



## Review of Gelechiidae (Lepidoptera) from Crete

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## Review of Gelechiidae (Lepidoptera) from Crete

Ole KARSHOLT & Peter HUEMER

**A b s t r a c t :** The paper gives the first comprehensive overview about Gelechiidae from the Island of Crete with detailed faunistic data. Altogether 115 species are reported, including 10 species indentified to genus level only and likely including undescribed taxa, and 25 new records for Crete. DNA barcode sequences give evidence to cryptic diversity in some species.

**K e y   w o r d s :** Gelechiidae, Crete, new records, DNA barcoding.

### Introduction

With an area of 8,261 km<sup>2</sup> Crete (Kreta) is the largest island of Greece and the fifth largest Mediterranean island, stretching about 260 km from east to west and between 12 and 57 km from north to south. Together with a number of small surrounding islands with total area of ca. 65 km<sup>2</sup> it constitutes the region of Crete. It is a mountainous island, reaching 2,456 m in the Lefka Ori Mts., and with 43 peaks above 2000 m. The mountains are overall karst/limestone (Figs 1-4). Crete is an extension of the Pindos Mts. of the Greek mainland. The distance to mainland Greece is about 100 km and to Turkey about 200 km.

The climate is Mediterranean, with warm summers and relatively cold winter. Most precipitation occurs during winter, in the mountains as snow, and from May to October there is almost no rain.

Being situated in the eastern Mediterranean Sea between Greece, Turkey and north-east Africa the flora and fauna of Crete is potentially exciting. Studies of Lepidoptera from Crete have mainly focused on butterflies and other Macro-Lepidoptera. The first to collect both Macro- and Microlepidoptera in Crete was Hans Rebel from Vienna who visited the island in 1904. He published the results of his efforts, also including results from earlier publications, in 1916 as "Die Lepidopterenfauna Kretas" (REBEL 1916). This publication is considered the base for all subsequent studies of the Lepidoptera fauna of Crete.

Despite Rebel's stimulating early work Microlepidoptera in particular were largely neglected for a long time, and only a few faunistic papers dealt with a larger number of species (see GOZMÁNY 2012). In fact most of the material was collected as 'bycatch' by people searching for Macrolepidoptera, e.g. Hans Reisser (1952-1957), Michael Fibiger (1995-2007) and Walter Ruckdeschel (1997-2011). Unpublished material collected by these and a number of other experts is widespread in several collections. Particularly the

Natural History of Denmark houses a large amount of material with representative samples of numerous species from almost all groups. An outstanding recent contribution to the regional fauna is due to the activities of Dr. Walter Ruckdeschel (Munich, Germany) with 13 expeditions to the Island from 1997–2011 resulting in extensive material from all groups of Lepidoptera (HUEMER 2016, RUCKDESCHEL 2007). Important parts of his material are currently stored in Tiroler Landesmuseum Ferdinandeum (Innsbruck, Austria).

In this paper a comprehensive overview of the family Gelechiidae in Crete is presented for the first time with numerous new records for Crete, mainly based on the aforementioned institutional collections.



**Fig. 1-4:** (1) Omalos plateau, 1050 m, field near hotel. Photo F. Vilhelmsen; (2) 3.5 km SW Omalos Plateau, 1200 m, forest with *Cupressus sempervirens*. Almost all vegetation at ground has been eaten by goats. Photo C. Hvid; (3) Kallergi Mts., ca. 1500 m, Photo C. Hvid; (4) 1.7 km S Topolia, 380 m, Mediterranean vegetation with many herbs. Photo F. Vilhelmsen.

## Material and Methods

### Material

Most of the material was collected at different light sources, mainly with automatic light traps. In addition a few specimens were collected by day with a net. None of the examined specimens was reared from larvae, a method which is otherwise advantageous when collecting Microlepidoptera. Material was partially set at a later stage or in the case of most of the Ruckdeschel material, only pinned and spread.

### DNA Barcoding

DNA samples from dried legs of 56 specimens were prepared according to prescribed standards using the standard high-throughput protocol of DEWAARD et al. (2008). Samples were processed at the Canadian Centre for DNA Barcoding (CCDB, Biodiversity Institute of Ontario, University of Guelph) to obtain DNA barcodes (RATNASHINGHAM & HEBERT 2007). DNA sequencing resulted in a full barcode fragment of 658 bp for 29 specimens and seven sequences ranging from 647 to 586 bp. Four samples with sequence length < 500 bp were not considered for analysis. Details of successfully sequenced voucher specimens including complete voucher data and images can be accessed in the Barcode of Life Data Systems (RATNASHINGHAM & HEBERT 2007) in the public project LECRG Lepidoptera of Crete - Gelechiidae. Intra- and interspecific divergences to Nearest Neighbours in the DNA barcode fragments were calculated under Kimura 2 parameter (K2P) model of nucleotide substitution using analytical tools in BOLD systems v3.0 (<http://www.boldsystems.org>).

Molecular data for species with a minimum divergence >1.5 % for Crete samples are discussed in some detail, whereas species with smaller intraspecific divergences are only listed in Table 1.

### Species inventory

Systematic arrangement follows KARSHOLT et al. (2013).

Records which are likely based on misidentifications are listed in square brackets.

### Abbreviations

BALD.....	Coll. G. Baldizzone, Asti, Italy
BÅB .....	Coll. B. Å. Bengtsson, Färjestaden, Sweden
FIBIGER et al.....	Leg. M. Fibiger, A. Madsen, D. Nilsson & P. Svendsen
FIBIGER & JEPPESEN et al. ....	Leg. M. Fibiger, G. Jeppesen, D. Nilsson, Å. Selling, P. Svendsen & H. Wegner
NHMO .....	Coll. Natural History Museum, Oslo, Norway
RUTT .....	Coll. T. Rutten, Gatersleben, Germany
NUPP .....	Coll. K. & T. Nupponen, Espoo, Finland
SMNK.....	Staatliches Museum für Naturkunde Karlsruhe, Germany
ZSM .....	Zoologische Staatssammlung München, Germany
TLMF.....	Tiroler Landesmuseum Ferdinandeum, Innsbruck, Austria
ZMUC.....	Coll. Zoological Museum, Natural History Museum of Denmark

### A n a c a m p s i n a e

### A n a c a m p s i i n i

#### *Stomopteryx detersella* (ZELLER, 1847)

First record . REBEL (1916: 160) from Mallaes.

**E x a m i n e d m a t e r i a l .** 2♀♀, Mt. Ida, Gonai, 700 m, 24.vii.1994, leg. Baldizzone (BALD, ZMUC); 1♂, 15 km SW Rethymnon, Agirroupoli, 200 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 2♂♂, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, near Omalos village, 1200-1400m, 17.v.2002, leg. Nuppenen (NUPP); 1♂, Agia Galini, 30 m, 14.vi.1997, leg. Ruckdeschel (TLMF); 1♂, Agia Galini, ca. 200 m, 3.vii.2010, leg. Ruckdeschel (TLMF); 1♂, ditto, but 11.vi.2010 (TLMF); 2♂♂, Lasithi plain, Mesa Lasithi, 850 m, 12.vii.2010, leg. Ruckdeschel (TLMF); 2♂♂, 2♀♀, ditto, but 13.vii.2010 (TLMF).

### ***Stomopteryx basalis* (STAUDINGER, 1876)**

**F i r s t r e c o r d .** KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 341) from Knosos (leg. Reisser).

**E x a m i n e d m a t e r i a l .** 2♂♂, Mt. Ida, Gonai, 700 m, 24.vii.1994, leg. Baldizzone (BALD, ZMUC); 2♂♂, 4 km S. Topolia, 28.vii.-1.viii.2001, 350 m, leg. Fibiger et al. (ZMUC); 1♀, Kolimbaria, Agios Stephanos, c1. 120 m, 3.vii.2006, leg. Ruckdeschel (TLMF); 1♀, Kissou Kampos, 460 m, 12.vii.2006, leg. Ruckdeschel (TLMF).

### ***Stomopteryx lusitaniella* CORLEY & KARSHOLT, 2014**

**F i r s t r e c o r d .** KARSHOLT (2004-2011) – as *Stomopteryx hungaricella* GOZMÁNY, 1957 – without details. GOZMÁNY (2012: 342) from Ag. Galini (leg. Sutter, det. Karsholt) as *Stomopteryx hungaricella*.

**E x a m i n e d m a t e r i a l .** 1♂, 3♀♀, Lassithi distr., Makrygialos, 11-19.vi.1988, leg. Johansson, genitalia slide Hendriksen 4418 (ZMUC); 3♀, ditto, but 26-31.v.1993 (ZMUC); 3♂♂, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al., genitalia slide Hendriksen 3604, 5415 (ZMUC); 4♂♂, 4♀♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

**R e m a r k s .** Some of the above mentioned specimens were listed in the original description of *S. lusitaniella* by CORLEY & KARSHOLT (2014: 241-242), but excluded from the type series due to "geographical separation" from the type locality.

### ***Stomopteryx remissella* (ZELLER, 1847)**

**F i r s t r e c o r d .** REBEL (1916: 160) from Mallaes and Kristallenia – and as 'Aristotelia vetusella H.-S.' from Kavusi.

**E x a m i n e d m a t e r i a l .** 1♂, Rethymnon, 3.vi.1988, leg. Johansson (ZMUC); 1♂, Lassithi distr., Makrigialos, 30.v.1993, leg. Johansson (ZMUC); 4♂♂, 3♀♀, Mt. Ida, Astiraki, 500 m, 23.vii.1994, leg. Baldizzone (BALD, ZMUC); 3♂♂, 1♀, Mt. Ida, Gonai, 700 m, 24.vii.1994, leg. Baldizzone (BALD); 1♂, 3 km NW Potamies, 300 m, 16.vi.1998, leg. H. v. d. Wolf (ZMUC); 2♂♂, 1♀, 5 km S. Topolia, 300 m, 25.-26.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, 1♀, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 7♂♂, 3♀♀, Omalos, 1200 m, 25.-30.vi.2000, leg. Fibiger et al. (ZMUC); 2♂♂, 1♀, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 3♂♂, 1♀, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 1♂, 2♀♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3278 (ZMUC); 1♂, 1♀, 4 km SE Lakki, 3.5 km N Omalos, 750 m, 6.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 5♂♂, 2♀♀, N of Omalos Plateau, at pass, 1150 m, 7.-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, Omalos, 1000-1275 m, 12-13.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1 ex, Hora Sfakion, 50 m, 9-21.vi.2014, leg. Aarvik (NHMO); 3♂♂, Imbros, 785 m, 13-17.vi.2010, leg. Aarvik (NHMO); 1 ex, Imbros, 570m, 20.vi.2014, leg. Aarvik (NHMO); 1♂, above Spili, 610 m, 16.v.2000, leg. Ruckdeschel (TLMF); 1♂, Omalos, 11.v.2000, leg. Ruckdeschel (TLMF); 3♂♂, Omalos, southern forest, 1250 m, 6.vii.2010, leg. Ruckdeschel (TLMF); 14♂♂, 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hviid &

Vilhelmsen (ZMUC); 2♂♂, 2♀♀, 3.5 km SW Omalos Plateau, 1200 m, 16-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

**R e m a r k s .** The examined specimens are variable both in size, colour and wing markings. No barcode data is available, and it is uncertain if the material from Crete is conspecific with *S. remissa* from the type locality in Sicily – and if it includes more than one species. The genus *Stomopteryx* is in need of revision.

### *Syncopacma linella* (CHRÉTIEN, 1904)

#### New to Crete.

**E x a m i n e d m a t e r i a l .** 1♂, 5 km S. Topolia, 300 m, 25-26.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 3♂♂, 4 km S. Topolia, 350 m, 28.vii.-1.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3280 (ZMUC); 2♂♂, Kissou Kampos, 460 m, 12.viii.2006, leg. Ruckdeschel (TLMF).

### *Syncopacma polychromella* (REBEL, 1902)

**F i r s t r e c o r d .** KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 343) from Ag. Galini (leg. Klimesch).

**E x a m i n e d m a t e r i a l .** 1♀, Iraklion distr., Zaros, 5-6.vi. 1988, leg. Johansson (ZMUC); 1♂, Lassithi distr., Makrygialos, 11-19.vi.1988, leg. Johansson (ZMUC); 2♀♀, Mt. Ida, Gonai, 700 m, 19.vii.1994, leg. Baldizzone (BALD, ZMUC); 1♂, Heracleion, 150 m, 20-26.iv.1995, leg. Fibiger (ZMUC); 1♂, 1♀, 5 km S. Topolia, 300 m, 25-26.vi.2000, leg. Fibiger et al. (ZMUC); 1♀, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 2♂♂, 3♀♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♀, road Sitia – Sakros, by Kiridi, 600 m, 9-10.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, Kissou Kampos, 460 m, 20.iv.2008, leg. Ruckdeschel (TLMF); 2♂♂, Hora Sfakion, 50 m, 7-13.vi.2009, leg. Aarvik (NHMO); 2♂♂, 1♀, 3.5 km SW Omalos Plateau, 1200 m, 16-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

**R e m a r k s .** The examined specimens are variable with regard to colour and wing markings. *S. polychromella* belongs to a complex of closely related taxa with more or less distinct differences in colour and markings of the forewings, but with almost similar genitalia. Further studies, with emphasis on molecular data are needed to resolve the taxonomy of the group.

### *Aproaerema anthyllidella* (HÜBNER, 1813)

**F i r s t r e c o r d .** KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 340) from Ag. Galini (leg. Sutter, det. Karsholt).

**E x a m i n e d m a t e r i a l .** 1♂, Mt. Ida, Gonai, 700 m, 24.vii.1994, leg. Baldizzone (BALD); 2♂♂, Kato Stalos, 19-27.iv.1995, leg. Baungaard (ZMUC); 1♂, Hore Spakion, 30 m, 21.iv.1995, leg. Fibiger (ZMUC); 1♂, Drepaines by Kissamos, 100 m, 27.iii.-2.iv.1999, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, Georgioupoli, 50 m, 28.iii.-2.iv.1999, leg. Fibiger & Jeppesen et al., genitalia slide Hendriksen 3279 (ZMUC); 1♂, 15 km SW Rethymnon, Agirroupoli, 200 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 2♂♂, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (HH 3601) (ZMUC); 1♀, Kallergi Mts., 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, Skines, 75 m, 5-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♀, 2 km S Fourne, 250 m, 6.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♀, N of Omalos Plateau, at pass, 1150 m, 11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 2♂♂, Agia Galini, ca. 100 m, 15.xi.2004, leg. Ruckdeschel (TLMF); 1♀, Loutro, Phinix, 40 m, 17.v.2005, leg. Ruckdeschel (TLMF); 1♂, Xekollimenos, Kirtomados, ca. 70 m, 9.v.2000, leg. Ruckdeschel (TLMF); 1♂, Xekollimenos, Patellari, ca. 20 m, 25.ix.2001, leg. Ruckdeschel (TLMF); 1♂, Koutsounari, 100 m, 12.iv.2008,

leg. Ruckdeschel (TLMF); 1♂, Koutsounari, Agios Joannis, 390 m, 28.iv.2003, leg. Ruckdeschel (TLMF); 1♂, above Spili, 610 m, 12.viii.2006, leg. Ruckdeschel (TLMF); 1♂, Schinokapsala, Agios Georgios, 675 m, 3.xi.2004, leg. Ruckdeschel (TLMF); 2♂♂, Sisi, ca. 50 m, 6.iv.1999, leg. Ruckdeschel (TLMF); 1♂, 18 km SSE, Sitia, 400 m, 8.v.2007, leg. Fibiger & Jeppesen et al., genitalia in vial (ZMUC); 1♀, road Sitia – Sakros, by Kiridi, 600 m, 9-10.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♀, Hora Sfakion, 50 m, 5-9.vi.2009, leg. Aarvik; 1♂, ditto, but 8-15.ix.2012, 2♀♀, 2♂♂, ditto, but 2♀♀, 26.vii.-7.viii.2015; 1♀, ditto, but 8-18.viii.2016 (NHMO); 1♀, Imbros, 570m, 11.vi.2010, leg. Aarvik; 2♀♀ ditto, but 15.vi.2013 (NHMO); 1♂, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### *Anacampsis scintilella* (FISCHER VON RÖSLERSTAMM, 1841)

#### New to Crete.

Examined material. 2♂♂, Mt. Ida, Astiraki, 500 m, 23.vii.1994, leg. Baldizzone, genitalia slide Hendriksen 3392 (BALD); 1♀, Mt. Ida, Goniai, 700 m, 24.vii.1994, leg. Baldizzone (ZMUC); 1♂, Meskla – Zourva, 650 m, 27.vi.2000, leg. Fibiger et al. (ZMUC).

### *Mesophleps corsicella* (HERRICH-SCHÄFFER, 1856)

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 349) from several localities.

Examined material. 1♂, 4 km S Agia Triada, 5 km W (Moni) Arkadi, 500 m, 14.x.2003, leg. B. Skule (ZMUC); 1♂, 18 km SSE, Sitia, 400 m, 8.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 6♂♂, 1♀, Pandom., Fodele, 100 m, 25.v.2000, leg. Ruckdeschel (TLMF); 2♂♂, 3♀♀, ditto, but 10.x.2001 (TLMF); 1♂, Xekolimenos, Kirtomados, ca. 70 m, 17.v.2003, leg. Ruckdeschel (TLMF); 3♂♂, 1♀, Koutsounari, Agios Joannis, 390 m, 2.x.2001, leg. Ruckdeschel (TLMF); 1♂, above Spili, 610 m, 12.viii.2006, leg. Ruckdeschel (DNA Barcode TLMF Lep 21362) (TLMF); 2♂♂, above Moni Arkadi, 500 m, 28.ix.2016, leg. Skule (ZMUC).

Molecular data. Two barcode sequences in BOLD from Spain are only 0.15 % divergent. The unique barcode from Crete with a minimum distance of 1.39 % indicates moderate intraspecific divergence rather than potential cryptic diversity.

### *Mesophleps silacella* (HÜBNER, 1796)

#### New to Crete.

Examined material. 1♀, road Sitia – Sakros, by Kiridi, 600 m, 9-10.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC).

### *Mesophleps ochracella* (TURATI, 1926)

First record. NEL & NEL (2003: 279) from Heronissos (described ‘*Mesophleps orientella* n. sp.’). Synonymized with *M. ochracella* by LI & SATTLER (2012: 40).

Examined material. 2♂♂, 1♀, road Iraklion – Malia, 18.ix.-2.x.1979, leg. Glaser (ZMUC); 1♀, road Malia – Neapolis, 18.ix.-2.x.1979, leg. Glaser (ZMUC); 1♀, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, 15 km SE Chania, Georgiupoli, 20 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, 4 km S. Topolia, 350 m, 28.vii.-1.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3282 (ZMUC); 1♂, by Kato Sakros, 0-200 m, 9-10.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♀, Agia Galini, E Beach, 15.vi.1997, leg. Ruckdeschel (TLMF); 1♂, 2♀♀, Xekolimenos, Kirtomados, ca. 70 m, 9.v.2000, leg. Ruckdeschel (TLMF); 1♀, Xekolimenos, Patellari, ca. 20 m, 22.ix.2001, leg. Ruckdeschel (TLMF); 2♀♀, ditto, but 25.ix.2001; 1♂, 2♀♀, Koutsouras, Achlia, 30 m, 9.iv.2008, leg. Ruckdeschel (DNA Barcode TLMF Lep 21363) (TLMF); 2♀♀, ditto, but 11.iv.2008 (TLMF); 3♀♀, Drakona, Agios Stephanos, ca. 120 m, 3.viii.2006, leg. Ruckdeschel (TLMF); 1♀, Plataniás, ca. 20 m, 4.viii.2006, leg. Ruckdeschel (TLMF); 1♂, 1♀, Hora Sfakion, 50 m, 8-

15.ix.2012, leg. Aarvik (NHMO); 2♀♀, Amnatos village, 325 m, 27.ix.-2.x.2016, leg. Skule (ZMUC).

### ***Mesophleps trinotella* (HERRICH-SCHÄFFER, 1856)**

**F i r s t r e c o r d .** KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 340) from Chersonisos, Ag. Galini (det. Karsholt).

**E x a m i n e d m a t e r i a l .** 1♂, Kato Stalos, 19.-27.iv.1995, leg. Baungaard (ZMUC); 3♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### **C h e l a r i i n i**

#### ***Nothris verbascella* (DENIS & SCHIFFERMÜLLER, 1775)**

**F i r s t r e c o r d .** KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 337) from several localities.

**E x a m i n e d m a t e r i a l .** 1♂, 1♀, Skordelos, la. 19.iv.1995, leg. Baungaard (ZMUC); 1♂, Heraclion, 150 m, 20-26.iv.1995, leg. Fibiger (ZMUC); 1♀, Rethymnon, ex. la. 20.iv.1996, Verbascum, Johansson (ZMUC); 1♀, ditto, but ex la. 28.iv.1996 (ZMUC); 1♂, 25 km. S. Chania, Zourva, 650 m, 29.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, near Vrysses village, 13.v.2002 leg. Nuppenon (NUPP); 3♂, Agia Galini, ca. 200 m, 17.v.2000, leg. Ruckdeschel (TLMF); 1♀, Ano Saktouria, 400 m, 18.v.2000, leg. Ruckdeschel (TLMF); 2 ex, Hora Sfakion, 50 m, 5-19.vi.2010, 2 ex, ditto, but 9-21.vi.2013, 1 ex, ditto, but 9-21.vi.2014, leg. Aarvik (NHMO); 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, Amnatos village, 325 m, 27.ix.-2.x.2016, leg. Skule (ZMUC).

#### ***Nothris congressariella* (BRUAND, 1858)**

**F i r s t r e c o r d .** KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 338) from Ferapetra (leg. Malicky).

**E x a m i n e d m a t e r i a l .** 1♀, Chersonios, 10.iv.1989, leg. Johansson (ZMUC).

### ***Anarsia* sp.**

**E x a m i n e d m a t e r i a l .** 2♂♂, 1♀, Mt. Ida, Goniai, 700 m, 19-25.vii.1994, leg. Baldizzone (BALD, ZMUC); 1♀, Omalos, 1200 m, 25-30.vi.2000, leg. Fibiger et al., genitalia slide Gregersen 3420; Crete W, Kallergi Mts., 1450-1550 m, 1♀, 28-30.vii.2001, leg. Fibiger et al., genitalia slide 3281 Hendriksen; 4♂♂, 1♀, N of Omalos plateau, at pass, 1150 m, 7-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); Omalos Plateau, 1040 m, 3♂♂, 15♀♀, 15-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia slides Gregersen 3436, 3437, 3438, 3439, Karsholt 5298, 5299 (ZMUC); Omalos plateau, road to Kaligeri, 1225 m, 4♂♂, 9♀♀, 15-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (all ZMUC); 1♂, 2♀♀, Imbros, 785 mm, 13.vi.2010, leg. Aarvik (NHMO); 1♀, Omalos, northern forest, 1250 m, 6.vii.2010, leg. Ruckdeschel (DNA Barcode TLMF Lep 21358) (TLMF).

**R e m a r k s .** This species was recently recorded from Crete as *A. innoxiatella* Gregersen & Karsholt, 2017. Although specimens from Crete are very similar to specimens from North Europe they were not included in the type series of the newly described species (GREGERSEN & KARSHOLT 2017: 76). From a specimen in poor condition from the Omalos area a DNA barcode sequence of 658 bp was recovered which clusters in a unique BIN BOLD:ADE9567. With a difference in the barcode of 2.09% to the nearest neighbour, a specimen of *A. innoxiatella* from Italy, and a similar distance to *A. lineatella* it may represent an undescribed species.

***Anarsia lineatella* ZELLER, 1839**

First record. REBEL (1916: 161) from Neapolis.

Examined material. 1♀, road Heraklion-Malia, 18.ix.-2.x.1979, leg. M. & W. Glaser (ZMUC); 1♀, Skines, 75 m, 5-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♀, Loutro, Phinix, ca. 40 m, 17.v.2005, leg. Ruckdeschel (TLMF); 1♂, Hora Sfakion, 50 m, 26.vii.-7.viii.2015, leg. Aarvik (NHMO).

***Anarsia* sp.**

First record. KARSHOLT (2004-2011) as *Anarsia spartiella* (SCHRANK, 1802) without details. GOZMÁNY (2012: 348) from Faliraki and Ixia as *Anarsia spartiella*.

Examined material. 1♂, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 1♀, Platanias, ca. 20 m, 17.v.2003, leg. Ruckdeschel (DNA Barcode TLMF Lep 21360) (TLMF); 1♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

Remarks. The *A. spartiella* complex is in need of revision.

**Dichomeris*****Dichomeris limbipunctellus* (STAUDINGER, 1859)**

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 350) from several localities.

Examined material. 1♂, Kato Stalos, 19-27.iv.1995, leg. Baungaard (ZMUC); 1♀, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 3♂♂, 4 km S Agia Triada, 5 km W (Momi) Arkadi, 500 m, 14.x.2003, leg. B. Skule (ZMUC); 1♂, by Kato Sakros, 0-200 m, 9-10.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, Xekollimenos, Patellari, ca. 20 m, 22.ix.2001, leg. Ruckdeschel (DNA Barcode TLMF Lep 21361) (TLMF).

Remarks. A record of *D. neatodes* MEYRICK, 1923 from Bali (GOZMÁNY 2012: 351) is attributed to *D. limbipunctellus*. The status of *D. neatodes*, described from Cyprus, needs further investigation.

***Dichomeris acuminatus* (STAUDINGER, 1876)**

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 350) from several localities.

Examined material. 3♂♂, Kato Stalos, 19-27.iv.1995, leg. Baungaard (ZMUC); 1♀, Xekollimenos, Patellari, ca. 20 m, 22.ix.2001, leg. Ruckdeschel (TLMF); 1♀, 2 km NW Kolymbari, Astratigos, 210 m, 1.x.2016, leg. Larsen (ZMUC).

***Brachmia blandella* (FABRICIUS, 1798)****New to Crete.**

Examined material. 1♂, 1♀, Kato Stalos, 19-27.iv.1995, leg. Baungaard (ZMUC); 1♂, Skines, 75 m, 5-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, Xekollimenos, Kirtomados, ca. 70 m, 9.v.2000, leg. Ruckdeschel (TLMF); 1♂, ditto, but 17.v.2003 (TLMF); 1♀, Xekollimenos, Kirtomados, Agios Georgios, ca. 40 m, 23.ix.2001 (TLMF); 1♂, Xekollimenos, Patellari, ca. 20 m, 22.ix.2001, leg. Ruckdeschel (TLMF); 1♀, ditto, but 25.ix.2001 (TLMF); 1♀, ditto, but 16.v.2003 (TLMF); 1♀, ditto, but 15.v.2003 (TLMF); 2♂♂, Drakona, Agios Stephanos, ca. 120 m, 3.viii.2006, leg. Ruckdeschel (TLMF).

***Helcystogramma triannulella* (HERRICH-SCHÄFFER, 1854)****New to Crete.**

Examined material. 1♂, Pandom., Fodele, 40 m, 25.v.2000, leg. Ruckdeschel (TLMF).

***Helcystogramma lamprostoma* (ZELLER, 1847)**

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 346) from Pitsidia (leg. Reisser).

Examined material. 1♂, Hora Sfakion, 50 m, 8-18.viii.2016, leg. Aarvik (NHMO).

**A patetrinae****Pexicopiini*****Pexicopia malvella* (HÜBNER, 1805)**

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 346) from Ag. Galini (leg. Klimesch).

Examined material. 1♀, Makrygialos, 11-19.vi.1988, leg. Johansson (ZMUC); 1♀, Zaros, 5-6.vi. 1988, leg. Johansson (ZMUC); 2♀♀, Makrygialos, 17.v.1993, leg. Johansson (ZMUC); 1♂, 5 km S. Topolia, 300 m, 25-26.vi.2000, leg. Fibiger et al. (ZMUC); 2♂♂, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al., genitalia slide Hendriksen 3601 (ZMUC); 2♂♂, 25 km SE Chania, Georgioupoli, 20 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, 15 km SW Rethymnon, Agriroupoli, 200 m, 25-29.vi.2000, leg. Fibiger et al., genitalia slide Hendriksen 3585 (ZMUC); 1♂, 2♀♀, near Fodele village, 16.v.2002, leg. Nuppenen (NUPP); 1♂, 1♀, Skines, 75 m, 5-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, Agia Galini, E Beach, 5 m, 15.vi.1997, leg. Ruckdeschel (TLMF); 1♂, Xekollimenos, Patellarí, ca. 20 m, 17.vi.1997, leg. Ruckdeschel (TLMF); 1♂, Paleochora, ca. 150 m, 14.v.2000, leg. Ruckdeschel (TLMF); 1♂, 2♀♀, Ano Saktouria, 400 m, 18.v.2000, leg. Ruckdeschel (TLMF); 1♂, Xekollimenos, Kirtomados, ca. 70 m, 15.v.2003, leg. Ruckdeschel (DNA Barcode TLMF Lep 21357) (TLMF); 3♂♂, 1♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♀, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

***Pectinophora gossypiella* (SAUNDERS, 1844)**

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 347) from Chersonisos and Ag. Galini (det. Karsholt).

Examined material. 1♂, Kastelon area, 20.ix.1979, leg. M. & W. Glaser, genitalia slide 3663 Karsholt (ZMUC); 1♀, Lasithi plateau, 20.ix.1978, leg. M. & W. Glaser (ZMUC).

***Platyedra subcinerea* (HAWORTH, 1828)**

First record. Galvagni (1935) from Knosos.

Examined material. 2♂♂, 1♀, Makrygialos, 11-19.vi.1988, leg. Johansson (ZMUC); 1♂, ditto, but 22.v.1993 (ZMUC); 1♀, ditto, but 30.v.1993 (ZMUC); 1♂, Kato Stalos, 19-27.iv.1995, leg. Baungaard (ZMUC); 1♂, Koutsomatas by Topolia, 300 m, 27.iii.-1.iv.1999, leg. Fibiger & Jeppesen et al. (ZMUC); 2♀♀, Paleochora, 20 m, 1.iv.1999, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, 2♀♀, Skines, 75 m, 5-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 4♂♂, Lasithi, Tzermiadou, 830 m, 3.iv.1999, leg. Ruckdeschel (TLMF); 3♂, ditto, but 3.v.2003 (TLMF); 1♂, Loutro, Phinix, 40 m, 17.v.2005, leg. Ruckdeschel (TLMF).

***Sitotroga psacasta* MEYRICK, 1908****New to Crete.**

Examined material. 1♂, Koutsounari, 100 m, 1.v.2003, leg. Ruckdeschel (TLMF); 1♂, Agia Galini, ca. 100 m, 18.iv.2008, leg. Ruckdeschel (TLMF); 1♂, ditto, but 19.iv.2008 (TLMF).

***Sitotroga cerealella* (OLIVIER, 1879)**

First record. REBEL (1916: 160) from Neapolis.

Examined material. None.

**Apatetrini*****Apatebris* sp.**

Examined material. 2♂♂, Hora Sfakion, 50 m, 5-19.vi.2010, leg. Aarvik; 1♀, ditto, but 9-21.vi.2014; 2♂♂, 1♀, ditto, but 26.vii.-7.viii.2015 (NHMO).

Remarks. The Apatetrini is in need of revision, and until then the present species cannot be named. It is distributed in South-East Europe from Turkey to Italy.

**Thiotrichinae*****Palumbina guerinii* (STAINTON, 1858)**

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 339) from several localities.

Examined material. 2♀♀, 30 km E Heraklion, 200 m, 11.xi.1991, leg. Fibiger (ZMUC); 1♀, Rethymnon, 21.x.1995, leg. Johansson (ZMUC); 2♂♂, 5 km S. Topolia, 300 m, 25-26.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, 1♀, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 1♀, 4 km S. Topolia, 28.vii.-1.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, 18 km SSE, Sitia, 400 m, 8.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, Xekollimenos, Patellari, ca. 20 m, 22.ix.2001, leg. Ruckdeschel (TLMF); 1♀, Agia Galini, ca. 200 m, 17.iii.2011, leg. Ruckdeschel (TLMF); 1♂, 2♀♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, Amnatos village, 325 m, 27.ix.-2.x.2016, leg. Skule (ZMUC); 1♀, 1.7 km S Topolia, 380 m, 2-3.x.2016, leg. Larsen (ZMUC); 1♂, Omalos Plateau, 1050 m, 28.ix.-3.x. 2016, leg. Larsen (ZMUC).

***Thiotricha subocellea* (STEPHENS, 1834)****New to Crete.**

Examined material. 2♀♀, 5 km S. Topolia, 300 m, 25-26.vi.2000, leg. Fibiger et al. (ZMUC).

**Anomolagine*****Bryotropha domestica* (HAWORTH, 1828)**

First record. KARSHOLT & RUTTEN (2005: 196) without details. GOZMÁNY (2012: 320) from several localities.

Examined material. 1♀, Xavusa, 20.v.1904, leg. Rebel (NHMV); 1♀, Assitis, 550 m, 13.vi.1958, leg. H. Reisser (ZSM); 1♂, Psikhron, 1000 m, 20.vii.1960, leg. Reisser (ZSM); 1♂, Mt. Ida, Silva Rouva, 1000 m, 27.vii.1957, leg. Reisser, 1♂, ditto, but 25.vi.1958 (ZSM); 1♀, road Iraklion - Malia, 27.ix.1979, leg. Glaser (SMNK); 4♂♂, 4♀♀, Asprospotamos, SE Makrigialos, 20 m, 15.v.-3.vi.1998, leg. Sutter (SMNK); 2♂♂, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg.

Fibiger et al. (ZMUC); 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♀, Loutro, Phinix, ca. 40 m, 17.v.2005, leg. Ruckdeschel (TLMF); 1♂, Hora Sfakion, 240 m, 11.v.2003, leg. Ruckdeschel (TLMF); 1♂, Omalos, 1000 m, 9.viii.2006, leg. Ruckdeschel (TLMF); 1♂, Omalos, northern forest, 1100 m, 5.vii.2010, leg. Ruckdeschel (DNA Barcode TLMF Lep 21332) (TLMF); 3♂, Imbros, 785m, 13-17.vi.2010, leg. Aarvik, genitalia slide NHMO 2050 (NHMO); 1♂, 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♀, 3.5 km SW Omalos Plateau, 1200 m, 16-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

**Molecular data.** A single barcode sequence in BOLD from Bavaria is clustering separately with an intraspecific divergence of 1.83 % to the two barcodes from Crete. However, further unpublished sequences from England are only 0.76 % divergent from Crete.

### ***Bryotropha arabica* AMSEL, 1952**

**First record.** KARSHOLT & RUTTEN (2005: 197) without details.

**Examined material.** 1♂, Pevkos, 850 m, 6.x.1951, leg. Reisser (ZSM); 1♂, Pevkos, 800 m, 30.vii.1962, leg. Reisser (ZSM); 2♂♂, Road Malia-Neapolis, leg. Glaser, genitalia slide Rutten 0193 (SMNK).

### ***Bryotropha terrella* (DENIS & SCHIFFERMÜLLER, 1775)**

**First record.** KARSHOLT & RUTTEN (2005: 199) without details.

**Examined material.** 2♂♂, Omalos, 1200 m, 25.-30.vi.2000, leg. Fibiger et al., genitalia slide Hendriksen 2772, 2773 (ZMUC); 1♂, 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3266 (ZMUC); 4♂♂, 3♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia in vial (ZMUC).

### ***Bryotropha sattleri* NEL, 2003**

**First record.** KARSHOLT & RUTTEN (2005: 185) from Malia-Neapolis and Rethymnion.

**Examined material.** 1♂, road Malia – Neapolis, v.1980, leg. Glaser, genitalia slide Rutten 0538 (RUTT); 2♂♂, 1♀, 18 km E Rethymnon, 0 m, 26.iv.1995, leg. Fibiger, genitalia slide Hendriksen 2179, 2180, 2622 (ZMUC); 4♂, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 4775, 4776 (ZMUC).

### ***Bryotropha desertella* (DOUGLAS, 1850)**

**First record.** REBEL (1916: 159) from Kristallenia (as '*B. descrepidella* H.-S.').

**Examined material.** 1♀, Psikhron, 980 m, 24.v.1963, leg. Reisser, (ZSM); 1♀, Kallergi Mts., 1450-1550 m, 26.vi.2000, leg. Fibiger, Madsen, Nilsson & Svendsen, genitalia slide Hendriksen 2654 (ZMUC); 1♀, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (HH 5674) (ZMUC); 11♂♂, 8♀♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3263, 3264, 3265, 3267, 4745, 4746 (ZMUC); 1♂, near Lakki village, 14.v.2002, leg. Nuppenon (NUPP); 1♂, below Kallergi, above Omalos Plateau, 1200 m, 7.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 2♂♂, 1♀, N of Omalos Plateau, at pass, 1150 m, 11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 2♂♂, 3♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia in vial (ZMUC); 1♀, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia in vial (ZMUC); 1♂, 10 km SW Omalos Plateau, 760 m, 18.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia in vial (ZMUC).

### ***Bryotropha hendrikseni* KARSHOLT & RUTTEN, 2005**

**First record.** KARSHOLT & RUTTEN (2005: 129) from Omalos.

**E x a m i n e d m a t e r i a l .** 4♂♂, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### ***Bryotropha hulli* KARSHOLT & RUTTEN, 2005**

**F i r s t r e c o r d .** KARSHOLT & RUTTEN (2005: 131) from several places.

**E x a m i n e d m a t e r i a l .** 2♂♂, Krystallenia, 1904, leg. Rebel (NHMV); 1♂, 1♀, Neapolis, 1904, leg. Rebel (NHMV); 1♂, Anoye, 750 m, 8.vii.1962, leg. Reisser (ZSM); 4♂♂, 3♀, road Iraklion – Malia, 18.ix.-2.x.1979, leg. Glaser (SMNK, ZMUC); 3♂♂, 3♀♀, road Malia – Neapolis, v.1980, leg. Glaser, genitalia slide Rutten 0273 (SMNK); 3♂♂, 1♀, Bali, 20 m, 29.ix.-5.x.1994, leg. Sutter, genitalia slide Sutter 5582, 5583 (SMNK); 2♂♂, Ag. Galini, 20 m, 17.v.1994, leg. Sutter (SMNK); 2♂♂, Asprospotamos, SE Makrigialos, 20 m, 16-18.v.1998, leg. Sutter (SMNK); 1♀, near Vrysses village, 13.v.2002, leg. Nuppenen (NUPP); 1♀, near Lakki village, 14.v.2002, leg. Nuppenen (NUPP); 1♂, Hora Sfakion, 50 m, 8-15.ix.2012, leg. Aarvik (NHMO); 1♂, 1♀, 1♀, Imbros, 570m, 13.ix.2012, leg. Aarvik (NHMO); 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 10 km SW Omalos Plateau, 760 m, 18.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia slide Karsholt 5305 (ZMUC).

### ***Bryotropha plebejella* (ZELLER, 1847)**

**F i r s t r e c o r d .** REBEL (1916: 159) from Neapolis and Kristallenia. We examined the specimens from Neapolis which turned out to belong to *B. hulli*.

**E x a m i n e d m a t e r i a l .** 1♂, Mt. Ida, Silva Rouva, 1000 m, 27.vii.1957, leg. Reisser (ZSM); 1♂, Knossos, 150 m, 24.viii.1959, leg. Reisser (SMNK); 3♂♂, 3♀♀, road Iraklion – Malia, 27.ix.1979, leg. Glaser, genitalia slide Hendriksen 2266, 2267 (SMNK, ZMUC); 1♂, Ag. Galini, 20 m, 16.v.1994, leg. Sutter, genitalia slide Sutter 4755 (SMNK); 1♂, Agia Pelagia, 20-26.iv.1995, leg. Fibiger, genitalia slide Hendriksen 2287 (ZMUC).

### **[*Bryotropha dryadella* (ZELLER, 1850)]**

**F i r s t r e c o r d .** REBEL (1916: 159) from Kavusi.

**E x a m i n e d m a t e r i a l .** None.

**R e m a r k s .** The record by Rebel was repeated in subsequent literature, e.g. KARSHOLT & RUTTEN (2005: 135). However, the specimen from Kavusi was not traced in the Natural History Museum Vienna, and no subsequent material has become available. Before the revision of KARSHOLT & RUTTEN (op cit.) *B. dryadella* was an unclear species, and until the record by Rebel can be confirmed we suggest that it is removed from the list of Gelechiidae from Crete.

### ***Bryotropha senectella* (ZELLER, 1839)**

**F i r s t r e c o r d .** KARSHOLT & RUTTEN (2005: 207) without details.

**E x a m i n e d m a t e r i a l .** 1♂, 30.vi.2000, leg. Fibiger et al., genitalia slide Hendriksen 2770 (ZMUC); 1♂, 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3268 (ZMUC); 1♂, Omalos, 1000-1275 m, 12-13.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 2♂♂, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 1♀, 10 km SW Omalos Plateau, 760 m, 18.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

***Ornativalva heluanensis* (DEBSKI, 1913)**

**New to Crete.**

Examined material. 1♀, Lasithi plateau, 22.ix.1979, leg. M. & W. Glaser (ZMUC); 1♂, 2♀♀, road Malia-Neapolis, 25-28.ix.1979, leg. M. & W. Glaser (ZMUC); 1♂, Limin Chersonisou, 10 m, early v.1993, leg. Ruckdeschel (DNA Barcode TLMF Lep 21331) (TLMF).

***Ornativalva plutelliformis* (STAUDINGER, 1859)**

First record. MOUCHA & ZAHRADNIK (1969) without details.

Examined material. 1♂, 1♀, Lassithi distr., Makrygialos, 11-19.vi.1988, leg. Johansson (ZMUC); 2♀♀, Hora Sfakion, 50 m, 5-19.vi.2010, leg. Aarvik (NHMO).

***Epidola stigma* STAUDINGER, 1859**

**New to Crete.**

Examined material. 3♂♂, 4 km S. Topolia, 28.vii.-1.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3269 (ZMUC).

**Genus near *Caulastrocecis* sp.**

Examined material. 1♂, Koutsounari, 100 m, 4.xi.2004, leg. Ruckdeschel (DNA Barcode TLMF Lep 21329) (TLMF); 1♂, Xekollimenos, Kirtomados, ca. 40 m, 27.ix.2001, leg. Ruckdeschel (DNA Barcode TLMF Lep 21330) (TLMF); 5♂♂, 2 km NW Kolymbari, Astratigos, 210 m, 1.x.2016, leg. Larsen (ZMUC); 1♀, 2 km N Kolymbari, 10 m, 1-3.x.2016, leg. Larsen (ZMUC); 1♂♂, 1♀, 1.7 km S Topolia, 380 m, 2-3.x.2016, leg. Larsen (ZMUC).

Remarks. We also examined specimens of this unidentified species from Greek mainland and from Croatia. We plan to deal with it in detail in a forthcoming publication.

***Megacraspedus separatellus* (FISCHER VON RÖSSLERSTAMM, 1843)**

First record. OSTERHELDER (1941: 370) from Mt. Ida.

Examined material. 1♂, Mt. Ida, Südhang, Rouwawald, 1300 m, 15-31.vii.1938, leg. Dürck, genitalia slide in vial (ZSM).

***Aristotelia decoratella* (STAUDINGER, 1879)**

**New to Crete.**

Examined material. 11♂♂, 11♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, 2♀♀, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 1♀, Imbros, 785 m, 17.vi.2010, leg. Aarvik (NHMO).

***Aristotelia brizella* (TREITSCHKE, 1833)**

First record. NEL & NEL (2003: 279) from Hersonissos.

Examined material. 5♂♂, 4♀♀, Hersonissos plage, v-vi.2001, leg. J. Nel, genitalia slides 12842♂, 12843♀ J. Nel (TLMF) (NEL & NEL 2003).

***Isophrictis anthemidella* (WOCKE, 1871)**

First record. NEL & NEL (2003: 279) from Lasithiou.

**E x a m i n e d m a t e r i a l .** 1♂, Lasithiou, v-vi.2001, leg. J. Nel, genitalia slide 13035 ♂ J. Nel (TLMF) (NEL & NEL 2003); 1♀, Laki, 1000 m, 19-27.iv.1995, leg. Baungaard, genitalia slide Hendriksen 3625 (ZMUC).

***Isophrictis* sp. (Fig. 5)**

**F i r s t r e c o r d .** KARSHOLT (2004-2011) as *Isophrictis striatella* (DENIS & SCHIFFERMÜLLER, 1775) without details. GOZMÁNY (2012: 304) from several localities as *I. striatella*.

**E x a m i n e d m a t e r i a l .** 2♂♂, Kato Stalos, 19-27.iv.1995, leg. Baungaard (ZMUC); 1♀, Laki, 1000 m, 19-27.iv.1995, leg. Baungaard, genitalia slide Karsholt 5312 (ZMUC); 1♂, Kandanos, 15.v.1995, leg. Karsholt (ZMUC); 2♂♂, Rethymnon distr., Plakias 4.v.1996, leg. Johansson, genitalia slide Karsholt 5313 (ZMUC); 1♂, Omalos, 35°21'735"N, 23°54'60"E, 1000-1150 m, 7.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 2♂♂, Mesa Potami, 35°12'N, 25°31'E, 900 m, 11.vii.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 24♂♂, 2♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia slide Karsholt 5308, 5309 (ZMUC).

**R e m a r k s .** The species is characterized by its large wingspan (15-18 mm) and brown forewings with only slightly contrasting longitudinal lines. The genitalia resemble those of *I. anthemidella*, but differ especially in the more numerous cornuti in the phallus, and also in the form of antrum. Superficially similar large specimens were described as *Paltodora striatella* spp. *magna* AMSEL, 1935 from Palestine. We could examine a photograph of a type specimen from SMNK. It shows high compliance with specimens from Crete, but until the genitalia can be compared we hesitate to refer specimens from Crete to it. The genus *Isophrictis* is in need of revision.



**Fig. 5:** *Isophrictis* sp. Male, Omalos plateau.

### *Isophrictis kefersteiniellus* (ZELLER, 1850)

First record. REBEL (1916: 161) from Neapolis and Kristallinia.

Examined material. 1♂, Iraklion distr., Chersonisos, 10.iv.1989, leg. Johansson (ZMUC); 1♀, 10 km E Hersonisou, 9-15.iv.2001, leg. Bengtsson (ZMUC); 1♂, by Kato Sakros, 0-200 m, 9-10.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, Koutsoumari, 100 m, 1.v.2003, leg. Ruckdeschel (TLMF); 1♂, Koutsoumari, Agios Joannis, 390 m, 1.v.2003, leg. Ruckdeschel (DNA Barcode TLMF Lep 21313) (TLMF); 1♂, Agia Galini, ca. 100 m, 18.iv.2008, leg. Ruckdeschel (DNA Barcode TLMF Lep 21314) (TLMF).

Microlocal data. Two barcode sequences in BOLD from Spain show no divergence. The unique barcode from Crete with a minimum distance of 1.88 % to these sequences indicates either high intraspecific divergence or potential cryptic diversity.

### *Metzneria tenuiella* (MANN, 1864)

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 302) from Chersonisos (leg. Bengtsson).

Examined material. 1♂, 10 km E Hersonisou, 9-15.iv.2001, leg. Bengtsson (BÅB); 5♂♂, 1♀, Paleohora, 20 m, 1.iv.1999, leg. Fibiger & Jeppesen et al., genitalia slide 3094 Hendriksen (ZMUC).

### *Metzneria paucipunctella* (ZELLER, 1839)

First record. REBEL (1916: 159) from Kristallenia as *M. intestinella* (MANN, 1864)

Examined material. 1♀, Omalos, 1200 m, 25.-30.vi.2000, leg. Fibiger et al. (ZMUC); 1♀, Nom. Chania, 4 km SE Lakki, 3.5 km N Omalos, 750 m, 6.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, by Kato Sakros, 0-200 m, 9-10.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 7♂♂, 7♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia slide Karsholt 5306, 5307 (ZMUC).

### *Metzneria aestivella* (ZELLER, 1839)

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 301) from Ag. Galini (leg. Sutter, det. Karsholt).

Examined material. 3♀♀, 24.vii.1994, Mt. Ida, Goniai, 700 m, leg. Baldizzone (BALD, ZMUC); 1♂, 4 km S. Topolia, 350 m, 28.vii.-1.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, below Kallergi, above Omalos Plateau, 1200 m, 7.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 2♀♀, Omalos, southern forest, 1250 m, 6.vii.2010, leg. Ruckdeschel (DNA Barcodes TLMF Lep 21308, 21309) (TLMF); 1♂, Agia Galini, ca. 100 m, 13.viii.2006, leg. Ruckdeschel (TLMF); 1♀, Hora Sfakion, 50 m, 7-13.vi.2009; leg. Aarvik; 6♂♂, ditto, but 5-19.vi.2010; 3♂♂, ditto, but 8-18.viii.2016 (NHMO); 7♂♂, 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 1♀, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### *Metzneria riadella* ENGLERT, 1974

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 302) from Chersonisos (leg. Bengtsson).

Examined material. 1♂, road Malia – Neapolis, v.1980, leg. Glaser (SMNK); 9 ex, 10 km E Hersonisou, 9-15.iv.2001, leg. Bengtsson (BÅB, ZMUC); 1♂, 10 km E Rethymnion, 0 m, 21.iv.1995, leg. Fibiger (ZMUC).

***Metzneria torosulella* (REBEL, 1893)****New to Crete.**

Examined material. 1♂, by Kato Sakros, 0-200 m, 9-10.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC).

***Metzneria castiliella* (MÖSCHLER, 1866)**

First record. ENGLERT (1974: 397) without details. GOZMÁNY (2012: 302) from Chersonisos (leg. Bengtsson).

Examined material. 1♂, road Malia – Neapolis, v.1980, leg. Glaser (SMNK); 1♀, Lassithi distr., Makrigialos, 11-19.vi.1988, leg. Johansson (ZMUC); 2♂♂, Iraklion distr., Chersonisos, 10.iv.1989, leg. Johansson (ZMUC); 1♂, Iraklion distr., Potamics, 11.iv.1989, leg. Johansson (ZMUC); 1♂, 2♀♀, Lassithi distr., Makrigialos, 17-30.v.1993, leg. Johansson (ZMUC); 1♂, 10 km E Hersonisou, 9-15.iv.2001, leg. Bengtsson (ZMUC); 1♂, by Kato Sakros, 0-200 m, 9-10.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 5♂♂, 1♀, Koutsounari, 100 m, 12.iv.2008, leg. Ruckdeschel (TLMF); 1♂, 2♀♀, Limni Chersonisou, 10 m, early v.1993, leg. Ruckdeschel (TLMF); 1♂, Koutsounari, Agios Joannis, 250 m, 1.v.2003, leg. Ruckdeschel (TLMF); 1♀, ditto, but 14.iv.2008 (DNA Barcode TLMF Lep 21311) (TLMF); 1♀, ditto, but 12.iv.2008 (DNA Barcode TLMF Lep 21312) (TLMF); 1♂, below Nea Roumata, Kalamonites valley, 300 m, 13.v.2003, leg. Ruckdeschel (TLMF).

***Metzneria artificella* (HERRICH-SCHÄFFER, 1861)****New to Crete.**

Examined material. 1♀, Lassithi distr., Makrigialos, 17.v.1993, leg. Johansson (ZMUC); 2♀♀, 4 km S. Topolia, 28.vii.-1.viii.2001, leg. Fibiger et al. (ZMUC); 1♀, Koutsounari, 100 m, 1.v.2003, leg. Ruckdeschel (DNA Barcode TLMF Lep 21310) (TLMF); 1♂, 1♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

***Metzneria agraphella* (RAGONOT, 1895)**

First record. ENGLERT (1974: 407) without details.

Examined material. 1♀, Iraklion distr., Zaros, 5-6.vi.1988, leg. Johansson (ZMUC). 7♂♂, 7♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

***Metzneria* sp.**

Examined material. 1♀, Hora Sfakion, 50 m, 5-19.vi.2010, leg. Aarvik (NHMO).

Remarks. This species is similar in the genitalia to *M. aprilella* (HERRICH-SCHÄFFER, 1854), but differs in the colour and markings of the forewings. It is widely distributed in SE Europe.

***Metzneria campicolella* (MANN, 1857)**

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 306) from Chersonisos (leg. Bengtsson, det. Sattler).

Examined material. 2♂♂, Iraklion distr., Potamics, 19.iv.1989, leg. Johansson (ZMUC); 13♂♂, 3♀♀, Agia Pelagia, 20-26.iv.1995, leg. Fibiger, genitalia slide Hendriksen 3137 (ZMUC); 2♂♂, Omalos, 1200 m, 25-30.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, Koutsounari, Agios Joannis, 390 m, 14.iv.2008, leg. Ruckdeschel (DNA Barcode TLMF Lep 21315) (TLMF).

***Apodia bifractella* (DUPONCHEL, 1843)**

First record. REBEL (1916: 160) from Kristallenia.

Examined material. 2♂♂, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia slide Karsholt 5311 (ZMUC).

***Ptocheuusa paupella* (ZELLER, 1847)****New to Crete.**

Examined material. 1♂, Drepandas by Kissamos, 100 m, 27.iii.-2.iv.1999, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, 1♀, near Vrysses village, 13.v.2002, leg. Nuppenen (NUPP); 1♀, 3 km S Ambelaki, 5 km NW Spili, 320 m, 12.x.2003, leg. B. Skule (ZMUC); 3♂♂, 3♀♀, Skines, 75 m, 5.-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, 4 km SE Lakki, 3.5 km N Omalos, 750 m, 6.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, Xekollimenos, Kirtomados, ca. 70 m, 22.ix.2001, leg. Ruckdeschel (TLMF); 1♂, ditto, but 17.v.2003, leg. Ruckdeschel (DNA Barcode TLMF Lep 21317) (TLMF); 1♂, below Nea Roumata, Kalamonites valley, 300 m, 13.v.2003, leg. Ruckdeschel (DNA Barcode TLMF Lep 21318) (TLMF); 1♂, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

Modelular data. Seven barcode sequences in BOLD from large parts of Europe are clustering together with a maximum intraspecific divergence of only 0.34 %. The unique barcode from Crete with a minimum distance of 3.54 % to other continental samples indicates potential cryptic diversity.

***Ptocheuusa minimella* (REBEL, 1936)****New to Crete.**

Examined material. 1♂, Makrigialos, Aspros Potamos, 50 m, 24.v.1998, leg. Sutter, genitalia slide 5834 Sutter (SMNK); 2♂♂, 1♀, Omalos, 1100-1200 m, 28.iii.-2.iv.2001, Fibiger et al. (ZMUC); 1♂, Koutsounari, 100 m, 12.iv.2008, leg. Ruckdeschel (DNA Barcode TLMF Lep 21316) (TLMF).

***Ptocheuusa* sp.**

Examined material. 2♂♂, Iraklion distr., Zaros, 5-6.vi.1988, leg. Johansson, genitalia slide Hendriksen 6558 (ZMUC).

Remarks. The specimens resemble *P. inopella* (ZELLER, 1839) in external appearance, but the genitalia show that it is more closely related to *P. paupella*, though with differences in the phallus. The genus *Ptocheuusa* is in need of revision.

***Monochroa cytisella* (CURTIS, 1837)****New to Crete.**

Examined material. 1♀, 5 km S. Topolia, 300 m, 25.-26.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, 4 km SE Lakki, 3.5 km N Omalos, 750 m, 6.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, Omalos, northern forest, 1100 m, 10.viii.2006, leg. Ruckdeschel (DNA Barcode TLMF Lep 21327) (TLMF); 1♂, ditto, but 5.vii.2010 (DNA Barcode TLMF Lep 21328) (TLMF); 1♂, Omalos Plateau, 1050 m, 25.vi.-1.vii.2012, leg. Hviid & Larsen (ZMUC).

***Monochroa moyses* UFFEN, 1991****New to Crete.**

**E x a m i n e d   m a t e r i a l .** 1♂, Irakleon, Linoperamata, 17.vii.1994, leg. Baldizzone (BALD).

### ***Monochroa* sp.**

**E x a m i n e d   m a t e r i a l .** 1♂, 5 km S. Topolia, 300 m, 25-26.vi.2000, leg. Fibiger et al., genitalia slide Hendriksen 4885; 3♂♂, 1♀, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al., genitalia slide Hendriksen 4924; 1♂, ditto, but 28.vii.-1.viii.2001, leg. Fibiger et al. (all ZMUC).

**R e m a r k s .** This and the following species are related to *Monochroa melagonella* (CONSTANT, 1895). They belong to a group of closely related, but still unrevised species, and it is thus too early to conclude if they are endemic to the fauna of Crete.

### ***Monochroa* sp.**

**E x a m i n e d   m a t e r i a l .** 3♂♂, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al., genitalia Hendriksen 3098 (ZMUC).

**R e m a r k s .** See comment to preceding species.

### ***Monochroa* sp.**

**E x a m i n e d   m a t e r i a l .** 1♂, 5 km S. Topolia, 300 m, 25-26.vi.2000, leg. Fibiger et al. (ZMUC).

### ***Deltophora maculata* (STAUDINGER, 1879)**

**F i r s t   r e c o r d .** KARSHOLT et al. (1996: 108) without details. GOZMÁNY (2012: 311) from several localities.

**E x a m i n e d   m a t e r i a l .** 1♂, Rethymnon distr., Rethymnon, 27.x.1995, leg. Johansson (ZMUC); 2♂♂, 7 km ESE Rethimno, Maroulas, 200 m, 11-17.x.2003, leg. B. Skule (ZMUC); 2♂♂, Loutro, Phinix, ca. 40 m, 21.v.2005, leg. Ruckdeschel (TLMF); 1♂, 3♀, ditto, but 17.v.2005 (DNA Barcodes TLMF Lep 21325, 21326) (TLMF); 1 ex, Hora Sfakion, 50 m, 28.v.-2.vi.2007, 2♂♂, ditto, but, 7-13.vi.2009, genitalia slide NHMO 2041, 5 ex, ditto, but 5-19.vi.2010, 3 ex, ditto, but 8-15.ix.2012, leg. Aarvik (NHMO).

### ***Eulamprotes nigromaculella* (MILLIÈRE, 1872)**

**F i r s t   r e c o r d .** KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 302) from Ag. Galini (leg. Sutter, det. Karsholt).

**E x a m i n e d   m a t e r i a l .** 2♂♂, 1♀, Rethymnon distr., Rethymnon, 3.vi.1988, leg. Johansson (ZMUC); 1♀, Lassithi distr., Makrigialos, 30.v.1993, leg. Johansson (ZMUC); 1♀, Irakleon, Linoperamata, 17.vii.1994, leg. Baldizzone (BALD); 9♂♂, 4♀♀, Mt. Ida, Gonai, 700 m, 19-25.vii.1994, leg. Baldizzone (BALD, ZMUC); 5♂♂, 4♀♀, Mt. Ida, Astiraki, 500 m, 23.vii.1994, leg. Baldizzone (BALD, ZMUC); 6♂♂, 4♀♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 3♂♂, 2♀♀, Skines, 75 m, 5-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♀, 2 km S Fourne, 250 m, 6.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, N of Omalos Plateau, at pass, 1150 m, 7.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♀, 18 km SSE Sitia, 400 m, 8.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, 2♀♀, Imbros, 780 m, 9.viii.2011, leg. Aarvik (NHMO); 3♂♂, Omalos, northern forest, 1100 m, 9.viii.2006, leg. Ruckdeschel (TLMF) (DNA Barcodes TLMF Lep 21319, 21320); 3♀♀, ditto, but 10.viii.2006 (TLMF); 2♂♂, above Spili, 610 m, 12.viii.2006, leg. Ruckdeschel (TLMF); 1♂, Agia Galini, ca. 100 m, 13.viii.2006, leg. Ruckdeschel (TLMF); 3 ex, Imbros, 785m, 9-17.viii.2011, leg. Aarvik (NHMO); 1♂, Omalos Plateau, 1050 m, 25.vi.-1.vii.2012, leg. Hviid & Larsen (ZMUC); 6♂♂,

5♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 2♀♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 1♀, 3.5 km SW Omalos Plateau, 1200 m, 16-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 10 km SW Omalos Plateau, 760 m, 18.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♀, 1.7 km S Topolia, 380 m, 2-3.x.2016, leg. Larsen (ZMUC).

### *Eulamprotes nigritella* (ZELLER, 1847)

#### New to Crete.

Examined material. 2♂♂, Agia Pelagia, 20-26.iv.1995, leg. Fibiger (ZMUC); 2♂♂, Rethymnon distr., Rethymnon, 20-22.iv.1996, leg. Johansson (ZMUC); 1♂, Omalos, 1100 m, 28.iii.-2.iv.1999, Fibiger & Jeppesen et al. (ZMUC); 6♂♂, 1♀, 7 km ESE Rethimno, Maroulas, 200 m, 11-17.x.2003, leg. B. Skule (ZMUC); 2♂♂, 3 km S Ambelaki, 5 km NW Spili, 320 m, 12.x.2003, leg. B. Skule (ZMUC); 4♂♂, 4.5 km E Spili, 800 m, 16.x.2003, leg. B. Skule (ZMUC); 1♂, N of Omalos Plateau, at pass, 1150 m, 7.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, 18 km SSE Sitia, 400 m, 8.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, Mesa Potami, 900 m, 11.vii.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, Omalos, 1000-1275 m, 12-13.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 2♂♂, Paleochora, Azogires, 15.v.2000, leg. Ruckdeschel (TLMF); 1♂, above Spili to Gerakari, 800 m, 16.v.2000, leg. Ruckdeschel (TLMF); 1♂, Xekollimenos, Kirtomados, ca. 70 m, 25.ix.2001, leg. Ruckdeschel (TLMF); 1♂, 2♀♀, Koutsounari, Agios Joannis, 390 m, 2.x.2001, leg. Ruckdeschel (TLMF); 1♂, Moni Kardiotissa, above Krasi, 8.x.2001, leg. Ruckdeschel (TLMF); 1♂, Pandon., Fodele, 100 m, 10.x.2001, leg. Ruckdeschel (TLMF); 1♂, Kissos Kampos, 460 m, 20.iv.2008, leg. Ruckdeschel (DNA Barcode TLMF Lep 21323) (TLMF); 2♂♂, Agios Georgios, 675 m, 3.xi.2004, leg. Ruckdeschel (DNA Barcode TLMF Lep 21324) (TLMF); 1♂, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 6♂♂, 7♀♀, 2 km NW Kolymbari, Astratigos, 210 m, 1.x.2016, leg. Larsen (ZMUC); 4♂♂, 4♀♀, 2 km N Kolymbari, 10 m, 1-3.x.2016, leg. Larsen (ZMUC).

Remarks. The species flies probably in three generations from April to October. Specimens of the autumn generation are distinctly smaller with a wingspan of 7-9 mm.

### *Eulamprotes helotella* (STAUDINGER, 1859)

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 305) from several localities.

Examined material. 2♀♀, 10 km E Rethymnon, 0 m, 21.iv.1995, leg. Fibiger (ZMUC); 1♂, Agia Galini, ca. 100 m, 19.iv.2008, leg. Ruckdeschel (DNA Barcode TLMF Lep 21321) (TLMF); 1♀, above Lanoos, Fassas valley, 400 m, 13.v.2003, leg. Ruckdeschel (DNA Barcode TLMF Lep 21322) (TLMF).

## G e l e c h i n a e

### G e l e c h i i n i

#### *Athrips rancidella* (HERRICH-SCHÄFFER, 1854)

First record. HUEMER & KARSHOLT (1999: 191) without details.

Examined material. 1♂, 4♀♀, Omalos, 1200 m, 25-30.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 2♀♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, 2♀♀, N of Omalos Plateau, at pass, 1150 m, 11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, Pandon., Fodele, 100 m, 10.x.2001, leg. Ruckdeschel (TLMF); 1♂, 4♀♀, Omalos, 1000 m, 11.viii.2006, leg. Ruckdeschel (TLMF); 1♂, ditto, but 9.viii.2006 (DNA Barcode TLMF Lep 21346) (TLMF);

3♂♂, 2♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 2♂♂, 1♀, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♀, 3.5 km SW Omalos Plateau, 1040 m, 16-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 10 km SW Omalos Plateau, 760 m, 18.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

**Molecular data.** 21 barcode sequences in BOLD cluster in three widely separated clades and show a large intraspecific divergence with maximum of 9.88 %. Specimens identified as *A. rancidella tadzhika* should likely be considered as a separate species due to the large genetic distance from European counterparts. Also the only available barcode from Crete with a minimum distance of 3.31 % to other continental samples indicates potential cryptic diversity.

**Remarks.** Specimens from Crete generally have more distinct forewing markings compared to specimens from mainland Europe.

### ***Mirificarma minimella* HUEMER & KARSHOLT, 2001**

**First record.** HUEMER & KARSHOLT (1999: 189) without details as '*Mirificarma rhodoptera* (MANN)', a misidentification. In the original description of *M. minimella* listed from several localities in Crete, the earliest from Zaros in 1988 (HUEMER & KARSHOLT 2001: 48).

**Examined material.** 2♂♂, Agia Pelagia, 20-26.iv.1995, leg. Fibiger (PH 00/952, 00/958) (ZMUC); 1♀, 15 km SW Rethymnon, Agriroupoli, 200 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 2♀♀, Skines, 75 m, 5-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 2♂♂, 4♀♀, 4 km SE Lakki, 3,5 km N Omalos, 750 m, 6.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 2♂♂, 2♀♀, 2 km S Fourne, 250 m, 6.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, 2♀♀, N of Omalos Plateau, at pass, 1150 m, 7-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, Mesa Potami, 900 m, 11.vii.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♀, Paleochora, Azogires, 15.v.2000, leg. Ruckdeschel (TLMF); 1♂, above Spili, 610 m, 16.v.2000, leg. Ruckdeschel (TLMF); 1♂, 3♀♀, Koutsounari, Agios Joannis, 390 m, 19.v.2000, leg. Ruckdeschel (TLMF); 1♂, Ano Saktouria, 400 m, 18.v.2000, leg. Ruckdeschel (TLMF); 1♂, Agia Galini, ca. 100 m, 6.v.2003, leg. Ruckdeschel (DNA Barcode TLMF Lep 21354) (TLMF); 2♀♀, Imbros, 570m, 9.vi.2010, genitalia slide NHMO 2418, 7 ex, ditto, but 20.vi.2014, leg. Aarvik (NHMO); 2♂♂, 6♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 8♀♀, 10 km SW Omalos Plateau, 760 m, 18.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### ***Mirificarma flavella* (DUPONCHEL, 1844)**

**First record.** REBEL (1916: 161) from Candia and Kristallenia.

**Examined material.** None.

### ***Mirificarma eburnella* (DENIS & SCHIFFERMÜLLER, 1775)**

**First record.** REBEL (1916: 161) from Chalepa, Candia and St. Nicolo (as '*Rhinosa formosella* HB.').

**Examined material.** 1♂, Limin Chersonisou, 10 m, early v.1993, leg. Ruckdeschel (TLMF); 1♀, Koutsouras, Achlia, 30 m, 11.iv.2008, leg. Ruckdeschel (TLMF); 4♂♂, ditto, but 9.iv.2008 (DNA Barcode TLMF Lep 21355) (TLMF); 1♂, ditto, but 10.iv.2008 (TLMF); 6♂♂, ditto, but 12.iv.2008 (TLMF); 1♂, Koutsounari, 100 m, 12.iv.2008, leg. Ruckdeschel (TLMF); 2♂♂, ditto, but 13.iv.2008 (TLMF); 1♂, ditto, but 14.iv.2008 (TLMF); 1♂, 1♀, ditto, but 1.v.2003 (TLMF); 1♂, Agia Galini, ca. 100 m, 18.iv.2008, leg. Ruckdschel (TLMF); 2♂♂, ditto, but 19.iv.2008 (TLMF); 4♂♂, ditto, but 6.v.2003 (TLMF); 1♂, ditto, but 17.v.2000 (TLMF); 1♂, Kissou Kampos, 460 m, 20.iv.2008, leg. Ruckdeschel (TLMF); 7♂♂, 1♀, Ano Saktouria, 18.v.2000, leg. Ruckdeschel (TLMF); 3♂♂, Lasithi plain, Mesa Lasithi, 850 m, 22.v.2010, leg.

Ruckdeschel (TLMF); 2♂♂, Hora Sfakion, 240 m, 11.v.2003, leg. Ruckdeschel (TLMF); 1♀, Sisi, 9.iv.2008, leg. Ruckdeschel (TLMF); 1♂, Paleochora, ca. 150 m, 14.v.2000, leg. Ruckdeschel (TLMF); 1♀, Koutsounari, Agios Joannis, 390 m, 1.v.2003, leg. Ruckdeschel (TLMF); 1♂, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### ***Mirificarma mulinella* (ZELLER, 1839)**

First record. HUEMER & KARSHOLT (1999: 137) without details.

Examined material. 1♂, 6 km W Heraklion, 150 m, 6.-11.xi.1991, leg. Fibiger, genitalia slide Hendriksen 1150 (ZMUC); 1♂, 2 km N Kolymbari, 10 m, 1-3.x.2016, leg. Larsen (ZMUC).

### ***Aroga velocella* (DUPONCHEL, 1838)**

First record. REBEL (1916: 159) from Kristallenia.

Examined material. None.

### ***Aroga aristotelis* (MILLIÈRE, 1876)**

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 322) from several localities. The record was based on information from the late L. Gozmány (in litt.) of: 1♀, Spili, 400 m; 2♂♂, Kournas lake; 2♂♂, Knosos; 1♀, Neo Amari, 450 m (all leg. Reisser) and 1♀, Palaiochora, vi.1950 (leg. Malicky) (all in SMNK).

Examined material. None.

### ***Gelechia* sp. (Fig. 6)**



**Fig. 6:** *Gelechia* sp. Male, Omalos plateau.

**E x a m i n e d   m a t e r i a l .** 1♂, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 11♂, 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3283, 4724, 5255 (ZMUC); 1♂, Omalos, road to Lakki, 900 m, 9.viii.2006, leg. Ruckdeschel (DNA Barcode TLMF Lep 21344) (TLMF).

**R e m a r k s .** Probably an undescribed species related to *G. sabinellus* (ZELLER, 1839).

### ***Gelechia senticetella* (STAUDINGER, 1859)**

#### **N e w   t o   C r e t e .**

**E x a m i n e d   m a t e r i a l .** 1♀, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3273 (ZMUC); 4♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, Omalos, northern forest, 1100 m, 9.viii.2006, leg. Ruckdeschel (TLMF); 2♂♂, ditto, but 10.viii.2006 (DNA Barcodes TLMF Lep 21347, 21348) (TLMF); 1♂, Koutsounari, 100 m, 28.iv.2003, leg. Ruckdeschel (TLMF); 1♂, Agia Galini, ca. 100 m, 15.xi.2004, leg. Ruckdeschel (TLMF); 1♀, Imbros, 570m, 11.vi.2010, leg. Aarvik; 1♂, 2♀ ditto, but 15.vi.2014; 2♀ ditto, but 20.vi.2014 (NHMO); 4♂♂, 6♀♀, 3.5 km SW Omalos Plateau, 1040 m, 16-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### ***Gelechia mediterranea* HUEMER, 1991**

**F i r s t   r e c o r d .** REBEL (1916: 159) from Kavusi as ‘*Lita sestertiella* H.-S.’.

**E x a m i n e d   m a t e r i a l .** 2♂♂, 5♀, Omalos, 1200 m, 25-30.vi.2000, leg. Fibiger et al. (ZMUC); 2♀♀, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 2♂♂, 1♀, Imbros, 785m, 13-17.vi.2010, 2♂♂, 2♀♀, ditto, but 9-17.viii.2011, leg. Aarvik (NHMO); 1♀, Omalos, southern forest, 1250 m, 6.vii.2010, leg. Ruckdeschel (DNA Barcode TLMF Lep 21345) (TLMF); 1♂, Omalos, northern forest, 1100 m, 5.vii.2010, leg. Ruckdeschel (DNA Barcode TLMF Lep 21346) (TLMF); 1♂, Omalos Plateau, 1050 m, 25.vi.-1.vii.2012, leg. Hviid & Larsen (ZMUC).

### **Gnorimoschemini**

#### ***Gnorimoschema soffneri* RIEDL, 1965**

**F i r s t   r e c o r d .** HUEMER & KARSHOLT (2010: 39) from Makrigialos.

**E x a m i n e d   m a t e r i a l .** 2♂♂, Makrigialos, 20.v.1993, leg. Johansson (ZMUC) (HUEMER & KARSHOLT 2010); 1♀, Agia Galini, Lavrasto, 100 m, 15.xi.2004, leg. Ruckdeschel (DNA Barcode TLMF Lep 21359) (TLMF).

### ***Scrobipalpa vasconiella* (RÖSSLER, 1877)**

#### **N e w   t o   C r e t e .**

**E x a m i n e d   m a t e r i a l .** 1♂, 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia in vial (ZMUC).

### ***Scrobipalpa obsoletella* (FISCHER VON RÖSLERSTAMM, 1841)**

**F i r s t   r e c o r d .** HUEMER & KARSHOLT (2010: 87) from 8 km W Heraclion.

**E x a m i n e d   m a t e r i a l .** 1♂, 8 km W Heraklion, 5.xi.1991, leg. Fibiger, genitalia slide Hendriksen 1154 (ZMUC) (HUEMER & KARSHOLT 2010). 2♀♀, Irakleon, Linoperamata, 17.vii.1994, leg. Baldizzone, genitalia slide Hendriksen 3241 (BALD); 1♂, 1♀, Hora Sfakion, 50m, 9-21.vi.2013, leg. Aarvik, genitalia slide NHMO 2534 (NHMO); 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia in vial (ZMUC).

***Scrobipalpa phagnalella* (CONSTANT, 1895)**

First record. HUEMER & KARSHOLT (2010: 93) from Nom. Rethymon, Agia Galini.

Examined material. 1♂, 8 km W Heraklion, 5.xi.1991, leg. Fibiger (ZMUC); 6♂♂, 10 km W Ag. Varvara, 500 m, 7.ix.1991, leg. Fibiger (ZMUC); 1♂, 20 km W Sitia, 10 m, 9-10.xi.1991, leg. Fibiger (ZMUC); 2♂♂, 30 km E Heraklion, Lomin Hersonison, 200 m, 11.xi.1991, leg. Fibiger (ZMUC); 1♂, Paleochroa, 20 m, 1.iv.1999, Fibiger & Jeppesen et al. (ZMUC); 1♂, Agia Galini, Nom. Rethymon, ca. 150 m, 21.iii.1995, leg. Ruckdeschel, genitalia slide GEL 1072♂ Huemer (TLMF) (HUEMER & KARSHOLT 2010); 1♂, Koutsounari, 28.iv.2003, leg. Ruckdeschel (TLMF); 1♂, ditto, but 4.xi.2004 (TLMF); 1♂, Koutsounari, Ferma, 70 m, 7.xi.2004, leg. Ruckdeschel (TLMF); 2♂♂, Koutsouras, Achlia, 30 m, 7.xi.2004, leg. Ruckdeschel (TLMF); 1♂, ditto, but 9.iv.2008 (TLMF); 1♂, Koutsounari, Agios Joannis, 390 m, 1.v.2005, leg. Ruckdeschel (TLMF); 1♂, ditto, but 14.iv.2008 (TLMF); 1♂, Agia Galini, ca. 100 m, 15.xi.2004, leg. Ruckdeschel (TLMF); 1♂, Paleochroa ca. 150 m, 27.iii.1999, leg. Ruckdeschel (TLMF); 1♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

Remarks. *S. phagnalella* is a rather common species in Crete, with adults flying from September to early May (one worn specimen was caught in mid-June), probably in one hibernating generation.

***Scrobipalpa portosanctana* (STAINTON, 1859)**

New to Crete.

Examined material. 1♀, Paleochroa, ca. 150 m, 27.iii.1999, leg. Ruckdeschel (TLMF).

***Scrobipalpa vicaria* (MEYRICK, 1921)**

First record. KARSHOLT (2004-2011) without details.

Examined material. 1♀, Mora Spakion, 30 m, 21.iv.1995, leg. Fibiger, genitalia slide Hendriksen 3044 (ZMUC).

***Scrobipalpa ocellatella* (BOYD, 1858)**

First record. HUEMER & KARSHOLT (2010: 165) from 7 km ESE Rethimno, Maroulas.

Examined material. 1♂, Elounda Island, 19.ix.2003, leg. Aarvik, genitalia slide NHMO 2882 (NHMO); 1♂, 7 km ESE Rethimno, Maroulas, 200 m, 11-17.x.2003, leg. B. Skule (ZMUC) (HUEMER & KARSHOLT, 2010).

***Scrobipalpa spergusonella* (CHRÉTIEN, 1910)**

First record. HUEMER & KARSHOLT (2010: 1840) from Irakleion, Linoperamata. The record was erroneously listed under *S. camphorosmella* (op cit.: 318).

Examined material. 1♀, 17.vii.1994, Irakleion, Linoperamata, leg. Baldizzone, genitalia slide Hendriksen 3233 (BALD) (HUEMER & KARSHOLT 2010).

***Scrobipalpa ergasima* (MEYRICK, 1916)**

First record. HUEMER & KARSHOLT (2010: 321) without details. GOZMÁNY (2012: 330) from Bali (leg. Sutter, det. Karsholt).

Examined material. 1♀, road Heraclion-Malia, 18.ix.-2.x.1979, leg. M. & W. Glaser (ZMUC); 2♀♀, Drepanides by Kissamos, 100 m, 27.iii.-2.iv.1999, leg. Fibiger & Jeppesen et al. (ZMUC); 2♂♂, 1♀, Skines, 75 m, 5-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♀, Pandom., Fodele, 100 m, 10.x.2008, leg. Ruckdeschel (TLMF); 1♂, 1♀, Amnatos village, 325 m, 27.ix.-2.x.2016, leg. Skule (ZMUC).

***Phthorimaea operculella* (ZELLER, 1873)**

First record. ISAAKIDES (1941) from Lasithi.

Examined material. 1♂, Georgiupoli, 50 m, 28.iii.-2.iv.1999, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, 5 km S. Topolia, 300 m, 25-26.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, Agia Galini, ca. 200 m, 21.iii.1999, leg. Ruckdeschel (TLMF); 1♂, ditto, but 22.iii.1999 (TLMF); 1♂, Agia Galini, Lavrasto, 250 m, 4.xii.2010, leg. Ruckdeschel (TLMF); 1♂, Agia Galini, E Beach, 5 m, 14.vi.1997, leg. Ruckdeschel (TLMF); 1♂, Agia Galini, 30 m, 14.vi.1997, leg. Ruckdeschel (TLMF); 1♂, 4♀♀, Koutsouras, Achlia, 30 m, 4.xi.2004, leg. Ruckdeschel (TLMF); 1♀, ditto, but 7.xi.2004 (TLMF); 1♂, 2♀♀, ditto, but 8.xi.2004 (TLMF); 1♂, ditto, but 11.iv.2008 (TLMF); 4♂♂, 4♀♀, Lassithi, Tzermiadou, 7.x.2001, leg. Ruckdeschel (TLMF); 2♂♂, 2♀♀, ditto but 8.x.2001 (TLMF); 1♀, Lasithi plain, Mesa Lasithi, 850 m, 1.xii.2010, leg. Ruckdeschel (TLMF); 1♂, ditto, but 22.v.2000 (TLMF); 1♂, Pandomi, Fodele, 100 m, 10.x.2009, leg. Ruckdeschel (TLMF); 1♀, Koutsounari, Agios Ioannis, 390 m, 1.v.2003, leg. Ruckdeschel (TLMF); 1♀, Xekollimenos, Patellari, ca. 20 m, 22.ix.2001, leg. Ruckdeschel (TLMF); 1♀, Schinokapsala, Agios Georgios, 675 m, 4.x.2001, leg. Ruckdeschel (TLMF); 1♂, Agios Nikolaos, 5.vi.1997, leg. Ruckdeschel (TLMF); 1♂, Skines, Fassas valley, 140 m, 22.ix.2001, leg. Ruckdeschel (TLMF); 1♀, Hora Sfakion, 50 m, 9-21.vi.2014, leg. Aarvik (NHMO); 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hvivid & Vilhelmsen (ZMUC); 1♂, 1♀, Amnatos village, 325 m, 27.ix.-2.x.2016, leg. Skule (ZMUC).

***Tuta absoluta* (MEYRICK, 1917)**

First record. RODITAKIS et al. (2010: 163) from Platania.

Examined material. 9♂♂, 6♀♀, Hora Sfakion, 50 m, 5-19.vi.2010, genitalia slide NHMO 2259; 1♀, ditto, but 8-15.ix.2012, leg. Aarvik (NHMO); 2♂♂, 1♀, Imbros, 570m, 9.vi.2010, leg. Aarvik (NHMO); 1♂, Agia Galini, ca. 200 m, 17.iii.2011, leg. Ruckdeschel (TLMF); 1♀, Agia Galini, Lavrasto, 250 m, 4.xii.2010, leg. Ruckdeschel (TLMF); 1♂, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hvivid & Vilhelmsen (ZMUC); 1♀, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hvivid & Vilhelmsen (ZMUC); 1♂, 2♀♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hvivid & Vilhelmsen (ZMUC); 1♀, 10 km SW Omalos Plateau, 760 m, 18.vi.2014, leg. Karsholt, Hvivid & Vilhelmsen (ZMUC); 1♀, Amnatos village, 325 m, 27.ix.-2.x.2016, leg. Skule (ZMUC); 1♀, 2 km NW Kolymbari, Astratigos, 210 m, 1.x.2016, leg. Larsen (ZMUC).

***Ephytsteris promptella* (STAUDINGER, 1859)**

First record. HUEMER & KARSHOLT (2010: 321) without details. GOZMÁNY (2012: 330) from Ag. Galini and Bali (leg. Sutter, det. Karsholt).

Examined material. 1♂, 2♀♀, road Iraklion – Malia, 18.ix.-2.x.1979, leg. Glaser, genitalia slide Hendriksen 1417 (SMNK); 4♂♂, 6 km W Heraklion, 150 m, 6-11.xi.1991, leg. Fibiger, genitalia slide Hendriksen 1413, 1415 (ZMUC); 2♂♂, 20 km S Heraklion, Afgeniki, 350 m, 7-11.xi.1991, leg. Fibiger (ZMUC); 1♂, 30 km E Heraklion, Limin Hersonison, 200 m, 6-11.xi.1991, leg. Fibiger (ZMUC); 1♂, Paleochora, 20 m, 1.iv.1999, leg. Fibiger & Jeppesen et al. (ZMUC); 2♂♂, Agia Galini, Lavrasto, 100 m, 15.xi.2004, leg. Ruckdeschel (TLMF); 1♂, Hora Sfakion, 50 m, 9-21.vi.2013, genitalia slide NHMO 2533, 1♂, ditto, but, 26.vii.-7.viii.2015, genitalia slide NHMO 2881, 1♀, ditto, but, 8-18.viii.2016, leg. Aarvik, genitalia slide NHMO 3057 (NHMO); 1♂, 1♀, Amnatos village, 325 m, 27.ix.-2.x.2016, leg. Skule (ZMUC).

***Ephytsteris iberica* POVOLNÝ, 1977**

First record. HUEMER & KARSHOLT (2010: 220) from Makrigialos.

Examined material. 1♀, Lassithi distr., Makrigialos, 11-19.vi.1988, leg. Johansson (ZMUC) (HUEMER & KARSHOLT 2010); 1♂, Paleochora, 20 m, 1.iv.1999, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, Agia Galini, ca. 100 m, 18.4.2008, leg. Ruckdeschel (TLMF); 1♂,

Koutsounari, 100 m, 4.xi.2004, leg. Ruckdeschel (TLMF); 3♂♂, ditto, but 12.iv.2008 (TLMF); 2♂♂, ditto, but 14.iv.2008 (TLMF); 1♂, Achlya b. Koutsouras, 30 m, 9.iv.2008, leg. Ruckdeschel (TLMF); 1♂, Ferma, H. Coriva beach, 10 m, 1.iv.1999, leg. Ruckdeschel (TLMF); 1♂, 1♀, 2 km NW Kolymbari, Astratigos, 210 m, 1.x.2016, leg. Larsen (ZMUC).

### ***Ochrodia subdiminutella* (STAINTON, 1867)**

First record. HUEMER & KARSHOLT (2010: 321) without details.

Examined material. 1♂, Drepanides by Kissamos, 100 m, 27.iii.-2.iv.1999, leg. Fibiger & Jeppesen et al., genitalia slide Hendriksen 3188 (ZMUC) (HUEMER & KARSHOLT 2010); 1♂, Hora Sfakion, 50 m, 5-19.vi.2010, leg. Aarvik (NHMO).

### ***Microlechia chretieni* TURATI, 1924**

First record. HUEMER & KARSHOLT (2010: 352) from Makrygialos.

Examined material. 1♂, 1♀, Lassithi distr., Makrygialos, 11-19.vi.1988, leg. Johansson, genitalia slide Hendriksen 2607, 2608 (ZMUC).

### ***Caryocolum tischeriella* (ZELLER, 1839)**

First record. HUEMER & KARSHOLT (2010: 241) from 4 km S. Topolia.

Examined material. 1♂, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al., genitalia slide Hendriksen 3274 (ZMUC) (HUEMER & KARSHOLT 2010).

### ***Caryocolum alsinella* (ZELLER, 1868)**

First record. HUEMER & KARSHOLT (2010: 242) from Omalos.

Examined material. 1♂, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3276 (ZMUC); 1♂, Omalos Plateau, 1050 m, 25.vi.-1.vii.2012, leg. Hviid & Larsen (ZMUC); 1♂, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♀, Mt. Ida, above Nida plateau, 1450 m, 29.ix. 2016, leg. Skule (ZMUC).

### ***Caryocolum marmorea* (HAWORTH, 1828)**

First record. HUEMER (1988: 495) from Stomio.

Examined material. 1♂, 6 km W Heraklion, 150 m, 6-11.xi.1991, leg. Fibiger, genitalia slide Huemer GU92/349 (ZMUC); 1♂, Agia Galini, ca. 100 m, 19.iv.2008, leg. Ruckdeschel (TLMF); 1♂, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### ***Caryocolum blandelloides* KARSHOLT, 1981**

First record. HUEMER & KARSHOLT (2010: 278) from Kalligeri Mts..

Examined material. 4♂♂, 2♀♀, Kallergi Mts., 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3275, 4735) (ZMUC); 1♂, 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3277 (ZMUC).

Remarks. Specimens from Crete differ from those of the type series by being smaller and having more greyish forewings with almost no brownish scales. There are no obvious differences in the genitalia.

### ***Caryocolum proxima* (HAWORTH, 1828)**

First record. HUEMER & KARSHOLT (2010: 280) from 4 km S. Topolia.

**E x a m i n e d   m a t e r i a l .** 2♂♂, 4 km S. Topolia, 300 m, 25-29.vi.2000, leg. Fibiger et al. (ZMUC); 1♂, Omalos Plateau, 1050 m, 25.vi.-1.vii.2012, leg. Hviid & Larsen (ZMUC); 1♂, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, 10 km SW Omalos Plateau, 760 m, 18.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

## L i t i n i

### **Schneidereria pistaciella WEBER, 1957**

#### **N e w   t o   C r e t e .**

**E x a m i n e d   m a t e r i a l .** 2♂♂, 4 km S. Topolia, 28.vii.-1.viii.2001, leg. Fibiger et al., genitalia slide Hendriksen 3272 (ZMUC).

#### **[*Teleiodes saltuum* (ZELLER, 1878)]**

**F i r s t   r e c o r d .** GOZMÁNY (2012: 314) from Gonia (leg. Reisser).

**E x a m i n e d   m a t e r i a l .** None.

**R e m a r k s .** *T. saltuum* is unknown from the Mediterranean and the alleged occurrence in Crete is most likely based on a misidentification.

#### ***Teleiodes albiloculella* HUEMER & KARSHOLT, 2001 (Fig. 7)**

**F i r s t   r e c o r d .** Described from Crete, Omalos and Kallergi Mts. (HUEMER & KARSHOLT 2001: 45).



**Fig. 7:** *Teleiodes albiloculella* HUEMER & KARSHOLT. Female, road to Kallergi.

**E x a m i n e d m a t e r i a l .** 5♂♂, 7♀♀, Omalos, 1200 m, 25-30.vi.2000, leg. Fibiger et al., genitalia slides Hendriksen 2669, 2744, Huemer 91/961, 91/963, GEL 968 (TLMF, ZMUC); 1♀, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 1♂, 1♀, Imbros, 785m, 17.vi.2010, leg. Aarvik (NHMO); 10♂♂, 12♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 16♂♂, 16♀♀, Omalos Plateau, road to Kallergi, 1225 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

**R e m a r k s .** Endemic to Crete. The host-plant and early stages are unknown. Most adults have been collected in June (one from higher altitudes in late July). The specimens from 2014 were caught in light traps placed among trees and bushes of *Acer sempervirens* L.

### ***Teleiodes cisti* (STAINTON, 1869)**

**F i r s t r e c o r d .** HUEMER & KARSHOLT (1999: 194) from Makrigialos.

**E x a m i n e d m a t e r i a l .** 1♂, 17.vii.1994, Irakleon, Linoperamata, leg. Baldizzone (BALD); 1♂, 5♀♀, 19.-25.vii.1994, Mt. Ida, Gonias, 700 m, leg. Baldizzone (BALD, ZMUC); 8♀♀, Koutsounari, Agios Joannis, 390 m, 2.x.2001, leg. Ruckdeschel (TLMF); 1♀, Schinokapsala, Agios Georgios, 675 m, 4.x.2001, leg. Ruckdeschel (TLMF); 1♀, Pandom., Fodele, 100 m, 10.x.2001, leg. Ruckdeschel (TLMF); 1♂, 3.5 km SW Omalos Plateau, 1040 m, 16-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### ***Carpatolechia decorella* (HAWORTH, 1812)**

#### **N e w t o C r e t e .**

**E x a m i n e d m a t e r i a l .** 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 2♂♂, Agios Georgios, 675 m, 4.x.2001, leg. Ruckdeschel (TLMF); 1♀, Agia Galini, ca. 100 m, 15.xi.2004, leg. Ruckdeschel (DNA Barcode TLMF Lep 21342) (TLMF); 1♂, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♀, 3.5 km SW Omalos Plateau, 1040 m, 16-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

### ***Istrianiis femoralis* (STAUDINGER, 1876)**

**F i r s t r e c o r d .** HUEMER & KARSHOLT (1999: 198) from Heraclion.

**E x a m i n e d m a t e r i a l .** 1♀, Heraclion, 150 m, 20-26.iv.1995, leg. Fibiger (ZMUC); 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♀, Skines, 75 m, 5-11.vi.2004, leg. Skule, Hviid & Vesterhede (ZMUC); 1♂, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC); 1♂, ditto, but 2-3.x.2016, leg. Larsen (ZMUC).

### ***Istrianiis myricariella* (FREY, 1870)**

#### **N e w t o C r e t e .**

**E x a m i n e d m a t e r i a l .** 1♂, 17.vii.1994, Irakleon, Linoperamata, leg. Baldizzone (BALD).

### ***Teleopsis terebinthinella* (HERRICH-SCHÄFFER, 1856)**

**F i r s t r e c o r d .** KLIMESCH (1968: 121) without details.

**E x a m i n e d m a t e r i a l .** None.

### ***Xenolechia pseudovulgella* HUEMER & KARSHOLT, 1999**

**F i r s t r e c o r d .** HUEMER & KARSHOLT (1999: 198) from Kato stalos and Lefkada.

**E x a m i n e d m a t e r i a l .** 1♂, Kato stalos, 19-27.iv.1995, leg. Baungaard (ZMUC); 1♂, Nedri, Lefkada, 16.viii.1995, leg. Baungaard (ZMUC).

***Xenolechia aethiops* (HUMPHREYS & WESTWOOD, 1845)****New to Crete.**

Examined material. 1♀, Kallergi Mts. 1450-1550 m, 28-30.vii.2001, leg. Fibiger et al. (ZMUC); 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♂, near Fodele village, 16.v.2002, leg. Nuppenen (NUPP); 2♂♂, Omalos, 1000-1275 m, 12-13.v.2007, leg. Fibiger & Jeppesen et al. (ZMUC); 1♂, 1♀, Omalos, road to Lakki, 900 m, 2.x.2001, leg. Ruckdeschel (DNA Barcode TLMF Lep 21339) (TLMF); 1♂, 3♀♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

***Altenia elsneriella* HUEMER & KARSHOLT, 1999****New to Crete.**

Examined material.; 1♂, Hora Sfakion, 50 m, 8-15.ix.2012, leg. Aarvik (NHMO); 1♂, 1♀, 1.7 km S Topolia, 380 m, 15-19.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

***Telphusa cistiflorella* (CONSTANT, 1890) (Fig. 8)**

First record. KARSHOLT (2004-2011) without details. GOZMÁNY (2012: 319) from Bali (leg. Sutter).

Examined material. 1♂, 2♀♀, 7 km ESE Rethimno, Maroulas, 200 m, 11.-17.x.2003, leg. B. Skule (ZMUC); 1♂, 3 km S Ambelaki, 5 km NW Spili, 320 m, 12.x.2003, leg. B. Skule (ZMUC); 1♂, Agios Georgios, 675 m, 3.xi.2004, leg. Ruckdeschel (DNA Barcode TLMF Lep 21340) (TLMF); 1♂, Koutsounari, 100 m, 6.xi.2004, leg. Ruckdeschel (DNA Barcode TLMF Lep 21341) (TLMF).



**Fig. 8:** *Telphusa cistiflorella* (CONSTANT). Male, Koutsounari.

Moecular data. Four barcode sequences in BOLD show a considerable intra-specific divergence of maximum 3.07 %. The only available barcode from Crete with a minimum distance of 2.91 % to Spanish counterparts indicates potential cryptic diversity.

***Recurvaria nanella* (DENIS & SCHIFFERMÜLLER, 1775)**

First record. GOZMÁNY (2012: 312) from Ag. Galini (leg. Sutter, det. Karsholt).

Examined material. 1♀, Omalos, 1100-1200 m, 28.vii.-2.viii.2001, leg. Fibiger et al. (ZMUC); 1♀, 4 km S. Topolia, 28.vii.-1.viii.2001, 350 m, leg. Fibiger et al. (ZMUC); 1♂, Omalos, 1000 m, 9.viii.2006, leg. Ruckdeschel (TLMF); 1♂, ditto, but 5.vii.2010, leg. Ruckdeschel (DNA Barcode TLMF Lep 21338) (TLMF); 1♀, Omalos, northern forest, 1100 m, 5.vii.2010, leg. Ruckdeschel (TLMF); 1♀, ditto, but 6.vii.2010 (TLMF); 1♀, Omalos Plateau, 1040 m, 14-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen (ZMUC).

***Agnippe lunaki* (REBEL, 1941)**

First record. BIDZILYA & LI (2010: 249) from Assitens.

Examined material. 1♂, 6♀, Mt. Ida, Astiraki, 500 m, 23.vii.1994, leg. Baldizzone (BALD, ZMUC); 1♂, 5 km S. Topolia, 300 m, 25.-26.vi.2000, leg. Fibiger et al. (ZMUC); 5♂♂, 4 km S. Topolia, 28.vii.-1.viii.2001, 350 m, leg. Fibiger et al. (ZMUC); 1♂, Koutsounari, Agios Ioannis, 390 m, 19.v.2000, leg. Ruckdeschel (DNA Barcode TLMF Lep 21343) (TLMF); 1♂, 5♀♀, 3.5 km SW Omalos Plateau, 1200 m, 16-20.vi.2014, leg. Karsholt, Hviid & Vilhelmsen, genitalia slide Karsholt 5310 (ZMUC).

## Discussion

The Gelechiidae, with about 800 species found in Europe, is considered one of the most diverse but least known families of European Lepidoptera. Several genera are still unrevised, and even among the more well known groups many species are rarely collected or difficult to identify. Apart from the overview of GOZMÁNY (2012) no previous study of the Gelechiidae fauna of Crete exists.

In his classical treatment of the Lepidoptera of Crete REBEL (1916) listed 15 species of Gelechiidae. No list of Cretan Gelechiidae was published during the next 80 years until the European checklist of 1996, which gave 19 species, all based on published information. The late Laszlo Gozmány worked for many years on a catalogue of Greek Lepidoptera. It was published in 2012 (several years after his death) and included 57 species of Gelechiidae from Crete. In Fauna Europaea (Lepidoptera last updated 2011) the number of Cretan Gelechiidae is 73.

Our study is mainly based on material kept in our museums (TLMF and ZMUC), but includes also additional material from museums and private collections. We have until now confirmed the presence of 115 species of Gelechiidae from Crete, ten of which have been identified only to genus. Three previously published species should be removed from the list due to misidentification.

Crete is known for its many endemic species. About 10% of vascular plants are considered endemic, and so are 6.5% of geometrid moths (RUCKDESCHEL 2007). In contrast only one species of Gelechiidae (*Teleiodes albiloculella* HUEMER & KARSHOLT, 2001) - or less than 1% - is known only from Crete. There are, however candidates for further Cretan endemic Gelechiidae, partly among the species only identified to genus, and partly among species identified on the basis of morphological characters, but showing differences in the DNA barcode from specimens from mainland Europe referred to the same species. Due to the long isolation of Crete from mainland Europe and also from other Mediterranean islands genetic distances within conspecific taxa are not unexpected. Out of 17 species with available barcode sequences both from Crete and from other areas

11 species show a minimum divergence < 1%, three species between 1-2% and another three species > 3% (Tab. 1). Potential cryptic diversity should be tested particularly for these last three taxa: *Athrips rancidella*, *Ptocheuusa paupella* and *Telphusa cistiflorella*. However, due to the large number of yet unsequenced species the level of potential cryptic diversity may be considerably higher. We plan to further investigate all these cases of potential cryptic diversity, but descriptions of new species should preferably be made in taxonomic revisions.

**Tab. 1:** Minimum sequence divergence (Kimura 2 Parameter) of barcoded specimens from Crete and Nearest Neighbours (NN) outside of Crete (public data from BOLD)

species Crete	sequence id	NN outside Crete	distance NN
<i>Athrips rancidella</i>	LECRT183-16	<i>Athrips rancidella</i>	3.3089936
<i>Bryotropha domestica</i>	LECRT159-16	<i>Bryotropha domestica</i>	1.8276479
<i>Bryotropha terrella</i>	LECRT161-16	<i>Bryotropha terrella</i>	0.9259529
<i>Eulamprotes helotella</i>	LECRT148-16	<i>Eulamprotes helotella</i>	0
<i>Eulamprotes nigromaculella</i>	LECRT123-16	<i>Eulamprotes nigromaculella</i>	0.15313807
<i>Gelechia senticetella</i>	LECRT117-16	<i>Gelechia senticetella</i>	0.7142988
<i>Isophrictis kefersteiniellus</i>	LECRT141-16	<i>Isophrictis kefersteiniellus</i>	1.8783318
<i>Mesophleps corsicella</i>	LECRT189-16	<i>Mesophleps corsicella</i>	1.3934559
<i>Mesophleps ochracella</i>	LECRT190-16	<i>Mesophleps ochracella</i>	0
<i>Metzneria castiliella</i>	LECRT139-16	<i>Metzneria castiliella</i>	0.20920531
<i>Mirificarma eburnella</i>	LECRT182-16	<i>Mirificarma eburnella</i>	0.3067496
<i>Monochroa cytisella</i>	LECRT154-16	<i>Monochroa cytisella</i>	0.33955875
<i>Pexicopia malvella</i>	LECRT184-16	<i>Pexicopia malvella</i>	0.15313807
<i>Ptocheuusa paupella</i>	LECRT145-16	<i>Ptocheuusa paupella</i>	3.5433016
<i>Recurvaria nanella</i>	LECRT165-16	<i>Recurvaria nanella</i>	0.4608315
<i>Telphusa cistiflorella</i>	LECRT167-16	<i>Telphusa cistiflorella</i>	2.91199
<i>Xenolechia aethiops</i>	LECRT166-16	<i>Xenolechia aethiops</i>	0

Summing up, the Gelechiidae fauna of Crete is far from being thoroughly investigated. Most of the specimens studied by us originated from localities in West Crete, and mostly from localities below 1200 m (with material from only one locality at 1550 m). Almost all specimens were collected by light (especially automatic light traps), and not a single specimen was bred from larva! These obvious gaps together with the already documented cases of potential cryptic diversity and unrevised taxa will definitely considerably increase regional species diversity in the future.

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### Zusammenfassung

Die Arbeit gibt einen umfassenden Überblick über die Gelechiidae Kretas einschließlich detaillierter faunistischer Daten. Insgesamt werden 115 Arten gemeldet, darunter 10 nur auf Gattungsniveau bestimmbar Taxa die mutmaßlich unbeschriebene Arten inkludieren, sowie 25 Neufunde für Kreta. DNA Barcode Sequenzen weisen bei mehreren Arten auf kryptische Diversität.

### Literatur

- BIDZILYA O. & H. LI (2010): Review of the genus *Agnippe* (Lepidoptera: Gelechiidae) in the Palaearctic region. — European J. Ent. **107**: 247-265.
- CORLEY M. & O. KARSHOLT (2014): *Stomopteryx lusitaniella* CORLEY & KARSHOLT, sp. n. Pp. 232, 236, 238-242. — In: CORLEY M., Five new species of Microlepidoptera from Portugal. Entomologist's Rec. **126**: 229-243.
- ENGLERT W.D. (1974): Revision der Gattung *Metzneria* ZELLER (Lepid., Gelechiidae) mit Beiträgen zur Biologie der Arten. — Zeitschrift für Angewandte Entomologie **75**: 381-421.
- GALVAGNI E. (1935): Griechische Falter, insbesondere über die auf der Griechenlandreise der Universität Wien, Ostern 1933, 8-23 April, beobachteten Schmetterlinge. — Z. öster. Ent. Ver. **20**: 5-7.
- GOZMÁNY L. (2012): Fauna Graeciae IX. The Lepidoptera of Greece and Cyprus. — Volume 1. Hellenic Zoological Society, Athens: 409 pp.
- GREGERSEN K. & O. KARSHOLT (2017): Taxonomic confusion around the Peach Twig Borer, *Anarsia lineatella* ZELLER, 1839, with description of a new species (Lepidoptera, Gelechiidae). — Nota lepid. **40** (1): 65-85.
- HUEMER P. (1988): A taxonomic revision of *Caryocolum* (Lepidoptera: Gelechiidae). — Bull. Br. Mus. nat. Hist. (Ent.) **57**: 439-571.
- HUEMER P. (2016): Beitrag zur Wicklerfauna Kretas aus Aufsammlungen von Dr. Walter Ruckdeschel (Lepidoptera, Tortricidae). — NachrichBl. bayer. Ent. **65** (1/2): 2-12.
- HUEMER P. & O. KARSHOLT (1999): Gelechiidae 1 (Gelechiinae: Teleiodini, Gelechiini). — In: HUEMER P., KARSHOLT O. & L. LYNEBORG (eds), Microlepidoptera of Europe **3**: 1-356. Stenstrup.

- HUEMER P. & O. KARSHOLT (2001): Additions to the fauna of Gelechiidae (Gelechiinae: Teleiodini and Gelechiini) of Europe. — *Nota lep.* **24**: 41-55.
- HUEMER P. & O. KARSHOLT (2010): Gelechiidae II (Gelechiinae: Gnorimoschemini). — In: HUEMER P., KARSHOLT O. & M. NUSS (eds), *Microlepidoptera of Europe* **6**: 1-586. Stenstrup.
- ISAAKIDES C.A. (1941): [Insects important to greek agriculture and observations on them]. — *Praktika de l'Academie d'Athènes* **16**: 238-263. [in Greek].
- KARSHOLT O. (2004-2011): Gelechiidae. — In: KARSHOLT O. & E. J. VAN NIEUKERKEN (eds), *Lepidoptera. Fauna Europaea*, version 1.1-2.4. <http://www.faunaeur.org>
- KARSHOLT O., MUTANEN M., LEE S. & L. KAILA (2013): A molecular analysis of the Gelechiidae (Lepidoptera, Gelechioidea) with an interpretative grouping of its taxa. — *Syst. Ent.* **38**: 334-348.
- KARSHOLT O., HUEMER P., POVOLNÝ D. & T. RIEDL (1996): Gelechiidae. — In: KARSHOLT O. & J. RAZOWSKI (eds), *The Lepidoptera of Europe*. Apollo Books, Stenstrup: 380 pp..
- KARSHOLT O. & T. RUTTEN (2005): The genus *Bryotropha* HEINEMANN in the western Palaearctic (Lepidoptera: Gelechiidae). — *Tijdschrift voor Entomologie* **148**: 77-207.
- KLIMESCH J. (1968): Die Lepidopterenfauna Mazedoniens, IV Microlepidopteren Posebno — Izdanje prirodonaučen Muzej Skopje **5**: 1-203.
- Li H. & K. SATTLER (2010): A taxonomic revision of the genus *Mesophleps* HÜBNER, 1825 (Lepidoptera: Gelechiidae). — *Zootaxa* **3373**: 1-82.
- MOUCHA J. & J. ZAHRADNIK (1969): *Papilio machaon* L. et *Chaerocampa electo* L. deux lépidoptères nuisibles, et remarques sur d'autres espèces de l'île de Chypre. — *Alexanor* **6**: 146-149.
- NEL J. & A. NEL (2003): Contribution à la connaissance des Lépidoptères de l'île de Crète (Grèce) (Lepidoptera). — *Bull. Soc. ent. France* **108**: 277-282.
- OSTHELDER L. (1941): Beitrag zur Kleinschmetterlingsfauna Kretas. — *Mitt. Münchner ent. Ges.* **31**: 365-370, pl. 15.
- PEAKERY (2016): Crete mountains and peaks. — <http://peakery.com/greece-mountains/crete/> (visited 30.12.2016).
- RATNASINGHAM S. & P.D.N. HEBERT (2007): BOLD: The Barcode of Life Data System (<http://www.barcodinglife.org>). — *Molecular Ecology Notes* **7**: 355-364.
- REBEL H. (1916): Die Lepidopterenfauna Kretas. — *Annl. Naturhist. Mus. Wien* **30**: 66-172, pl. 4.
- RODITAKIS E., PAPACHRISTOS D. & N.E. RODITAKIS (2010): Current status of the tomato leafminer *Tuta absoluta* in Greece. — *Bulletin OEPP/EPPO Bulletin* **40**: 163-166.
- RUCKDESCHEL W. (2007): Die Geometriden Kretas (Lepidoptera, Geometridae). — *NachrBl. bayer. Ent.* **56** (1/2): 2-13.

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