

**Tortricidae (Lepidoptera) of Wielkopolska province
with comments on rare species**

WOJCIECH KUBASIK

Department of Entomology and Environmental Protection, University of Life Sciences in
Poznań, Dąbrowskiego 159, 60-594 Poznań, Poland, e-mail: wkubasik@up.poznan.pl

ABSTRACT. The research was conducted between 1999 and 2002 in an orchard environment in the Poznań area. Faunistic data on two species of Tortricidae new to the Polish fauna (*Eucosma scorzonerana* and *Epiblema inulivora*) and 23 rare ones, new to Wielkopolska province, are given.

KEY WORDS: Lepidoptera, Tortricidae, *Eucosma scorzonerana*, *Epiblema inulivora*, Poland, Wielkopolska, new records.

INTRODUCTION

In Poland the Tortricidae are represented by over 450 species and constitute the second most abundant Lepidoptera family in the country. Knowledge of their distribution, however, is still inadequate, as is the case with other Microlepidopteran families, and many areas of Poland are still unstudied in this respect. In comparison, Wielkopolska emerges comparatively well, as 270 tortricid species have been reported from the province, that is, nearly 60% of the Tortricidae known from Poland. Nevertheless, these data are very often historical in character, because the records stem mainly from the pre-war period or from before 1960 (BUSZKO & NOWACKI 2000) and have not yet been subjected to comprehensive study. The most complete data concerning the Poznań area were gathered before and after World War II by two exceptionally active amateur entomologists, Marcei Lewandowski and Marian Szmyt. Unfortunately, however, the results of their studies have not yet to be published. A large part of the collection data they collected was, however, described in studies by RAZOWSKI (1981, 1983, 1987, 1991). Among the pre-war studies,

the one by SZULCZEWSKI (1933) deserves particular attention: it lists some 120 Tortricidae species. A study by TOLL (1931), also a pre-war one, reports nearly a hundred species from the provinces of Poznań and Pomerania. A year earlier his study of the Tortricidae of the Bydgoszcz area and Jamy forest district (TOLL 1930) was published: this five-year study (1925-1929) revealed 121 Tortricidae species in the Bydgoszcz area, and 164 in the Jamy forest district (a total of 199 species). His studies from the years 1919-1923 carried out on the Stemplew estate, Łódź province (on the border of Wielkopolska) was also very interesting (TOLL 1929, 1933): this research uncovered 183 Tortricidae species. These figures should, however, be treated as approximate ones, as they are relevant to the then state of knowledge of the Tortricidae family.

MATERIALS AND METHODS

The aim of this study, carried out in 1999-2002, was to specify whether the species composition and structure of Tortricidae communities differ depending on the manner in which humans utilize the habitat. With this in view, three orchards were selected: one completely neglected, another was an extensively cultivated traditional orchard, and the third was a commercial one. The orchards were in the vicinity of Poznań:

Dębno – UTM: XT19 (52°18'33"N, 16°42'24"E) – a small neglected orchard, situated among cultivated fields; various species of fruit trees and bushes with the dominance of apple trees.

Komorniki – UTM: XU 20 (52°20'14"N, 16°48'52"E) – a traditional orchard next to a house; various species of fruit trees and bushes, the oldest 50 years of age.

Rosnowo – UTM: XT 29 (52°19'33"N, 16°47'02"E) – a commercial orchard with various fruit trees and bushes, which in 1999 covered an area of 66 ha. The tortricid moth specimens were caught near the apple tree section with Lobo and Wealthy cultivars, an area of 6.5 ha.

The results of the study will be published separately. They yielded, however, many interesting faunistic data, contributing greatly to the knowledge of the Tortricidae of Wielkopolska. These are presented below.

The moths were caught with light traps (a 250W MIX-type bulb) affixed to a self-catching trap or an entomological screen. A total of slightly more than 19 000 specimens were caught from 174 species, which makes up almost 40% of the tortricid moth species reported in Poland so far. More than 20 species were reported from Wielkopolska province for the first time. One species proved to be new to the Polish fauna and another was confirmed, although it had previously been deemed dubious and struck off the list of Polish Tortricidae (RAZOWSKI 1987). A breakdown of the species is presented in the Table. The taxa were adopted from BROWN (2005) and the most common synonyms are given for a

few species. According to RAZOWSKI (2003) and other authors, *Celypha rosaceana* (SCHLÄGER, 1847) is treated here as a true species. Some of the most interesting species are discussed below.

Table. List of Tortricidae collected in Wielkopolska province in orchard habitats.

* species new to Wielkopolska province, ** species new to Poland.

Species	Dębno	Komor-niki	Rosno-wo	No of speci-mens
1	2	3	4	5
<i>Phtheochroa inopiana</i> (HAWORTH, 1811)*			●	46
<i>Phtheochroa pulvillana</i> (HERRICH-SCHÄFFER, 1851)	●	●		3
<i>Phtheochroa sodaliana</i> (HAWORTH, 1811)*		●		1
<i>Cochylimorpha hilarana</i> (HERRICH-SCHÄFFER, 1851)		●		1
<i>Cochylimorpha elongana</i> (FISCHER V. RÖSLERSTAMM, 1839)*	●		●	2
<i>Cochylimorpha alternana</i> (CURTIS, 1831)*			●	1
<i>Phalonidia manniana</i> (FISCHER V. RÖSLERSTAMM, 1839)*	●		●	5
<i>Gynnidomorpha permixtana</i> (DENIS & SCHIFFERMÜLLER, 1775)*		●	●	3
<i>Gynnidomorpha alismana</i> (RAGONOT, 1883)			●	1
<i>Agapeta hamana</i> (LINNAEUS, 1758)	●	●	●	208
<i>Aethes hartmanniana</i> (CLERCK, 1758)		●	●	3
<i>Aethes margaritana</i> (HAWORTH, 1811)	●	●	●	14
<i>Aethes smeathmanniana</i> (FABRICIUS, 1781)	●	●	●	1084
<i>Aethes francillana</i> (FABRICIUS, 1794)*		●	●	2
<i>Aethes tessera</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●	●	4
<i>Aethes rubigana</i> (TREITSCHKE, 1830)	●	●	●	20
<i>Aethes kindermanniana</i> (TREITSCHKE, 1830)	●			3
<i>Cochylidia moguntiana</i> (RÖSSLER, 1864)			●	1
<i>Cochylidia implicitana</i> (WOCKE, 1856)	●	●	●	174
<i>Cochylis nana</i> (HAWORTH, 1811)*		●		2
<i>Cochylis hybridella</i> (HÜBNER, 1813)	●	●	●	65
<i>Cochylis atricapitana</i> (STEPHENS, 1852)*	●			2
<i>Cochylis posterana</i> ZELLER, 1847	●	●	●	394
<i>Tortrix viridana</i> LINNAEUS, 1758	●	●	●	322
<i>Aleimma loeflingiana</i> (LINNAEUS, 1758)	●	●	●	23

Species	Dębno	Komor-niki	Rosno-wo	No of speci-mens
1	2	3	4	5
<i>Acleris holmiana</i> (LINNAEUS, 1758)	●	●	●	152
<i>Acleris forsskaleana</i> (LINNAEUS, 1758)	●	●	●	15
<i>Acleris bergmanniana</i> (LINNAEUS, 1758)	●	●	●	21
<i>Acleris rhombana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●		9
<i>Acleris variegana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●		6
<i>Acleris hastiana</i> (LINNAEUS, 1758)		●		1
<i>Acleris ferrugana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●		●	4
<i>Acleris notana</i> (DONOVAN, 1806)	●	●		2
<i>Neosphaleroptera nubilana</i> (HÜBNER, 1796-1799)	●	●	●	29
<i>Tortricodes alternella</i> (DENIS & SCHIFFERMÜLLER, 1775)		●		1
<i>Eana incanana</i> (STEPHENS, 1852)*	●	●	●	4
<i>Cnephasia incertana</i> (TREITSCHKE, 1835)	●	●	●	195
<i>Cnephasia stephensiana</i> (DOUBLEDAY, 1850)	●	●	●	468
<i>Cnephasia asseclana</i> (DENIS & SCHIFFERMÜLLER, 1775)*	●	●		21
<i>Cnephasia pasiuana</i> (HÜBNER, 1796-1799)*	●	●	●	89
<i>Cnephasia genitalana</i> PIERCE & METCALFE, 1915*	●	●	●	175
<i>Cnephasia communana</i> (HERRICH-SCHÄFFER, 1851)	●	●	●	61
<i>Cnephasia longana</i> (HAWORTH, 1811)*	●	●	●	384
<i>Eulia ministrana</i> (LINNAEUS, 1758)	●	●		3
<i>Pseudargyrotoza conwagana</i> (FABRICIUS, 1775)		●		8
<i>Epagoge grotiana</i> (FABRICIUS, 1781)*	●			7
<i>Paramesia gnomana</i> (CLERCK, 1759)	●	●	●	8
<i>Capua vulgana</i> (FRÖLICH, 1828)	●	●	●	14
<i>Archips oporana</i> (LINNAEUS, 1758)		●		1
<i>Archips podana</i> (SCOPOLI, 1763)	●	●	●	412
<i>Archips crataegana</i> (HÜBNER, 1796-1799)	●	●		26
<i>Archips xylosteana</i> (LINNAEUS, 1758)	●	●		73
<i>Archips rosana</i> (LINNAEUS, 1758)	●	●	●	3089
<i>Choristoneura hebenstreitella</i> (MÜLLER, 1764)	●	●	●	80
<i>Argyrotaenia ljugiana</i> (THUNBERG, 1797)	●	●	●	16
<i>Ptycholomoides aeriferana</i> (HERRICH-SCHÄFFER, 1851)	●	●		2
<i>Ptycholoma lecheana</i> (LINNAEUS, 1758)	●	●		10

Species	Dębno	Komor-niki	Rosno-wo	No of speci-mens
1	2	3	4	5
<i>Pandemis corylana</i> (FABRICIUS, 1794)	●	●		31
<i>Pandemis cerasana</i> (HÜBNER, 1786)	●	●	●	768
<i>Pandemis heparana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●	●	1022
<i>Pandemis dumetana</i> (TREITSCHKE, 1835)	●	●	●	136
<i>Syndemis musculana</i> (HÜBNER, 1796-1799)	●	●	●	80
<i>Aphelia paleana</i> (HÜBNER, 1793)	●	●	●	8
<i>Dichelia histrionana</i> (FRÖLICH, 1828)	●	●	●	240
<i>Clepsis spectrana</i> (TREITSCHKE, 1830)	●	●	●	158
<i>Clepsis neglectana</i> (HERRICH-SCHÄFFER, 1851)*	●	●		4
<i>Clepsis consimilana</i> (HÜBNER, 1817)	●	●	●	41
<i>Adoxophyes orana</i> (FISCHER V. RÖSLERSTAMM, 1834)	●	●	●	764
<i>Bactra lancealana</i> (HÜBNER, 1799)	●	●	●	12
<i>Bactra lacteana</i> (CARADJA, 1916)*	●	●	●	29
<i>Bactra furfurana</i> (HAWORTH, 1811)	●			1
<i>Endothenia ericetana</i> (HUMPHREYS & WESTWOOD, 1845)	●	●	●	26
<i>Endothenia quadrimaculana</i> (HAWORTH, 1811)	●	●	●	21
<i>Eudemis porphyrana</i> (HÜBNER, 1799)	●			3
<i>Eudemis profundana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●			2
<i>Apotomis betuletana</i> (HAWORTH, 1811)	●	●	●	22
<i>Apotomis capreana</i> (HÜBNER, 1817)		●	●	2
<i>Apotomis soroculana</i> (ZETTERSTEDT, 1839)	●	●	●	24
<i>Orthotaenia undulana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●	●	30
<i>Hedya salicella</i> (LINNAEUS, 1758)	●	●	●	190
<i>Hedya nubiferana</i> (HAWORTH, 1811)	●	●	●	1134
<i>Hedya pruniana</i> (HÜBNER, 1799)	●	●	●	144
<i>Hedya ochroleucana</i> (FRÖLICH, 1828)	●	●		4
<i>Metendothenia atropunctana</i> (ZETTERSTEDT, 1839)	●	●	●	7
<i>Celypha rufana</i> (SCOPOLI, 1763)	●	●	●	13
<i>Celypha rosaceana</i> (SCHLÄGER, 1847)*	●		●	5
<i>Celypha striana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●	●	389
<i>Celypha cespitana</i> (HÜBNER, 1817)	●	●	●	33
<i>Celypha siderana</i> (TREITSCHKE, 1835)		●		1

Species	Dębno	Komor-niki	Rosno-wo	No of speci-mens
1	2	3	4	5
<i>Syricoris lacunana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●	●	1634
<i>Syricoris rivulana</i> (SCOPOLI, 1763)		●	●	2
<i>Olethreutes metallicana</i> (HÜBNER, 1799)*		●		1
<i>Olethreutes micana</i> (DENIS & SCHIFFERMÜLLER, 1775)		●		1
<i>Olethreutes palustrana</i> (LIENIG & ZELLER, 1846)	●	●	●	25
<i>Olethreutes arcuella</i> (CLERCK, 1759)	●			4
<i>Cymolomia hartigiana</i> (RATZEBURG, 1840)		●		8
<i>Piniphila bifasciana</i> (HAWORTH, 1811)	●	●	●	49
<i>Pseudohermenias hercyniana</i> (BECHSTEIN & SCHARFENBERG, 1804) (= <i>abietana</i> FABRICIUS, 1787)		●		9
<i>Lobesia fuligana</i> (HAWORTH, 1811) (= <i>abscissana</i> DOUBLEDAY, 1849)	●	●	●	97
<i>Thiodia citrana</i> (HÜBNER, 1796-1799)	●	●	●	147
<i>Rhopobota myrtillana</i> (HUMPHREYS & WESTWOOD, 1845)		●	●	12
<i>Rhopobota naevana</i> (HÜBNER, 1814-1817)	●	●	●	7
<i>Spilonota ocellana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●	●	506
<i>Spilonota laricana</i> (HEINEMANN, 1863)	●	●		59
<i>Epinotia granitana</i> (HERRICH-SCHÄFFER, 1851)		●		5
<i>Epinotia immundana</i> (FISCHER V. RÖSLERSTAMM, 1839)	●	●	●	8
<i>Epinotia nanana</i> (TREITSCHKE, 1835)	●	●		12
<i>Epinotia demarniana</i> (FISCHER V. RÖSLERSTAMM, 1839)		●		3
<i>Epinotia tetraquetrana</i> (HAWORTH, 1811)	●	●	●	3
<i>Epinotia tenerana</i> (DENIS & SCHIFFERMÜLLER, 1775)			●	1
<i>Epinotia rubiginosana</i> (HERRICH-SCHÄFFER, 1851)			●	1
<i>Epinotia tedella</i> (CLERCK, 1759)		●		2
<i>Epinotia bilunana</i> (HAWORTH, 1811)		●		1
<i>Epinotia nisella</i> (CLERCK, 1759)		●		1
<i>Zeiraphera isertana</i> (FABRICIUS, 1794)	●		●	4
<i>Eucosma obumbratana</i> (LIENIG & ZELLER, 1846)	●		●	8
<i>Eucosma cana</i> (HAWORTH, 1811)	●	●	●	149
<i>Eucosma balatonana</i> (OSTHELDER, 1937)*		●		2
<i>Eucosma lacteana</i> (TREITSCHKE, 1835)	●	●	●	247
<i>Eucosma metzneriana</i> (TREITSCHKE, 1830)	●	●	●	209

Species	Dębno	Komor-niki	Rosno-wo	No of speci-mens
1	2	3	4	5
<i>Eucosma conterminana</i> (GUENÉE, 1845)	●	●	●	324
<i>Eucosma pupillana</i> (CLERCK, 1759)*		●	●	3
<i>Eucosma scorzonera</i> (BENANDER, 1942)**	●			1
<i>Gypsonoma dealbana</i> (FRÖLICH, 1828)	●	●	●	50
<i>Gypsonoma oppressana</i> (TREITSCHKE, 1835)	●	●	●	5
<i>Gypsonoma sociana</i> (HAWORTH, 1811)	●			2
<i>Gypsonoma aceriana</i> (DUPONCHEL, 1842)	●		●	7
<i>Epiblema foenella</i> (LINNAEUS, 1758)	●	●	●	506
<i>Epiblema graphana</i> (TREITSCHKE, 1835)	●		●	10
<i>Epiblema inulivora</i> (MEYRICK, 1932)** (= <i>obscurana</i> (HERRICH-SCHÄFFER, 1851))			●	1
<i>Notocelia cynosbatella</i> (LINNAEUS, 1758)	●	●		33
<i>Notocelia uddmanniana</i> (LINNAEUS, 1758)	●	●	●	42
<i>Notocelia aquana</i> (HÜBNER, 1796-1799)	●	●		5
<i>Notocelia rosaecolana</i> (DOUBLEDAY, 1850)*	●	●		5
<i>Notocelia trimaculana</i> (HAWORTH, 1811)	●	●	●	9
<i>Blastesthia turionella</i> (LINNAEUS, 1758)	●			1
<i>Retinia resinella</i> (LINNAEUS, 1758)	●	●		4
<i>Gravitarmata margarotana</i> (HEINEMANN, 1863)			●	1
<i>Rhyacionia pinicolana</i> (DOUBLEDAY, 1850)	●			1
<i>Rhyacionia pinivorana</i> (LIENIG & ZELLER, 1846)		●		1
<i>Eucosmomorpha albersana</i> (HÜBNER, 1811-1813)		●		1
<i>Enaromnia formosana</i> (SCOPOLI, 1763)	●	●	●	79
<i>Ancylis uncella</i> (DENIS & SCHIFFERMÜLLER, 1775)			●	1
<i>Ancylis laetana</i> (FABRICIUS, 1775)	●			1
<i>Ancylis obtusana</i> (HAWORTH, 1811)	●			1
<i>Ancylis upupana</i> (TREITSCHKE, 1835)		●		1
<i>Ancylis geminana</i> (DONOVAN, 1806)		●		2
<i>Ancylis diminutana</i> (HAWORTH, 1811)*		●		1
<i>Ancylis apicella</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●	●	10
<i>Ancylis badiana</i> (DENIS & SCHIFFERMÜLLER, 1775)		●		1
<i>Ancylis mitterbacheriana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●			3

Species	Dębno	Komor-niki	Rosnowo	No of specimens
1	2	3	4	5
<i>Ancylis achatana</i> (DENIS & SCHIFFERMÜLLER, 1775)	●	●		168
<i>Ancylis tineana</i> (HÜBNER, 1796-1799)		●		3
<i>Cydia nigricana</i> (FABRICIUS, 1794)	●	●	●	5
<i>Cydia conicolana</i> (HEYLAERTS, 1874)			●	1
<i>Cydia coniferana</i> (SAXESEN, 1840)		●		1
<i>Cydia strobilella</i> (LINNAEUS, 1758)		●		2
<i>Cydia pomonella</i> (LINNAEUS, 1758)	●	●	●	554
<i>Cydia splendana</i> (HÜBNER, 1796-1799)	●	●	●	54
<i>Cydia amplana</i> (HÜBNER, 1796-1799)	●	●	●	5
<i>Lathronympha strigana</i> (FABRICIUS, 1775)	●	●	●	100
<i>Grapholita funebrana</i> (TREITSCHKE, 1835)	●	●	●	171
<i>Pammene gallicana</i> (GUENÉE, 1845)	●			2
<i>Pammene fasciana</i> (LINNAEUS, 1761)	●			1
<i>Pammene suspectana</i> (LIENIG & ZELLER, 1846)		●		1
<i>Pammene obscurana</i> (STEPHENS, 1834)*		●		3
<i>Pammene rhediella</i> (CLERCK, 1759)	●			1
<i>Stophedra nitidana</i> (FABRICIUS, 1794)		●		1
<i>Dichrorampha acuminatana</i> (LIENIG & ZELLER, 1846)	●	●	●	22
<i>Dichrorampha simpliciana</i> (HAWORTH, 1811)	●	●	●	471
<i>Dichrorampha vancouverana</i> MCDUNNOUGH, 1935 (= <i>gueneana</i> OBRAZTSOV, 1953)		●	●	3
<i>Dichrorampha petiverella</i> (LINNAEUS, 1758)	●	●	●	9
<i>Dichrorampha plumbagana</i> (TREITSCHKE, 1830)		●		1
<i>Dichrorampha obscuratana</i> (WOLFF, 1955)			●	1
Number of species:	124	138	106	
Number of specimens:				19023

***Cochylimorpha elongana* (FISCHER V. RÖSLERSTAMM, 1839)**

Dębno, 11.06.1999, 1 ♀, leg. and coll. W. Kubasik, GS 75; Rosnowo, 14.06.2000, 1 ♀, leg. and coll. W. Kubasik.

A species reported from only three provinces in Poland, including the type locality of

Głogów. In recent years reported from Lublin province (RAZOWSKI 2000). It is rarely caught, most often in dry biotopes with *Artemisia vulgaris*, *A. campestris*, *Helichrysum arenarium* and *Achillea millefolium*, in whose stems its larvae feed (RAZOWSKI 2002).

***Cnephasia longana* (HAWORTH, [1811])**

Dębno, 7.07.1999-29.07.2002, 375 specimens; Komorniki, 11.07.1999-7.07.2002, 6 sp.; Rosnowo 13.07.2001, 1 sp., 23.07.2001, 2 sp., 12.07.2002, 1 sp.

Until now the species had been known from Poland from only one locality at Bielinek nad Odrą (RAZOWSKI 1959). It is the most characteristic of the *Cnephasia* species in the country, which are often difficult to distinguish, and is not very likely to have been missed by earlier researchers, especially as during the present study a total of 384 specimens of this species were caught at all three sites. This provides ample demonstration of the dynamics of the fauna of the study area and the changes that have occurred there. The species may be of local economic importance, and its feeding spectrum is very wide, from crops to fruit trees and strawberries (MEIJERMAN & ULENBERG 2000). It is therefore advisable to monitor its range and numbers in Poland.

***Aethes francillana* (FABRICIUS, 1794)**

Komorniki, 29.07.2002, 1 ♂, GS 270, leg. and coll. W. Kubasik; Rosnowo, 27.07.2001, 1 sp.

This species has so far been reported from only two provinces: Świętokrzyskie and Lublin. It was first found by Prof. Buszko in Pińczów (RAZOWSKI 1991). Previous apparent sightings of this species in Poland in fact referred to a very similar species – *Aethes fennicana* (M. HERING, 1924) (RAZOWSKI 1981). Taking into consideration the distance between the localities reported, *Aethes francillana* should certainly be more widely distributed.

***Cochylis atricapitana* (STEPHENS, 1852)**

Dębno, 29.07.2002, 1 sp., 10.08.2002, 1 sp.

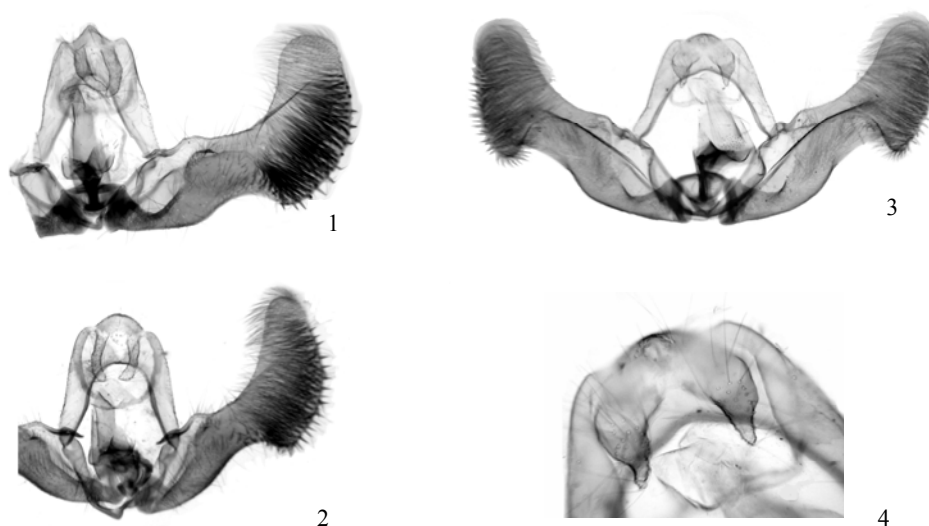
In Poland, only historically reported from Szczecin (BÜTTNER 1880). Recently it has probably expanded its range, as there are reports of it in various parts of the country, although as a rule they are unpublished. Its larvae feed on *Senecio jacobea* and various species of *Hieracium* and *Hypericum* (RAZOWSKI 2002). Only two specimens of the species were caught during this research at the Dębno site.

***Eucosma scorzonerana* (BENANDER, 1942)**

Dębno, 22.07.2000, 1 ♂, GS 385, leg. and coll. W. Kubasik.

A species new to the Polish fauna, it is known in Europe from Sweden, Norway,

Estonia, Latvia, Russia, the Czech Republic, Slovakia and Italy. Its sighting in Poland was thus very probable; but because it is very similar in appearance to several other *Eucosma* species, it went unnoticed in our country. The species is associated with the *Scorzonera* genus of plants (RAZOWSKI 2003). In Sweden, where it is considered a threatened species, the larvae develop in the umbels of *Scorzonera humilis* L. (KLEMICH 2007). The genitalia of the specimen caught at the site in Dębno are illustrated in Fig. 3. Fig. 4 shows the magnified socii with their characteristic pointed shape.



Figs 1-4. Male genitalia: 1 – *Epiblema graphana*, 2 – *Epiblema inulivora*, 3 – *Eucosma scorzonera*, 4 – *E. scorzonera* – magnified uncus and socii.

***Epiblema inulivora* (MEYRICK, 1932)**

(= *Epiblema obscurana* (HERRICH-SCHÄFFER, 1851))

Rosnowo, 4.07.2001. 1 ♂, GS 369, leg. and coll. W. Kubasik.

This species was reported from Poland by MASŁOWSKI & MASŁOWSKI (1936) – one female caught in Czarny Las near Zawiercie. For lack of confirmatory evidence and its extreme similarity (both morphological and in the genitalia) to some other species of the genus it was struck off the list of Polish Lepidoptera (RAZOWSKI 1987). Its host plant – *Inula salicina* L. – was also found in the study area (ŻUKOWSKI et al. 1995) Fig. 2 shows

the male genitalia of *E. inulivora*. For comparison, Fig.1 illustrates the male copulatory apparatus of *Epiblema graphana* (TREITSCHKE, 1835) from a specimen caught on the same site. Externally these two species are very similar to each other and they can only be definitively identified after a genital examination.

REFERENCES

- BROWN J. W. 2005. Tortricidae (Lepidoptera). [In:] LANDRY B. World catalogue of Insects 5. Apollo Books, Senstrup, 741 pp.
- BÜTTNER F.O. 1880. Die Pommerschen insbesondere die Stettiner Microlepidopteren. Entomologische Zeitung, Stettin **41**: 383-473.
- BUSZKO J., NOWACKI J. (eds) 2000. The Lepidoptera of Poland. A Distributional Checklist. Polish Entomological Monographs **1**, 178 pp.
- KLEMICH S. 2007. Ecology and conservation aspects of the moth *Eucosma scorzonera* on Gotland. Degree project in conservation biology. Länsstyrelsen i Gotlands Län, Visby, 40 pp.
- MASŁOWSKI L., MASŁOWSKI M. 1936. Motyle okolic Zawiercia III. Uzupełnienia i sprostowania. Fragmenta Faunistica **2**: 403-451.
- MEIJERMAN L., A. ULENBERG S. A. 2000. Arthropods of Economic Importance: Eurasian Tortricidae. University of Amsterdam, Zoological Museum.
(<http://nlbif.eti.uva.nl/bis/tortricidae.php?menuentry=inleiding>)
- RAZOWSKI J. 1959. European species of Cnephasiini (Lepidoptera, Tortricidae). Acta Zoologica Cracoviensia **4**: 179-423.
- RAZOWSKI J. 1981. Motyle (Lepidoptera) Polski. Część V – Cossioidea i Tortricinae. Monografie Fauny Polski. **10**, 345 pp.
- RAZOWSKI J. 1983. Motyle (Lepidoptera) Polski. Część VI – Olethreutinae: Olethreutini. Monografie Fauny Polski. **13**, 177 pp.
- RAZOWSKI J. 1987. Motyle (Lepidoptera) Polski. Część VII – Uzupełnienia i Euomini. Monografie fauny Polski. **15**, 253 pp.
- RAZOWSKI J. 1991. Motyle (Lepidoptera) Polski. Część VIII – Grapholitini. Monografie Fauny Polski. **15**, 253 pp.
- RAZOWSKI J. 2000. Tortricidae. [In:] BUSZKO J., NOWACKI J. (eds). The Lepidoptera of Poland. A Distributional Checklist. Polish Entomological Monographs **1**: 53-69.
- RAZOWSKI J. 2002. Tortricidae (Lepidoptera) of Europe. Vol. 1. Tortricinae and Chlidanotinae. Bratislava, 247 pp.
- RAZOWSKI J. 2003. Tortricidae (Lepidoptera) of Europe. Vol. 2. Olethreutinae. Bratislava, 301 pp.
- SZULCZEWSKI J. W. 1933. Przyczynek do fauny motyli drobnych Poznania i okolicy. Polskie Pismo Entomologiczne **11**: 119-132.
- TOLL S. 1929. Tortricidae znalezione na terenie majątku Stemplew w latach 1919-23. Polskie Pismo Entomologiczne **8**: 184-197.
- TOLL S. 1930. Die Tortricidenfauna der Umgebung von Bydgoszcz und der Staatlichen Oberförsterei Jamy. Polskie Pismo Entomologiczne **9**: 65-86.
- TOLL S. 1931. Beitrag zur Tortricidenfauna der Wojewodschaften Poznań und Pomorze. Polskie Pismo Entomologiczne **10**: 58-68, Tab. II.

- TOLL S. 1933. Wykaz Microlepidoptera znalezionych na terenie majątku Stemplew w latach 1919-23. *Polskie Pismo Entomologiczne* **12**: 28-49.
- ŻUKOWSKI W., LATOWSKI K., JACKOWIAK B., CHMIEL J., 1995. Rośliny naczyniowe Wielkopolskiego Parku Narodowego. Bogucki Wydawnictwo Naukowe, Poznań, 229 pp.

Received: February 03, 2011

Accepted: July 23, 2011