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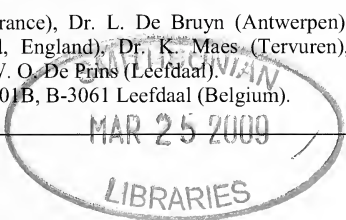
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## New data on the Rhopalocera (Lepidoptera) of Dobrogea (south-eastern Romania)

Vlad Dincă, Sylvain Cuvelier, Levente Székely & Roger Vila

**Abstract.** We provide new data on the Rhopalocera of Dobrogea (south-eastern Romania), a region that represents a meeting point for faunistic elements from Central Europe, Balkans, Asia Minor and the Russian steppe. *Lycaena tityrus* (Poda, 1761) and *Neptis sappho* (Pallas, 1771) are rediscovered in Dobrogea after 142 years and are recorded for the first time in the south of the province. New faunistic data as well as ecological and conservation aspects are also provided for several species with very few records in Dobrogea, such as *Zerynthia polyxena* ([Denis & Schiffmüller], 1775), *Brenthis daphne* (Bergsträsser, 1780), *Brenthis ino* (Rottemburg, 1775), *Brenthis hecate* ([Denis & Schiffmüller], 1775), *Euphydryas maturna* (Linnaeus, 1758), *Hipparchia syriaca* (Staudinger, 1871), etc. The survival of *Tomares nogelii* (Herrich-Schäffer, 1851) in Romania is discussed as directed research didn't allow for the discovery of any population both in previously known or potential sites. The presence of *Carcharodus floccifera* (Zeller, 1847) in Dobrogea is confirmed by genitalia and new data is presented that indicates its probable sympatry with *Carcharodus orientalis* Reverdin, 1913 in this province. In addition, *C. orientalis* is recorded in Romania for the first time outside Dobrogea, namely from neighbouring south-eastern Moldavia.

**Samenvatting.** We brengen nieuwe gegevens over de Rhopalocera van Dobrogea (Zuidoost-Roemenië), een regio die een ontmoetingspunt is van faunistische elementen van centraal Europa, de Balkan, Klein-Azië en de Russische steppe. *Lycaena tityrus* (Poda, 1761) en *Neptis sappho* (Pallas, 1771) worden voor het eerst na 142 jaar terug meldt uit Dobrogea en voor het eerst uit het zuiden van de provincie. Er worden nieuwe faunistische gegevens alsook aspecten over ecologie en natuurbehoud verstrekt voor meerdere soorten met zeer weinig meldingen uit Dobrogea, zoals *Zerynthia polyxena* ([Denis & Schiffmüller], 1775), *Brenthis daphne* (Bergsträsser, 1780), *Brenthis ino* (Rottemburg, 1775), *Brenthis hecate* ([Denis & Schiffmüller], 1775), *Euphydryas maturna* (Linnaeus, 1758), *Hipparchia syriaca* (Staudinger, 1871), enz. Het voortbestaan van *Tomares nogelii* (Herrich-Schäffer, 1851) in Roemenië wordt besproken daar gericht onderzoek niet heeft toegelaten om een populatie te vinden en dit zowel op vroeger gekende als op potentiële plaatsen. De aanwezigheid van *Carcharodus floccifera* (Zeller, 1847) in Dobrogea wordt bevestigd door genitalia en nieuwe gegevens worden voorgesteld die wijzen op het waarschijnlijk sympatrisch voorkomen in deze provincie met

*Carcharodus orientalis* Reverdin, 1913. Daarnaast wordt *C. orientalis* uit Roemenië voor het eerst gemeld buiten Dobrodgea namelijk uit het aanpalende zuidoostelijke Moldavië.

**Résumé.** Nous apportons des nouvelles données concernant les Rhopalocera de la Dobrodgea (Sud-Est de la Roumanie), une région qui représente un point de réunion d'éléments faunistiques de l'Europe centrale, les Balkans, l'Asie Mineure et la steppe Russe. *Lycaena tityrus* (Poda, 1761) et *Neptis sappho* (Pallas, 1771) sont enregistrés pour la première fois depuis 142 ans de la Dobrodgea et pour la première fois du Sud de la province. Des nouvelles données faunistiques ainsi que des aspects écologiques et concernant la conservation de la nature, sont fournies pour plusieurs espèces avec très peu de données de la Dobrodgea comme *Zerynthia polyxena* ([Denis & Schiffermüller], 1775), *Brenthis daphne* (Bergsträsser, 1780), *Brenthis ino* (Rottemburg, 1775), *Brenthis hecate* ([Denis & Schiffermüller], 1775), *Euphydryas maturna* (Linnaeus, 1758), *Hipparchia syriaca* (Staudinger, 1871), etc. La survie de *Tomares nogelii* (Herrich-Schäffer, 1851) en Roumanie est discutée car des recherches ciblées n'ont pas permis de trouver une population aussi bien dans des sites qui étaient anciennement connus que dans des sites potentiels. La présence de *Carcharodus floccifera* (Zeller, 1847) de la Dobrodgea est confirmée par les genitalia et des nouvelles données indiquent la cohabitation probable dans cette province avec *Carcharodus orientalis* Reverdin, 1913. De plus *C. orientalis* est mentionné pour la première fois de la Roumanie hors de la Dobrodgea, à savoir du proche Sud-Est de la Moldavie.

**Rezumat.** Sunt prezentate noi date referitoare la fauna de Rhopalocera a Dobrogei (sud-estul României), o regiune care reprezintă un punct de întâlnire a numeroase elemente faunistice din Europa Centrală, Balcani, Asia Mică și stepele rusești. *Lycaena tityrus* (Poda, 1761) și *Neptis sappho* (Pallas, 1771) sunt redescoperite în Dobrogea după 142 de ani și sunt totodată semnalate pentru prima dată din sudul provinciei. Noi date faunistice precum și aspecte legate de ecologie și conservare sunt prezentate pentru mai multe specii cu foarte puține semnalări din Dobrogea, precum *Zerynthia polyxena* ([Denis & Schiffermüller], 1775), *Brenthis daphne* (Bergsträsser, 1780), *Brenthis ino* (Rottemburg, 1775), *Brenthis hecate* ([Denis & Schiffermüller], 1775), *Euphydryas maturna* (Linnaeus, 1758), *Hipparchia syriaca* (Staudinger, 1871), etc. Este discutată situația lui *Tomares nogelii* (Herrich-Schäffer, 1851) în România, întrucât cercetări direcționate nu au permis identificarea nici unei populații atât în zone deja cunoscute cât și potențiale. Prezența lui *Carcharodus floccifera* (Zeller, 1847) în Dobrogea este confirmată pe baza analizei armăturii genitale și sunt oferite noi date care indică că, în această provincie, specia este probabil simpatrică cu *Carcharodus orientalis* Reverdin, 1913. În plus, *C. orientalis* este semnalat în România pentru prima dată din afara Dobrogei, și anume din sud-estul Moldovei.

**Key words:** Romania – Rhopalocera – Dobrogea – distribution – habitat – conservation.

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## Introduction

Dobrogea represents a historical region shared by Romania and Bulgaria, being bordered by the lower Danube River to the west and north, the Black Sea to the east and the southern border of the administrative Bulgarian regions of Dobrich and Silistra to the south (Fig. 1).

The Romanian part of Dobrogea includes the Danube Delta and covers a total area of about 15.500 km<sup>2</sup>. It is divided in two counties: Tulcea in the north and Constanța in the south (Fig. 2). The altitudes in Dobrogea range from sea level in the Danube Delta and along the Black Sea coast, to 467 m in the Măcin Mountains, with most areas rising at 20–200 m above sea level. Although milder

than in most other parts of Romania, the climate is still temperate continental with an average temperature of about 10.6–11°C in the north and above 11°C in the south (Rákósy & Székely 1996, Rákósy & Wieser 2000, Székely 2006). Dobrogea is one of the driest regions of Romania, with average rainfall values of about 450 mm/year in the Măcin Mountains (Rákósy & Wieser 2000), 330–440 mm/year in the Danube Delta (Székely 2006) and 350–400 mm/year in southern Dobrogea (Rákósy & Székely 1996). Depending on the year, these values might sometimes substantially increase (up to 600 mm/year in the Măcin Mountains) (Rákósy & Wieser 2000) or decrease (less than 150 mm/year in parts of the Danube Delta and less than 200 mm/year in southern Dobrogea) (Rákósy & Székely 1996, Székely 2006).



Fig. 1.– General map of Romania and its historical regions, indicating the position of the Romanian and Bulgarian parts of Dobrogea. Black dots – Locations outside Dobrogea discussed in the paper. Letters refer to the localities in table 1.

The most notable geographic formations in Dobrogea are the Danube Delta and the Măcin Mountains, both lying in the northern part of the province (Fig. 2). While the Danube Delta represents the youngest Romanian territory (8.000–10.000 years old), the Măcin Mountains were formed during the Hercinic orogenesis (about 350 million years ago) and are some of the oldest mountains in Europe.



Fig. 2.– Map of the Romanian part of Dobrogea indicating the localities discussed in this paper. Numbers refer to the localities in table 1.

Belonging to the stepic eco-region, Dobrogea harbours a particular flora and fauna with many elements that are unique for Romania and even Europe. Rákossy & Wieser (2000) referred to Măcin Mountains as to a veritable bridge between Central Europe, the Balkans, Asia Minor and the Russian steppe. Given its geographic position and species composition, we would extend this affirmation to the entire Dobrogea. Of particular biogeographical interest are the Russian steppe elements or the pontic elements from Asia Minor that reach Dobrogea and in many cases do not infiltrate deeper into Western Europe.

As a consequence of its particular flora and fauna, several parts of Dobrogea are now declared nature reserves, including a national Park (Măcin Mountains)

and a biosphere reserve comprising the second largest delta in Europe (the Danube Delta).

Especially since the beginning of the last century, Dobrogea has been studied by many scientists who focused on various taxonomical groups, including the Lepidoptera. The first data on the Lepidoptera of Dobrogea come from Josef Mann (1866) who collected interesting material in the northern part of the province. Since then, many entomologists studied various parts of Dobrogea and their publications pointed out the uniqueness of the species assemblages occurring in many parts of this region. Among the most active lepidopterists in the region we mention: A. Ostrogovich, A. Caradja, A. Popescu-Gorj, I. Drăghia, E. Niculescu, F. König, M. Skolka, D. Ruști, M. Stănescu, C. Bere, M. Goia, Z. Kovács & S. Kovács, L. Rákosy, L. Székely, etc. As a result, many Lepidoptera were reported for the first time in Romania based on material collected in Dobrogea, among which several Rhopalocera such as *Carcharodus orientalis* Reverdin 1913, *Zerynthia (Allancastria) cerisyi ferdinandi* Stichel 1907, *Euchloe ausonia taurica* Röber, [1907], *Tomares nogelii dobrogensis* Caradja, 1895, *Pseudophilotes bavius egea* Herrich-Schäffer, 1852, *Melitaea punica telona* Fruhstorfer, 1908, *Hipparchia volgensis delattini* Kudrna, 1975.

Three recent major studies summarize most of the Lepidoptera data previously published about Dobrogea, while adding original data: Rákosy & Székely (1996), Rákosy & Wieser (2000) and Székely (2006).

Nevertheless, the fauna of Dobrogea is still not sufficiently studied from a lepidopterological point of view as fairly large areas were never visited by lepidopterists and many of the old records concerning a good number of taxa have never been confirmed. The records of Mann (1866) provide one of the best examples because many of them were never confirmed since then, including the following species: *Parnassius apollo* (Linnaeus, 1758), *Hamearis lucina* (Linnaeus, 1758), *Lycaena tityrus* (Poda, 1761), *Lycaena alciphron* (Rottemburg, 1775), *Lycaena hippothoe* (Linnaeus, 1761), *Cupido osiris* (Meigen, 1829), *Eumedonia eumedon* (Esper, 1780), *Aricia (Ultraaricia) anteros* (Freyer, 1838), *Cyaniris semiargus* (Rottemburg, 1775), *Polyommatus (Plebicula) dorylas* ([Denis & Schiffermüller], 1775), *Euphydryas aurinia* (Rottemburg, 1775), *Limnitis reducta* Staudinger, 1901, *Neptis sappho* (Pallas, 1771), *Pyronia tithonus* (Linnaeus, 1767), *Erebia aethiops* (Esper, 1777), *Erebia medusa* ([Denis & Schiffermüller], 1775), etc.

The aim of this study is to improve the knowledge on the Rhopalocera fauna of Dobrogea and neighbouring areas by adding original data on the distribution, ecology and conservation status for several taxa that are poorly known from these regions.

Table 1. Studied localities of Dobrogea and neighbouring areas (numbers correspond to the localities in figure 2; letters correspond to the localities in figure 1).

Symbol	Locality	Alt. (m)	County	Comments
1	2 km E of Smârdan	5	Tulcea	
2	Greci (Morsu Valley-Șaua Țuțuiatului)	150–220	Tulcea	W Măcin Mountains National Park
3	Nifon (Măcin Mts.)	130	Tulcea	E Măcin Mountains National Park
4	Cerna	80–120	Tulcea	SW Măcin Mountains National Park
5	3 Km E of Slava Rusă (Babadag forest)	130	Tulcea	Protected area of Babadag forest
6	10 Km S of Babadag (Babadag forest)	115	Tulcea	Protected area of Babadag forest
7	Gura Dobrogei	40-80	Constanța	Protected area
8	Canaraua Fetei (Băneasa)	20-90	Constanța	Protected area
9	Esechioi forest	130	Constanța	Protected area
Z	ca. 9 km E Zorleni	240	Vaslui	
O	Oancea	10	Galați	
G	Gârboavele forest	90	Galați	Protected area

## Discussion

### *Zerynthia polyxena* ([Denis & Schiffermüller], 1775)

Material. > 20 last instar larvae, Canaraua Fetei (Constanța county), 7.vi.2008.

The species was recently rediscovered in Dobrogea after 80 years and reported for the first time from the southern part of the province, where it is sympatric with *Zerynthia (Allancastria) cerisyi ferdinandi* Stichel, 1907 (Dincă & Vila 2008). The record was based on larvae found feeding on *Aristolochia clematitis*. In order to eliminate any possible confusion with larvae of *Z. cerisyi ferdinandi*, the identification was confirmed by DNA-based identification. Nevertheless, given the low number of larvae observed (five) and the uniqueness of the record, it was not possible to prove whether in Canaraua Fetei there is a more or less stable population or only an isolated case of ovoposition by a vagrant female (Dincă & Vila 2008).

On the 7<sup>th</sup> of June 2008, in Canaraua Fetei (Fig. 3), we found more than 20 last instar larvae of *Z. polyxena* feeding on *A. clematitis*. Some of the larvae were found on exactly the same group of *A. clematitis* as the ones recorded in 2007, while an even larger group was on a different but nearby patch of plants. All 12 collected larvae pupated successfully and are currently alive (adults should emerge in spring 2009). It is worth mentioning that, although *A. clematitis* is very well represented on different parcels in Canaraua Fetei, many other groups of *A. clematitis* were inspected without results. Thus, the larvae of *Z. polyxena* seem to be very localized and fairly difficult to find unless a thorough search is done.

With these new data, *Z. polyxena* can be considered a resident in Canaraua Fetei, flying at the same site as *Z. cerisyi*, but most likely about a month earlier. No larvae of *Z. cerisyi* were found on the same date, as this species flies between the second week of May and first days of June (Rákósy & Székely 1996).

### ***Euchloe ausonia* (Hübner, [1803])**

Material. 1 specimen, ca. 10 km S of Babadag locality (Babadag forest, Tulcea county), 5.vi.2008; 5 specimens, Gura Dobrogei (Constanța county), 5.vi.2008; 1 specimen, Esecchioi forest (Constanța county), 7.vi.2008.

In July 1954 it was collected for the first time in the Romanian part of Dobrogea (one female) from Niculițel (northern Dobrogea) (Niculescu 1963), and a few years later from Canaraua Fetei (SW Dobrogea) (Popescu-Gorj 1959). The species is currently known in Romania only from Dobrogea:

Southern Dobrogea: Canaraua Fetei (Popescu-Gorj 1959, Rákósy & Székely 1996, Dincă & Vila 2008), Oltina, Comorova (Popescu-Gorj & Drăghia 1967), Hagieni (Popescu-Gorj & Drăghia 1964, Popescu-Gorj & Drăghia 1967, Skolka 1994, Bálint & Székely 1995, Rákósy & Székely 1996), Fântânița (Skolka 1994);

Northern Dobrogea: Niculițel (Niculescu 1963).

The specimen collected by us in Babadag forest represents the second record of this species in northern Dobrogea after 54 years. Moreover, we found the species to be fairly common in central Dobrogea (Gura Dobrogei), from where there are no previous records. Esecchioi forest also represents a new locality for *E. ausonia* in southern Dobrogea.

It is worth mentioning that certain authors (Niculescu 1963, Popescu-Gorj & Drăghia 1964, Skolka 1994) cited the species from Tulcea (northern Dobrogea), based on the record of Mann (1866). Mann cited “*Antocharis Belia* Esp.” and it is unclear if he referred to *Anthocharis euphenoides* (Staudinger, 1869), a western Mediterranean species unlikely to be present in Dobrogea, or to *E. ausonia*. As a matter of fact, in older literature the complex *ausonia-cramerii* was sometimes cited as *Papilio belia* Cramer [1782] (Rákósy *et al.* 2003) or as *Euchloe belia gigantea* Caradja, 1931 (Popescu-Gorj & Drăghia 1964).

This species prefers open areas (often rather ruderal) and is a fast flyer with considerable dispersion ability, so that it is likely to be more widespread at least in Dobrogea. Although listed as endangered by Rákósy (2003), with the new available data on its distribution and abundance, we consider it vulnerable at national level.

### ***Lycaena tityrus* (Poda, 1761)**

Material. 1♂, 1♀, Canaraua Fetei (Constanța county), 25–26.ix.2006; > 20 specimens observed, Canaraua Fetei (Constanța county), 30.ix–2.x.2007; 5♂, Esecchioi Forest (Constanța county), 29.vi.2008.

*Lycaena tityrus* is a fairly widespread and common species in Romania, being recorded from all the country's historical regions (Rákósy *et al.* 2003). Nevertheless, the butterfly has been recorded from Dobrogea (northern part)

only by Mann (1866) who cites it as "*Polyommatus Dorilis* Hufn.". Mann mentions he found the species to be relatively common in May and July, without indicating exact localities. *Lycaena tityrus* was later collected by Ostrogovich from Balchik (end of July 1928) (Popescu-Gorj 1964), in the Bulgarian part of Dobrogea. The presence of this species in Dobrogea was considered as requiring reconfirmation (Skolka 1994).

During the autumns of 2006 and 2007, we encountered the species in Canaraua Fetei, the butterfly being particularly abundant at the end of September 2007. These observations, together with the specimens collected at Esechioiu forest (Fig. 4), represent the first records for the south of Dobrogea, and the second citation from the entire province after 142 years.

### ***Tomares nogelii* (Herrich-Schäffer, 1851)**

An extremely local species considered as critically endangered in Romania (Rákosy 2003). According to some authors (Tolman & Lewington 1997, Rákosy & Wieser 2000, Rákosy *et al.* 2003), in Romania it is represented by the subspecies *dobrogensis* Caradja, 1895, while other authors (Van Oorschot & Wagener 2000, Tshikolovets 2003) list it under the nominotypical subspecies. *Tomares nogelii* was recorded for the first time in Romania by Mann (1866) from the surroundings of Tulcea (northern Dobrogea). A few more specimens were found in the same area during the 1970's (Van Oorschot & Wagener 2000). The species was also known to survive near Galați (Gârboavele forest, south-eastern Moldavia), from where it has been collected by several lepidopterists such as F. König (Stănescu 1995) and V. Olaru (Marcu & Rákosy 2002). Nevertheless, since the late 80's, the species has apparently vanished from both Gârboavele forest and the surroundings of Tulcea.

The very local character of *T. nogelii* is mainly related to its larval food plant, *Astragalus ponticus* (Fabaceae). This plant is rare and localized in Romania, being almost exclusively recorded from the south-eastern part of Romania (south-eastern Moldavia, Dobrogea and south-eastern Muntenia) (Oprea 2005).

From 2<sup>nd</sup> to 7<sup>th</sup> of June 2008, we undertook field research in an attempt to find *T. nogelii* in south-eastern Romania. We directed our attention to already known or potential areas for *A. ponticus*: Moldavia – surroundings of Zorleni (Vaslui county), Buciumeni forest (Bacău county), Oancea (Prut river banks, Galați county), Gârboavele forest (Galați county); Dobrogea – parts of Măcin mountains and their surroundings, Smârdan (Danube river banks), Babadag forest, and Gura Dobrogei.

We found *A. ponticus* in two already known locations, namely Gârboavele and Babadag forests. The plant was poorly represented in Babadag (3-4 individuals). At Gârboavele forest, the historical site for *T. nogelii*, we counted about 15 plants gathered in 3 small groups (Fig. 5). Although the moment was correct according to the known phenology of *T. nogelii* (end of May - first half of June) and the plants had several buds ready to open, we couldn't observe any adult or larvae.



The causes for the decline of *T. nogelii* in Romania are not clear, but at least the following factors might have played a significant role:

- The Romanian populations lie at the western limit of the species' range in Europe.

- Although representing a Natura 2000 site, large parts of Gârboavele forest look fairly disturbed as consequence of weekend tourism, uncontrolled grazing and lack of proper management. The ecotone habitats near the forest borders are either inexistent (agricultural fields finishing under the trees), or are invaded by ruderal vegetation such as *Urtica* and *Cannabis*. Many parts are also overgrown by *Robinia* trees.

- Overcollecting possibly also played a role by weakening the very local populations. An example is the 80 specimens (62♂ and 18♀) collected by only one lepidopterist (V. Olaru) at Gârboavele forest during three consecutive years (1970–1972) (Marcu & Rákósy 2002).

Another interesting phenomenon is the apparently temporary occurrence of *A. ponticus* in certain areas. In August 2007, we identified numerous healthy plants near Smârdan (Tulcea county), at about 10 m from the Danube's shores. Visiting the same place in the beginning of June 2008, we had the surprise to see that none of these plants survived there, the area being overgrown by very tall weeds. This might be due to the fact that the Danube's shores are often flooded, so that the local vegetation is often represented by opportunistic species with ephemeral existence.

Given the very local character of the plant, it is not impossible that isolated colonies of *T. nogelii* might still survive in the country. More directed studies are necessary in order to clarify the status of both *T. nogelii* and *A. ponticus* in the country.

### ***Lampides boeticus* (Linnaeus, 1767) & *Leptotes pirithous* (Linnaeus, 1767)**

Material. *Lampides boeticus*. > 10 specimens, Nifon (Tulcea county), 2.viii.2007; 3 specimens, Smârdan (Tulcea county), 3.viii.2007.

*Leptotes pirithous*. 7♂, 2♀, Canaraua Fetei (Constanța county), 24–27.ix.2006; > 500 specimens observed, Canaraua Fetei (Constanța county), 30.ix–2.x.2007; 2 specimens, Smârdan (Tulcea county), 3.viii.2007; 1♂, Periprava (Danube Delta, Tulcea county), 24.viii.2007; > 10 specimens, Râșova (Constanța county), 3.x.2007.

Both species are considered as migrants in Romania (Rákósy 2003), where they have been cited sporadically and in low numbers, especially from the south of the country (e.g. Mann 1866, Popescu-Gorj et al. 1972, König 1975, Ruști 1993, Skolka 1994, Stănescu 1995, Rákósy & Székely 1996, Székely 2005).

Nifon and Smârdan represent two new localities for *L. boeticus* in northern Dobrogea. Moreover, *L. boeticus* was fairly abundant near Nifon and we observed several other specimens (males and females) besides the ones collected.

Smârdan and Râșova represent two new localities for *L. pirithous* in Dobrogea, while from Canaraua Fetei, we record the species for the second time,

after having previously been mentioned based on one male collected in August 1992 (Rákósy & Székely 1996).

It is unclear if the high numbers of *L. pirithous* observed in Canaraua Fetei at the end of September 2007 (more than 500 specimens) represent a massive autumn migration, or are the offspring of summer migrants.

### ***Cupido (Everes) argiades (Pallas, 1771)***

Material. 1♂ (several other specimens observed), Nifon (Tulcea county), 2.viii.2007; 1♂, 1♀, Canaraua Fetei (Constanța county), 7.vi.2008.

In contrast to the high abundance and wide distribution of *C. argiades* in Romania (Rákósy et al. 2003), this species is rare and local in Dobrogea. Mann (1866) is the first who mentioned the species from northern Dobrogea, without providing locality details. The second citation was again from northern Dobrogea (1♂ collected on 19th of May 1917 in Babadag) (Fiebig 1927). Later on, *C. argiades* was recollected in Dobrogea only in 1993, this time from the south of the province (1♂ taken on 12th of May in Canaraua Fetei) (Rákósy & Székely 1996). Three more localities from northern Dobrogea were a few years later added by Rákósy & Wieser (2000), who reported the species as fairly common during July and beginning of August in Greci, Horia and Turcoaia (all in Tulcea county).

Therefore, Nifon represents the fifth known locality for *C. argiades* in northern Dobrogea, while the record from Canaraua Fetei confirms the presence of this species (Fig. 6) in southern Dobrogea, from where it was known only based on the male reported by Rákósy & Székely (1996).

### ***Brenthis daphne (Bergsträsser, 1780)***

Material. 1 specimen, Canaraua Fetei (Constanța county), 14.vi.1998; 3 specimens, Canaraua Fetei (Constanța county), 7.vi.2008.

This species is fairly widespread and locally abundant in the western, central and northern parts of Romania (Rákósy et al. 2003). Nevertheless, it seems to be very rare and local in Dobrogea from where it was recorded for the first time by Mann (1866) based on a male collected in the northern part of the province ("Marcosch", July 1865). Later it was reported by Fiebig (1927) from Babadag (in June 1917).

Although collected in 1931 by Ostrogovich from the Bulgarian part of Dobrogea (Balchik) (Popescu-Gorj 1964), *B. daphne* was only again collected in the Romanian part of Dobrogea in 1993 (four specimens taken at the end of June in Canaraua Fetei, southern Dobrogea) (Rákósy & Székely 1996). In May 1994, one male was collected in Babadag forest (Skolka 1994) and between 1995–1999 was found in Greci (Măcin Mts.) and Horia (at both locations rare during June) (Rákósy & Wieser 2000).

Therefore, the four specimens collected by us in Canaraua Fetei represent the second mention of *B. daphne* in southern Dobrogea and confirm the presence of this species near the Bulgarian border.

### ***Brenthis ino* (Rottemburg, 1775)**

Material. 1 specimen, 3 km E of Slava Rusă (Babadag forest, Tulcea county), 30.vi.2008.

Usually associated to damp meadows, *B. ino* has a fragmented distribution across the country's territory. In Dobrogea the species is particularly rare and it is currently known only from the northern part of the province. The first records from northern Dobrogea belong to Mann (1866) who reported *B. ino* from the surroundings of Ciucurova (Tulcea county). The presence of this species in Dobrogea was confirmed only in 1993, based on a male collected at the end of June in Babadag forest (Tulcea county) (Skolka 1994). The third and latest record of *B. ino* from Dobrogea belongs to Rákosy & Wieser (2000), who reported the butterfly from Horia (Tulcea county) as common during June.

The specimen collected by us at 3 km E of Slava Rusă represents the second record of *B. ino* from Babadag forest and the fourth record in all Dobrogea.

### ***Brenthis hecate* ([Denis & Schiffermüller], 1775)**

Material. 1 specimen, Cerna (Tulcea county), 15.vi.1986; 2 specimens, 3 km E of Slava Rusă (Babadag forest, Tulcea county), 5.vi.2008 (1 specimen), 30.vi.2008 (1 specimen);

Although it is fairly widespread in Transylvania and Banat, *B. hecate* is generally scarce in the south of the country, especially in Dobrogea. Mann (1866) reported the butterfly as common at Ciucurova and in the surroundings of Tulcea city (Tulcea county). After Mann's records, *B. hecate* was rediscovered in Dobrogea in 1999, based on two specimens collected at the beginning of June at Horia (Rákosy & Wieser 2000).

The three specimens collected by us from Cerna and Slava Rusă (Fig. 7) add two new localities to the previous three known from Dobrogea.

### ***Euphydryas maturna* (Linnaeus, 1758)**

Material. 1♂, 1♀, Canaraua Fetei (Constanța county), 25.vi.1993; 2♂, Canaraua Fetei (Constanța county), 3.vi.1995.

Although recorded from all Romania's historical regions (Rákosy *et al.* 2003), *E. maturna* is a very localized species which is occasionally abundant in suitable habitats. In Dobrogea the species is known based on three very old records coming from the northern part of the province: Mann (1866) mentioned the species from the forested areas around Telița (end of May) and Ciucurova (beginning of June) (both in Tulcea county), while Fiebig (1927) mentioned it from Babadag (1♂ on 5<sup>th</sup> of June 1917). In addition to these data, in the Catalogue of the Romanian Lepidoptera (Rákosy *et al.* 2003), *E. maturna* was listed as recorded recently from Dobrogea (after 1980), without further details.

Our records from Canaraua Fetei represent the first record of *E. maturna* from southern Dobrogea and the fourth locality known in the entire province. It is worth mentioning that *E. maturna* is known to be present in the Bulgarian part of Dobrogea, in the area of Suha Reka (Abadjiev & Beshkov 2007). This is a more than 62.000 ha sylvo-stepic and karstic mosaic that is in fact the southern continuation of Canaraua Fetei, formed in the dry valley of Suha river.

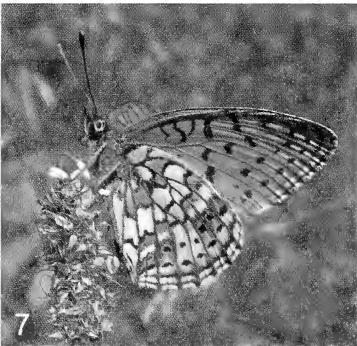
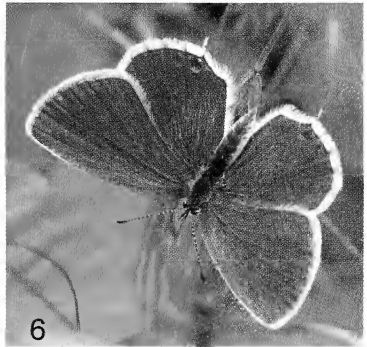
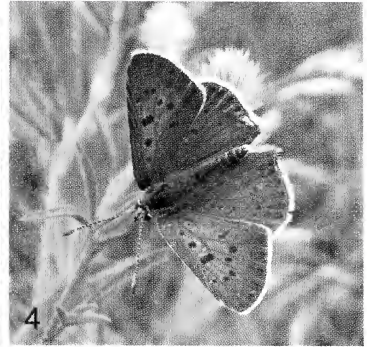


Fig. 3.– The protected area of Canaraua Fetei (7.vi.2008), one of the butterfly diversity hotspots in southern Dobrogea, Romania (photo V. Dincă).

Fig. 4.– Male of *Lycaena tityrus*, Romania, Esechioi forest, 29.vi.2008 (photo V. Dincă).

Fig. 5.– *Astragalus pouticus*, Romania, Gârboavele forest, 3.vi.2008 (photo V. Dincă).

Fig. 6.– Female of *Cupido (Everes) argiades*, Romania, Canaraua Fetei 7.vi.2008 (photo V. Dincă).

Fig. 7.– *Brenthis hecate*, Romania, 3 Km E from Slava Rusă (Babadag forest), 5.vi.2008 (photo V. Dincă).

Fig. 8.– Habitat of *Hipparchia syriaca* near Greci village (Romania, Măcin Mountains National Park), 1.vii.2008 (photo V. Dincă).

Suha Reka is considered to shelter the largest populations of *E. maturna* in Bulgaria (Abadjiev & Beshkov 2007) and it is rather surprising that the butterfly is so sporadic in the Romanian part (Canaraua Fetei). Mark-recapture studies have shown that, at least in patchy habitat areas, *E. maturna* displays low mobility levels, but displays a certain tendency of dispersing into new patches given proper connectivity (Wahlberg et al. 2002, Cizek & Konvicka 2005). On the other hand, it is worth mentioning that Canaraua Fetei together with Suha Reka represent some of the south-easternmost areas of occurrence for *E. maturna* in Europe (see Kudrna 2002). Further studies are needed in order to assess the status of *E. maturna* in the area of Canaraua Fetei and the population structure and dynamics in the whole area of Suha Reka.

Moreover, as *E. maturna* is protected by law in Romania (see Rákósy 2006) and is considered as vulnerable at national level (Rákósy 2003), detailed information on its distribution and conservation status in the country is urgently needed. In this context, the (probable) population from the protected area of Canaraua Fetei, being one of the southernmost occurring in Romania and in Europe, is of particular interest. We also find worth mentioning a previously unknown population discovered by the authors in the eastern part of Romania (Moldavia), at about 20 km from the border with the Republic of Moldavia. Several adults of *E. maturna* were observed flying in clearings along the forest border on 2<sup>nd</sup> of June 2008 in an area situated at about 9 km east of Zorleni (Vaslui county) (Fig. 1).

### *Neptis sappho* (Pallas, 1771)

Material. 2♀ (> 10 specimens observed), Canaraua Fetei (Constanța county), 26.ix.2004; 8–10 specimens observed, Canaraua Fetei (Constanța county), 24–27.ix.2006; 8–10 specimens observed, Canaraua Fetei (Constanța county), 30.ix–2.x.2007.

While *N. sappho* is generally well represented in most parts of Romania (Rákósy et al. 2003), from Dobrogea it has been recorded only by Mann (1866), who mentioned the butterfly from Telița and Tulcea (both in Tulcea county).

Our findings from Canaraua Fetei confirm the presence of *N. sappho* in Dobrogea and represent the first record of this species from the southern part of the province.

On the other hand, the late dates on which the specimens were observed at Canaraua Fetei are unusual. Some of the adults observed during three different years in Canaraua Fetei at the very end of September were relatively fresh (especially the females), while others were more obviously worn out.

Most authors state that in Europe the second brood of *N. sappho* ends in August (Tolman & Lewington 1997, Pamperis 1997, Lafranchis 2004, Kolev 2008), or in September (Higgins & Riley 1970, Beneš et al. 2002, Slamka 2004, Abadjiev 1995). Nevertheless, at least in some parts of Europe such as eastern Austria, adults of *N. sappho* have been observed flying until October, as a consequence of a prolonged second brood (Jutzeler et al. 2000). Niculescu (1965), referring to the general phenology of this butterfly, mentioned that its second brood covers the interval July–October. Thus, the most likely hypothesis

is that the specimens we observed at the end of September might belong to a very prolonged second brood. This might happen as a consequence of late ovipositions by females of the first brood, combined with favourable regional climatic conditions.

### ***Apatura metis* Freyer, 1829**

Material. 6♂, 2♀, 2 km E of Smârdan (Tulcea county), 3.viii.2007.

In Romania, the distribution of *A. metis*, formerly considered a subspecies of *Apatura ilia* ([Denis & Schiffermüller], 1775) (Niculescu 1965), follows mainly the Danube, including the delta. Although in Europe *A. metis* is considered a bivoltine species (Tolman & Lewington 1997, Tshikolovets 2003, Lafranchis 2004, Slamka 2004), its voltinism in Romania is controversial. Niculescu (1965) mentioned that *A. metis* is bivoltine (June, August) across all its Romanian distribution. Rákosy & Székely (1996) considered it as univoltine (June–July) in southern Dobrogea and bivoltine in the Danube Delta and the flooded areas of the Danube. Székely (2006) reported it as occasionally developing a partial second brood (August) in the Danube Delta. Dincă & Vila (2008) recorded the species from Southern Dobrogea (Canaraua Fetei) on the 22<sup>nd</sup> of May 2007 and suggested that *A. metis* has two broods in southern Dobrogea, similarly to the populations from the north of the province.

Near Smârdan the species seems to develop a vigorous population as, besides the collected specimens, we could observe several others flying in the canopy of the *Salix* flooded forests. With the exception of one female, all the specimens we collected were fresh, indicating that the species was at the peak of the flight period at the beginning of August. These data suggest that *A. metis* is bivoltine in Romania, flying probably between end of May – beginning of July and end of July–August, although partial overlaps between the two broods are not excluded.

### ***Kirinia roxelana* (Cramer, 1777)**

Material. 1♀ observed, Esecchio forest (Constanța county), 29.vi.2008.

*Kirinia roxelana* is classically known from the extreme south-west of Romania (a few areas around the Danube and Cerna Mountains) (Rákosy & Neumann 1997, Rákosy & Wieser 2000). In Dobrogea, the species was discovered recently and it is known from only two locations:

(1) The forested area around Horia (Tulcea county), from where Rákosy & Wieser (2000) mentioned two females found the 24th of July 1998.

(2) The Esecchio forest (Constanța county), from where the species was recorded by Dincă (2005) based on several males and females collected in June and July 2001.

The 29<sup>th</sup> of June 2008 we spent several hours in Esecchio forest trying to find specimens of *K. roxelana* and one female was observed resting on a *Quercus* trunk, at about three meters from the ground.

Although rare and localized, the species is likely to be more widespread in Dobrogea and in several other parts from southern Romania. Several areas of

Dobrogea are very similar to Esecioi forest and therefore may represent suitable habitats for *K. roxelana*. The butterfly may have been overlooked in such places because of its almost exclusive presence within the forest. As few butterfly species can be found in such areas, these were probably not well researched for Rhopalocera.

*Kirinia roxelana* seems to reach its northern Balkanic distribution limit in the south of Romania, with the northernmost locality at Horia (northern Dobrogea) (Rákosy & Wieser 2000). The records from neighbouring Ukraine were recently considered as requiring confirmation (Tshikolovets 2005).

### ***Hipparchia syriaca* (Staudinger, 1871)**

Material. 5♂, 10 km S of Babadag locality (Babadag forest, Tulcea county), 30.vi.2008, prep. genit. 677–679/Dincă; 30♂, 8♀ (> 300 observed specimens), Greci–Morsu Valley to Şaua Țuțuiatului (Măcin Mts., Tulcea county), 1.vii.2008, prep. genit. 670–674, 680–683/Dincă.

This species is known in Romania only from southern Banat and northern Dobrogea (Rákosy & Wieser 2000, Rákosy *et al.* 2003). In both regions the butterfly is considered to be data deficient (Rákosy 2003). In Dobrogea, *H. syriaca* is known from the area of Măcin Mountains (Greci and Horia), where it was reported as common in the dry rocky areas of the mountain (Rákosy & Wieser 2000).

The specimens collected by us at Babadag forest represent the third known locality for *H. syriaca* in Dobrogea and the southernmost record of this species in the region. The collecting site from Babadag is located at about 30 km south-east from Horia and at about 50 km south-east from Măcin Mountains (Fig. 2).

On the other hand, we found the species to be extremely abundant in Măcin Mountains, near Greci village, following the path through Morsu Valley until reaching Şaua Țuțuiatului. This area has a pronounced sylvo-stepic character, with sparse *Quercus* trees on a rocky (granite) substratum (Fig. 8). The butterflies manifested an identical behaviour to *Hipparchia fagi* (Scopoli, 1763), as they were often resting on the *Quercus* tree trunks (more rarely on the ground or rocky slopes) and it was common to see several specimens resting on the same tree.

*Hipparchia syriaca* is difficult to separate from *H. fagi* based on wing characters alone. Nevertheless, it can be easily identified through genitalia examination, especially based on the morphology of the Jullien organ, which has two wide lamellae each bearing 7–8 sclerified flat batons (Fig. 9). By comparison, the Jullien organ of *H. fagi* displays narrower lamellae, each bearing 3–5 slender batons (Fig. 10).

It is interesting that *H. fagi* was also reported from various parts of Dobrogea (e.g. Mann 1866, Skolka 1994), including the Babadag forest (Fiebig 1927, Skolka 1994) and Măcin Mountains (Rákosy & Wieser 2000). The two species might be sympatric in some areas of Dobrogea as this phenomenon was reported for example from parts of the Balkans (e.g. Bulgaria – Abadjiev 1993, Kolev 2008). Yet, the relationship between *H. syriaca* and *H. fagi* in Dobrogea is very

poorly known, as it is not clear how many of the records of *H. fagi* from this province were based on genitalia examination.



Fig. 9.– Jullien organ of male *Hipparchia syriaca*, ca. 10 km S from Babadag locality (Babadag forest, Tulcea county), 30.vi.2008. Prep. genit. no. 678/Dincă.



Fig. 10.– Right lamella of the Jullien organ of male *Hipparchia fagi*, surroundings of Dobraia (Caraș-Severin county), 30.vii.2007. Prep. genit. no. 669/Dincă.

*Hipparchia syriaca* might be more widespread in the southern parts of Romania, but its external similarity to *H. fagi* might have strongly limited the availability of reliable data concerning its general distribution in Romania. With the current data, it seems that *H. syriaca* reaches its northern Balkanic range limit in the north of Dobrogea (Măcin Mountains) (see also Kudrna 2002).

### ***Carcharodus orientalis* Reverdin, 1913 & *C. floccifera* (Zeller, 1847)**

Material. *Carcharodus orientalis*. 1♂, 2 km E Smârdan (Tulcea county), 3.viii.2007, prep. genit. 505/Dincă; 6♂, Gârboavele forest (Galați county), 3.vi.2008, prep. genit. 634–636, 648, 649, 654/Dincă; 1♂, Oancea (Galați county), 2.vi.2008, prep. genit. 645/Dincă; 1♂, 3 km NE Slava Rusă (Babadag forest, Tulcea county), 5.vi.2008, prep. genit. 653/Dincă; 5♂, Gura Dobrogei (Constanța county), 6.vi.2008, prep. genit. 650–652, 666, 702/Dincă.

*Carcharodus floccifera*. 3♂, Canaraua Fetei (Constanța county), 24.ix.2006 (1 specimen, prep. genit. 684/Dincă); 22.v.2007 (1 specimen, prep. genit. 448/Dincă); 7.vi.2008 (1 specimen, prep. genit. 646/Dincă).

Species recently recorded in Romania (Rákósy & Varga 2001) based on material collected in various localities from southern and northern Dobrogea, including the Danube Delta. The distribution of *C. orientalis* is very poorly known as the species is externally very similar to *C. floccifera* and reliable



identification requires genitalia examination. The following are the properly documented records for this species in Romania:

- Southern Dobrogea – Canaraua Fetei, Hagieni (Rákosy & Varga 2001), Dumbrăveni (Dincă & Vila 2008);
- Northern Dobrogea – Turcoaia and Horia (Rákosy & Varga 2001), Tulcea (Rákosy & Varga 2001), Greci (Rákosy & Varga 2001, Dincă & Vila 2008), Babadag (Dincă & Vila 2008);
- Danube Delta – Maliuc, Letea, Caraorman (Rákosy & Varga 2001).

During the last years, the authors collected several specimens of the *Carcharodus floccifera* / *orientalis* group from several localities in Dobrogea and southern Moldavia (Figs. 1, 2). After genitalia examination, the specimens proved to belong to *C. orientalis*. The records from Oancea and Gârboavele forest (both in Galați county, SE Moldavia) represent the first certain records of *C. orientalis* outside Dobrogea (Figs. 1, 11, 12).

Moreover, Oancea lies on the western shore of Prut river, exactly on the border between the Romanian historical region of Moldavia and the Republic of Moldavia. Because the species flies on the western side of the river and identical habitats are present on the eastern side, we consider very likely that *C. orientalis* is also present in the Republic of Moldavia, a country which has barely been studied (Kudrna 2002, Tshikolovets 2003). One new locality is also reported for northern Dobrogea (Smârdan), while Gura Dobrogei represents the first record of *C. orientalis* from the central part of Dobrogea.

On the other hand, it was not clear if both *C. orientalis* and *C. floccifera* are present in Dobrogea, as previous records of the latter (before 2001, when *C. orientalis* was not known from Romania) (e.g. Skolka 1994, Stănescu 1997) might very well refer in reality to *C. orientalis*. The three specimens collected by us in Canaraua Fetei, belong to *C. floccifera* (Fig. 13) and prove the presence of *C. floccifera* in Dobrogea. Moreover, because Rákosy & Varga (2001) mention *C. orientalis* from Canaraua Fetei, this might represent the first known Romanian locality where the species are sympatric. This phenomenon was reported, for example, from Greece, where *C. floccifera* and *C. orientalis* cohabitate between 1700–1800 m (Lafranchis 2003). A rather unusual aspect is that in Canaraua Fetei *C. floccifera* flies at very low altitude (20 m). This species usually flies in Romania in hilly and mountainous areas, preferring stream banks and more or less damp meadows.

According to our observations, the adults of *C. orientalis* usually fly along dust roads in the vicinity of forest or shrub areas (Babadag, Gârboavele, Gura Dobrogei, Canaraua Fetei, Dumbrăveni) but also in the vicinity of rivers where they prefer the areas along temporarily flooded ditches (Oancea, Smârdan).

As already stated by Rákosy & Varga (2001), we consider that *C. orientalis* might be present in several other parts of Romania, especially south of the Carpathians, but also in stepic parts of Transylvania.

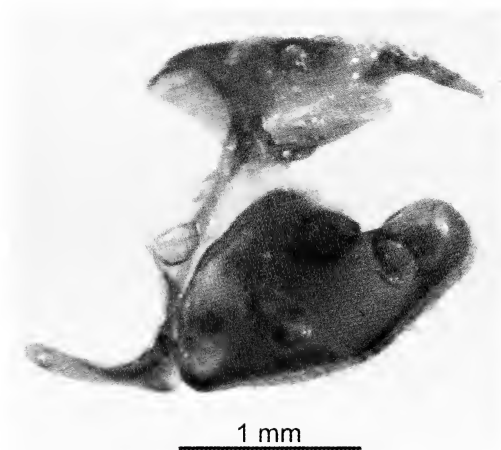


Fig. 11.– Lateral view of male genitalia of *Carcharodus orientalis*, Romania, Oancea, 2.vi.2008. Prep. genit. 645/Dincă.

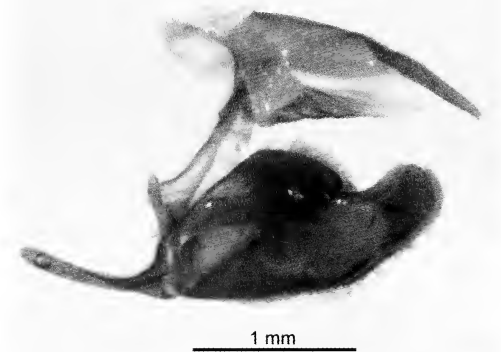


Fig. 12.– Lateral view of male genitalia of *Carcharodus orientalis*, Romania, Gârboavele forest, 3.vi.2008. Prep. genit. 648/Dincă.

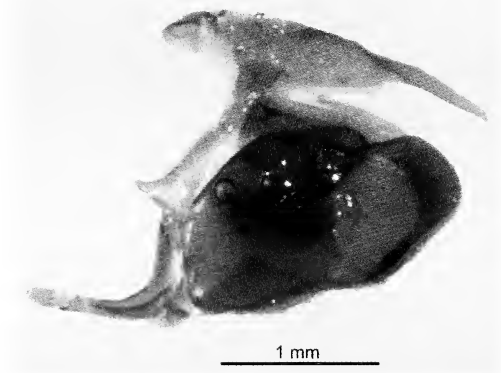


Fig. 13.– Lateral view of male genitalia of *Carcharodus floccifera*, Romania, Canaraua Fetei, 7.vi.2008. Prep. genit. 646/Dincă.

*Carcharodus orientalis* is listed as vulnerable in the Red List of the Romanian Rhopalocera (Rákosy 2003). The butterfly is often an inhabitant of rather ruderal habitats and seems to be capable of surviving in fairly disturbed areas. Its high ecological plasticity was also reported in other studies (see Lafranchis 2003). Given the current data on its distribution and ecology in Dobrogea and southern Moldavia, it seems to have a fairly large potential distribution in Romania. Therefore, we consider it near threatened in Dobrogea and data deficient at national level.

### Conclusions

– *Lycaena tityrus* and *Neptis sappho* are rediscovered in Dobrogea after 142 years. Together with *Euphydryas maturna*, these species are also reported for the first time from the southern part of Dobrogea.

– A well established population of *Zerynthia polyxena* is confirmed for Dobrogea based on larvae encountered in the southern part of the province (Canaraua Fetei) for two consecutive years.

– *Euchloe ausonia* is recorded for the first time from northern Dobrogea after 54 years, while we provide the third to fifth record in the entire province for several species (*Cupido (Everes) argiades*, *Brenthis daphne*, *Brenthis ino*, *Brenthis hecate*, and *Hipparchia syriaca*).

– Based on published and original data, it is concluded that *Apatura metis* is likely to develop two broods in Dobrogea.

– *Lampides boeticus* and *Leptotes pirithous*, which are rare migrants in Romania, are reported from several localities in Dobrogea. The latter was found to be particularly abundant in southern Dobrogea (Canaraua Fetei) during the autumn of 2007.

– The knowledge on the distribution of *Carcharodus orientalis* in Romania is improved with new localities from Dobrogea and its range extended to neighbouring Moldavia.

– The capture of several specimens of *Carcharodus floccifera* in Canaraua Fetei (southern Dobrogea) determined by genitalia confirms the presence of this species in the province. Since *C. orientalis* has also been reported in this locality, it is possible that both species occur sympatrically in Canaraua Fetei.

– The value of some protected areas from Dobrogea (Măcin Mountains, Babadag forest, Gura Dobrogei, Canaraua Fetei, Esecchioi forest, etc.) is highlighted and increased by the discovery of rare and local species at regional and national level.

– The survival of *Tomares nogelii* in Romania is considered to require confirmation due to the lack of recent records and the apparent absence of the species from its main site, namely Gârboavele Forest.

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# A new species of the genus *Holopogon* from Turkey (Diptera: Asilidae)

Guy Tomasovic, Guy Van de Weyer & Jos Dils

**Abstract.** *Holopogon hasbenlii* sp. n. is described from Turkey and the structures of the aedeagus are illustrated. A key for the Turkish species of *Holopogon* is given.

**Samenvatting.** Een nieuwe soort *Holopogon* uit Turkije (Diptera: Asilidae)  
Een nieuwe soort, *Holopogon hasbenlii* sp. n., wordt beschreven uit Turkije en de mannelijke genitaliën worden afgebeeld. Een sleutel voor de in Turkije voorkomende soorten uit het genus *Holopogon* wordt gegeven.

**Résumé.** Une espèce nouvelle du genre *Holopogon*, de Turquie (Diptera: Asilidae)  
Une nouvelle espèce de Turquie, *Holopogon hasbenlii* sp. n., est décrite et les structures des genitalia mâles sont illustrées. Une clef pour les espèces d'*Holopogon* de Turquie est présentée.

**Key words:** *Holopogon hasbenlii* sp. n. – Asilidae – Turkey

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## Presentation

All the species of the genus *Holopogon* Loew, 1847 are small, shiny black flies, colouring that is in relation with their ecosystem. It is an ecologically genus, well isolated by the hunting zone of the species that extends in a single layer, above the surface of grasses and shrubs. In this layer, small insects are the main food source of this small predator. Each species of *Holopogon* shows a preference for occupying a habitat with specific microclimate components. Actually, there are 63 species distributed in the world: 23 species in the Nearctic region, 4 in the Neotropical region, and 36 in the Palaearctic region (Geller-Grimm 2007).

Lehr (1972) noted that the species of *Holopogon* in the fauna of the USSR are clearly recognizable by their characters of colouring, the distribution of the hairs on the body and the form of hind tibia and of the antennae. However, this is not always so easy for the species around the Mediterranean. For example, Carlos *et al.* (2002) cite 11 species from Spain, where 4 species, *H. binotatus* Loew, 1870, *H. claripennis* (Loew, 1856), *H. flavotibialis* Strobl, 1909, and *H. rugiventris* Strobl, 1906, are endemic. But Geller-Grimm (2007) cites only 7 species for the same country, removing *H. fumipennis* (Meigen, 1820), *H. nigripennis* (Meigen, 1820), *H. siculus* (Macquart, 1834), and *H. venustus* (Rossi, 1790).

At this moment only 4 species of the genus *Holopogon* are published for the Turkish fauna. Lehr (1988) cited *H. albosetosus* Schiner, 1867. Hayat (1993) added *H. fumipennis* and *H. priscus* (Meigen, 1820) from Erzurum and

surroundings and finally Bozak & Hradsky (2001) added *H. nigripilosus* Theodor, 1980 (distribution: fig. 1).

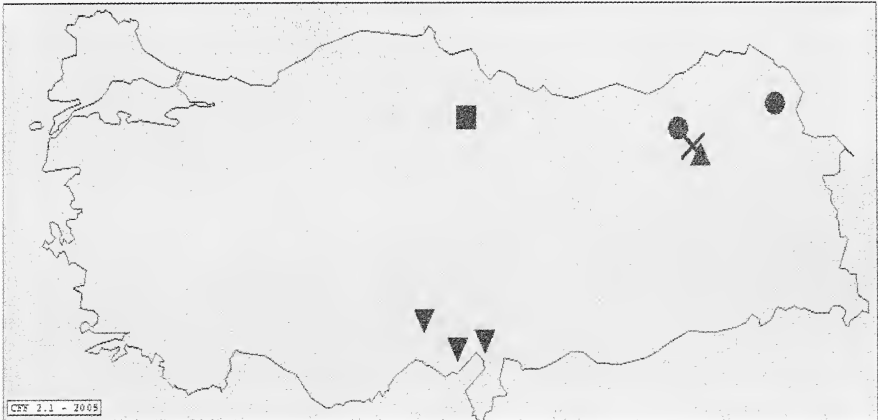


Fig. 1. Distribution of the genus *Holopogon* in Turkey.

- *Holopogon hasbenlii* 2 specimens
- *Holopogon albosetosus* 1 specimen
- ▲ *Holopogon fumipennis* 1 specimen
- × *Holopogon priscus* 2 specimens
- ▼ *Holopogon nigripilosus* 4 specimens

In Belgium, we have just the species *H. nigripennis* (Meigen, 1820), which is classified as a very uncommon species and the majority of the specimens are been collected on calcareous substrate (Tomasovic 1998a, b).

### ***Holopogon hasbenlii* spec. nov. (figs. 2a–c)**

Material: Holotype ♂, Turkey, Erzurum, Gölyurt Geçidi, 23.07.2005, 2366 m, N 40°20'55" E 40°47'35", leg. J. Dils & J. Faes. Paratypes 1♂: same data as holotype, and 1♂, Turkey, Kars, Duranlı (8 km S of Akçay), 22.07.2003, 2000 m, N 40°02'53" E 43°17'02", leg. T. & W. Garrovoet & N. Vandorpe. The holotype will be deposited in the Zoological Museum of Amsterdam (ZMA), 1 paratype in the private collection of Milan Hradsky (Czech Republic) and 1 paratype in the private collection of G. Van de Weyer (Belgium).

**Male.** Length 7 mm. Colour shining black.

Head: Face black. Mystax with fine, long black setae reaching the antennae. Frons and ocellar tubercle with long and fine black setae. Occiput blackish, with black setae and black hairs. Antennae black, scape short with small, black setae, pedicel longer than scape with a ventral stron, black setae, postpedicel twice as long as scape + pedicel, arista subulate.

Thorax: shining black, scutum with greyish tomentum and sparse, fine black hairs. 2 notopleurals, other setae indistinct. 8 long, fine and black scutellar bristles. Pleurae with greyish tomentum and white hairs. Legs black with white

setae. Hind femora, tibia and basitarsus thickened. Wing plate darkened, its apical half lighter.

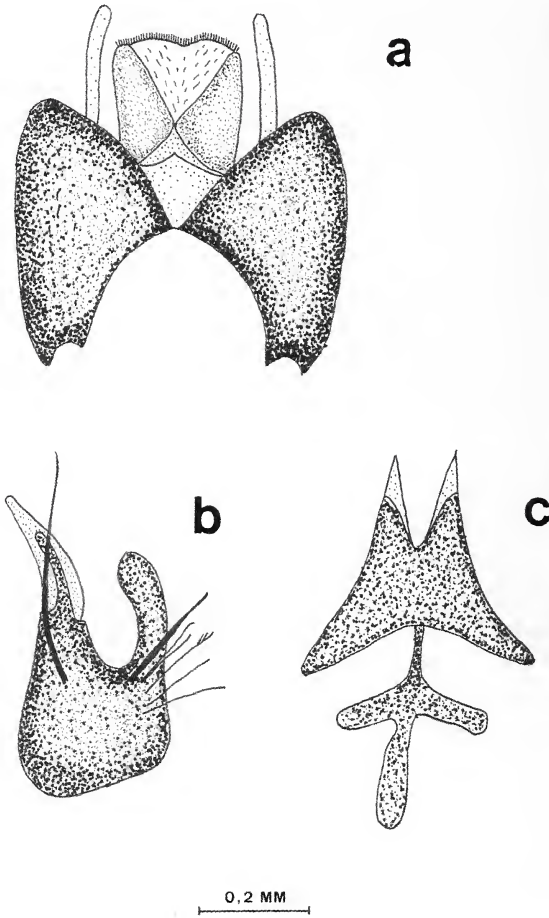


Fig. 2. Male genitalia of *Holopogon hasbenlii* sp. nov. a.- Epandrium and proctiger, b.- Gonocoxite and dististylus, c.- aedeagus (by G. Tomasovic).

Abdomen: shining black without tomentum, tergites with sparse, short black hairs. Sternites with long, fine white hairs.

Male genitalia (Fig. 2): parts of epandrium triangular with a small notch at the end. Proctiger broad, with long straight processes, in basal region of ventral part. These processes are rounded at their tip. Gonocoxites with a long, broad, curved, ventral process and a smaller, pointed dorsal process. Dististylus



long, tapering, pointed, slightly curved. Sheath of aedeagus with two large triangular processes. Apodeme short.

**Female.** Unknown.



Fig. 3. Area of the Gölyurt Geçidi, Erzurum, Turkey, 23.07.2005 (Photo: Theo Garrevoet).

### **Differential diagnosis**

Habitus of this species looks much like *H. fumipennis* but it can be separated from it by the wholly black hairs of the *mystax* and on the scutum, by the *mystax* reaching the antennae and by the strong black setae on the pedicel. The structures of the male genitalia look like those of the *claripennis* group, but *H. hasbenlii* stands out by the wholly black legs, whereas the legs of the *claripennis* group are bicolorous. The genitalia of *H. hasbenlii* are also similar to those of *H. kugleri* Theodor, 1980 from Israel, illustrated by Theodor (1980), but they can be separated from it by the presence of the processes at the basal region of proctiger.

For the identification key for the Palearctic species of *Holopogon* we have followed Engel (1927) and Lehr (1972). The latter author also says that "the structure of the external sexual appendages in the male is very uniform and is not always suitable for use identification purpose". This is true because the genitalia

are very small and sometimes hidden by hairs or the last tergite. But if prepared, the genitalia offer good supplementary criteria for a more accurate identification.

## Etymology

This new species is named in honour of Prof. Dr. Abdullah Hasbenli, Gazi University, Ankara, for his contributions to the taxonomy of Diptera and the knowledge of the Turkish fauna.

### Simple key to the males of the Turkish *Holopogon*

1. – Wing uniformly darkened. Mesonotum with white and black setae.....  
..... *fumipennis* Meigen
- Wing colourless. Mesonotum with yellow-tipped hairs. ....  
..... *priscus* Meigen
- Wing with obscure base and clear tip..... **2**
2. – Mystax white. 2<sup>nd</sup> segment of antennae, short and conical.....  
..... *albosetosus* Schiner
- Mystax with black and yellowish hairs. 2<sup>nd</sup> segment of antennae pear-shaped, slightly tapering..... *nigropilosus* Theodor
- Mystax black. 2<sup>nd</sup> segment of antennae narrow and long..... *hasbenlii* **sp. n.**

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# Interessante waarnemingen van Lepidoptera in België in 2008 (Lepidoptera)

Willy De Prins

**Abstract.** Interesting records of Lepidoptera in Belgium in 2008 (Lepidoptera)  
Some new province records and interesting observations are mentioned. The genera and species within them are given in alphabetical order. The nomenclature is according to Fauna Europaea ([www.faunaeur.org](http://www.faunaeur.org)).

**Résumé.** Observations intéressantes de Lépidoptères en Belgique en 2008 (Lepidoptera)  
Plusieurs données faunistiques nouvelles sont mentionnées par province, ainsi que quelques observations intéressantes. Les genres et espèces sont rangés alphabétiquement. La nomenclature suit les listes de Fauna Europaea ([www.faunaeur.org](http://www.faunaeur.org)).

**Key words:** Lepidoptera – faunistics – Belgium.

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In deze vaste rubriek worden de meest interessante waarnemingen van Lepidoptera uit het voorbije jaar (en eventueel vorige jaren) geciteerd. Vele van de nieuwigheden in dit artikel vermeld, zijn reeds gepubliceerd op de website van de Belgische Lepidoptera (De Prins & Steeman 2003–2008). De hele lijst is alfabetisch gerangschikt volgens familie-, genus- en soortnaam; zo sluit hij beter aan bij de gegevens op de website. Voor de nomenclatuur wordt de lijst van Fauna Europaea ([www.faunaeur.org](http://www.faunaeur.org)) gevolgd. Afkortingen: AN = Antwerpen, BR = Brabant, HA = Hainaut, LG = Liège, LI = Limburg, LX = Luxemburg, NA = Namur, OV = Oost-Vlaanderen en WV = West-Vlaanderen.

## Acrolepiidae

*Acrolepia autumnitella*: enkele mijnen op *Solanum* sp. op 31.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

Adelidae

*Cauchas rufimitrella*: 30 ex. in de periode van 03.v.2008 tot begin juni te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Nemophora oxsenheimerella*: 1 ex. op 17.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

## Arctiidae

*Eilema caniola*: begin mei 2008 werden de rupsen talrijk aangetroffen op verschillende plaatsen in de stad Harelbeke, leg. Y. Deboscher, det. T. Muus. Op 28.vi.2008 werden 12 adulten waargenomen te Kuurne, niet zo ver van Harelbeke, leg. P. Vantiegheem. Deze soort blijkt dus lokaal gewoon voor te komen in het zuidwesten van de Provincie West-Vlaanderen. Het gaat trouwens om de eerste waarneming van deze soort in Vlaanderen.

## Autostichidae

*Oegoconia caradjai*: 1 ex. op 30.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

## Bedelliidae

*Bedellia somnulenta*: 1 ex. op 03.viii.2008 te Engsbergen, leg. F. Van de Meutter; enkele mijnen op *Calystegia sepium* op 26.ix.2008 te Waremmes, leg. J.-Y. Baugnée. Nieuw voor LG en LI.

## Bucculatricidae

*Bucculatrix cidarella*: enkele bladmijnen op *Alnus glutinosa* op 23.x.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

*Bucculatrix demaryella*: enkele bladmijnen op *Betula* op 08.ix.2007 te Antoing, leg. C. Snyers *et al.* Nieuw voor HA.

*Bucculatrix frangutella*: enkele bladmijnen op *Frangula alnus* op 29.vii.2008 te Engsbergen, leg. F. Van de Meutter, en op 26.x.2008 te Eeklo, leg. S. Wullaert. Nieuw voor LI en OV.

*Bucculatrix noltei*: verscheidene bladmijnen op *Artemisia vulgaris* op 09.ix.2007 te Laplaigne, leg. C. Snyers, op 16.ix.2008 te Gembloux en op 18.ix.2008 te Oreye, beide leg. J.-Y. Baugnée. Nieuw voor HA, LG en NA.

*Bucculatrix thoracella*: enkele bladmijnen op *Tilia* sp. op 17.vii.2008 te Engsbergen, leg. F. Van de Meutter, op 18.x.2008 langs het Canal de l'Ourthe te Luik, leg. J.-Y. Baugnée, op 18.x.2008 te Ooigem, leg. S. Wullaert, en op 06.xi.2008 te Gembloux, leg. J.-Y. Baugnée. Nieuw voor LG, LI, NA en WV.

*Bucculatrix ulmifoliae*: enkele bladmijnen op *Ulmus* op 10.ix.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

## Choreutidae

*Prochoreutis myllerana*: 1 ex. op 27.viii.2007 te Olen, leg. L. Jansen. Nieuw voor AN.

## Coleophoridae

*Coleophora gryphipennella*: 1 rups en verscheidene vraatsporen op *Rosa* sp., 27.iv.2008 te Resteigne, leg. J. & W. De Prins. Nieuw voor LX.

*Coleophora ibipennella*: 1 zak op *Quercus* sp. op 31.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Coleophora kuehniella*: een volgroeide zak op *Quercus* sp. op 30.v.2008 te Resteigne, leg. J.-Y. Baugnée. Nieuw voor LX.

*Coleophora lusciniapennella*: 1 zak op 08.iii.2008 op *Salix* sp. te Laplaigne, leg. C. Snyers. Nieuw voor HA.

*Coleophora lutipennella*: 1 zak op op *Castanea sativa* 31.v.2008 te Rongy, leg. C. Snyers. Nieuw voor HA.

*Coleophora milvipennis*: 1 zak op *Betula pendula* op 23.x.2008 te Namèche, en op 02.xi.2008 te Sainte-Cécile, beide leg. J.-Y. Baugnée. Nieuw voor LX en NA.

*Coleophora pennella*: 2 zakken op 14.viii.2008 te Hermalle-sous-Huy, leg. J.-Y. Baugnée. Nieuw voor LG.

*Coleophora peribenanderi*: een zak op 28.vi.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.

*Coleophora spinella*: een zak op *Crataegus monogyna* op 11.vi.2008, leg. J.-Y. Baugnée (det. W. N. Ellis).

*Coleophora striatipennella*: 1 ex. op 03.vi.2006 te Diepenbeek, leg. R. Spronck (det. H. G. Van der Wolf). Nieuw voor LI.

### **Cosmopterigidae**

*Limnaecia phragmitella*: enkele rupsen op *Typha latifolia* op 13.xi.2008 te Mons nabij Les Pichepots, leg. J.-Y. Baugnée. Nieuw voor HA.

### **Crambidae**

*Catoptria verellus*: 5 ex. op 01.vii.2008 te Battice, leg. A. Georis, det. R. Spronck. Nieuw voor LG. Deze soort is duidelijk aan een opmars bezig. Vroeger was ze enkel bekend uit drie provincies (Brabant, Namen en Luxemburg), maar na 2004 is ze bekend geworden uit alle Belgische provincies.

*Pyrausta despicata*: 1 ex. op 05.vii.2008 te Tienen, leg. K. Boux. Nieuw voor BR.

### **Depressariidae**

*Agonopterix alstroemeriana*: 1 ex. op 29.vii.2008 te De Panne, leg. E. Hantson. Nieuw voor WV.

*Luquetia lobella*: 1 ex. op 13.vi.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

### **Elachistidae**

*Elachista apicipunctella*: 2 ex. op 12.iv.2007 in het Stamprooiersbroek te Kinrooi, leg. M. Jacobs & C. Steeman. Nieuw voor LO.

### **Epermeniidae**

*Epermenia falciformis*: 1 ex. op 31.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

### **Gelechiidae**

*Carpatolechia alburnella*: 1 ex. op 28.vi.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.

*Carpatolechia proximella*: 1 ex. op 31.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Chrysoesthia drurella*: 1 ex. op 10.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Chrysoesthia sexguttella*: enkele mijnen op *Chenopodium* op 20.viii.2008 te Berchem, leg. C. Snyers; 1 ex. op 04.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor AN en LI.

*Dichomeris marginella*: 1 ex. op 26.v.2007 te Nassogne, leg. C. Steeman; 1 ex. op 25.vii.2008 te Zemst, leg. J. Ravoet. Nieuw voor BR en LX.

*Gelechia senticetella*: 1 ex. op 27.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Metzneria metzneriella*: 1 ex. op 17.v.2007 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Monochroa palustrellus*: 1 ex. op 05.vii.2008 te Bredene, leg. E. Vanloo. Nieuw voor WV.

*Pseudotelphusa paripunctella*: 1 ex. op 31.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Recurvaria nanella*: 1 ex. op 09.vi.2007 te Rongy, leg. B. Dedeken, G. De Prins & C. Snyers. Nieuw voor HA.

## Geometridae

*Ennomos autumnaria*: 1 ex. op 04.ix.2008 te Gembloux, leg. J.-Y. Baugnée. Nieuw voor NA.

*Eupithecia innotata*: 1 ex. op 19.viii.1993 te Biron, leg. T. Sierens. Nieuw voor LX.

*Eupithecia phoeniceata*: 1 ex. op 30.viii.2008 te Hamme-St.-Anna, leg. R. Pletinck. Nieuw voor OV. Deze soort breidt zich uit door de aanplant van de voedselplant van de rups: *Cupressocyparis* × *leylandii*. In Nederland werd de soort voor het eerst waargenomen op 10.ix.2005 te Groot-Abeele (Zeeland) (de Vos 2008) en van daaruit blijkt de soort zich langzaam uit te breiden naar het binnenland (de Vos *et al.* 2008).

*Eupithecia subumbrata*: 1 ex. op 28.vi.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.

*Horisme tersata*: 1 ex. op 20.viii.2008 te Mariakerke, leg. T. Sierens. Nieuw voor OV.

*Idaea ochrata*: 1 ex. in juli 2007 te Wilrijk en 1 ex. in augustus 2007 in het natuurgebied Wolvenberg te Berchem, leg. W. De Ceuster. Nieuw voor AN.

*Idaea rusticata*: 1 ex. op 28.vi.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.

*Melanthia procellata*: 1 ex. reeds op 27.v.1989 in het natuurgebied "Het Broek" te Blaasveld, leg. G. De Prins & T. Garvoet; een tweede waarneming op 27.v.2008 in "De Bospolder" te Ekeren, leg. G. De Prins.

*Menophra abruptaria*: 1 ex. op 25.vii.2008 te Ledegem, leg. D. Pollet. Nieuw voor WV.

*Perizoma affinitata*: 2 ex. op 08.v.2008 in het Kloosterbos te Sint-Maria-Oudenhove, leg. T. Sierens. Nieuw voor OV.

*Perizoma bifasciata*: 1 ex. in augustus 1964 te Warsage, leg. R. Spronck. Nieuw voor LG.

*Stegania trimaculata*: 1 ex. op 18.viii.2008 te Herstal, leg. R. Stas. Nieuw voor LG.

## Gracillariidae

*Acrocercops bronniardella*: verscheidene bladmineers op *Quercus* op 10.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Callisto denticulella*: 1 ex. op 18.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Caloptilia cuculipennella***: enkele bladmineerders op *Fraxinus excelsior* op 28.VI en 05.vii.2008 te Antoing, leg. C. Snyers (fig. 2). Nieuw voor HA. *C. cuculipennella* komt nergens in Europa talrijk voor. De soort is in de meeste musea niet of met slechts heel weinig exemplaren vertegenwoordigd. In België werd de soort vroeger vermeld uit Brabant, Luxemburg, Namen en Oost-Vlaanderen, maar het ging steeds om enkele exemplaren. De rups mineert oligofaag op *Fraxinus excelsior*, *Ligustrum vulgare* en *Syringa vulgaris*.

***Caloptilia populetorum***: 1 ex. op 31.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Caloptilia rufipennella***: enkele bladmineerders op *Acer* sp. op 12.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Dialectia imperialella***: 1 ex. op 23.v.2008 in het natuurgebied "Het Wijtschot" te Schoten, leg. A. Peeters, en 1 ex. op 20.vi.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor AN en LI. Deze soort was uit België enkel bekend van een oude waarneming uit de provincie Namen (De Fré 1860: 109), maar ze is zeker over het hoofd gezien en op vele andere plaatsen te verwachten. De aanwezigheid van de soort kan o.a. vastgesteld worden door naar de bladmineerders te zoeken. Deze bevinden zich op de onderkant van de bladeren van vooral *Symphytum officinale*, maar ook op *Lithospermum officinale* of *Pulmonaria officinalis* (alle Boraginaceae) en kunnen het best gezocht worden in augustus-september in vochtige biotopen naast riviervluchten, langs bosranden enz.

***Parornix anglicella***: enkele bladmineerders op *Crataegus* sp. op 15.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Phyllocnistis saligna***: bladmineerders op *Salix alba* op 26.ix.2008 te Waremmes, leg. J.-Y. Baugnée. Nieuw voor LG.

***Phyllocnistis unipunctella***: enkele bladmineerders op *Populus nigra* 'italica' op 06.ix.2008 te Luik, leg. J.-Y. Baugnée. Nieuw voor LG.

***Phyllocnistis xenia***: verscheidene bladmineerders op *Populus canescens* op 09.x.2008 te Gembloux, leg. J.-Y. Baugnée, en op *Populus alba* op 21.x.2008 te Grammene, leg. S. Wullaert. Nieuw voor NA en OV.

***Phyllonorycter acerifoliella***: enkele bladmineerders op *Acer campestre* op 22.xi.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Phyllonorycter blancardella***: verscheidene bladmineerders op appel (*Malus*) op 21.x.2007 te Lessive, leg. 5<sup>de</sup> bladmineerderswandeling. Nieuw voor NA.

***Phyllonorycter comparella***: verscheidene bladmineerders op 11.viii.2007 op *Populus canescens* te Rongy, leg. B. Dedeken, G. De Prins & C. Snyers; enkele bladmineerders op *Populus alba* op 18.ix.2008 te Ooigem, leg. S. Wullaert. Nieuw voor HA en WV.

***Phyllonorycter corylifoliella***: enkele bladmineerders op *Malus* sp. op 19.x.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Phyllonorycter emberizaepennella***: verscheidene bladmineerders op *Lonicera* op 21.x.2007 te Lavaux Ste.-Anne, leg. 5<sup>de</sup> bladmineerderswandeling. Nieuw voor NA.

***Phyllonorycter esperella***: verscheidene bladmineerders op *Carpinus betulus* op 08.ix.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

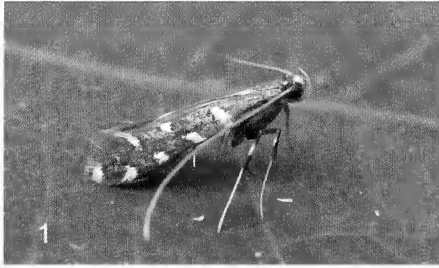


Fig. 1. *Dialectica imperialella* (Zeller, 1847): Schoten, Natuurgebied Het Wijtschot (Prov. Antwerpen), 23.v.2008, leg. en foto A. Peeters.

Fig. 2. *Caloptilia cuculipennella* (Hübner, 1796): Antoing, Hainaut, bladmine op *Fraxinus excelsior*, 05.vii.2008, leg. en foto C. Snyers.

Fig. 3. *Eilema caniola* (Hübner, 1808): Kuurne, West-Vlaanderen, 28.vi.2008, leg. en foto P. Vantiegheem.

Fig. 4. *Cacyreus marshalli* Butler, 1898: Wervik, West-Vlaanderen, 31.vii.2008, leg. en foto D. Pollet.

***Phyllonorycter froelichiella***: enkele bladmine op *Alnus* sp. op 26.x.2006 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Phyllonorycter joannis***: enkele bladmine op *Acer platanoides* op 13.x.2007 te Waregem, leg. C. Snyers. Nieuw voor WV.

***Phyllonorycter klemannella***: verscheidene bladmine op els (*Alnus*) op 21.x.2007 te Lessive, leg. 5<sup>de</sup> bladmine wandeling; enkele uitgekweekte imago's (ex *Alnus*) op 28.vi.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA en NA.

***Phyllonorycter lantanella***: enkele bladmine op *Viburnum lantana* op 14.x.2007 te Resteigne, leg. J. & W. De Prins, en op *Viburnum tinus* op 13.x.2008 te Grammene, leg. S. Wullaert. Nieuw voor LX en OV.

***Phyllonorycter leucographella***: enkele bladmine op *Pyracantha coccinea* op 14.xi.2008 te Grand-Leez, leg. J.-Y. Baugnée; enkele bladmine op *Crataegus* sp. op 05.vii.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA en NA. Gewoonlijk mineert *P. leucographella* bij voorkeur *Pyracantha*-soorten,



maar als de populatie erg talrijk wordt, zoals vastgesteld werd te Brunehaut op 19.x.2008 tijdens de 6<sup>de</sup> bladmijnenwandeling, kunnen de eieren ook afgezet worden op andere Rosaceae (Ellis 2007).

***Phyllonorycter messaniella***: enkele bladmijnen op *Castanea sativa* op 01.xi.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Phyllonorycter pastorella***: enkele bladmijnen op smalbladige wilg (*Salix* sp.) op 14.ix.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

***Phyllonorycter platani***: enkele bladmijnen op gevallen bladeren van *Platanus* sp. op 08.III.2008 te Waregem, leg. G. De Prins & C. Snyers. Nieuw voor OV.

***Phyllonorycter rajella***: enkele bladmijnen op *Alnus* op 13.x.2007, leg. G. De Prins & C. Snyers. Adulten kwamen uit in maart 2008, det. W. De Prins. Nieuw voor HA.

***Phyllonorycter salicicolella***: verscheidene bladmijnen op *Salix* op 21.x.2007 te Lessive, leg. 5<sup>de</sup> bladmijnenwandeling. Nieuw voor NA.

***Phyllonorycter schreberella***: enkele bladmijnen op *Ulmus* op 08.vii.2008, leg. D. D'Hert. Nieuw voor WV.

***Phyllonorycter sorbi***: enkele bladmijnen op *Sorbus aucuparia* op 13.ix.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

***Phyllonorycter stettinensis***: enkele bladmijnen op *Alnus* sp. op 26.x.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Phyllonorycter tenerella***: enkele bladmijnen op *Carpinus betulus* op 15.xi.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Phyllonorycter trifasciella***: 1 ex. op 03.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

***Phyllonorycter tristrigella***: verscheidene bladmijnen op *Ulmus* op 06.x.2007 te Rongy, leg. B. Dedeken, G. De Prins & C. Snyers, en op 10.ix.2008 te Ooigem, leg. S. Wullaert. Nieuw voor HA en WV.

## Heliozelidae

***Heliozela resplendella***: enkele bladmijnen op *Alnus* sp. op 30.vii.2008 te Oostham en op 13.viii.2008 te Wilrijk, beide leg. C. Snyers; op 20.viii.2008 te Ooigem en op 26.x.2008 te Eeklo, beide leg. S. Wullaert. Nieuw voor AN, BR, LI en WV.

***Heliozela treitschkiella***: enkele bladmijnen op *Cornus mas* op 14.ix.2008 te Montagne de Bueren, leg. J.-Y. Bagnée. Nieuw voor LG.

## Incurvariidae

***Incurvaria pectinella***: bladeren van *Alnus* met uitgesneden bladstukjes op 28.vi.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.

## Limacodidae

***Heterogenea asella***: een jonge rups op 14.ix.2008 op *Quercus* in het militair kamp "Groot Schietveld" te Brecht, leg. C. Steeman. Nieuw voor AN. Dit is een zeer zeldzame soort in ons land die nog maar enkele keren werd vermeld.

## Lycaenidae

*Cacyreus marshalli*: 1 ex. op 31.vii.2008 te Wervik, leg. D. Pollet. Nieuw voor WV.

## Lyonetiidae

*Lyonetia clerkella*: enkele bladmijnen op *Prunus serotina* op 09.xi.2008 te Liège nabij Coteaux de la Citadelle, leg. J. Y. Baugnée. Nieuw voor LG.

## Momphidae

*Mompha divisella*: 1 ex. op 05.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Mompha langiella*: 1 ex. op 11.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Mompha propinquella*: 1 ex. op 07.viii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Mompha raschkiella*: enkele mijnen op *Epilobium angustifolium* op 28.ix.2008 te Belvaux, leg. S. Sinev, J. & W. De Prins. Nieuw voor NA.

*Mompha subbistrigella*: 1 ex. op 10.v.2008 te Brunehaut, leg. C. Snyers *et al.*, en 1 ex. op 15.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor HA en LI.

## Nepticulidae

*Ectoedemia septembrella*: enkele bladmijnen op *Hypericum* sp. op 08.vii.2008 te Nieuwpoort, leg. D. D'Hert. Nieuw voor WV.

*Ectoedemia sericopeza*: 1 ex. op 11.v.2008 te Engsbergen, leg. F. V. de meutter. Nieuw voor LI.

*Stigmella aceris*: enkele bladmijnen op *Acer campestre* op 04.viii.2008 te Berchem, leg. C. Snyers, op 10.vii.2008 te Engsbergen, leg. F. Van de Meutter, op 23.viii.2008 te Ooigem, leg. S. Wullaert, op 10.ix.2008 te Zemst, leg. J. Ravoet, en op 18.x.2008 langs het Canal de l'Ourthe te Luik, leg. J.-Y. Baugnée. Nieuw voor AN, BR, LG, LI en WV, en daarmee komt deze recente aanwinst voor de Belgische fauna reeds in 6 provincies voor. Op 23.x.2008 werden de mijnen zelfs talrijk aangetroffen op een geïsoleerde boom *Acer campestre* langs de ring rond Antwerpen te Berchem (AN), leg. W. De Prins.

*Stigmella alnetella*: enkele bladmijnen op *Alnus* sp. op 16.x.2008 te Zemst, leg. J. Ravoet. Enkel bekend van BR uit de literatuur, maar dus nu met zekerheid vastgesteld.

*Stigmella anomalella*: enkele bladmijnen op *Rosa* sp. op 10.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Stigmella assimilella*: enkele bladmijnen op *Populus tremula* op 17.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Stigmella aurella*: enkele bladmijnen op *Rubus* sp. op 05.vii.2008 te Brunehaut, leg. C. Snyers *et al.*, op 10.vii.2008 te Engsbergen, leg. F. Van de Meutter, en op 26.x.2008 te Eeklo, leg. S. Wullaert. Nieuw voor BR, HA en LI.

***Stigmella basiguttella***: verscheidene bladmijnen op *Castanea sativa* op 11.viii.2008 te Zemst, leg. J. Ravoet; enkele bladmijnen op *Quercus* sp. op 15.ix.2008 te Ooigem en op 26.x.2008 te Eeklo, beide leg. S. Wullaert. Nieuw voor BR en WV.

***Stigmella floslactella***: enkele bladmijnen op *Carpinus betulus* op 18.x.2008 te Ooigem en op 26.x.2008 te Eeklo, beide leg. S. Wullaert. Nieuw voor BR en WV.

***Stigmella glutinosae***: talrijke bladmijnen op *Alnus* sp. vanaf begin september 2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Stigmella hemargyrella***: enkele bladmijnen op *Fagus sylvestris* op 10.vii.2008 te Engsbergen, leg. F. Van de Meutter, en op 18.x.2008 te Ooigem, leg. S. Wullaert. Nieuw voor LI en WV.

***Stigmella hybnerella***: bladmijnen op *Crataegus* sp. op 15.vii.2008 te Engsbergen, leg. F. Van de Meutter, op 08.ix.2007 te Antoing, leg. C. Snyers, en op 18.x.2008 te Ooigem, leg. S. Wullaert. Nieuw voor HA, LI en WV.

***Stigmella lemniscella***: enkele bladmijnen op *Ulmus* op 24.viii.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

***Stigmella malella***: enkele bladmijnen op *Prunus* op 08.ix.2007 te Antoing, leg. C. Snyers *et al.* Nieuw voor HA.

***Stigmella microtheriella***: verscheidene bladmijnen op *Carpinus betulus* en *Corylus avellana* op 08.ix.2007 te Rongy, leg. C. Snyers; enkele bladmijnen op *C. avellana* op 14.vii.2008 te Ooigem, leg. S. Wullaert. Nieuw voor HA en WV.

***Stigmella obliquella***: enkele bladmijnen op *Salix* sp. op 16.x.2008 te Ooigem, leg. S. Wullaert, op 18.x.2008 te Zemst, leg. J. Ravoet, en op 19.x.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI en WV en bevestigd voor BR waar de soort enkel uit de literatuur bekend was.

***Stigmella oxyacanthella***: enkele bladmijnen op *Crataegus* sp. op 18.x.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

***Stigmella perpygmaeella***: enkele bladmijnen op *Crataegus* op 19.vii.2008 te Koksijde, leg. C. Snyers, det. W. Ellis. Nieuw voor WV.

***Stigmella pyri***: enkele bladmijnen op *Pyrus* sp. op 17.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

***Stigmella regiella***: enkele bladmijnen op *Crataegus* op 08.ix.2007 te Antoing, leg. C. Snyers, det. E. van Nieukerken. Nieuw voor HA.

***Stigmella sakhalinella***: bladmijnen op *Betula* op 26.ix.2008 te Zemst, leg. J. Ravoet. Nieuw voor BR.

***Stigmella samiatella***: bladmijnen op *Castanea sativa* op 18.x.2008 te Zemst, leg. J. Ravoet, op 21.x.2008 te Grammene, leg. S. Wullaert, en op 01.xi.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor BR, LI en OV.

***Stigmella speciosa***: enkele bladmijnen op *Acer pseudoplatanus* op 05.vii.2008 te Brunehaut, leg. C. Snyers *et al.*, op 08.vii.2008 te Nieuwpoort, leg. D. D'Hert, op 17.vii.2008 te Engsbergen, leg. F. Van de Meutter, en op 18.viii.2008 te Zemst, leg. J. Ravoet, det. W. N. Ellis. Nieuw voor HA, LI en WV en bevestigd voor BR.

*Stigmella tiliae*: enkele bladmijsjes op *Tilia* sp. op 06.xi.2008 te Gembloux, en op 13.xi.2008 te Mons nabij Les Pichepots, beide leg. J.-Y. Baugnée. Nieuw voor HA en NA.

*Stigmella tityrella*: enkele bladmijsen op *Fagus sylvestris* op 18.x.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

*Stigmella trimaculella*: een bladmijs op *Populus* op 19.vii.2008 te Koksijde, leg. C. Snyers. Nieuw voor WV.

*Stigmella ulmella*: enkele bladmijsen op *Ulmus* op 24.viii.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

## Noctuidae

*Acronicta alni*: 1 ex. op 10.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Agrochola macilenta*: verscheidene ex. op 13.x.2007 te Rongy, leg. B. Dedeken, G. De Prins & C. Snyers. Nieuw voor HA.

*Apamea scolopacina*: 1 ex. op 28.vi.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.

*Coenobia rufa*: 1 ex. op 18.viii.2007 te Rongy, leg. G. De Prins & C. Snyers. Nieuw voor HA.

*Cucullia absinthii*: 1 rups op *Artemisia vulgaris* op 09.ix.2007 te Laplaigne, leg. C. Snyers. Nieuw voor HA.

*Euclidia glyphica*: 1 ex. op 05.viii.2008 te Gent-Dampoort, leg. T. Calu.

*Lithophane socia*: 2 ex. op 01.iv.2008 te Tielt-Winge, leg. W. Veraghtert. Nieuw voor BR.

*Polypogon plumigeralis*: 1 ex. op 14.vii.2007 te Rongy, leg. B. Dedeken & C. Snyers. Nieuw voor HA.

*Rhizedra lutosa*: 1 ex. op 26.x.2008 te Rendeux, leg. T. Vermeulen. Nieuw voor LX.

*Shargacucullia scrophulariae*: enkele volgroeide rupsen op *Scrophularia* sp. op 01.vi.2008 te Labuissière, leg. J.-Y. Baugnée. Nieuw voor HA.

## Nymphalidae

*Apatura iris*: 1 ex. op 11.VI en 22.vii.2007 in het Hayesbos te Heverbeek, leg. J. V. Uytvanck. Nieuw voor OV.

## Oecophoridae

*Borkhausenia fuscescens*: 1 ex. op 26.vii.2007 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Borkhausenia minutella*: 1 ex. op 18.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Crassa tinctella*: 1 ex. op 22.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Eratophyes amasiella*: 1 ex. op 17.v.2008 te Balen, leg. L. Jansen. Nieuw voor AN.

*Esperia sulphurella*: 1 ex. op 27.iv.2008 te Lommel in een sparrebosje met daarin snoeihout van vogelkers, leg. F. Groenen. Vermoedelijk leven de rupsen in dit dode hout. Nieuw voor LI.

### Opostegidae

*Opostega salaciella*: enkele ex. op 30.vi.2008 te Oostkamp, leg. A. Zwaenepoel. De vlindertjes vlogen vooral 's avonds laag over de vegetatie van een kruidenrijke weide. De biologie van de soort is nog onbekend, maar de voedselplant is waarschijnlijk *Rumex acetosella* (Warren 1888) en/of *R. acetosa*. Nieuw voor WV.

### Psychidae

*Bankesia conspurcatella*: enkele zakken op 08.III.2008 te Waregem, leg. G. De Prins & C. Snyers. Nieuw voor OV.

*Luffia lapidella*: 1 zak op 10.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

### Pterophoridae

*Amblyptilia acanthadactyla*: 1 ex. op 30.v.2007 te Lavaux Ste.-Anne, leg. C. Steeman. Nieuw voor NA.

*Capperia britanniodyctylus*: 1 ex. op 04.vi.2007 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Oidaematophorus lithodactyla*: ca. 50 ex. rustend op *Pulicaria dysenterica* op 17.vii.2008 in het kleine reservaat Hof ter Musschen te Brussel, leg. B. Hanssens. Deze soort is lang geleden vermeld uit BR maar ze komt er dus wel degelijk nog steeds voor.

### Pyralidae

*Ancylosis cinnamomella*: 1 ex. op 14.viii.2008 te Hermalle-sous-Huy, leg. J.-Y. Baugnée. Nieuw voor LG.

*Diorcytria schuetzeella*: 1 ex. op 23.vi.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Phycitodes binaevella*: 1 ex. op 14.vii.2007 te Rongy, leg. B. Dedeken & C. Snyers. Nieuw voor HA.

*Salebriopsis albicilla*: 1 ex. op 25.v.2007 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Trachycera advenella*: 1 ex. op 27.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

### Schreckensteiniidae

*Schreckensteinia festaliella*: 1 afgevlogen ex. op 03.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

### Scythrididae

*Scythris limbella*: 1 erg vroeg ex. op 25.iv.2007 te Wielsbeke, leg. S. Wullaert. Nieuw voor WV.

*Scythris scopolella*: 1 ex. op 31.v.2007 te Hour, leg. D. Testaert. Nieuw voor NA.

## Tineidae

*Triaxomera parasitella*: 1 ex. op 04.vi.2007 te Engsbergen, leg. F. Van de Meutter.

## Tortricidae

*Acleris bergmanniana*: 1 ex. op 28.vi.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.

*Acleris rufana*: 1 ex. op 01.v.2008 in het natuureservaat "De Maten" te Genk, leg. W. Veraghtert. Nieuw voor LI.

*Aethes tessarana*: 1 ex. op 05.vii.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.

*Ancylis obtusana*: 1 ex. op 10.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Cacoecimorpha pronubana*: 1 ex. op 02.v.2007 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Celypha rosaceana*: 1 ex. op 17.vi.2008 te Antong, leg. C. Snyers *et al.* Nieuw voor HA.

*Clavigesta purdeyi*: 1 ex. op 16.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Cydia conicolana*: rupsen in pijnappels van *Pinus* sp. op 08.III.2008 te Waregem, G. De Prins & C. Snyers. Nieuw voor OV.

*Cydia inquinatana*: 1 ex. op 29.v.2008 te Berchem, leg. C. Snyers. Nieuw voor AN.

*Cydia nigricana*: 1 ex. op 17.v.2007 te Antoing, leg. B. Dedeken, G. De Prins & C. Snyers. Nieuw voor HA.

*Cydia succedana*: 1 ex. op 27.v.2008 te Oostkamp, leg. A. Zwaenepoel. Nieuw voor WV.

*Dichrorampha flavidorsana*: 1 ex. rustend op *Tanacetum vulgare* op 19.vii.2008 te Hour, leg. J.-Y. Bagnée. Nieuw voor NA.

*Dichrorampha vancouverana*: 1 ex. op 28.vi.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Endothenia gentianaeanana*: verscheidene rupsen in de kaardenbollen van *Dipsacus fullonum* op 08.ix.2007 te Antoing, leg. C. Snyers. Nieuw voor HA.

*Endothenia nigricostana*: 2 ex. op 31.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Epiblema scutulana*: 1 ex. op 27.v.2008 te Oostkamp, leg. A. Zwaenepoel. Nieuw voor WV.

*Epiblema sticticana*: 1 ex. op 10.v.2008 te Antoing, leg. C. Snyers *et al.* Nieuw voor HA.

*Epinotia abbreviana*: vraatsporen op *Ulmus* op 23.x.2008 te Ooigem, leg. S. Wullaert. Nieuw voor WV.

*Epinotia demarniana*: 1 ex. op 31.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Eucosma conterminana*: 1 ex. op 26.vii.2007 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Eulia ministrana*: 1 ex. op 03.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Gravitarmata margarotana*: 1 ex. op 15.iv.2007 te Engsbergen, leg. F. Van de Meutter en 1 ex. op 22.iv.2008 te Sint-Katherina-Lombeek, leg. S. Van Cleynenbreugel. Nieuw voor BR en LI.

*Hedya pruniana*: 1 ex. op 21.v.2008 te Roux, leg. J.-Y. Bagnée. Nieuw voor HA.

*Lobesia reliquana*: 1 ex. op 10.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Olindia schumacherana*: 1 ex. op 31.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Pandemis cinnamomeana*: 1 ex. op 23.v.2008 te Engsbergen, leg. F. Van de Meutter, nadien tamelijk gewoon waargenomen op dezelfde plaats. Nieuw voor LI.

*Pseudococcyx posticana*: 1 ex. op 29.iv.2007 te Wielsbeke, leg. S. Wullaert. Nieuw voor WV.

*Rhyacionia pinicolana*: 1 ex. op 28.vi.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.

*Syndemis musculana*: 1 ex. op 03.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

### Yponomeutidae

*Argyresthia albistria*: 1 ex. op 29.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Argyresthia curvella*: 1 ex. op 31.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Cedestis subfasciella*: enkele mijnen in naalden van *Pinus* sp. op 08.III.2008 te Waregem, leg. G. De Prins & C. Snyers. Nieuw voor OV.

*Pseudoswammerdemia combinella*: 1 ex. op 08.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Scythropia crataegella*: 1 ex. op 31.v.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Swammerdamia pyrella*: 1 ex. op 07.vii.2008 te Engsbergen, leg. F. Van de Meutter. Nieuw voor LI.

*Yponomeuta padella*: enkele ex. gekweekt uit *Prunus spinosa* 03.v.2008 te Rongy, leg. C. Snyers *et al.* Nieuw voor HA.

*Yponomeuta rorrella*: 1 ex. op 05.vii.2008 te Brunehaut, leg. C. Snyers *et al.* Nieuw voor HA.



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## Corrigendum

In het artikel "*Omalis fontisbellaquei* (Coleoptera: Omalisidae) in België" (*Phegea* **35**(4): 157–159) wordt gezegd dat deze kever in Brabant nooit eerder was gezien (2<sup>de</sup> zin). Zoals het verspreidingskaartje en de eindzin aangeven is dit niet correct. In de collecties van het K.B.I.N. te Brussel, Departement Entomologie, bevinden zich 4 exemplaren uit het Zoniënwoud, meer bepaald uit de volgende lokaliteiten: Rood Klooster (1887), Rixensart (1900), Bosvoorde (1901) en Groenendaal (1928).

Willy Troukens

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