

Notes on Lepidoptera Tortricidae from the Thessaly region with 13 new records for the Greek fauna

Pasquale TREMATERRA, Marco COLACCI

Department of Agricultural, Environmental and Food Sciences, University of Molise, Campobasso, Italy

Abstract

During entomological expeditions conducted in the Thessaly region (central Greece) in 2019 and 2021, 68 species of Lepidoptera Tortricidae were collected: 25 species of Tortricinae and 43 species of Olethreutinae. Thirteen of the species are newly reported for the Greek fauna: *Phalonidia gilvicomana* (Zeller) (Cochylini); *Oxypteron impar* Staudinger and *Eana clercana* (Joannis) (Cnephasiini); *Choristoneura lafauryana* Kennel and *Pandemis dumetana* (Treitschke) (Archipini); *Endothenia lapideana* (Herrich-Schaffer), *Endothenia nigricostana* (Haworth) and *Pristerognatha fuligana* (Denis et Schiffermuller) (Olethreutiini); *Gibberifera simplana* (Fischer von Roslerstamm), *Gypsonoma imparana* (Muller-Rutz) and *Gypsonoma nitidulana* (Lienig et Zeller) (Eucosmini); *Cydia aldocataniae* Trematerra and *Lathronympha balearici* Diakonoff (Grapholitini).

Key words: Lepidoptera Tortricidae, fauna, Thessaly region, Greece.

Introduction

Over the last few decades, the Tortricidae of Greece have received limited attention from lepidopterists, with publications referring to only one or a few species from the region (Aarvik and Karsholt, 1993; Trematerra and Karsholt, 1996; Trematerra and Aarvik, 1998; Gozmany, 2012; Bassi, 2014; Trematerra and Colacci, 2016; 2017). Given this relatively scattered and limited data, we embarked on a more comprehensive investigation of the tortricid fauna of the central Greek peninsula, continuing research started in the Thessaly region by Trematerra and Colacci in 2016. Two entomological expeditions were organised, one in 2019 and one in 2021, in the same areas in different seasons, and in previously uninvestigated sites. A wide range of habitats were visited at altitudes between sea level and 1,520 m. Our collection sites were situated mostly in the mountainous areas of Pelion, but also included lowland pastures and forests. Among the most frequently visited areas were Peneo River (0-237 m a.s.l.), a site near Lake Panagiotiko (240 m a.s.l.), Mount Ossa (878-1520 m a.s.l.), Pelion Mountains (750-1527 m a.s.l.), and Mount Olympus (325-1530 m a.s.l.) (figure 1).

In the present paper, a list of tortricids collected in 2019 and 2021 is presented. Data from the previous 2016 expedition by Trematerra and Colacci (2016; 2017) are also included to provide a more thorough biogeographical picture.

Materials and methods

Specimens were collected mainly by net and by attraction to light (UV-LED) at night-time. Nomenclature follows Razowski (2002; 2003; 2008; 2009), with modifications as proposed by Brown (2005), Gilligan *et al.* (2018) and Brown *et al.* (2020). Species' distributions are taken mostly from Razowski (1996), Trematerra (2003), and Aarvik (2013), with additional data from Trematerra's personal catalogue (unpublished data). The chorotype of

each species was taken from Vigna Taglianti *et al.* (1992; 1999). Food plants and adult fly period are reported for new Greek fauna records.

For brevity, collectors are abbreviated as follows: Goglia = G; Papadopoulos = P; Rodovitis = R; Colacci and Goglia = CG; Giuffrida and Goglia = GG; Goglia and Karasmanoglou = GK; Bella, Catania, Goglia = BCG; Fotiou, Goglia and Karasmanoglou = FGK; Bella, Catania, Colacci and Goglia = BCCG.

LIST OF TAXA FAMILY TORTRICIDAE

SUBFAMILY TORTRICINAE

TRIBE TORTRICINI

Acleris forsskaleana (L. 1758)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 1 female: Larissa, Mt Ossa, Spilia, 850 m, 10.VII.2019, BCCG legit.

CHOROTYPE. Turano-European.

TRIBE COCHYLINI

Cochylimorpha meridiana (Staudinger 1859)

MATERIAL EXAMINED. 1 male: Magnesia, Mt Pelion, Drakia, 800 m, 6.VII.2019, BCCG legit.

CHOROTYPE. Centralasiatic-European.

Phalonidia gilvicomana (Zeller 1847)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1300 m, 7.VII.2019, BCCG legit; 1 female: Thessaly, Kouloura, 2 m, 12.IX.2021, BCG legit.

DISTRIBUTION. Europe, from Spain, France and British Islands to Scandinavia and Finland, W-Russia, Ukraine, Bulgaria. **New record for Greece.**

CHOROTYPE. European.

BIOLOGY. Larva on *Chenopodium* spp.; *Lactuca* spp.; *Lapsana* spp., *L. communis*; *Mycelis* spp., *M. muralis*; *Prenanthes purpurea*; *Solidago* spp.. Adult flies from June to August.

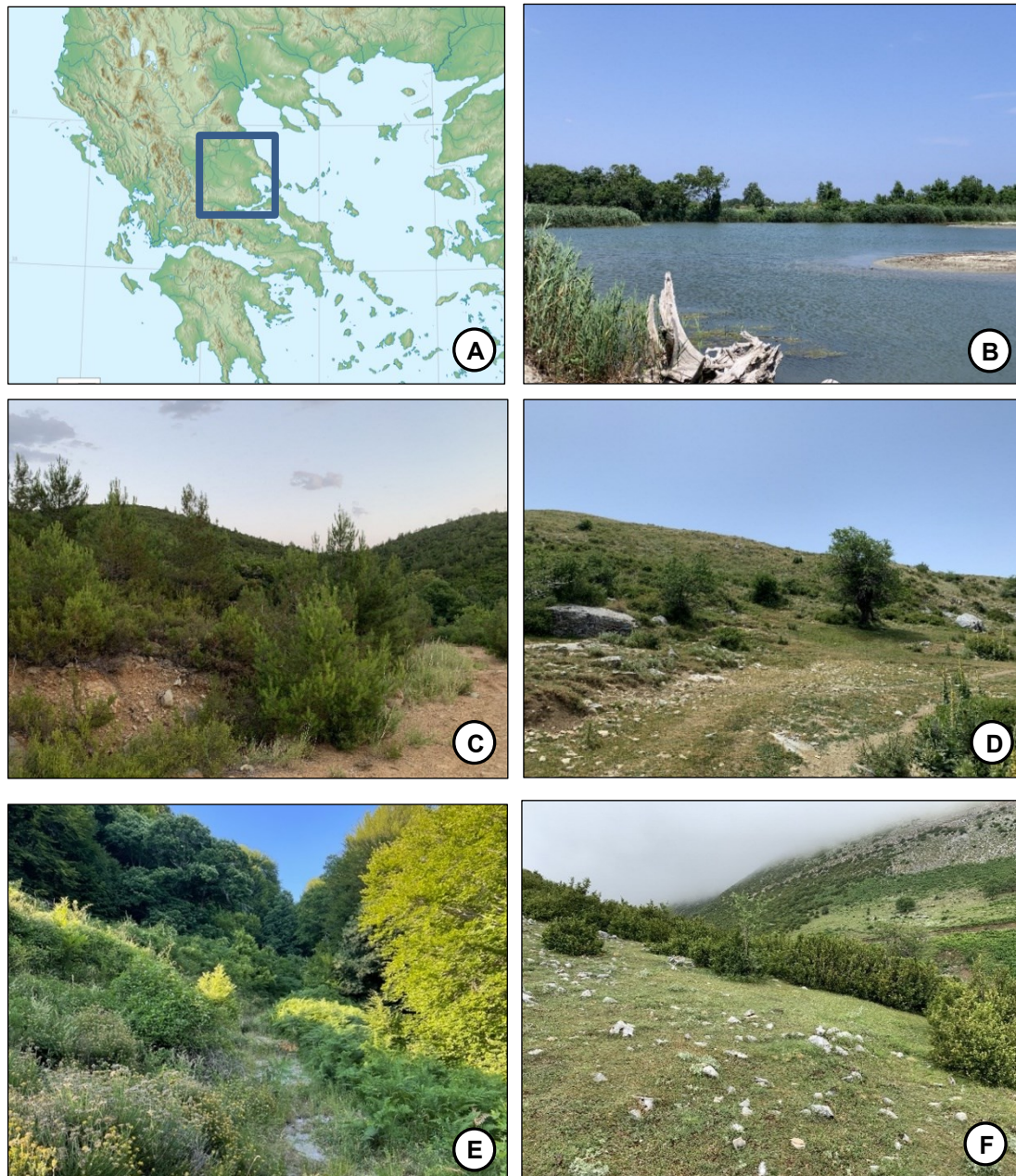


Figure 1. Investigated area of Thessaly (A); Peneo River, Alexandrini (10 m/a.s.l.) (B); Lake Panagiotiko, Afetes (170 m/a.s.l.) (C); Mount Ossa, Spilia (850 m/a.s.l.) (D); Pelion Mountains, Chania (1,169 m/a.s.l.) (E); Mount Olympus, Kalivia (1,699 m/a.s.l.) (F).

Phalonidia affinitana (Douglas 1846)

MATERIAL EXAMINED. 3 males: Thessaly, Kouloura, 1 m, 12.IX.2021, BCG legit.

CHOROTYPE. European.

Ceratoxanthus giansalottii Bassi 2014

MATERIAL EXAMINED. 1 male: Magnesia, Mt Pelion, Chania, 1350 m, 4.VII.2019, CG legit; 2 males: Magnesia, Mt Pelion, Chania, 1350 m, 6.VII.2019, BCCG legit; 1 male; Magnesia, Mt Pelion, Chania, 1355 m, 9.VII.2021, GG legit; 1 male: Magnesia, Mt Pelion, Chania, 1156 m, 28.VII.2021, FGK legit.

CHOROTYPE. Thessalian endemic.

Aethes bilbaensis (Rossler 1877)

MATERIAL EXAMINED. 18 males and 7 females: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

CHOROTYPE. W-Palaeartic.

Diceratura rhodograpt Djakonov 1929

MATERIAL EXAMINED. 1 female: Larissa, Mt Ossa, Spilia, 850 m, 10.VII.2019, BCCG legit.

CHOROTYPE. Mediterranean.

Neocoehylis molliculana (Zeller 1847)

MATERIAL EXAMINED. 10 males: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

CHOROTYPE. Europeo-Mediterranean.

Pontoturania posterana (Zeller 1847)

MATERIAL EXAMINED. 1 male: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit; 1 male: Larissa, Mt Ossa, Spilia, 850 m, 10.VII.2019, BCCG legit.

CHOROTYPE. Palaearctic.

TRIBE CNEPHASIINI

Oxypteron impar Staudinger 1871

MATERIAL EXAMINED. 1 female: Larissa, Mt Ossa, Spilia, 850 m, 10.VII.2019, BCCG legit.

DISTRIBUTION. SE-Europe, S-Russia, N-Caucasus, Transcaucasia, Kazakhstan and C-Asia. **New record for Greece.**

CHOROTYPE. Centralasiatic-European.

BIOLOGY. Larva feeds in flowers of *Tulipa schrenkii* (Kuznetsov, 1978). Adult flies in September.

Eana incanana (Stephens 1852)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1350 m, 4.VII.2019, CG legit; 3 males and 7 females: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 5 males and 9 females: Magnesia, Mt Pelion, Chania, 1350 m, 6.VII.2019, BCCG legit.

CHOROTYPE. Sibero-European.

Eana clercana (Joannis 1908) (figures 2-3)

MATERIAL EXAMINED. 2 males: Magnesia, Mt Pelion, Chania, 1168 m, 9.VII.2021, GG legit; 1 male: Magnesia, Mt Pelion, Chania, 1168 m, 17.VII.2021, GK legit.

DISTRIBUTION. Spain (Castile, Sierra de Gredos) and France (Alpes-de-Haute-Provence). **New record for Greece** (figure 4).

CHOROTYPE. S-European.

BIOLOGY. Moth collected from late May to July. Observed on *Paeonia* spp. (Cama, 2012).

Eana italica (Obraztsov 1950)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Chania, 1300 m, 7.VII.2019, BCCG legit.

CHOROTYPE. Appennino-Dinaric.

Cnephasia communana (Herrich-Schaffer 1851)

MATERIAL EXAMINED. 11 males and 9 females: Magnesia, Mt Pelion, Chania, 1168 m, 9.VII.2021, GG legit; 1 female: Magnesia, Mt Pelion, Chania, 1168 m, 17.VII.2021, GK legit.

CHOROTYPE. W-Palaearctic.

TRIBE ARCHIPINI

Epagoge grotiana (F. 1781)

MATERIAL EXAMINED. 1 male: Magnesia, Mt Pelion, Chania, 1350 m, 4.VII.2019, CG legit; 1 male and 3 females: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 1 female: Magnesia, Mt Pelion, Chania, 1350 m, 6.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Chania, 1520 m, 6.VII.2019, BCCG legit; 2 males and 22 females: Magnesia, Mt Pelion, Chania, 1355 m, 9.VII.2021, GG legit; 3 females: Magnesia, Mt Pelion, Chania, 1168 m, 17.VII.2021, GK legit.

CHOROTYPE. W-Palaearctic.



Figure 2. *E. clercana*: male wings.



Figure 3. *E. clercana*: male genitalia.

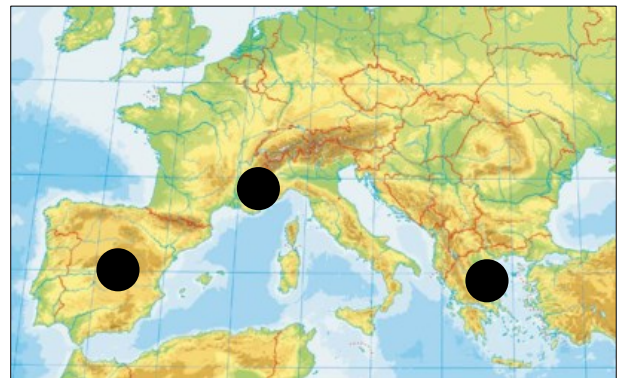


Figure 4. Distribution of *E. clercana*: Spain (Castile, Sierra de Gredos); France (Alpes-de-Haute-Provence); Greece (Magnesia, Pelion Mountains, Chania).

Paramesia diffusana (Kennel 1899)

MATERIAL EXAMINED. 1 male: Magnesia, Mt Pelion, Chania, 1488 m, 29.VII.2021, G legit; 4 males and 1 female: Magnesia, Mt Pelion, Chania, 1168 m, 31.VII.2021, G legit.

CHOROTYPE. SW-Europe.

Paramesia gnomana (Clerck 1759)

MATERIAL EXAMINED. 3 males and 7 females: Magnesia, Mt Pelion, Chania, 1355 m, 9.VII.2021, GG legit;

3 males: Magnesia, Mt Pelion, Chania, 1168 m, 17.VII.2021, GK legit; 2 males: Magnesia, Mt Pelion, Chania, 1156 m, 28.VII.2021, FGK legit; 2 females: Magnesia, Mt Pelion, Chania, 1158 m, 31.VII.2021, G legit.

CHOROTYPE. Turano-European.

Avaria hyerana (Milliere 1858)

MATERIAL EXAMINED. 4 males: Thessaly, Spilia, 878 m, 17.IX.2021, BCG legit.

CHOROTYPE. Mediterranean.

Archips podanus (Scopoli 1763)

MATERIAL EXAMINED. 1 male: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

CHOROTYPE. Holarctic.

Archips xylosteanus (L. 1758)

MATERIAL EXAMINED. 1 male: Magnesia, Mt Pelion, Afetes, 192 m, 18.VII.2021, GK legit; 1 male, Thessaly, Spilia, 849 m, 17.IX.2021, BCG legit; 1 female, Magnesia, Mt Pelion, Agios Lavrestios, 938 m, 31.VII.2021, G legit.

CHOROTYPE. Palaearctic.

Choristoneura lafauryana Kennel 1910

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1168 m, 9.VII.2021, GG legit; 2 males and 1 female: Thessaly, Kouloura, 2 m, 12.IX.2021, BCG legit.

DISTRIBUTION. From S and C Europe to Transcaucasia, Asia Minor, S Siberia, Russian Far East, Korea, China and Japan. **New record for Greece.**

CHOROTYPE. Asiatic-European.

BIOLOGY. Larvae feeding on leaves, shoots and flowers of *Myrica gale*, *Fragaria* spp., *Lespedeza* spp., *Medicago sativa*, *Ledum palustre*, *Artemisia* spp., *Cirsium* spp., *Citrus* spp., *Malus* spp., *Pyrus* spp. and other Rosaceae and Saxifragaceae, also on *Abutilon* spp., *Glycine* spp., *Forssythia* spp. etc. Moth flies in July and August (Razowski, 2002).

Pandemis dumetana (Treitschke 1835)

MATERIAL EXAMINED. 2 males: Thessaly, Kouloura, 2 m, 12.IX.2021, BCG legit.

DISTRIBUTION. Europe to Urals Mts, Russia, Asia Minor, Iran, S-Siberia, Transcaucasia, Far East, NW-China, South Korea, Japan. **New record for Greece.**

CHOROTYPE. Palaearctic.

BIOLOGY. Larvae feed polyphagously in leaves of *Urtica* spp., *Chenopodium* spp., *Origanum* spp., *Sanguisorba* spp., *Valeriana* spp., *Lonicera* spp., *Rubus* spp., *Quercus* spp., *Mentha* spp., *Fragaria* spp. etc. Moth flies in July and August (Razowski, 2002).

Cacoecimorpha pronubana (Hubner 1796-99)

MATERIAL EXAMINED. 1 male: Magnisia, Lechonia, 5 m, VIII.2021, P legit.

CHOROTYPE. W-Palaearctic.

Clepsia burgasiensis (Rebel 1916)

MATERIAL EXAMINED. 2 males: Thessaly, Spilia, 878 m, 17.IX.2021, BCG legit.

CHOROTYPE. S-European.

Clepsia consimilana (Hubner [1814-1817])

MATERIAL EXAMINED. 2 females: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Portaria, 750 m, 7.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Portaria, 1000 m, 7.VII.2019, BCCG legit; 1 female: Magnesia, Afetes, 170 m, 8.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Afetes, 192 m, 18.VII.2021, GK legit; 1 female: Magnisia, Lechonia, 5 m, 29.VIII.2021, G legit; 2 males: Thessaly, Dion, 325 m, 15.IX.2021, BCG legit; 1 female: Magnesia, Portaria, 748 m, 18.IX.2021, BCG legit.

CHOROTYPE. Cosmopolitan.

SUBFAMILY OLETHREUTINAE

TRIBE OLETHREUTINI

Endothenia oblongana (Haworth [1811])

MATERIAL EXAMINED. 1 male: Magnesia, Peneo river, Kalabaka, 231 m, 1.VIII.2021, G legit.

CHOROTYPE. European.

Endothenia marginana (Haworth [1811])

MATERIAL EXAMINED. 1 male: Thessaly, Kouloura, 2 m, 12.IX.2021, BCG legit.

CHOROTYPE. Palaearctic.

Endothenia lapideana (Herrich-Schaffer 1848)

MATERIAL EXAMINED. 1 female: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

DISTRIBUTION. Known from C-Europe excluded northern territories, Albania, W-European Russia, W-Ukraine. **New record for Greece.**

CHOROTYPE. European.

BIOLOGY. Larva in stems and roots of *Digitalis* spp., *D. grandiflora*. Adult flies in May-June.

Endothenia nigricostana (Haworth [1811])

MATERIAL EXAMINED. 1 male: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

DISTRIBUTION. Holarctic region: Europe, S-Siberia, Far East (Primorsk), Korea and Japan. **New record for Greece.**

CHOROTYPE. Asiatic-European.

BIOLOGY. Larva in stems and roots of *Stachys sylvatica*, *S. palustris* and *Lamium* spp.. Adult in May-July.

Lobesia botrana ([Denis et Schiffermuller] 1775)

MATERIAL EXAMINED. 1 female: Magnesia, Volos, 6 m, 11.VII.2021, G legit; 1 male: Magnesia, Mt Pelion, Afetes, 192 m, 18.VII.2021, GK legit; 1 female: Magnesia, Agria, 1 m, 25.VII.2021, G legit; 1 male: Magnesia, Mt Pelion, Portaria, 907 m, 28.VII.2021, FGK legit; 2 females: Thessaly, Spilia, 878 m, 17.IX.2021, BCG legit.

CHOROTYPE. W-Palaearctic.

Lobesia artemisiana (Zeller 1847)

MATERIAL EXAMINED. 1 female: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

CHOROTYPE. Turano-European.

Eudemis profundana ([Denis et Schiffermuller] 1775)

MATERIAL EXAMINED. 2 females: Lamia, Anavra, 947 m, 14.IX.2021, BCG legit.

DISTRIBUTION. From W-Europe to W-Ukraine and Ural Mts, Asia Minor.

CHOROTYPE. W-Palaeartic.

Pristerognatha fuligana ([Denis et Schiffermuller] 1775)

MATERIAL EXAMINED. 1 female: Thessaly, Spilia, 878 m, 17.IX.2021, BCG legit.

DISTRIBUTION. Known from C-Europe and E-Europe excluded its southern part; Kazakhstan, Siberia, Russian Far East, Japan (Hokkaido and Honshu). **New record for Greece.**

CHOROTYPE. Palaeartic.

BIOLOGY. Larva in stems and roots of *Impatiens noli-tangere*. Adult flies in April and August.

Olethreutes arcuellus (Clerck 1759)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1350 m, 4.VII.2019, CG legit; 1 female: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit.

CHOROTYPE. Centralasiatic-European.

Syricoris lacunana ([Denis et Schiffermuller] 1775)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1350 m, 4.VII.2019, BCCG legit; 1 female: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Chania, 1520 m, 6.VII.2019, BCCG legit; 1 female: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

CHOROTYPE. Asiatic-European.

TRIBE ENARMONIINI

Ancylis comptana (Frolich 1828)

MATERIAL EXAMINED. 1 male: Larissa, Mt Olympus, Kalivia, 1500 m, 11.VII.2019, BCCG legit.

CHOROTYPE. Holarctic.

Ancylis badiana ([Denis et Schiffermuller] 1775)

MATERIAL EXAMINED. 1 male: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

CHOROTYPE. Asiatic-European.

Ancylis achatana ([Denis et Schiffermuller] 1775)

MATERIAL EXAMINED. 1 female: Larissa, Mt Olympus, Kalivia, 1100 m, 11.VII.2019, BCCG legit.

CHOROTYPE. Asiatic-European.

TRIBE EUCOSMINI

Thiodia trochilana (Frolich 1828)

MATERIAL EXAMINED. 1 male: Larissa, Mt Ossa, Spilia, 850 m, 10.VII.2019, BCCG legit.

CHOROTYPE. Turano-European-Mediterranean.

Spilonota ocellana ([Denis et Schiffermuller] 1775)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Chania, 1520 m, 6.VII.2019, BCCG legit; 1 female: Magnesia, Mt Pelion, Portaria, 750 m, 7.VII.2019, BCCG legit; 1 male and 1 female: Magnesia, Mt Pelion, Chania, 1300 m, 7.VII.2019, BCCG legit.

CHOROTYPE. Holarctic.

Spilonota laricana (Heinemann 1863)

MATERIAL EXAMINED. 1 male: Magnesia, Mt Pelion, Chania, 1168 m, 17.VII.2021, GK legit; 3 males: Magnesia, Mt Pelion, Chania, 1156 m, 28.VII.2021, FGK legit.

CHOROTYPE. Holarctic.

Gibberifera simplana (Fischer von Roslerstamm 1836)

MATERIAL EXAMINED. 2 females: Magnesia, Peneo river, Kalabaka, 231 m, 1.VIII.2021, G legit.

DISTRIBUTION. Europe from France and British Islands to Italy, Romania and Scandinavia, East Europe excluded northern territories; N-China, Korea, Russian Far East: Amur-Zeya area; Japan: Honshu. **New record for Greece.**

CHOROTYPE. Asiatic-European.

BIOLOGY. Larva in spun leaves of *Populus tremula* and *Salix* spp. Adult flies from May to July.

Epinotia thapsiana (Zeller 1847)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit.

CHOROTYPE. Asiatic-European.

Crocidosema plebejana Zeller 1847

MATERIAL EXAMINED. 2 females: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 1 female: Magnesia, Mt Pelion, Portaria, 750 m, 7.VII.2019, BCCG legit; 1 female: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit; 1 female: Magnesia, Volos, 6 m, 11.VII.2021, G legit; 1 female: Magnesia, Mt Pelion, Chania, 1168 m, 17.VII.2021, GK legit; 1 male: Magnesia, Volos, 6 m, 25.VII.2021, G legit.

CHOROTYPE. Cosmopolitan.

Pelochrista agrestana (Treitschke 1830)

MATERIAL EXAMINED. 2 males: Magnesia, Mt Pelion, Chania, 907 m, 28.VII.2021, FGK legit.

CHOROTYPE. S-European.

Eucosma cana (Haworth 1811)

MATERIAL EXAMINED. 1 male: Thessaly, Kouloura, 1 m, 12.IX.2021, BCG legit.

DISTRIBUTION. Europe from British Is and France to Ural Mts and from Scandinavia to Mediterranean and Asia Minor. From White Sea to Caucasus also Transcaucasia, Central Asia, Kazakhstan, Russia, S-Siberia, Far East Priamure, Primorsk, China, Japan.

CHOROTYPE. Palaeartic.

Eucosma conformana (Mann 1872)

MATERIAL EXAMINED. 1 female: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

CHOROTYPE. Palaeartic.

Gypsonoma imparana (Muller-Rutz 1914)

MATERIAL EXAMINED. 1 male: Magnesia, Volos, 6 m, 11.VII.2021, G legit.

DISTRIBUTION. Europe: France, Italy, Switzerland, Germany and Austria. Also from Russia: Khabarovsk Krai. **New record for Greece.**

CHOROTYPE. Asiatic-European.

BIOLOGY. Larva in spun leaves of *Populus* spp. and *Salix viminalis*. Adult flies from June to August.

Gypsonoma nitidulana (Lienig et Zeller 1846)

MATERIAL EXAMINED. 1 male and 1 female: Larissa, Alexandrini, Peneo river, 10 m, 9.VII.2019, BCCG legit.

DISTRIBUTION. Europe from British Islands and Scandinavia as far as Ural Mts, Siberia, Asia Minor, Mongolia, Russia (Altaj), Russian Far East: Priamure, S-Primorsk, S-Kuril Is (Shikotan I). **New record for Greece.**

CHOROTYPE. Asiatic-European.

BIOLOGY. Larva on *Arctostaphylos uva-ursi*; *Betula* spp.; *Erica* spp.; *Populus* spp., *P. tremula*; *Rubus* spp.; *Rhododendron* spp.; *Salix* spp.; *Vaccinium* spp.. Adult flies from April to July.

Notocelia uddmanniana (L. 1758)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Portaria, 750 m, 7.VII.2019, BCCG legit.

CHOROTYPE. Palearctic.

Notocelia aquana (Hubner [1796-1799])

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1156 m, 28.VII.2021, FGK legit; 1 male and 2 females: Magnesia, Mt Pelion, Chania, 1168 m, 17.VIII.2021, GK legit; 1 female: Magnesia, Portaria, 748 m, 18.IX.2021, BCG legit.

CHOROTYPE. Palearctic.

Notocelia incarnatana (Hubner 1800)

MATERIAL EXAMINED. 1 male and 2 females: Magnesia, Trikeri, 33 m, 13.IX.2021, BCG legit; 1 male: Magnesia, Portaria, 748 m, 18.IX.2021, BCG legit.

CHOROTYPE. Palearctic.

Blastesthia tessulatana (Staudinger 1871)

MATERIAL EXAMINED. 1 male: Magnesia, Volos, Nea Ionia, 57 m, 11.VIII.2021, G legit.

CHOROTYPE. S-Europeo-Mediterranean.

Rhyacionia buoliana ([Denis et Schiffermuller] 1775)

MATERIAL EXAMINED. 2 males and 7 females: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit.

CHOROTYPE. Subcosmopolitan.

TRIBE GRAPHOLITINI

Cydia succedana ([Denis et Schiffermuller] 1775)

MATERIAL EXAMINED. 2 males: Magnesia, Mt Pelion, Chania, 1350 m, 4.VII.2019, CG legit; 1 female: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 1 male and 1 female: Magnesia, Mt Pelion, Chania, 1350 m, 6.VII.2019, BCCG legit; 2 males and 1 female: Magnesia, Mt Pelion, Chania, 1300 m, 7.VII.2019, BCCG legit.

CHOROTYPE. Centralasiatic-European-Mediterranean.

Cydia trogodana Prose 1988

MATERIAL EXAMINED. 1 male and 4 females: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 1 female: Magnesia, Mt Pelion, Chania, 1350 m, 6.VII.2019, BCCG legit.

CHOROTYPE. Mediterranean.

Cydia duplicana (Staudinger 1871)

MATERIAL EXAMINED. 3 females: Thessaly, Spilia, 878 m, 17.IX.2021, BCG legit.

CHOROTYPE. SW-Palaeartic.

Cydia pomonella (L. 1758)

MATERIAL EXAMINED. 1 female: Magnisia, Lechonia, 5 m, 16.VIII.2021, ex fructu *Pyrus communis* 16.VII.2021, R legit; 1 male and 1 female: Magnisia, Lechonia, 5 m, 29.VIII.2021, G legit; 1 male: Magnisia, Lechonia, 5 m, 31.VIII.2021, ex fructu *Pyrus communis* 7.VIII.2021, R legit.

CHOROTYPE. Cosmopolitan.

Cydia triangulella (Goeze 1783)

MATERIAL EXAMINED. 2 females: Magnesia, Volos, Nea Ionia, 57 m, 7.VIII.2021, G legit; 1 female: Magnesia, Chania, 57 m, 11.IX.2021, BCG legit; 1 female: Magnesia, Chania, 1157 m, 11.IX.2021, BCG legit; 2 females: Lamia, Anavra, 947 m, 14.IX.2021, BCG legit.

CHOROTYPE. Palearctic.

Cydia fagiglandana (Zeller 1841)

MATERIAL EXAMINED. 1 female: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 4 males and 1 female: Magnesia, Mt Pelion, Portaria, 750 m, 7.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Portaria, 1000 m, 7.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Chania, 1300 m, 7.VII.2019, BCCG legit; 1 male: Larissa, Mt Ossa, Spilia, 850 m, 10.VII.2019, BCCG legit; 8 males: Magnesia, Mt Pelion, Portaria, 858 m, 29.VII.2021, G legit; 1 male and 2 females: Magnesia, Mt Pelion, Portaria, 907 m, 29.VII.2021, FGK legit; 6 males and 2 females: Magnesia, Trikeri, 33 m, 13.IX.2021, BCG legit; 13 males and 1 female: Magnesia, Trikeri, 148 m, 13.IX.2021, BCG legit; 1 male: Lamia, Anavra, 803 m, 14.IX.2021, BCG legit; 1 male: Lamia, Anavra, 947 m, 14.IX.2021, BCG legit; 2 males and 1 female: Thessaly, Dion, 204 m, 15.IX.2021, BCG legit; 1 female: Thessaly, Spilia, 849 m, 17.IX.2021, BCG legit; 3 males and 1 female: Magnesia, Portaria, 748 m, 18.IX.2021, BCG legit; 5 males and 1 female: Magnesia, Portaria, 851 m, 18.IX.2021, BCG legit.

CHOROTYPE. W-Palaeartic.

Cydia aldocataniae Trematerra 2019

MATERIAL EXAMINED. 1 male and 2 females: Magnesia, Mt Pelion, Portaria, 750 m, 7.VII.2019, BCCG legit; 2 males and 1 female: Magnesia, Afetes, 170 m, 8.VII.2019, BCCG legit; 1 male: Magnesia, Mt Pelion, Portaria, 907 m, 28.VII.2021, FGK legit; 1 male: Magnesia, Trikeri, 33 m, 13.IX.2021, BCG legit; 3 males: Magnesia, Trikeri, 148 m, 13.IX.2021, BCG legit; 1 male: Lamia, Anavra, 803 m, 14.IX.2021, BCG legit; 3 males: Thessaly, Dion, 204 m, 15.IX.2021, BCG; 1 male: Thessaly, Spilia, 849 m, 17.IX.2021, BCG legit; 1 male: Magnesia, Mt Pelion, Portaria, 851 m, 18.IX.2021, BCG legit.

DISTRIBUTION. Malta. **New record for Greece.**

CHOROTYPE. S-European.

BIOLOGY. Larva in acorns of *Quercus ilex*. Adult flies also in May-July.

Cydia magnesia Trematerra and Colacci 2017

MATERIAL EXAMINED. 1 male: Magnesia, Mt Pelion, Portaria, 858 m, 29.VII.2021, G legit; 2 males: Magnesia, Mt Pelion, Portaria, 907 m, 29.VII.2021, FGK legit; 2 males: Magnesia, Trikeri, 33 m, 13.IX.2021, BCG legit; 10 males and 1 female: Magnesia, Trikeri, 148 m, 13.IX.2021, BCG legit; 3 males and 1 female: Lamia, Anavra, 947 m, 14.IX.2021, BCG legit; 2 females: Thessaly, Spilia, 849 m, 17.IX.2021, BCG legit; 1 male: Magnesia, Portaria, 748 m, 18.IX.2021, BCG legit; 1 male: Magnesia, Portaria, 851 m, 18.IX.2021, BCG legit.

CHOROTYPE. Mediterranean.

Cydia amplana (Hubner [1796-1799])

MATERIAL EXAMINED. 1 male: Magnesia, Trikeri, 33 m, 13.IX.2021, BCG legit; 8 males and 2 females: Magnesia, Trikeri, 148 m, 13.IX.2021, BCG legit; 2 males and 1 female: Thessaly, Dion, 204 m, 15.IX.2021, BCG legit; 1 male and 1 female: Magnesia, Portaria, 851 m, 18.IX.2021, BCG legit.

CHOROTYPE. Turano-European.

Cydia pelionae Trematerra and Colacci 2016

MATERIAL EXAMINED. 1 male: Magnesia, Mt Pelion, Portaria, 1000 m, 7.VII.2019, BCCG legit.

CHOROTYPE. Thessalian endemic.

Lathronympha balearici Diakonoff 1972

MATERIAL EXAMINED. 2 males: Magnesia, Mt Pelion, Chania, 1520 m, 6.VII.2019, BCCG legit.

DISTRIBUTION. Europe: Spain, Italy, Estonia. **New record for Greece.**

CHOROTYPE. European.

BIOLOGY. Adults from *Hypericum balearicum*, moth flies in April and October.

Selania capparidana (Zeller 1847)

MATERIAL EXAMINED. 1 male: Magnesia, Volos, 8 m, 17.IX.2021, ex folia *Capparis* sp. 25.VIII.2021, G legit; 1 female: Magnesia, Sipias, 7 m, 18.IX.2021, ex folia *Capparis* sp. 15.VIII.2021, G legit; 1 female: Magnesia, Sipias, 7 m, 21.IX.2021, ex folia *Capparis* sp. 15.VIII.2021, G legit; 1 female: Magnesia, Volos, 8 m, 21.IX.2021, ex folia *Capparis* sp. 25.VIII.2021, G legit; 1 female: Magnesia, Volos, 8 m, 27.IX.2021, ex folia *Capparis* sp. 25.VIII.2021, G legit.

CHOROTYPE. Mediterranean.

Grapholita molesta (Busck 1916)

MATERIAL EXAMINED. 1 male and 1 female: Imathia Zevrochori, 5 m, 18.IX.2021, R legit; 1 female: Magnesia, Lechonia, 5 m, 20.IX.2021, ex fructu *Ficus carica* 17.IX.2021, R legit.

CHOROTYPE. Subcosmopolitan.

Pammene fasciana (L. 1761)

MATERIAL EXAMINED. 2 males: Magnesia, Mt Pelion, Chania, 1150 m, 5.VII.2019, BCCG legit; 4 males: Magnesia, Mt Pelion, Portaria, 750 m, 7.VII.2019, BCCG legit; 2 males: Magnesia, Mt Pelion, Chania, 1355 m,

9.VII.2021, GG legit; 1 female: Magnesia, Mt Pelion, Chania, 1168 m, 17.VII.2021, GK legit; 5 males: Magnesia, Mt Pelion, Chania, 1156 m, 28.VII.2021, FGK legit.

CHOROTYPE. Turano-European.

Considerations

The entomological expeditions conducted in the Thessaly region (central Greece) in 2019 and 2021 yielded 68 species of Lepidoptera Tortricidae. Species belonging to almost all the tribes have been found in the explored Greek territory: Tortricini with 1 species, Cochylini with 8, Cnephasiini 5, Archipini 11, Olethreutini 10, Enarmoniini 3, Eucosmini 16, and Grapholitini 14. No representatives of the subfamily Chlidanotinae or the tribes Sparganothini, Euliini, and Bactrini were observed.

Among the collected species, 13 represent the first recorded for the fauna of Greece: *Phalonidia gilvicomana* (Zeller) (Cochylini); *Oxypteron impar* Staudinger and *Eana clercana* (Joannis) (Cnephasiini); *Choristoneura lafauryana* Kennel and *Pandemis dumetana* (Treitschke) (Archipini); *Endothenia lapideana* (Herrich-Schaffer), *Endothenia nigricostana* (Haworth) and *Pristerognatha fuligana* (Denis et Schiffermuller) (Olethreutiini); *Gibberifera simplana* (Fischer von Roslerstamm), *Gypsonoma imparana* (Muller-Rutz) and *Gypsonoma nitidulana* (Lienig et Zeller) (Eucosmini); *Cydia aldocataniae* Trematerra and *Lathronympha balearici* Diakonoff (Grapholitini). Finally, of the species appear to be endemic to Greece: *Ceratoxanthus giansalottii* Bassi and *Cydia pelionae* Trematerra and Colacci.

Including specimens collected in the same area during an entomological expedition conducted in 2016 by P. Trematerra and M. Colacci, a total of 95 species of Lepidoptera Tortricidae was identified.

A biogeographic analysis of the Lepidoptera Tortricidae collected using chorological data reveals the following. In the tortricid fauna of Greece includes few cosmopolitan (3.16%), subcosmopolitan (2.11%), and Holarctic (6.32%) species. More than 65% of the species show a wide Palaearctic distribution. Within this group, Asiatic-European (15.79%), Palaearctic (12.63%), W-Palaearctic (11.58%), Turano-European (9.47%), and Centralasiatic-European (5.26%) chorotypes are well represented. A very few species (2.11%) exhibit a Sibero-European, European with Anatolian extension, and Turano-European-Mediterranean chorotypes; all the other chorotypes (SW-Palaearctic, Centralasiatic-European-Mediterranean, Europeo-Mediterranean, and S-European-Mediterranean) contain 1.05% of the species. More than 12% of the tortricids have a European distribution; the elements belonging to this chorotype are S-European (6.32%), European (5.26%), and SW-European (1.05%). Only 7.37% of the recorded species exhibited a Mediterranean distribution, including Mediterranean (6.32%) and Appennino-Dinaric (1.05%) elements. Finally, three species have a Thessalian chorotype.

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Authors' addresses: Pasquale TREMATERRA (corresponding author: trema@unimol.it), Marco COLACCI, Department of Agricultural, Environmental and Food Sciences, University of Molise, via de Sanctis, I-86100 Campobasso, Italy.

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