

***Enolmis acanthella*, a new species for Central Europe (Lepidoptera: Scythrididae)**

Marcel Hellers

Abstract. *Enolmis acanthella* (Godart, 1824), a species known from SW Europe and NW Africa, is spreading its distribution area. It has first been sighted in 1988 in France near Nancy. Since 1991 it regularly occurs in a western suburb of the city of Luxembourg. In 1998, a new locality in the south-eastern part of Luxembourg has been discovered, in 1999, it has been collected in Saarland (D), and in 2000 in the south of Luxembourg. According to the literature, the first instars feed on lichens, which could explain such a spreading.

Samenvatting. *Enolmis acanthella*, een nieuwe soort voor Midden-Europa (Lepidoptera: Scythrididae)

Enolmis acanthella (Godart, 1824), een gewone soort in Zuidwest-Europa en Noordwest-Afrika, breidt zijn areaal uit. De eerste vermelding uit Frankrijk vond plaats te Nancy in 1988. Sinds 1991 komt deze soort geregeld voor in een westelijk district van de stad Luxemburg. In 1998 werd een nieuwe lokaliteit ontdekt in het zuidoostelijk deel van Luxemburg. In 1999 werd de soort gesigneerd uit Saarland (Duitsland) en in 2000 uit het zuiden van Luxemburg. Volgens de literatuur zou de rups op korstmossen leven, wat deze uitbreiding van het verspreidingsgebied zou kunnen verklaren.

Résumé. *Enolmis acanthella*, une espèce nouvelle pour l'Europe centrale (Lepidoptera: Scythrididae)

Enolmis acanthella (Godart, 1824), une espèce commune à l'Europe du sud-ouest et à l'Afrique du nord-est, est en train d'agrandir son aire de répartition vers l'Europe centrale. Elle a été trouvée en France près de Nancy en 1988. Depuis 1991, elle est observée régulièrement dans un faubourg de Luxembourg-Ville. En 1998, une nouvelle localité au sud-est du Grand-Duché est signalée, en 1999 l'espèce a été prise en Sarre (Allemagne) et finalement en 2000 au sud du Luxembourg. D'après la littérature, les chenilles vivent sur des lichens, ce qui contribuerait à un agrandissement de son aire de répartition.

Zusammenfassung. *Enolmis acanthella*, eine neue Art für Mitteleuropa (Lepidoptera: Scythrididae)

Enolmis acanthella (Godart, 1824), eine Art mit Verbreitungsgebiet in SW-Europa und NW-Afrika, ist im Begriff, ihr Areal nach Norden zu erweitern. Sie wurde zuerst 1988 bei Nancy (F) gefunden. 1991 tauchte sie im Zentrum Luxemburgs auf, wo sie seither jedes Jahr regelmäßig auftritt. 1998 wurde sie im Südosten Luxemburgs in einer weiteren Lokalität entdeckt, 1999 im Saarland (D), und schließlich 2000 im Süden Luxemburgs. Die Literatur gibt als Raupenfutterpflanze Flechten an, was einer Arealerweiterung kaum ein Hindernis setzt.

Key words: *Enolmis acanthella* – Luxembourg – Germany – distribution – faunistics.

Hellers, M.: 15, Op der Huuscht, L-9395 Tandel, GD-Luxembourg.

Introduction

During the last years, there were several records in and around the Grand-Duchy of Luxembourg of a species, the area of which was until now presumed to be restricted to SW Europe and NW Africa (Bengtsson 1997: 170). This taxon is *Enolmis acanthella* (Godart, 1824), a conspicuously marked representative of the Scythrididae with a wingspan varying from 12 to 19 mm.

Imago

There is no difference in the wing pattern of the specimens originating from Central Europe as compared to those collected by the author in the Pyrenees

(France, Pyrénées-Orientales) and in the north of Spain (León). The markings are the same, but most of the southern European specimens are larger than those from Central Europe. Two ♂ specimens were dissected, and there were no relevant differences as compared to the figure given by Bengtsson (1997: 255). Bengtsson, to whom the author sent the genitalia for confirmation, acknowledged the species being *Enolmis acanthella* (Godart, 1824).

Distribution

E. acanthella occurs in SW Europe and NW Africa (Spuler 1910: 441, Bengtsson 1997: 170). Checking the collection of Michel Martin (Nancy, F), the author discovered 2 specimens of *E. acanthella* from the same site: "fin juillet 1988, Villers-lès-Nancy", which is a suburb of Nancy, Département Meurthe-et-Moselle (F).

From 27.VI.1991 onwards, the species is mentioned from the Grand-Duchy of Luxembourg, from Bertrange, a western suburb of the city of Luxembourg. Romain Schoos, Bertrange (L), who runs a light trap in his garden, confirmed to the author having got *E. acanthella* in numbers every year since its first appearance. These observations cover a time-span from 4.VI until 5.VIII. Bengtsson (1997: 170) reports a flight period from mid-May to the end of September.

On 21.VII.1998, Marc Meyer (Natural History Museum, L) got 2 specimens in a light trap near Erpeldange/Bous, in the south-west of Luxembourg.

Andreas Werno (Nunkirchen, D) confirmed to the author the capture of *E. acanthella* on 25.IX.1999 near Nennig, Saarland (D). This is the first record of this species in Germany (Gaedike & Heinicke 1999).

On 17.VI.2000, the author himself finally discovered the species near Dudelange in the south of Luxembourg. At late dusk, returning after a long and exhausting day excursion, an adult moth was observed sitting on top of the car. The specimen, collected because it could no longer be identified in the field, was recognised as being *E. acanthella* once at home.

The habitats of *Enolmis acanthella* in Luxembourg

E. acanthella is most common at Bertrange in the central part of Luxembourg. The light trap which attracted the species, is overviewing gardens and, beyond these, intensively used meadows, which are irrigated by a small brook. A railway embankment, along which hedges grow, lies at a distance of 1.000 m. The soil consists mainly of clay. Altitude: 300 m. The landscape in the neighbourhood is without any rocks or bare soil surfaces. The climate is mild with moderate precipitation (750–800 mm). In January, the average temperature is 0°C and in July 16,5–17°C.

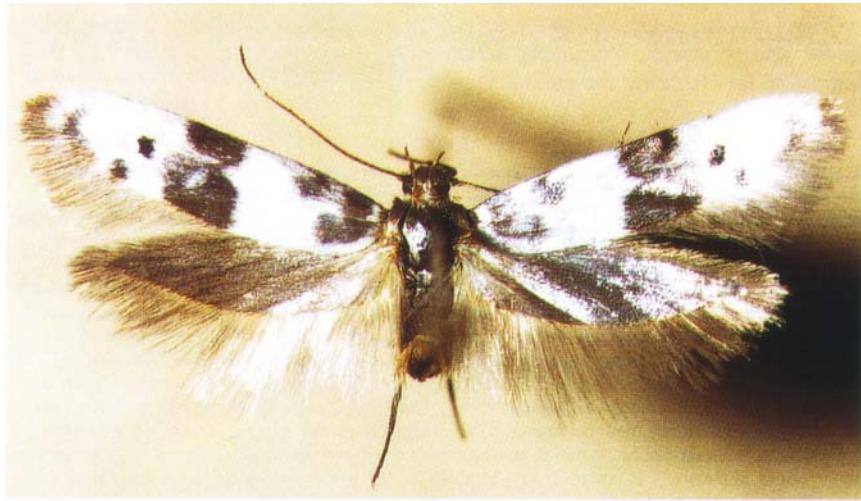


Figure 1: *Enolmis acanthella* (Godart, 1824), Grand-Duchy of Luxembourg, Dudelange, Haardt, 17.VI.2000, leg. M. Hellers.

The only area corresponding to the sites in southern Europe, where the author also collected this species, is the locality near Dudelange. It is made up of a dry wasteground neighbouring a former iron ore exploitation. The plant associations and the microclimate remind the southern European localities. All over the place, there are many bare rocks with a lot of lichens. Nevertheless, *E. acanthella* was collected near the urban area.

The locality at Villers-lès-Nancy is also situated just at the city border of Nancy, but those of Nittel and Erpeldange/Bous are lying some kilometres away from any agglomeration.

Discussion

According to literature records (Spuler 1910: 441, Cifuentes 1994: 236, Bengtsson 1997: 170), the caterpillar of *E. acanthella* lives on lichens. If this is correct, the species is, in the Grand-Duchy of Luxembourg, obligatory linked to lichens growing on walls, roofs and trees, as there are no rocks in the dense agglomeration of Bertrange.

The author supposes that the species may be living on another plant or even a garden plant, with which it had been introduced in Central Europe. This could

explain its occurrence in or near human settlements. Further research should clarify this problem.

Acknowledgments

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References

- Bengtsson, B. Å., 1997. Scythrididae. In: Huemer, P., Karsholt, O. & Lyneborg, L.: *Microlepidoptera of Europe*, Vol. 2. — Apollo Books, Stenstrup, 301 pp.
- Cifuentes, J., 1994. Los microlepidópteros de Navarra (I). Superfamilias Yponomeutoidea, Gelechioidea, Tortricoidea, Sesioidea, Alucitoidea y Pterophoroidea (Insecta: Lepidoptera). — *Shilap, Revista de lepidopterología* **22**: 223–247.
- Gaedike, R. & Heinicke, W. (Eds.), 1999. Verzeichnis der Schmetterlinge Deutschlands (Entomofauna Germanica Band 3). — *Entomologische Nachrichten und Berichte*, Suppl. **5**: 1–216.
- Spuler, A., 1910. *Die Schmetterlinge Europas, Kleinschmetterlinge*. Reprint 1983. — Verlag Erich Bauer, Keltern-Weiler, 342 pp.