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Coleophora saponoriella Heeger, 1848 – see page 69

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A new genus and two new species of Tortricidae (Lepidoptera) from the Canary Islands

Knud Larsen

Abstract. In this paper the new genus *Willibaldiana* is described. The description of the new genus is based upon material collected at the Island Fuerteventura, part of the archipelago of the Canary Islands, Spain. The material consists of two species both of them new to science. All the material is collected from the same light trap stationed at a summer house at the southern tip of Fuerteventura – Barranco Esquinzo, Jandia. It is rather remarkable to find two new species belonging to the same new genus at the same locality. It is suggested that these taxa are belonging to very old Mediterranean taxa that have survived and developed in the semi desert environment of Fuerteventura. The new genus is placed in Eucosmini after *Clavigesta* Obraztsov, 1946. The names of the two new species are *Willibaldiana paasi* **n. sp.** and *Willibaldiana schmitzi* **n. sp.** Holotypes and paratypes are deposited in the author's collection.

Samenvatting. Een nieuw genus en twee nieuwe soorten Tortricidae (Lepidoptera) van de Canarische Eilanden
Het nieuwe genus *Willibaldiana* wordt beschreven, gebaseerd op materiaal verzameld op het eiland Fuerteventura, deel van de Canarische Eilanden, en bestaand uit twee nieuwe soorten voor de wetenschap. Al het materiaal werd verzameld in een lichtval die opgesteld staat in een buitenverblijf op de zuidelijke tip van Fuerteventura – Barranco Esquinzo, Jandia. Het is merkwaardig dat twee nieuwe soorten uit een nieuw genus op dezelfde plaats worden gevonden. Er wordt verondersteld dat ze behoren tot de oude Mediterrane taxa die zich aan de semi-woestijnomgeving van Fuerteventura hebben aangepast. Het nieuwe genus wordt in de Eucosmini geplaatst net achter Clavigesta Obraztsov, 1946. De nieuwe soorten zijn: *Willibaldiana paasi* **n. sp.** en *Willibaldiana schmitzi* **n. sp.** Holotypes en paratypes staan in de verzameling van de auteur.

Résumé. Un genre nouveau et deux espèces nouvelles de Tortricidae (Lepidoptera) des Îles Canaries
Le nouveau genre *Willibaldiana* est décrit d'après le matériel recueilli sur l'île de Fuerteventura, qui fait partie de l'archipel des Îles Canaries. Ce matériel consiste en deux espèces nouvelles pour la science et fut pris dans un piège lumineux dans la partie méridionale de l'île de Fuerteventura – Barranco Esquinzo, Jandia. Il est remarquable que deux espèces nouvelles appartenant au même genre nouveau soient trouvées dans la même localité. On suppose qu'il s'agit de deux espèces appartenant aux vieux taxa méditerranéens qui se sont adaptées aux conditions semi-désertiques de l'île de Fuerteventura. Le nouveau genre est placé dans la tribu des Eucosmini juste après *Clavigesta* Obraztsov, 1846. Les deux nouvelles espèces sont: *Willibaldiana paasi* **n. sp.** et *Willibaldiana schmitzi* **n. sp.** Les holotypes et les paratypes sont gardés dans la collection de l'auteur.

Key words. *Willebaldiana paasi – schmitzi* – Descriptions – Faunistics.

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Introduction

The fauna of Microlepidoptera of the Canary Islands, especially the Tortricidae (Klimesch 1987) but also many other groups, have been studied intensively even from the middle of the 19th century. The composition of the fauna is partly endemic and partly influenced by the West African fauna and the South West European fauna. The distance to Cap Juby in Morocco is only about 70 km and thus the strong winds from the Sahara frequently cause rather strong migratory activity on the Islands, especially the easternmost islands Lanzarote and Fuerteventura. Also the landscape on these islands has a strong affinity with the landscape of southern Morocco and western Sahara consisting of dry rocky or sandy coast and inland semi-desert and desert combined with lower rocky or mountainous areas. As a consequence of these geographical factors the level of endemism on the eastern islands is lower than on the western islands (Hacker & Schmitz 1996). Altogether more than 600 Lepidoptera are known from the islands and of these about 200 are endemic (Báez 1998). The present paper describes a new genus and two new species from the island Fuerteventura. Whether those species are endemic to the Island or they can be found elsewhere is due to more profound field research in the neighbouring biogeographically areas.

Both species have been found at the same locality at the south tip Jandia on Fuerteventura. The material has been given to me for investigation by the well-known lepidopterist Willibald Schmitz (Bergisch Gladbach, Germany), who has gathered a very large amount of material from the Canary Islands, especially Fuerteventura.

The author has studied the Tortricid fauna of the Canary Islands during several decades and has been on six collecting trips, including two trips to Fuerteventura, searching these species at the locality in Jandia without success. Species living in arid environments are so dependent on occasional weather conditions that they often just fly in short periods and not every year. Because of the mild climate many Tortricid species can be found around the year at the Canary Islands, which also seems to be the fact for the two new species presented here.

The new taxon *Willibaldiana* **gen. n.** is suggested to belong to the Eucosmini tribe although molecular examination could reveal other possible solutions to the position of the genus.

Terminology for pattern in forewing, venation and genitalia follows Horak (1999, 2006), Razowski (2002, 2003) and Komai (1999). All material is deposited in the private collection of Knud Larsen.

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Systematics

Willibaldiana **new genus**
Type species: *Willibaldiana paasi* **new species**

Description. (Figure 1) Labial palp two and a half the diameter of the eye, whitish grey; second segment strongly scaled, spatula shaped; head rough scaled with white greyish tipped scales; antenna fasciculate black and white ringed. Hind tibia whitish with more or less strongly blackish rings narrower closer to the tip of tibia; two pairs of rather long spurs. In hindwing vein M2 is approaching basally to CuA1 and M3 is missing.

Forewing with many fine costal strigula and a costal fold reaching 2/5th of the length; at the tornal area there is a reminiscence of a speculum where the outer line is present but only with a very week line of leaden glistening scales.

Male genitalia (Figure 4). Uncus very week, reduced; socii rather broad, rounded; tegumen broad with slender pedunculi; valva very small and rather weak with a bigger rounded and hairy cucullus; at the dorsal edge of cucullus three long pointed thorns growing in size to the corner of cucullus; aedeagus long, narrow and tipped; it is more strongly sclerotised towards the tip; vinculum strong.

Female genitalia (Figure 6). Papilla analis long and hairy; apophyses rather week and short; ostium very weekly developed or reduced; ductus bursa long, strongly sclerotised from bursa to just before ostium, where it is without sclerotisation and is narrowing; bursa rounded with two small signa and a central area with stronger wrinkles.

Abdomen (Figure 8, *W. schmitzi* **n. sp.**) has strongly sclerotised spiracles – one at each segment.

Etymology. The genus is named after my good friend and provider of the specimens Willibald Schmitz.

Figs. 1–3. Imagines of *Willibaldiana* species. 1.- *Willibaldiana paasi* **n. sp.** ♂ Spain: Fuerteventura; 2.- *Willibaldiana schmitzi* **n. sp.** ♂ Spain: Fuerteventura; 3.- *W. schmitzi* **n. sp.** ♂ Spain: Fuerteventura. (Photo K. Larsen).

Willibaldiana paasi Knud Larsen **new species** (Figs. 1, 4, 6)

Type material: Holotype male, Spain: Canary Islands, Fuerteventura, Jandia/ Bco. [Barranco] Esquinzo 25.9–19.10.[20]02, leg. Paas, genital slide 3857♂ Knud Larsen, coll. KL.

Paratypes: Spain: Canary Islands, Fuerteventura, Jandia/ Bco. [Barranco] Esquinzo 1♂ 8.3–8.4.[20]01 leg. Paas, genital slide 2997♂ Knud Larsen; 1♀ 23.7–11.8.[20]02 leg. Paas, genital slide 3859♀ Knud Larsen; 1♂ 9.3–10.4.(20]02 leg. Paas; 2♂ 12–28.2.[20]03 leg Paas; 1♂ 4–12.3.[20]04 leg. Paas. Paratypes in coll. KL.

Diagnosis. The species differs from the other *Willibaldiana* species by the much smaller size and the more whitish/grey ground colour of the forewing. The drawings are less stretched towards the tip of the wing than in the preceding species. In the male genitalia the species differs by having general smaller genitalia with smaller thorns and the hairs on the cucullus are much less pronounced; aedeagus is more tipped and shorter; socii are bigger and the following species has a short uncus. In the female genitalia the two signa are very small and not funnel shaped. The sclerotised spiracles – one in each segment of abdomen - are much smaller than in the following species.

Description. Imago. (Figure 1) Wingspan 9–10 mm. Antenna fasciculate, strongly ringed white and black. Labial palp two and a half the diameter of the eye, whitish grey; second segment strongly scaled, spatula shaped; head rough scaled with white greyish tipped scales. Hind tibia whitish with more or less strongly blackish rings narrower closer to the tip of tibia; two pairs of rather long spurs. In hindwing vein M2 is approaching basally to CuA1 and M3 is missing. Ground colour whitish suffused with irregular dark areas and spots and also powdered with very small orange-yellow scales. The basal blotch is dark irregular defined followed by a lighter area before some darker areas which are reminiscent of the median fascia; apical fascia darker irregular spotted. There is a reminiscence of a speculum where just the outer line is present but only with a very week line of leaden glistening scales and at the place for the inner spot there is a bright area. At costa several strigula dark and light and five of them are not divided. Cilia are light grey with a dark dividing line. Hindwing is light grey unicoloured and the fringes are without a dividing line.

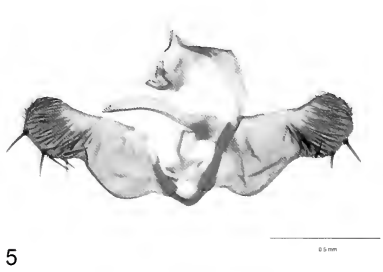
Male genitalia. See genus description.

Female genitalia. See genus description.

Biology. Only the flight data are known – February to April and again July to August.

Distribution. The species is only known from the type locality. All the specimens were taken in a light trap.

Etymology. The species is named after the kind collector Dr. Paas, Germany.



Figs. 4–5. Genitalia of *Willibaldiana* species. 4.- *Willibaldiana paasi* **n. sp.** ♂ gen. slide 3857 KL; 5.- *W. schmitzi* **n. sp.** ♂ gen. slide 3856 KL (Photo T. Garrevoet).

Figs. 6–7. Genitalia of *Willibaldiana* species. 6.- *Willibaldiana paasi* **n. sp.** ♀ gen. slide 3859 KL; 7.- *W. schmitzi* **n. sp.** ♀ gen. slide 3858 KL. (Photo T. Garrevoet).

Fig. 8 Abdomen of *Willibaldiana* n. genus, slide 3856 KL *Willibaldiana schmitzi* ♂. (Photo T. Garrevoet).

Willibaldiana schmitzi Knud Larsen **new species** (Figs. 2, 3, 5, 7, 8)

Type material. Holotype ♂, Spain: Canary Islands, Fuerteventura, Jandia/ Bco. (Barranco) Esquinzo, 25.9–10.10.[20]02 leg. Paas, genital slide 3856♂ Knud Larsen coll. KL.

Paratypes: Spain: Canary Islands, Fuerteventura, Jandia/ Bco. (Barranco) Esquinzo, 1♂ 1♀ 1–19.4.[20]00 leg. Paas, genital slide 2892♀ Knud Larsen; 1♂ 3–16.10.[20]00 leg Paas, genital slide 2891♂ Knud Larsen; 2♂ 1♀ 7–8.2000 leg Paas, genital slide 3858♀ Knud Larsen; 2♂ 10–29.9.[20]01 leg. Paas; 5♂ 25.9–10.10.[20]02 leg. Paas; 1♀ 1.8–10.9.2005 & 1♂ 15–31.10.2005 leg. Paas. Paratypes in coll. KL.

Diagnosis. The species differs from the other *Willibaldiana* species by the much larger size and the light yellow ground colour of the forewing. The drawings

are stretched towards the tip of the wing and the markings are ochreous to brown. In the male genitalia the species differs by having larger genitalia with many thorns and hairs on the cucullus; aedeagus is longer and slightly curved; socii are nearly absent and there is a short uncus. In the female genitalia the two signa are well developed, funnel shaped. The sclerotized spiracles – one in each segment of abdomen - are pronounced (fig. 8).

Description. Imago. (Figures 2–3) Wingspan 14–15 mm. Antenna are fasciculate, conical ringed ochreous and slightly darker brown. Labial palp twice the diameter of the eye, whitish; second segment strongly scaled, spatula shaped; head rough scaled and ochreous. Hind tibia light ochreous with two pairs of rather long spurs. In hindwing vein M2 is approaching basally to CuA1 and M3 is missing. Ground colour light ochreous suffused with irregular darker areas. The basal blotch is darker, angled and with a subbasal interfascia; a week and interrupted median fascia plus a postmedian fascia are both pointing towards the tip of the wing. The terminal area irregularly brown spotted and there is a reminiscence of a speculum where the outer line is present but only with a very week line of leaden glistening scales; the inner spot has many scattered black scales and the inner line of speculum is present as a white stretched dot. At costa several ochreous strigula dark and light and four of them are not divided, but can consist of several very fine strigula and a costal fold reaching 2/5th of the length. Cilia are light ochreous with a black dividing line interrupted in the middle of the termen. Hindwing is light ochreous unicoloured and the fringes are without a dividing line.

Male genitalia (Figure 5). Uncus small, flat and tipped; socii very week, nearly not present; tegumen broad with slender pedunculi; valva rather short and weak with a rounded and strongly haired cucullus; at the dorsal edge of cucullus three or more long pointed thorns as a part of the area with thorns on cucullus; aedeagus long, equally broad, rounded and weekly sclerotised; vinculum strong.

Female genitalia (Figure 7). Papilla analis triangular, short and hairy; apophyses stronger and rather short; ostium very weekly developed or reduced; subgenital sternite is weak and excavated around ostium; ductus bursa long, strongly sclerotised from bursa to just before ostium, where it is without sclerotisation and is narrowing; bursa rounded with two big funnel shaped signa and some wrinkles near the bursa "neck".

Biology. Only the flight data are known – April and again July to October.

Distribution. The species is only known from the type locality. All the specimens were taken in a light trap.

Etymology. The species is named after my good friend and provider of the specimens Willibald Schmitz.

Systematic position of *Willibaldiana* new genus

From the first sight, some years ago, it was obvious that these two species were new to science, but the genital characters made it very difficult to find out whether they could be assigned to an already known genus or whether a new genus should be established. It was also very extreme to see that the two species obviously belonged to the same genus in spite of the differences in imagines, which later turned up to be rather slight. It was only last year that I had the possibility to make a slide of the female of *W. paasi* which convinced me of the close relationship between the two species.

The next question was to find out a reasonable position of the new genus *Willibaldiana*. Many of the characters in the genitalia seem to be less developed or reduced. The basal excavations of the valva and the single scale ring on the segments of the antenna, define the genus into the family Olethreutinae. The opinion is that the characters which follow define the genus to the tribe Eucosmini:

1. The venation of the hindwing with M2 approaching basally to CuA1 and M3 is missing.
2. The presence of socii, although "reduced", and the slender pedunculi.
3. The shape of the signa in bursa.
4. The general drawings on the forewings, especially with many costal strigula.
5. The presence of a speculum although reduced.

A character against this opinion is the shape of aedeagus which is more like a Grapholitini, but as there are some Eucosmini species with an aedeagus of this type, e.g. *Rhyacionia piniana* (Herrich-Schäffer, 1851), this factor should not dominate the ideas about the taxonomic position. In fact the female genitalia of *R. piniana* have some characters which have affinities to the females of *Willibaldiana*, especially the reduced characters in ostium, etc.

Now, the next question is to define the relationships inside the tribe Eucosmini. To give a proper answer to that question a molecular examination of the species would be preferable, but that is beyond the scope of this paper and beyond the scope of my possibilities. Thus the decision can only be of preliminary character. As there are some affinities with the genus *Salsolicola* Kuznetsov, 1960 both in imagines and male genitalia a relation to this genus should be considered, but there are many more differences. The genus *Rhyacionia* Hübner, 1825 is very diverse in the Mediterranean area with one endemic species in the Canary Islands (Rebel 1896) and the sister group *Clavigesta* Obraztsov, 1946 (Larsen 2010) has its main evolutionary area in the Mediterranean, and this genus also has reduced characters (Obraztsov 1946) like the new genus. I would not be surprised if a more close investigation would reveal a common ancestor to these three genera. A preliminary position of *Willibaldiana* is proposed to be after the genus *Clavigesta* Obraztsov, 1946 as the last genus in Eucosmini.

The number of Tortricidae found on the Canary Islands is 48 (Aarvik 2013). With the two new species the number increases to 50.

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The Arctiinae (Lepidoptera: Erebidae) of Istanbul Belgrad Forest, Turkey

Hamit Ayberk

Abstract. Istanbul-Belgrad Forest mainly is in the form of a deciduous forest, composed of various tree species and tall shrubs. The study was conducted between the years of 2010 and 2011 in related area. The objectives of this study were to investigate the Arctiinae fauna of the area. As a result of the study; a total of 13 species belonging to 3 tribes of the subfamily Arctiinae are determined.

Samenvatting. De Arctiinae (Lepidoptera: Erebidae) van Istanbul Belgrad Forest, Turkije

Het Istanbul Belgrad Forest is een hoofdzakelijk een loofbos, samengesteld uit verschillende boomsoorten en grote struiken. De studie werd uitgevoerd in 2010 en 2011 met als doel de Arctiinae fauna van dit gebied te inventariseren. In totaal werden 13 soorten, behorende tot 3 tribi waargenomen.

Résumé. Les Arctiinae (Lepidoptera: Erebidae) de la forêt d'Istanbul Belgrad, Turquie

La forêt d'Istanbul Belgrad consiste surtout en arbres à feuillage caduque et en arbustes. L'étude a été conduite en 2010 et 2011 et avait comme but d'inventorier la faune d'Arctiinae dans cette région. Au total, 13 espèces appartenant à 3 tribus ont été signalées.

Key Words: Istanbul Belgrad Forest – Lepidoptera – Arctiinae fauna – Faunistics

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Introduction

Belgrad Forest corresponding to 0.03% of total forested areas in Turkey covers an area of 5,444 ha. Elevation in the area ranges from 40–230 m. The climate of Belgrad Forest according to Thorthwaite classification system is humid, mesothermal oceanic with a moderate water deficit in summer. The soils are shallow to deep, gravely, loamy clay in texture, rich in organic matter with medium to good permeability rates. The area, geographically, is on the Thracian side of Istanbul and spreads over the part of the land encased by the Bosporus on one side and the Black sea coastline on the other. The forest mainly is in the form of a deciduous forest, composed of various tree species and tall shrubs (Figure 1). Dominant vegetation of the area includes *Quercus frainetto*, *Q. cerris* and *Fagus orientalis* tree species mixed with varying amounts of *Acer campestre*, *A. trautvetteri*, *Alnus glutinosa*, *Carpinus betulus*, *Castanea sativa*, *Populus tremula*, *Sorbus torminalis* and *Ulmus campestris* with a normal crown closure (Yaltırık 1966, Kantarcı 1980; Karaöz 1988).

Figure 1. Istanbul Belgrad Forest, Turkey.

The Lepidoptera is the second largest single group of similar organisms in the world (only the beetles, Coleoptera, have more species) comprising an estimated 174,250 species in 126 families and 46 superfamilies (Mallet 2007, Capinera 2008). According to Koçak & Kemal (2009), 5,182 Lepidopteran species, belong to 76

families are recorded from Turkey. Butterflies constitute only 11% of all lepidopteran species. In other words, more than 89% of all of the scale-winged insects are moths, not butterflies (Shields 1989). The larvae of most species are phytophagous and some of them are very serious pests on agricultural plants. On the other hand, aesthetics play a significant role in butterfly importance and adults of many species may serve as inspiration for artists and designers (Borror *et al.* 1989).

The systematics of the Arctiinae are in need of revision and depend significantly on a personal view of an author. In any case, Arctiinae (formerly Arctiidae) is a monophyletic group with a clear autapomorphic character — the presence of anal glands in the females. On the other hand, this group bifurcated between Catocalinae and Herminiinae. So, many specialists downgraded the family Arctiidae to a subfamily of Erebidae (Lafontaine & Fibiger 2006, Dubatolov 2010). Arctiinae include the groups commonly known as tiger moths (or tigers), which usually have bright colours, footmen (which are usually much drabber), lichen moths and wasp moths. Many species have 'hairy' caterpillars which are popularly known as woolly bears or woolly worms. Tiger moths are characterized by the presence of tymbal organs on the metepisternum, sound producing organs used as a defence against predatory bats (Scoble 1995).

Materials and Methods

The study was conducted between the years 2010 and 2011; the objectives of this study were to investigate the Arctiinae fauna of Istanbul Belgrad Forest. After collecting with sweep nets and light traps, each specimen was put into a killing jar and brought to the laboratory for preparation and identification. Specimens were pinned using insect pins and they were mounted on spreading boards. All specimens were stored according to the conventional techniques for Lepidoptera (Steyskal *et al.* 1986). Identifications were made mostly by comparison with determined specimens from the collection of the author and that of the Arthropod Collection of the Forest Entomology and Protection Department in Istanbul University, Faculty of Forestry.

Results

Although there were a lot of studies to determine the Lepidoptera fauna of Turkey, they were mostly regionally carried out and the complete faunistics list has not definitely completed yet. For Belgrad Forest, a total of 13 species belonging to 3 tribes of the subfamily Arctiinae are listed hereunder. The list is generated accordingly with the systematics and nomenclature of Fauna Europaea (Fibiger & Skule 2012).

Family: **Erebidae**
Subfamily: **Arctiinae**
Tribe: **Arctiini**

1. *Arctia festiva* (Hufnagel, 1766) – Collected on 15.06.2010
2. *Arctia villica* (Linnaeus, 1758) – Collected on 13.07.2010 and 02.08.2011
3. *Coscinia striata* (Linnaeus, 1758) – Collected on 30.06.2010
4. *Euplagia quadripunctaria* (Poda, 1761) – Collected on 29.07.2010
5. *Phragmatobia fuliginosa* (Linnaeus, 1758) – Collected on 25.07.2010, 27.07.2010, 07.08.2011 and 08.08.2011
6. *Phragmatobia placida* (Frivaldszky, 1835) – Collected on 15.06. 2010 and 10.07.2011
7. *Spilosoma lubricipeda* (Linnaeus, 1758) – Collected on 25.08.2011 and 26.08.2011
8. *Spilosoma lutea* (Hufnagel, 1766) – Collected on 15.06.2010, 05.07.2010 and 17.07.2011

Tribe: **Syntomini**

9. *Dysauxes famula* (Freyer, 1836) – Collected on 03.08.2011

Tribe: **Lithosiini**

10. *Eilema depressa* (Esper, 1787) – Collected on 08.07.2010
11. *Eilema lurideola* (Zincken, 1817) – Collected on 10.08.2011
12. *Eilema sororcula* (Hufnagel, 1766) – Collected on 15.08.2010
13. *Miltochrista miniata* (Forster, 1771) – Collected on 15.06. 2010, 03.07.2011 and 15.07. 2011

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Colydium elongatum (Coleoptera: Zopheridae) in België en in het omliggend gebied

Willy Troukens

Samenvatting. Sinds 1985 werden tientallen *Colydium elongatum* (Fabricius, 1787) verzameld in Vlaanderen, België. Voordien was de soort onbekend in de Benelux. De uitbreiding van het areaal van deze soort werd ook vastgesteld in Zuid-Engeland, in de Duitse Rijnvallei, in Noord-Frankrijk en Zuid-Nederland. Deze kever leeft onder losse schors van dood hout van eik, beuk, berk en naaldbomen. Het is een predator van schorskevers zoals Scolytinae en Platypodinae, meer bepaald van *Platypus cylindrus* (Fabricius, 1792).

Abstract. *Colydium elongatum* in Belgium and in the neighbouring countries (Coleoptera: Zopheridae)
Since 1985 tens of *Colydium elongatum* (Fabricus, 1787) were collected in Flanders, Belgium. Before that time this species was unknown in the Benelux. The extending of its territory has also been established in South-England, in the German Rhine valley, in the North of France and in the South of The Netherlands. This beetle lives under loose bark of dead wood of oak, beech, birch and coniferous trees. It is a predator of bark beetles such as Scolytinae and Platypodinae, more especially of *Platypus cylindrus* (Fabricus, 1792).

Résumé. *Colydium elongatum* en Belgique et dans les régions limitrophes (Coleoptera: Zopheridae)
Depuis 1985 des dizaines d'exemplaires de *Colydium elongatum* (Fabricus, 1787) furent signalés en Flandre (Belgique). Avant cette période l'espèce était inconnue au Benelux. Depuis lors l'extension de son habitat a été remarquée aussi dans le Sud de l'Angleterre, dans la vallée du Rhin en Allemagne, dans le Nord de la France, et dans le Sud des Pays-Bas. Ce coléoptère vit sous l'écorce détachée du chêne, du hêtre, du bouleau et des conifères. C'est un prédateur des Scolytinae et des Platypodinae, surtout de *Platypus cylindrus* (Fabricus, 1792).

Zuzammenfassung. *Colydium elongatum* in Belgien und in den Nachbarländern (Coleoptera: Zopheridae)
Seit 1985 sind viele Exemplare von *Colydium elongatum* (Fabricus, 1787) gesammelt worden in Flandern, Belgien. Vorher war diese Art unbekannt im Benelux. Die Ausdehnung ihres Areal ist auch beobachtet in Süd England, im Deutschen Rheintal, in Nord Frankreich und im Süden von die Niederlande. Die Käfer leben im toten Holz verschiedener Laubgehölzer wie Eichen, Rotbuchen, Birken, und seltener in Koniferen wo man sie kann finden unter lockerer Rinde und in den Gängen von Borkenkäfer. Sie sind Karnivoren und jagen auf Scolytinae und Platypodinae, insbesondere auf *Platypus cylindrus* (Fabricius, 1792).

Key words: *Colydium elongatum* – Zopheridae – Colydiinae – Faunistics – Belgium – Records since 1985.

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Inleiding

Op 21.viii.2011 vond ik in mijn kleine Heath-val te Dilbeek (VB) een opvallend slank, bruinzwart kevertje dat mij even deed denken aan een klein kortschildkevertje (Staphylinidae). Bij nader onderzoek bleek het te gaan om *Colydium elongatum* (Fabricus, 1787), een xylobiont kevertje, behorende tot de familie der Zopheridae (= Colydiidae).

Het kevertje is 6 mm lang (fig. 1). Het halsschild is 1½ keer langer dan breed met in het midden een duidelijke lengtegroef en aan beide zijden een lengtestreep. De dekschilden zijn elk voorzien van 3 lengteribben met tussenin telkens 2 stippelrijen. Poten en sprieten zijn bruin. Kenmerkend voor de 11-ledige sprieten is de 3-ledige eindknots.

C. elongatum in België

Volgens Dajoz (1977: 40–41) en Slipinski (2012) komt *C. elongatum* voor in de meeste Europese landen. Tot voor kort was hij in de Benelux echter quasi onbekend. In de kevercollecties van het KBIN te Brussel is geen enkel Belgisch exemplaar aanwezig. In de rijke collectie van wijlen F. Guilleaume ontdekte ik niettemin één exemplaar, maar jammer genoeg zonder datumgegevens. F. Guilleaume prospecteerde meestal in de streek rond Liège in de jaren 1900–1920. Mogelijk gaat het hier om het enige Belgische exemplaar dat volgens Horion (1961: 91) gevangen werd in 1856, evenwel zonder vermelding van een vindplaats.

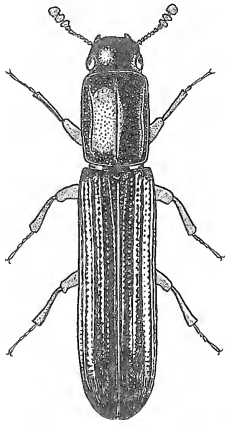

Fig. 1. *Colydium elongatum* (Fabricus, 1787), Dilbeek, 21.viii.2011

Pas op het einde van de vorige eeuw deed *C. elongatum* succesvolle pogingen om vooral de Vlaamse

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provincies te koloniseren. Op 25.iv.1985 ontdekte René Pletinck 5 exemplaren te Hamme Sint-Anna (OV) onder de schors van geïmporteerd eikenhout, afkomstig uit de omgeving van Vierzon (Frankrijk). Het gaat hier duidelijk om adventieven. Maar te Zemst zag Roland Deledicque op 1.viii.1992 1 exemplaar lopen op een beukenstronk en dat is het begin van een lange reeks waarnemingen, met name in de volgende lokaliteiten (fig. 2): in 2000 te Nevele-Merendree (OV); in 2003 te Kortessem (LI), Meeuwen-Gruitrode (LI) en Wingene (WV); in 2004 te Dilsen-Stokkem (LI) en Hechtel-Eksel (LI); in 2005 te Heusden-Zolder (LI); in 2006 te Voeren (LI); in 2007 te Maaseik (LI) en Stabroek (AN); in 2008 te Diest (VB) en Genk (LI); in 2009 te Tongeren (LI), Waarschoot (OV) en Watermaal-Bosvoorde (HGB); in 2010 te Hoeselt (LI) en opnieuw te Waarschoot (OV); in 2011 te Dilbeek (VB) en Houthalen-Helchteren (LI). Er valt niet aan te twijfelen: *C. elongatum* is een vast bestanddeel geworden van onze keverfauna.

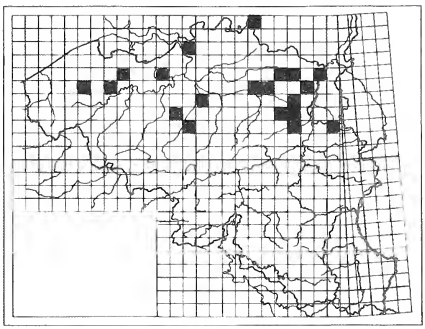

Fig. 2. Vindplaatsen van *Colydium elongatum* (Fabricus, 1787) in België sinds 1985.

C. elongatum in onze buurlanden

In Nederland was *C. elongatum* in 1966 nog onbekend (Brakman 166: 125). Tijdens een onderzoek in het Bovenste Bosch te Epen (Ned. Limburg) werd op 2.vi.1991 onder de schors van een dode zomereik een groot aantal kevers verzameld. Hiertussen bleek één exemplaar te zitten van *C. elongatum* (Vorst 1994: 23–25). De vangst van een exemplaar op 30.v.2006 in het nabijgelegen Veursbos te Voeren (België) toont aan dat het kevertje zich hier in het grensgebied thuisvoelt. Daarna is de soort ook ontdekt in Noord-Brabant (NL), nl. 3 exemplaren te Hilvarenbeek op 15.iv.2004 in het domein Ananina's Rust (leg. Hans Heerkens).

In Groot-Brittannië was *C. elongatum* vroeger zeer zeldzaam. Dajoz (1977: 40-41) vermeldt hem alleen voor het graafschap Hampshire. In Zuid-Engeland blijkt de soort zich de laatste decaden snel uit te breiden. Het areaal bestrijkt nu al 6 zuidelijke graafschappen. In het graafschap Surrey waren tot 1970 geen vondsten bekend terwijl de soort er tegenwoordig algemeen voorkomt (Reissmann 2002: 17–26). Ook ten noorden van London, in het Northaw Great Wood, in het graafschap Hertfordshire, is *C. elongatum* onlangs aangetroffen: op 14.vi.2012 en op 20.vi.2012, telkens 1 exemplaar op dood berkenhout (MacGee 2012: 8).

In Duitsland wordt *C. elongatum* beschouwd als niet gewoon. In het oosten schijnt hij algemener voor te komen. Naar het zuiden en het westen toe wordt hij duidelijk zeldzamer. Uit de Rijnvallei waren tot voor kort alleen vondsten bekend uit Süd Hessen en Nordbaden (Riessmann 2002: 17–26). Maar recent werd de soort ook aangetroffen in de deelstaten Nordrhein-Westfalen en Rheinland-Pfalz. Het begon met de vangst van een exemplaar op 4.viii.2001 in een dode eik in het Diersfordter Wald nabij de stad Wesel. In 2002 en 2003 volgden nieuwe vondsten in hetzelfde gebied, maar nu op 3 verschillende plaatsen (Riessmann 2002: 17–26, 2003: 67–70). In 2003 werden ook 14 exemplaren verzameld in de omgeving van Krefeld door A. Müller (Riessmann 2003: 67–70). Meer zuidelijk langs de Saar in Rheinland-Pfalz, ontdekte S. Scharf in 1996 nog 5 exemplaren in het plaatsje Taben. In Hessen, even ten noorden van Mannheim, meldt Riessmann (2002: 17–26, 2003: 67–70) in 2002 en 2003 nog tientallen vondsten in het Lampertheimer Wald. Tijdens een prospectietocht op 27 en 28.v.2003 werden aldaar zo maar even 40 exemplaren geteld.

In Frankrijk komt *C. elongatum* vrij algemeen voor ten zuiden van de lijn Nantes-Compiègne (Dajoz 1977: 40–41). Onze collega, Jean-Claude Bocquillon, weet te vertellen dat de kever in de bossen langsheen deze fictieve grenslijn tegenwoordig veel wordt opgemerkt. Brocquillon vindt de kever ook regelmatig in zijn lichtvallen in verschillende bossen ten noorden van Parijs. Hij denkt dat de genoemde grenslijn van Dajoz de laatste decaden al ruim noordwaarts is opgeschoven, dankzij een resem bosgebieden die zich uitstrekken tot aan de Belgische grens.

Levenswijze

C. elongatum leeft in lichte bossen met loof- en naaldhout, alsook in bosranden en in parken (Möller *et al.* 2006: 138). Men vindt hem vooral van april tot augustus op of onder losse schors van dode beuken, eiken, berken en naaldbomen. De kevers gaan gericht op zoek naar bomen die één of twee jaar dood zijn en waar ze jacht maken op Scolytinae en Platypodinae. In Engeland wordt *C. elongatum* ook veel gevonden in gangen van *Platypus cylindrus* (Fabricus, 1793). Het is opvallend dat de snelle verspreiding van *C. elongatum* in Zuid-Engeland een gevolg blijkt te zijn van de eerdere expansie van *P. cylindrus* (Riessmann 2002: 17–26). Misschien is dat ook het geval in België.

Besluit

Alhoewel het areaal van *C. elongatum* in Benelux zich voorlopig beperkt tot Vlaanderen, kan verwacht worden dat de soort zich verder zal verspreiden. In de bosbouw en in parken kan dit kevertje een nuttige rol gaan spelen om de populaties van hout- en schorskevers wat in toom te houden.

Dankwoord

Dit artikel kon geschreven worden dankzij gegevens en informatiebronnen, mij vriendelijke bezorgd door de volgende personen: Jean-Claude Bosquillon (Chantilly, F), Guido Bonamie (Nevele-Merendree), Jean-David Chapelin-Viscardi (Muséum des Sciences naturelles, Orléans, F), Luc Crevecoeur (Genk), Roland Deledicque (Laken-Brussel), Alain Drumont (KBIN, Brussel), Marc Lodewijckx (Stabroek), René Pletinck (Hamme), Hugo Raemdonck (Jette) en Oscar Vorst (Utrecht, NL). Hartelijk dank!

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Remarks on *Conophorus heteropilosus* (Diptera: Bombyliidae)

Jos Dils

Abstract. Comparison of the original descriptions and examination of the holotype of *Conophorus mauritanicus* Bigot, 1892 have revealed that *Conophorus heteropilosus* Timon-David, 1952 is a junior subjective synonym of *C. mauritanicus* Bigot, 1892.

Samenvatting. Bemerkingen over *Conophorus heteropilosus* (Diptera: Bombyliidae)
Vergelijking van de originele beschrijvingen en studie van het holotype van *Conophorus mauritanicus* Bigot, 1892 hebben aangetoond dat *Conophorus heteropilosus* Timon-David, 1952 een jonger, subjectief synoniem is van *C. mauritanicus* Bigot, 1892.

Résumé. Remarques sur *Conophorus heteropilosus* (Diptera: Bombyliidae)
La comparaison des descriptions originales et l'examen de l'holotype de *Conophorus mauritanicus* Bigot, 1892 ont montré que *Conophorus heteropilosus* Timon-David, 1952 est un synonyme subjectif, plus récent de *C. mauritanicus* Bigot, 1892.

Key words: *Conophorus heteropilosus* – *Conophorus mauritanicus* – New synonymy.

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The status of *Conophorus heteropilosus* Timon-David, 1952

In the description of *Conophorus heteropilosus*, Timon-David (1952) compares this new species with *Conophorus mauritanicus* Bigot, 1892. Basically, the description of *C. heteropilosus* is based only on the colour of the hairs on the inner underside of the scape: "Espèce tres voisine de *Conophorus mauritanicus* Bigot, 1892, de Tunisie ; s' en distingue essentiellement par la présence de soies jaune d'or sur les articles 1 et 2 de l' antenne". Unfortunately, the whereabouts of the personal collection of the late Jean Timon-David could not be retrieved.

Fig. 1. Holotype of *Conophorus mouritonicus* Bigot, 1892, Algeria, leg. Sériziat, University Museum, University of Oxford, Oxford, UK (Photograph A. Pont).

Bigot (1892: 360–361), in the original description of *Conophorus mauritanicus* Bigot, 1892, writes about the hairs on the antennae: "Antennis nigris, basis, cinereo pruinosis et longe nigro pilosis" translated in French in the same paper: "Antennes noires, le 1er segment couvert d'une pruinosité grise, et garni de longs poils noirs mélangés de gris". The addition "mélangés de gris" is confusing, and is not present in the original Latin description.

Engel (1932–1937) follows the original Latin description of Bigot: "Das 1ste und 2de Fühlerglied, Bestaubung mit schwacher graugelber Bestäubung und ausschliesslich schwarzen Haaren".

The holotype (Fig. 1) of *Conophorus mauritanicus* Bigot, 1892, Algeria, leg. Sériziat, was deposited in the University Museum, University of Oxford, Oxford, UK (Evenhuis & Greathead 1999), and examined, on my request to Amoret Spooner, by the university honorary associate, Dr. Adrian Pont, who wrote the following: "Scape with golden hairs amongst the black ones on dorsal surface and elsewhere, and a few golden ones also on pedicel, from this I can only conclude that the two species are indeed the same".

Fig. 2. Holotype of *Conophorus mouritonicus* Bigot, 1892, detail of antennae showing mixed black and ochreous hairs, University Museum, University of Oxford, Oxford, UK (Photograph A. Pont).

The specimen is in good condition and also the photographs send to me by Mr. D. J. Gibbs revealed that the scape, very clearly, has long stiff yellow/golden hairs mixed with the black ones on the lower inside surfaces (Fig. 2).

We collected *C. mauritanicus* and/or *C. heteropilosus* in several localities in Morocco, including the type locality of *C. heteropilosus* and more to the North East near Mrirt close to the Algerian border. We noticed that within the same colony, some specimens have the black hairs on the inner underside of the scape intermingled with a few and other specimens with a considerable amount of golden-yellow hairs.

Considering that the holotype of *Conophorus mauritanicus* Bigot, 1892 in Oxford also bares yellow-golden hairs on the inner underside of the scape and that Bigot himself, in his French translation writes "de longs poils noirs mélangés de gris" indicates that *Conophorus mauritanicus* Bigot, 1892 is a variable species and therefore, the distinction of *C. heteropilosus*, based on this character alone (Timon-David 1952) does not hold any longer. As other distinctive characters are also absent, we have to conclude that *Conophorus heteropilosus* Timon-David, 1952 is a junior subjective synonym of *Conophorus mauritanicus* Bigot, 1892.

Acknowledgment

I wish to thank David J. Gibbs, Mr. Amoret Spooner and Dr. Adrian Pont for their kind assistance and the good photographs.

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On the occurrence of Eastern knapweed fritillary, *Melitaea ornata* (Lepidoptera: Nymphalidae) in Croatia

Toni Koren & Ana Štih

Abstract. The occurrence of *Melitaea ornata* Christoph, 1893 is confirmed for Croatia. The species was recorded in six localities in different regions of the country. All records originate from mountain areas or areas with strong mountain influence. Also, all specimens were recorded in May, which indicates the univoltism of this species.

Samenvatting. Over het voorkomen van *Melitaea ornata* (Lepidoptera: Nymphalidae) in Kroatië

Melitaea ornata Christoph, 1893 wordt hier voor het eerst uit Kroatië vermeld. De soort werd er vastgesteld in zes lokaliteiten, vooral uit bergstreken of uit gebieden dichtbij bergen. Alle exemplaren werden in mei waargenomen, wat duidt op slechts één generatie per jaar.

Résumé. De la présence de *Melitaea ornata* (Lepidoptera: Nymphalidae) en Croatie

Melitaea ornata Christoph, 1893 est mentionnée ici pour la première fois de Croatie. L'espèce a été trouvée dans six localités dans ce pays, dans des montagnes ou des régions montagneuses. Tous les exemplaires ont été trouvés en mai, ce qui indique l'univoltinisme de cette espèce.

Key words: *Melitaea ornata* – Croatia – distribution – new records.

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Introduction

The genus *Melitaea* comprises of about 65 small to medium sized butterfly species distributed widely across the Palearctic region (Leneveu *et al.* 2009). In Europe 15 species of the genus *Melitaea* occur (Van Swaay *et al.* 2010), of which eight are present in Croatia (Šašić & Mihoci 2011). In most cases, the European representatives of this genus have clearly visible external morphological characteristics and they can be easily distinguished from each other (Tolman & Lewington 2008). However, for some species complexes, like that of *Melitaea athalia* (Rottemburg, 1775), *Melitaea aurelia* (Nickerl, 1850) and *Melitaea britomartis* Assmann, 1847, an analysis of the genitalia is crucial for a correct identification (Koren & Jugovic 2012).

Another problematic species complex of the same genus is that of *Melitaea phoebe* (Denis & Schiffermüller, 1775). The nominate species, *M. phoebe*, is distributed from North Africa, across Europe, Turkey, and the Middle East towards Mongolia and China (Tolman & Lewington 2008). Recently, many subspecies of this *M. phoebe* from Europe and Asia were recognized as separate species, according to their common ecological characteristics, including their univoltism, the red head capsule of L4 larvae and the preference to *Cirsium* or *Centaurea* host-plants (Tóth & Varga 2010). At first, some subspecies were assigned to *Melitaea telona* Fruhstorfer, 1908 (Tóth & Varga 2010), which later proved to be conspecific with *Melitaea ornata* Christoph, 1893, which is now the accepted name (Jakšić 2011, Tóth & Varga 2011, Tóth *et al.* 2013). The species status was proven by genital morphometry (Tóth & Varga 2011) and on the basis of mitochondrial and two nuclear genes (Leneveu *et al.* 2009). The current knowledge about the distribution of this species includes the southern part of the Italian peninsula, the Balkans, Hungary, Greece, Turkey and localized records in parts of western Asia (Tóth *et al.* 2012). Among the subspecies which were attributed to *M. ornata* is also *Melitaea phoebe nigrogyia* Verity, 1938 described from Opatija (Croatia) but only on the base of the literature description of the species (Tóth & Varga 2010). The presence of *M. ornata* in Croatia was also shown in the recent paper dealing with the current distribution (Tóth *et al.* 2012). In the paper, there are three points on the map showing the territory of Croatia, but its presence there was not addressed, and it is not known if the points originate from the literature or they represent new records (Tóth *et al.* 2012). Also, this species was not listed in the recent checklist of butterflies of Croatia (Šašić & Mihoci 2011). The aim of this paper is to report the new record of *M. ornata* for the territory of Croatia, and confirm its occurrence in the country.

Materials and methods

During the year 2012 we did an intensive survey of the butterfly fauna of Croatia. During that period special attention was given to the *M. phoebe* species complex. The specimens were collected with an entomological net and stored in a private butterfly collection (Koren in Pazin, Croatia). For each specimen basic data about the habitat were noted, as well as the geographic coordinates. Coordinates were taken using a Garmin e-Trex Vista device. Additionally, specimens from the first author's collection, collected between the years 2002-2011, were included in the analysis. The determination of the collected specimens was done using the determination key presented in Tóth & Varga (2011). To confirm the correct determination, genital slides were prepared using the standard preparation method, similar to that given by Tóth & Varga (2011). The abdomen of fresh specimens was cut, and left overnight in a 10% KOH solution. After that the genitalia were cleaned, mounted in Euparal and photographed.

Results and discussion

From all collected specimens only six individuals had the external characteristics according to which they could be identified as *M. ornata*. Localities in which the specimens were collected are shown in Fig. 1 and listed here:

1. Mt. Učka, Vela Učka, Istria, dry karstic grassland, 45.305554, 14.205031, 30.v.2002.
2. Gorjani Sutinski, near the church Sv. Jakob, Mt. Strahinšćica, wet meadow, 46.177722, 15.947750, 20.v.2012.
3. 1200 m E from Gorjani Sutinski, Mt. Strahinšćica, wet meadow, 46.180250, 15.964833, 20.v.2012.
4. Vugrovec, Mt. Medvednica, wet meadow, 45.874578, 16.108326, 24.v.2010.
5. Zrmanja Vrelo, Zrmanja river, wet meadows 1 km south from the river spring, 44.203035, 16.070720, 1.v.2012.
6. Road toward village Velji Do, Mt. Sniježnica, dry karstic grassland, 42.550942, 18.354265, 2.v.2012.

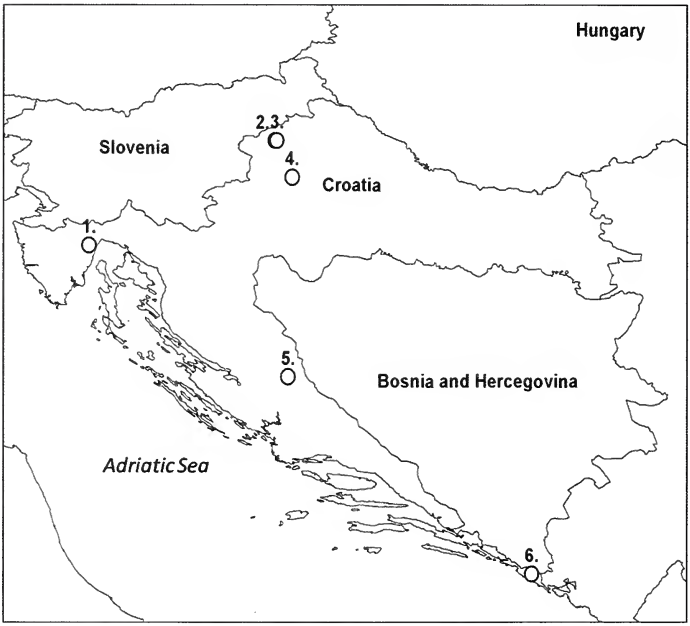

Fig. 1. Distribution of *M. ornata* in Croatia.
1. Mt. Učka, Vela Učka,
2. Gorjani Sutinski, near the church Sv. Jakob, Mt. Strahinšćica,
3. 1200m E from Gorjani Sutinski, Mt. Strahinšćica,
4. Vugrovec, Mt. Medvednica,
5. Zrmanja Vrelo, wet meadows 1 km south from the river spring,
6. Road towards village Velji Do, Mt. Sniježnica.

There are several external characteristic on which it is possible to distinguish adults of *M. ornata* from *M. phoebe* (Fig. 2): the triangular shaped lunules on the underside of the fore-wing; the disconnected, triangular shaped lunules in the marginal region of the hind-wing; the broader and elliptic antennal club (Tóth & Varga 2011). The most important difference between male genitalia of *M. phoebe* and *M. ornata* is the depth of the central notch of the saccus in *M. ornata* (Fig. 3), as well as the more symmetric shape of the posterior processes (Tóth & Varga 2010). With all these in mind we can conclude that the collected specimens belong to *M. ornata* rather than *M. phoebe*. Three specimens collected in the year 2012, as well as three specimens from the private collection, were determined as *M. ornata*. In the same localities more specimens of *M. phoebe* were observed and collected, which shows that these two similar species are sympatric in the area.

Ecology

All specimens were collected in May, which is in agreement with the univoltine appearance of *M. ornata* in comparison with *M. phoebe* (Tóth & Varga 2010). Five records were recorded in a mountain zone (Mt. Učka, Mt. Medvednica, Mt. Strahinšćica and Mt. Sniježnica), while the record from Zrmanja Vrelo can also be considered as such. The area of Zrmanja spring is under an interesting climatic inversion, which allows some butterflies species, which are usually present on higher altitudes, to live there (Koren *et al.* 2011). All the specimens, except the ones from Mt. Učka and Mt. Sniježnica were collected in wet meadows.

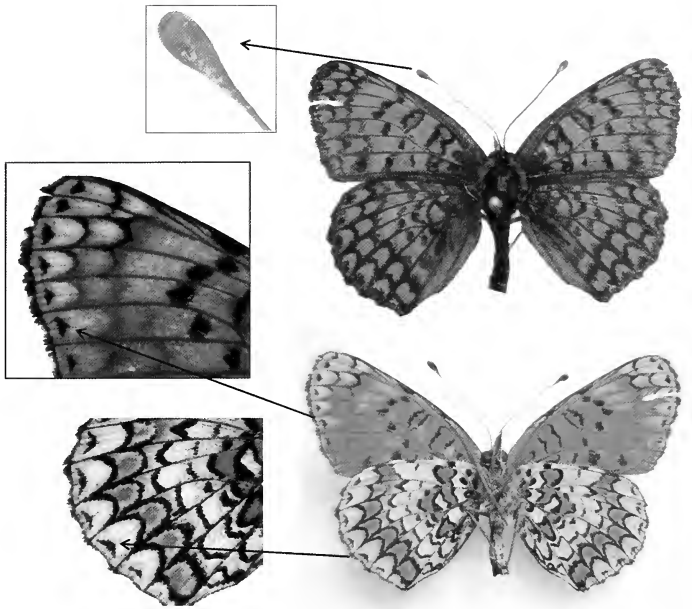

Fig. 2. *M. ornata* Christoph; 1893 from Mt. Strahinščica, Croatia.

Fig. 3. Male genitalia of *Melitaea ornata* Christoph, 1893 from Mt. Strahinščica, Croatia.

Distribution in Croatia

Our data show that *M. ornata* is present in almost whole Croatia. Records originate from Istria, toward Mt. Medvednica and northern Croatia. The record from Zrmanja lies on the border between Lika and Dalmatia, while the record from Mt. Sniježnica belongs to the southern Dalmatia. The occurrence of this species in Croatia was previously noted only on the distribution map in Tóth *et al.* (2013) but without any mention of their origin, or with any exact locality. In the light of that, our records are the first exact findings of this species in Croatia.

Conclusions

The distribution of the Eastern knapweed fritillary in Croatia is still far from known. Our records indicate that the species is present in the whole country, but probably is more common in the mountainous areas. More records of this species in Croatia, as well as in neighbouring areas are to be expected in the future. With this record, the butterfly fauna of Croatia consists of 196 species (Šašić & Mihoci 2012).

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Pyropterus nigroruber (Coleoptera: Lycidae) nu ook inheems in België

Hugo Raemdonck

Samenvatting. *Pterophorus nigroruber* (De Geer, 1774) wordt hier voor het eerst uit België en de Benelux vermeld. De eerste waarneming vond plaats op 15 juni 2003 te Daverdisse (LX), leg. Y. Thieren. Nadien raakten 17 exemplaren bekend uit 4 vindplaatsen in Luik en Luxemburg. De larve van *P. nigroruber* leeft carnivoor op allerlei insecten en hun larven.

Abstract. *Pyropterus nigroruber* (Coleoptera: Lycidae) new to the Belgian list

Pterophorus nigroruber (De Geer, 1774) is recorded here for the first time from the Belgian fauna and from the Benelux. The species was first observed on 15 June 2003 at Daverdisse (LX), leg. Y. Thieren. Until now, 17 specimens from 4 localities in LG and LX became known. The larva of *P. nigroruber* lives carnivorous on several other insects and their larvae.

Résumé. *Pyropterus nigroruber* (Coleoptera: Lycidae) espèce nouvelle pour la faune belge

Pterophorus nigroruber (De Geer, 1774) est mentionné ici pour la première fois de Belgique et du Benelux. Le premier exemplaire fut observé à Daverdisse (LX) le 15 juin 2003 par Y. Thieren. Jusqu'à maintenant, 17 exemplaires furent trouvés dans 4 localités des provinces de Liège et du Luxembourg. La larve de *P. nigroruber* est un carnivore qui se nourrit d'autres insectes et de leurs larves.

Key words: *Pyropterus nigroruber* – Coleoptera – Belgium – Faunistics – New record.

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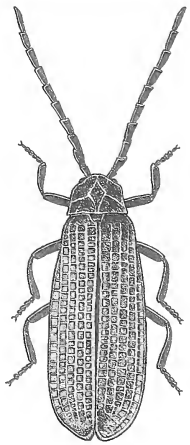
Tijdens een wandeling te Daverdisse (LX) op 24/07/2012, tussen 2 regenbuien in, kwam ik een zeer oude, vermolde houtstapel tegen, en ik kon de verleiding niet weerstaan om enkele houtblokken om te draaien. Tot mijn grote verbazing zag ik een rood kevertje zitten. Ik dacht meteen aan *Platycis minutus* (Fabricius, 1787). Deze had ik een tweetal weken terug van een bevriend entomoloog gekregen en nu had ik eindelijk de soort zelf ook eens gevangen. Na de vakantie en onder de microscoop werd mij duidelijk dat dit geen *Platycis minutus* was (dit exemplaar had geen gekleurd uiteinde aan de antennes). Na wat speurwerk kwam ik bij *Pyropterus nigroruber* (De Geer, 1774).

Het is een roodschildkever van ± 8 mm lengte, sterk afgeplat met zwarte poten en een zwart halsschild door een ribachtige structuur verdeeld in 5 velden. De dekschilden zijn felrood, met 4 overlangse ribben, met tussenin regelmatige dwarsribben waardoor deze een tralie-achtig patroon vormen.



Figuur 1. *Pyropterus nigroruber* (De Geer, 1774), België, LX, Daverdisse, 24.vii.2012, leg. H. Raemdonck (tekening Willy Troukens).

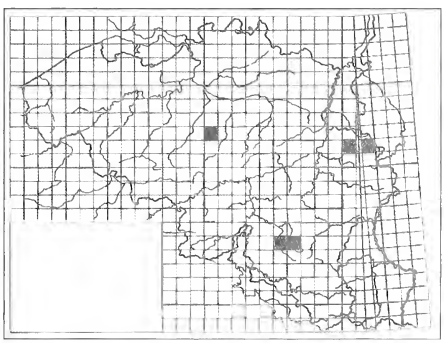
Volgens Bocak (2012) is deze soort nog niet waargenomen in de Benelux, maar ze komt wel voor in al onze andere buurlanden en verder over een groot deel van Europa en tot in het Verre Oosten. Een Nederlandse entomoloog werd geraadpleegd, maar ook deze kon geen melding van deze kever vinden. Er bevinden zich geen exemplaren in de Belgische collecties van het KBIN te Brussel. De soort wordt hier dus voor het eerst uit België en uit de Benelux vermeld.

Sinds 2003 zijn er enkele vondsten uit België gemeld:

Yves Thieren: 5 ex. te Schönefeld, Eupen (LG)

Johnatan Lhoir: 2 ex. te Daverdisse (LX) op 15/06/2003
6 ex. te Goé, Hertogenwald (LG) op 28/06/2003
4 ex. te Groenendaal in het Zoniënwoud (VB) op 15/07/2004.

Guido Bonamie: 1 ex. te Hatrival (LX) op 07/06/2007.



Figuur 2. Verspreiding van *Pyropterus nigroruber* (De Geer, 1774) in België.

Het merendeel van deze vangsten komt van venstervallen.

Volgens Möller *et al.* (2006: 86) is *P. nigroruber* te vinden van juni tot augustus in vochtige bossen, in struikgewas, langs houtwallen, op geveld hout, op stronken en soms bij zonnig weer ook op bloemen. De afgeplatte larven jagen in vermolmd loof- en naaldhout op andere insecten en hun larven.

Mijn dank gaat naar Guido Bonamie (Nevele), Alain Drumont (KBIN Brussel), Johnatan Lhoir (Fr. Montpellier), Yves Thieren (Baelen) en Willy Troukens (Anderlecht) want zonder hen zou dit artikel niet ontstaan zijn.

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Coleophora saponariella (Lepidoptera: Coleophoridae), a new species for the Belgian fauna

Chris Snyers, Guido De Prins, Jean-Yves Baugnée & Nicolas Vereecken

Abstract. On the 4th of October 2009, several mines and cases of *Coleophora saponariella* Heeger, 1848 were found on Common Soapwort (*Saponaria officinalis*) at De Panne (province of West-Flanders). It was the first mention of this species in Belgium. In 2010 the species was found again in the same locality and several cases were bred to adults. It appears that *C. saponariella* has a permanent population in "De Westhoek" with three generations per year. In 2012, the species was also discovered at Rochefort (province of Namur). It is distributed in the whole of Europe and is sometimes very common.

Samenvatting. *Coleophora saponariella* (Lepidoptera: Coleophoridae), een nieuwe soort voor de Belgische fauna
Op 04 oktober 2009 werden op Zeepkruid (*Saponaria officinalis*) enkele mijnen en kokers van *Coleophora saponariella* Heeger, 1848 gevonden te De Panne (West-Vlaanderen). Het is de eerste keer dat deze soort uit België gemeld wordt. In 2010 werd deze soort op dezelfde vindplaats terug gevonden. Zij blijkt in de Westhoek dus een vaste populatie te hebben en door uitkweken werd vastgesteld dat er drie generaties per jaar voorkomen. In 2012 werd *C. saponariella* ook te Rochefort (Namen) aangetroffen. De soort is verspreid in heel Europa en soms zeer talrijk.

Résumé. *Coleophora saponariella* (Lepidoptera: Coleophoridae), une espèce nouvelle pour la faune belge
Le 04 octobre 2009, des mines et fourreaux larvaires de *Coleophora saponariella* Heeger, 1848 ont été observés sur Saponaire officinale (*Saponaria officinalis*) à De Panne (prov. Flandre Occidentale). Il s'agit de la première mention de cette espèce en Belgique. En 2010 l'espèce fut observée dans la même localité et des adultes ont été obtenus en élevage. Il apparaît que *C. saponariella* présente une population permanente dans la réserve naturelle du Westhoek, avec trois générations par an. En 2012, l'espèce fut aussi observée à Rochefort, dans la province de Namur. Elle est largement distribuée en Europe et parfois très commune.

Key words: *Coleophora saponariella* – Belgium – Faunistics – First record

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Introduction

On the 4th of October 2009, several blotch mines and cases of a *Coleophora* species were found on Common Soapwort, *Saponaria officinalis*, at De Panne (prov. West-Flanders, Belgium), by several members of the Workgroup Leafminers. Later on, the species was identified by the first author as *Coleophora saponariella* Heeger, 1848, a new species for the Belgian fauna (De Prins & Steeman 2013).

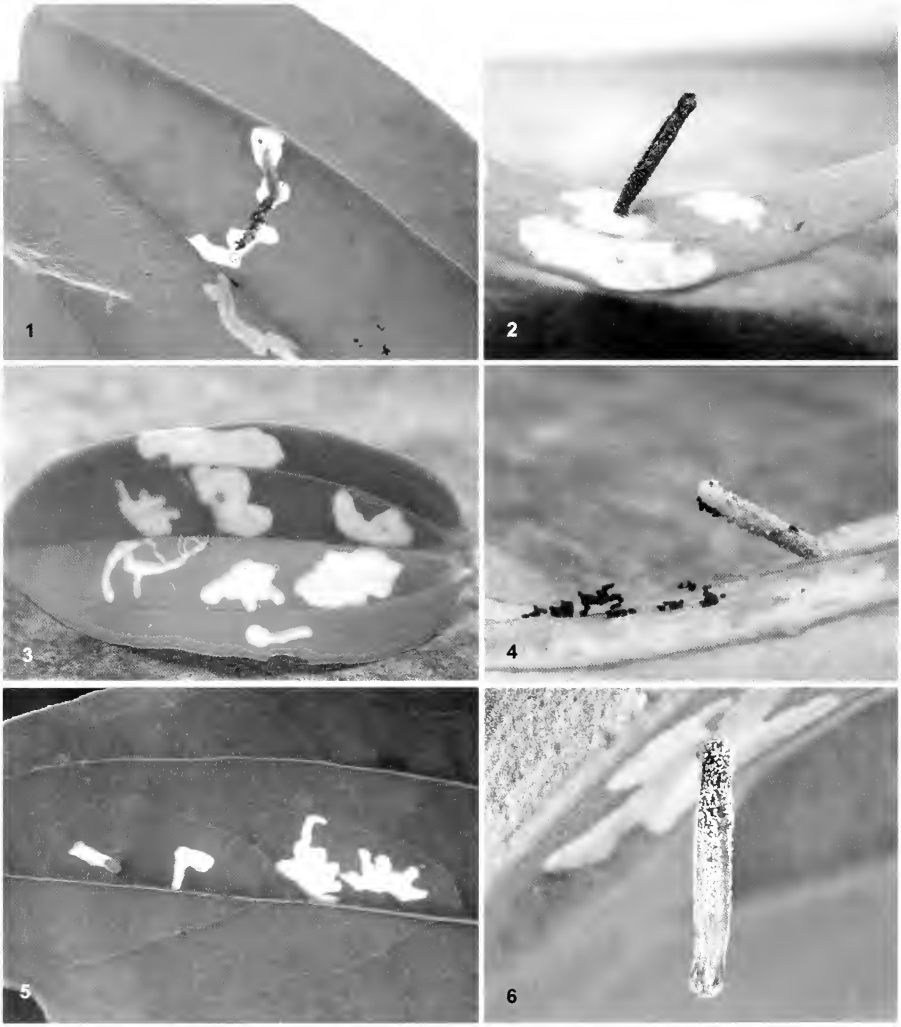
The cases were kept in small containers and hibernated, but no imagos emerged. During spring and early summer of 2010, more searches were conducted in several localities along the coast, looking for traces of this species on soapwort. There were, however, no new findings.

On 31st of July 2010, the same locality in De Panne was visited where the cases were found the year before. It became soon clear that the species was still present. On 1 out of 4 plants blotch mines were discovered, but no cases were present, except for one full-grown case that was broken open, found on a mine that was recently made. Apart from that, a leaf with three galleries from which the frass was pushed out, was discovered. On 4th October 2010 two full-grown cases and 1 young case were found. The species was again met with in 2011 when on 14th May many small cases were seen, sometimes about 10 per leaf.

Several mines and six young cases of *C. saponariella* were recently discovered at Rochefort (prov. Namur) on 6 August.2012, by the third author (Fig. 5). They stand on a tuft of *Saponaria officinalis* from N. Vereecken's garden, at less than 200 m from the river Lomme. The soapwort has been installed there for many years by the previous owner. It is possible that *C. saponariella* was already present before our observations. On 23 September 2012, a mature case was observed at the same site by N. Vereecken himself (Fig. 6).

Description of the species

The imago (Figs. 7, 8) is ochreous brown with several light longitudinal stripes on the fore wings. The wing span is around 11 mm. The egg is pale green. The caterpillars are yellowish green (Fig. 1). The cases are initially straw coloured (Fig. 4), but after reaching around 5 mm in length they become dark grey with black longitudinal stripes. When the caterpillar is full-grown, it lives in a straight three-valved silken case of about 7 mm long. Towards the head, the case becomes granular with remains of the host plant. The mouth angle reaches 70°–80° (Fig. 2). For a detailed description, see Heeger (1848: 342–347, pl. 6).



Figs. 1–6. *Coleophara sapanariella* Heeger, 1848;

1.– a young caterpillar on *Sapanaria officinalis*, Belgium, West-Vlaanderen, De Panne, 11 vii 2012, leg. and photo C. Snyers.

2.– case of a full grown caterpillar, ca. 7 mm, Belgium, West-Vlaanderen, De Panne, 4 x 2009, leg. and photo C. Snyers.

3.– mines on a leaf of *Sapanaria officinalis*, Belgium, West-Vlaanderen, De Panne, 4 x 2009, leg. and photo C. Snyers.

4.– case of a young caterpillar with "frass", Belgium, West-Vlaanderen, De Panne, 4 x 2009, leg. and photo C. Snyers.

5.– mines on *Saponoria officinolis*, Belgium, Namur, Rochefort, 6.xiii.2012, leg. and photo J.-Y. Baugnée.

6.– mature case on *Soponorio officinalis*, Belgium, Namur, Rochefort, 23.ix.2012, leg. and photo N. Vereecken.

Biology

The eggs are deposited on the upper side of the leaves, relatively high on the plant (up to 25 cm high), usually on a large vein. After hatching of the eggs, the caterpillars make small half-transparent galleries on the upper side of the leaf. The galleries can be up to five cm long before they convert into blotch mines. The first frass is secreted here and building of the case begins immediately. The initial galleries exceed themselves

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regularly, but rarely the main vein. The blotch mines originate from the consumption of the entire content of the leaf. Because of this, the mine is whitish and transparent. On sandy soil and the dunes, where the host plant is usually found, the mines remain relatively intact. However, aging of the mines is well visible, given a certain experience (Fig. 3). The caterpillars can be found from September to May. After hibernation the caterpillars cease eating (Patzak 1974).

It is thought that three generations appear each year: the first one right after hibernation in May–June, the second one in summertime (July–August) and the third generation during autumn (September–October).

Figs.7–8. *Caleaphara. sapanariella* Heeger, 1848;

7.–adult, Belgium, West-Vlaanderen, De Panne, mine 07.vii.2010, e.l. 24.viii.2010, leg. and photo C. Snyers.

8.– adult, Belgium, West-Vlaanderen, De Panne, mine 31.vii.2010, .e.l.24.viii.2010, leg. and photo C. Snyers.

Distribution

So far, this species is found in Belgium in two distinct areas: in the coastal dunes (maritime phytogeographical district) and in the Famenne (mosan district). According to the distribution of the host plant, *Saponaria officinalis*, the species could also exist in other localities. The third author has conducted research in 2011 and 2012 in the surroundings of Gembloux as well as in the valley of the Meuse between Liège and Huy, but without success.

C. saponariella was recently also discovered in the Netherlands by Arnold Scheurs (27th June 2010, Limburg, Vlodrop-Station). He writes the following on *C. saponariella*: "conducting searches in springtime is little effective because the larvae are moving around. During autumn, hundreds of cases were discovered. The results of breeding were satisfying: out of 40 larvae, 30 imagos emerged. After hibernation the larvae become active again. When found, they were put in jars with small branches to stimulate pupation."

In Europe, *Coleophora saponariella* is found in Sweden and Denmark and in the entire Western and Central Europe except in Great Britain and Ireland. In Southern Europe it is recorded only from Portugal and Italy. In Eastern Europe the species is mentioned from Poland, Slovakia, Croatia and Rumania (Baldizzone & van der Wolf 2012).

Acknowledgements

Special thanks to Willem N. Ellis for providing the references of literature, to Willy De Prins for proofreading the text and for writing the résumé, to Arnold Scheurs for the data of the Netherlands and Johan De Prins for the translation in English.

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Corrigendum

Critical note on the publication by Korb "*Gegenes nostrodamus* (Lepidoptera: Hesperiidae), first record for East Kazakhstan", *Phegea* 41(1): 22 (2013)

The specimen of skipper figured in the mentioned publication, as well as the other listed specimens, do not belong to *Gegenes nostrodamus* (Fabricius, 1783), but to *Eogenes alcides* (Herrich-Schäffer, 1852), as can be seen from the male genitalia and form and colour of wings. *Eogenes alcides* has a wide distribution from Turkey and Transcaucasia in the west to S. E. Kazakhstan and Pakistan in the East. This species was recorded for the first time from Kazakhstan by Evans in 1949.

Evans W. H. 1949. *A catalogue of the Hesperiidae from Europe, Asia und Australia in the British Museum* (*Natural History*). — British Museum (Natural History), London pp. i–xix, 1–502, pls. 1–53.

V. Tshikolovets

Boekbespreking

Porter J.: Colour Identification guide to caterpillars of the British Isles. Macrolepidoptera.
17 × 23 cm, 287 pagina's, 49 kleurenplaten, te bestellen bij Brill, P.O. Box 9000, NL-2300 PA Leiden, ingebonden, 2010, EUR 69,- excl. portkosten (ISBN 978 87 88 75795 8).

Dit is de eerste, omvattende fotogids over de rupsen van de Britse Macrolepidoptera (dagvlinders inbegrepen). In dit boek worden 850 verschillende soorten behandeld, wat 95% van de Britse fauna vertegenwoordigt. Hiertoe behoren de inlandse soorten, maar ook enkele reeds uitgestorven en een reeks invasieve soorten. Al deze rupsen werden in hun natuurlijke omgeving gefotografeerd op een van hun voedselplanten. Sommige foto's werden op continentaal Europa genomen. Veel van deze soorten werden nooit eerder afgebeeld, hetzij fotografisch of met tekeningen. Het boek kon worden samengesteld door een nauwe samenwerking tussen verscheidene vooraanstaande lepidopterologen in Groot-Brittannië.

Hoewel in het boek haast alle Britse soorten staan afgebeeld, is het toch ook zeer bruikbaar voor Europese lepidopterologen, vooral dan uit Noord- en Midden-Europa. Zij zullen er de meeste soorten uit hun nationale fauna in terugvinden op prachtige kleurenfoto's.

Na een inleiding en een lijst van ontbrekende soorten, waarvoor medewerking wordt gevraagd, volgt de beschrijving van de afzonderlijk soorten. Die tekst is voor alle soorten op dezelfde manier ingedeeld: algemene beschrijving van de rups, voedselplanten, gedrag, instructies voor het kweken van deze soort. Iedereen die in de biologie van Europese Macrolepidoptera geïnteresseerd is, vindt in dit boek zijn gading. Het is keurig uitgegeven en stevig ingebonden.

Willy De Prins

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