll. Szócs). Data on the specimens outside country in coll. HNHM from Romania: Borosjenő, 1914.VI.27., leg. Diószeghy; Csiki-havasok, Jávorhegy, 1943.VII.23., leg. Szent-Ivány. Additional data in private collection of F. Buschmann (H-Jászberény): Gyöngyös, Sár-hegy, 3 ex, 06.06.2003; 21.06.2006; 11.06.2010; Nagykáta, Székesrekeszi-legelő, 1 ex, 15.07.2009, leg. F. Buschmann. Meanwhile the number of known *Dichrorampha flavidorsana* specimens from four has grown to more than ten.

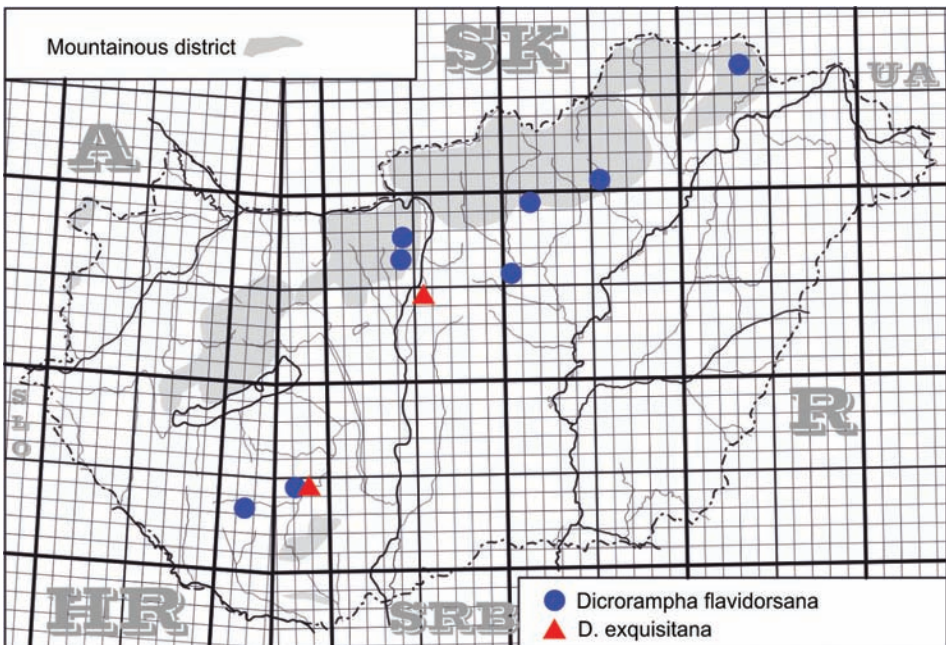


Fig. 7: Recent distribution area of *Dichrorampha flavidorsana* and *D. exquisitana* in Hungary

The species occurs from western Siberia to Iberian Peninsula. The flight period is in one generation from June to August. The larva oligophagous on *Chrysanthemum leucanthemum* and *Ch. vulgare*. Habitat in Hungary: rich fens, eu- and mesotrophic meadows and tall herb communities; colline and montane hay meadows, acid grasslands and heaths; thermophilous woodland fringes; semi-natural vegetation of abandoned vineyards and orchards and trampled swards.

Dichrorampha vancouverana McDunnough, 1935 (= *gueneana* Obraztsov, 1953) – Material examined: Dombóvár, Gunaras, 1 ex, 12-23.07.1999, gen. prep. F. Groenen, No. 2008. Rare and local in Transdanubian Hills (FAZEKAS, 2001, 2002; SZABÓKY 2000): only from Villány Hills, in calcareous open rock grasslands. The occurrence is uncertain in Somogy County (FAZEKAS 2002). Sporadic and xerothermophilous species in Hungary: Zempléni Mts, Bükk Mts, Vértes Mts and Szigetköz area.

Eana incanana (Stephens, 1852) – Material examined: Dombóvár, Gunaras, 1♂, 05-15.06.2003, gen. prep. Schreurs, No. 901. Known only in one locality in Transdanubian Hills: from Kárász, in kitchen gardens and waterside and fen tall herb communities (FAZEKAS 2002). Distribution in Hungary: Bükk Mts, Mátra Mts (Sár-hegy), Bakony Mts (Tihany), Great Hungarian Plain (Sárvíz areas [salt meadows] and Jászság areas [sand steppes]).

Grapholita delineana (Walker, 1863) – Material examined: Dombóvár, Gunaras, 1 ex, 26.07. – 06.08.2010, det. F. Groenen. Only a single record published from Transdanubian Hills (FAZEKAS 2002): from Mecsek Mountains (Pécs-Vasas), in oak-hornbeam woodland associations. The species is sporadically distributed in Hungary: Bakony Mts, Vértes Mts and Mátra Mts.

Hedya ochroleucana (Frölich, 1828) – Material examined: Dombóvár, Gunaras, 1♂, 15.06.2003; 1♀, 28.07.2010; 1♂, 08.08.2008. Localities in southern Transdanubia: only two data (Komló, Pécs) in Mecsek Mountains (FAZEKAS 2002). Sporadically distributed in Hungary: Bükk and Mátra Mountains (ÁCS & SZABÓKY 1993, BUSCHMANN 2004).

Pelochrista decolorana (Freyer, 1842) – Material examined: Dombóvár, Gunaras, 1♂, 5-15.06.2003, gen. prep. Schreurs, No. 874. In the Transdanubian Hills known only from the Somogy county (FAZEKAS 2002). Fairly widely distributed in Hungary: North Hungarian Mountains and Great Hungarian Plain (Sárvíz and Jászság regions).

Pelochrista modicana (Zeller, 1847) – Material examined: Dombóvár, Gunaras, 1♂, 25-31.08.1998, gen. prep. Schreurs, No. 898. New to the fauna of the Transdanubian Hills. There is only one reliable reference from the area of Hungary from July 1978 and June 1999 when Pastorális and Szeőke caught two specimens in Vértes Mountains (PASTORÁLIS & SZEŐKE 2011). *P. modicana* is apparently very rare and local in Hungary, but could be overlooked and therefore careful search should be made.

PYRALIDAE

Ancylois oblitella (Zeller, 1848) – Material examined: Dombóvár, Gunaras, 2♀, 1-12.09.2003, det. J. Asselbergs. Second record in the Transdanubian Hills (see FAZEKAS 1996, 2002). Widely distributed in much of Hungary (FAZEKAS 1996).

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References

- ÁCS, E. & SZABÓKY, CS. 1993: The Lepidoptera fauna of the Bükk National Park. – [in:] MAHUNKA, S. (ed): The fauna of the Bükk National Park I. Hungarian Natural History Museum, Budapest, 186–220.
- BUSCHMANN, F. 2004: A Mátra Múzeum molylepke-gyűjteménye II. Limacodidae – Tortricidae. – *Folia Historico Naturalia Musei Matraensis* 28: 219–242.
- BUSCHMANN, F., FAZEKAS, I., & PASTORÁLIS, G. 2011: A magyarországi Swammerdamia fajcsoport revíziója. [Revision of the Swammerdamia species-group in Hungary]. – *Microlepidoptera.hu* 3: 15–24.
- ELLIS, W. N. 2012: Bladmineerders van Europa/Leafminers of Europe. – www.bladmineerders.nl [visited on 30.03.2012]
- FAZEKAS, I. 1992: Records of the Cochylini from Hungary, Rumania and Bulgaria based on I. Balogh's collection (Lepidoptera: Tortricidae). – *Folia Entomologica Hungarica* 53: 45–50.
- FAZEKAS, I. 1994: A magyarországi makrorégiók Cochylini faunája (Lepidoptera: Tortricidae) I. A Dunántúli-dombság. – *Állattani Közlemények* 80: 35–56.
- FAZEKAS, I. 1996: Systematic catalogue of the Pyraloidea, Pterophoridae and Zygaenoidea of Hungary (Lepidoptera). – *Folia Comloensis, Suppl.*: 1–34.
- FAZEKAS, I. 2006: Beiträge zur Kenntnis der Pterophoriden-Fauna Ungarns, Nr. 9. Stenoptilia Hübner, 1825 Aufzeichnungen, Nr. 3: Stenoptilia-Fauna Ungarns (Microlepidoptera: Pterophoridae). – *Folia Historico Naturalia Musei Matraensis* 30: 231–245.
- FAZEKAS, I. 2008: Microlepidoptera Pannoniae meridionalis, VII. Faunisztikai és taxonómiai adatok Somogy megyéből (1.) Lepidoptera. [Microlepidoptera Pannoniae meridionalis, VII. Faunistical and taxonomical data from Somogy county (1.) SW Hungary]. – *Somogyi Múzeumok Közleményei* 18: 101–115.
- FAZEKAS, I. & SCHREURS, A. 2010: Microlepidoptera Pannoniae meridionalis, VIII. Data to knowledge of micro-moths from Dombóvár (SW Hungary) (Lepidoptera). – *Natura Somogyiensis* 17: 273–292.
- GAEDIKE, R. 2012: Fauna Europaea; Epermenidae. In Karsholt, O. & Nieuwerkerken, E. J. van (eds.): *Fauna Europaea; Lepidoptera, Moths. Fauna Europaea version 2.4*, <http://www.faunaer.org> [visited on 30.03.2012]
- GOZMÁNY, L. 1958: Molylepkék IV. Microlepidoptera IV. – *Fauna Hungariae* XVI., 5: 295 pp
- GOZMÁNY, L. 1968: Hazai molylepkéink magyar nevei. – *Folia Entomologica Hungarica* 21: 225–296.
- GOZMÁNY, L. & SZABÓKY, CS. 1986: Microlepidoptera. [in:] Mahunka S. (ed.): The fauna of the Kiskunság National Park. – Akadémia Kiadó, Budapest, pp. 247–299.
- HORVÁTH, GY. 1993: Adatok a Szigetköz lepkefaunájának ismeretéhez (Lepidoptera). [Data to the knowledge of the Lepidopterous fauna of Szigetköz]. – *Folia Entomologica Hungarica* 54: 170–185.
- LEPIFORUM E. V. 2012: Bestimmungshilfe für die in Europa nachgewiesenen Schmetterlingsarten. – <http://www.lepiforum.de> [visited on 31.03.2012]
- LESAR, T. & GOVEDIČ, M. 2010: Check list of Slovenian Microlepidoptera. – *Natura Sloveniae* 12 (1): 35–125.
- MATTHEWS, D. L. & LOTT, T. A. 2005: Larval hostplants of the Pterophoridae. – *Memoirs of the American Entomological Institute* 76: 1–324.
- MEY, W. 2012: Fauna Europaea; Bucculatricidae. In Karsholt, O. & Nieuwerkerken, E. J. van (eds.): *Fauna Europaea; Lepidoptera, Moths. Fauna Europaea version 2.4*, <http://www.faunaer.org> [visited on 30.03.2012]
- PASTORÁLIS, G., SZABÓKY, CS. & TÖKÁR, Z. 2000: Molyfaunisztikai újdonságok IV. – *Folia Entomologica Hungarica* 61: 278–280.

- PASTORÁLIS, G. 2011: A Magyarországon előforduló molylepkefajok jegyzéke, 2011. A checklist of the Microlepidoptera occurring in Hungary, 2011 (Lepidoptera: Microlepidoptera). – *Microlepidoptera.hu* 3: 37–136.
- PASTORÁLIS, G. & SZEÖKE, K. 2011: A Vértes-hegység molylepke kutatásának eddigi eredményei. [The summary of the research results of the micro-moths of Vértes Mountains] (Lepidoptera, Microlepidoptera). – *e-Acta Naturalia Pannonica* 2 (1): 53–100.
- PERRETTTE, L. & SPILL, F. 2008: Une espèce nouvelle de Lépidoptère en France découverte dans les Vosges du Nord: *Blastobasis huemeri* (Sinev, 1993). – *Ann. Sci. Rés. Bios. Trans. Vosges du Nord – Pfälzerwald* 14: 191–193.
- SCHOLZ, A. 1996: Zur Identität von *Epermenia falciformis* (Haworth, 1828) (Lepidoptera: Epermeniidae). – *Nota lepidopterologica* 18 (3/4): 289–296.
- SINEV, S. YU. 1993: Novye i maloizvestnye vidy molej-blastobazid Palearktiki (Lepidoptera, Blastobasidae). (New and little known species of Blastobasid moths (Lepidoptera, Blastobasidae) of Palearctic). – *Entomologicheskoe Obozrenie*, 72: 368–377.
- SINEV, S. YU. 2012: Fauna Europaea; Blastobasidae. In Karsholt, O. & Nieuken, E. J. van (eds.): *Fauna Europaea; Lepidoptera, Moths. Fauna Europaea version 2.4*, <http://www.faunaeur.org> [visited on 05.04.2012]
- SZABÓKY, Cs. 1982: A Bakony molylepkéi. – A Bakony természettudományi kutatásának eredményei, *BTM Zirc*, XV: 1–43.
- SZABÓKY, Cs. 1983: A Dél-Dunántúl molylepkéi I. Nattán Miklós molylepke-gyűjteménye (Lepidoptera). – *A Janus Pannonius Múzeum Évkönyve* 27: 15–35.
- SZABÓKY, Cs. 1985: A Barcsi borókás molylepkefaunája II. (Lepidoptera). – *Dunántúli Dolgozatok Természettudományi Sorozat* 5: 234–236.
- SZABÓKY, Cs. 2000: A Villány-hegység molylepkéi (Microlepidoptera). – *Dunántúli Dolgozatok Természettudományi Sorozat*, Pécs, 10: 297–307.
- SZABÓKY, Cs. 2004: A hárslevél-sátorosmoly *Phyllonorycter issikii* Kumata, 1963 (Lepidoptera: Gracillariidae) terjedése Magyarországon. – *Növényvédelem* 40 (6): 301.
- SZABÓKY, Cs. 2009: Pécsely lepkéi (Lepidoptera). – *Folia Musei Historico-Naturalis Bakonyiensis* 26: 111–140.
- SZÓCS, J. 1973: Újabb molylepkék a magyar faunában. – *Folia Entomologica Hungarica* 26: 155–164.
- TOKÁR, Z., RICHTER I., PASTORÁLIS, G. & SLAMKA, F. 2002. New and interesting records of Lepidoptera of Slovakia from the years 1998–2001. – *Entomofauna carpathica* 14 (1–2): 1–11.
- ÜNGER, M. 2012: Moths and butterflies of Sweden. – www.lepidoptera.se [visited on 31.03.2012]

