

ENTOMOLOGY

Lepidoptera Tortricidae from Sicily with new taxa for Italian and European fauna and description of *Thiodia major* (Rebel) and *Pammene castanicola* Trematerra females

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Abstract

A list of 155 species of Lepidoptera Tortricidae collected in Sicily (Italy) is reported. The two most numerous tortricid sub-families recorded are the Olethreutinae and Tortricinae, which have 84 species and 70 species, respectively; the subfamily Chlidanotinae is represented by 1 species. Species belonging to

almost all the tribes cited in the Italian fauna have been found in Sicily (Tortricini with 10 species, Cochylini 26, Cnephasiini 18, Archipini 16, Polyorthini 1, Bactrini 5, Olethreutini 12, Enarmoniini 1, Eucosmini 33, and Grapholitini 33), except for the members of the tribes Sparganothini and Eulini. *Phtheochroa ochralana* and *Cydia magnesia* are new to Italian fauna; *Fulvoclysia forsteri* and *Tortricodes selma* are recorded for first time in Europe. The females of *Thiodia major* and *Pammene castanicola* are described. *Acleris hastiana*, *A. notana*, *Cochylidia rupicola*, *C. moguntiana*, *Cochylis sannitica*, *Eana joannisi*, *E. italica*, *Cnephasia fulturata*, *Archips betulanus*, *A. crataeganus*, *Pandemis cerasana*, *Olindia schumacherana*, *Epinotia dalmatana*, *Eucosma obumbratana*, *Epiblema cirsiarum*, *E. graphanum*, *Cydia medicaginis*, *C. cythisantana*, *C. ulicetana*, *C. derrai*, *C. leguminana*, *Lathronimpha balearici*, *Grapholita pallifrontana*, *Pammene querceti*, *P. obscurana*, and *Strophedra weirana* are cited for first time in Sicily.

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Introduction

Over time, the Lepidoptera fauna of Sicily has received the attention of Italian and foreign entomologists, especially for the zoogeographic interest of the Island, for the richness of biotopes and for tourism interest.

The main contributions referring to the Tortricidae family can be found in the work of Minà-Palumbo and Failla-Tedaldi (1889) in which the Authors listed 113 tortricids living on the Island. After the catalog of Enrico Ragusa (1905) dedicated to the moths of Sicily, in 1938 Mariani published a new catalog, which groups 15 years of research carried out on the Island, 184 species were assigned to the tortricids to which with delay, in a note appeared in 1948, due to "the serious events that have engulfed our country", the same Author adds *Tortrix amplana* (Hübner) and *Phalonidia atricapitana* (Stephens). 61 years after the publication of Curò's catalog of Lepidoptera d'Italia (1880), Mariani (1940-41) prints his *Fauna Lepidopterorum Italiae*, among the best studied areas of Italy there is also Sicily.

During the spring of 1954 Mariani and Klimesch decided to collaborate to draw up an *addenda* to the Catalog of the Lepidoptera of Sicily. However, they were able to carry out their work only in 1957, after the completion of the studies of some groups by foreign specialist entomologists and once the descrip-

tion of the new species found was ready. Thus, 10 Tortricidae were added to the first *addenda* (Mariani and Klimesch, 1957).

In 1999, the annotated list of Lepidoptera Tortricidae collected in Sicily by Salvatore Bella and Paolo Russo in the interesting wetland of Pantano Longarini (Syracuse-Ragusa provinces) was reported by Trematerra *et al.* (1999), where 15 species of Tortricidae were listed, some of which of particular interest as *Cochylis salebrana* (Mann) and *Bactra furfurana* (Haworth) found for the first time on the Island, and *Cydia multistriana* (Chrétien) new to Europe, previously known only for Tunisia and Morocco. Romano and Romano (1995), after a field trip carried out on the islands of Lampedusa, Linosa and Pantelleria cited three common species of tortricids, while Trematerra (1999) reports *Aethes rubiginana* (Walsingham) collected in Taormina and Lipari as new for Italy. In the same year, studying the material collected by Friedrich von Hartig in different locations in Sicily, especially from Etna Mount, it was possible to describe *Cnephasia etnana* Razowski and Trematerra (Razowski and Trematerra, 1999). While from the Pantani di Vendicari (Syracuse province) is described the new species *Pelochrista cannatana* Trematerra (Trematerra, 2000).

In the Catalog of "Lepidoptera Tortricidae della fauna italiana" realized by Trematerra (2003) 246 species are listed for Sicily. A few years later, among the chestnut groves of Milo, on the slopes of Etna, specimens of *Pammene Hübner* were found and described as *castanicola* Trematerra (Trematerra and Clausi, 2009).

By checking Fauna Europaea (Aarvik, 2013) and from a further survey of the international papers, other species collected in Sicily can be traced (Trematerra unpublished data), some of which are endemic, so much to bring the fauna of the Tortricidae to 250 entities, one of the richest regions in Italy.

Following the study results of the material collected and preserved by dr Salvatore Bella in his collection and surveys on the territory carried out over time by the other co-authors of the paper. Most of the species studied were collected mainly in the Etna

Natural Park, Iblei Mountains, Nebrodi Natural Park, and Peloritani Mountains.

In the present paper, in compiling the different lists, the indications reported by Razowski (2002, 2003, 2009) and Aarvik (2013), were followed, with some modifications suggested by Brown (2005) and by Gilligan *et al.* (2018). Distribution of the species was largely taken from Trematerra (2003) with new data from Trematerra's personal catalogue (unpubl. data). For distribution of species in Italy we reported N (North); C (Centre); S (South); Si (Sicily); Sa (Sardinia) (Trematerra, 2003). Chorotype of the species was taken from Vigna Taglianti *et al.* (1992, 1999) and Parenzan (1994).

Localities visited

Sicily is widely recognized as one of the main biodiversity hotspots in the Mediterranean basin. Our entomological expeditions visited the following eleven 'macro areas' of Sicily: Lipari Island, Vulcano Island, Peloritani Mounts, Madonie Mounts, Nebrodi Mounts, Etna Mount, Erei Mounts, Piana di Catania, Agrigento area, Iblei Mounts, and Pantelleria Island (Figure 1).

Lipari Island (1) and Vulcano Island (2), they are typically Mediterranean, quite rich and well diversified flora, with a predominance of thermophytic and xerophytic species. *Pinus radiata*, *P. pinaster* and *P. halepensis*, *Vitis*, *Capparis spinosa*, *Opuntia ficus-indica*, *Prunus spinosa*, *Mesembryanthemum*, *Genista ephedroides*, *Nerium oleander*, and *Casuarina* are the most common plants.

Peloritani Mounts (3) (Figure 2), together with the Aspromonte, Serre and Sila Massif (Calabria region), they represent a patch of the Alpine orogeny located in the central part of the Mediterranean basin: the so-called Calabrian-Peloritani Arc. The physiognomic diversity determines a remarkable variety of habitat, with an extraordinary richness in flora and vegetation. The rich flora of this territory includes rare and highly localized palaeo-endemites, such as *Colymbada tauromentana*, *Brassica raimondoi* and *Limonium sibthorpiatum*.



Figure 1. Sicily region and trapping localities visited. Lipari Island (1); Vulcano Island (2); Peloritani Mounts (3); Madonie Mounts (4); Nebrodi Mounts (5); Etna Mount (6); Erei Mounts (7); Piana di Catania (8); Agrigento area (9); Iblei Mounts (10); Pantelleria Island (11).

Madonie Mounts (4), one of the park's most notable natural features is the extensive forest of beech trees (*Fagus*) found only at 1,500 meters and above. These are the most southerly beech forests in Europe. Lower down, below 1,600 meters, there are large forests of *Quercus ilex*, *Q. pubescens* and *Q. suber*, and the rare manna ash (*Fraxinus ornus*) is still farmed. Also, *Abies nebrodensis* is present. The mountains contain some 1500 species and subspecies of plants, around 60% of all those found in Sicily.

Nebrodi Mounts (5) (Figure 3) are a mountain range that runs along the northeast of Sicily. Together with the Madonie and the Peloritani they form the Sicilian Appennines. Much of the mountains are covered by thick forests of cork trees (*Quercus suber*) on the lowest slopes giving way to oak (*Quercus*) and then beech (*Fagus*) at the higher elevations. Yew trees (*Taxus baccata*) occur in the beech forests. In many areas the upland forest has been cleared to make mountain pastures.

Etna Mount (6) (Figure 4), in the basement the landscape is dominated by citrus groves, vineyards, olive groves, almond

groves, pistachio groves and fruit trees. In the altitudinal range between 1,000 and 1,500 meters, the vegetation is characterized by pine forests with *Pinus nigra laricio*, *Betula aetnensis*, *Fagus sylvatica* and *Populus tremula*. Chestnut groves are widespread in the same climatic zone as the oaks. In the plain between 1,500 and 2,400 meters the *Astragalus* is in association with *Berberis aetnensis*, *Juniperus hemisphaerica*, *Genista aetnensis*, *Viola aetnensis*, and *Cerastium minus*. *Saponaria sicula* and *Rumex aetnensis* live among the sands and lapilli. Above 2,400 meters, only sparse populations of *Rumex* and *Senecio* survive.

Erei Mounts (7) are characterized by *Eucalyptus* forests (*Eucalyptus camaldulensis*, *E. globulus*, *E. botrioides*, *E. gomphocephala*, *E. trabutii*, and *E. maidenii*), poplar grove, pine forest of *Pinus pinea*, and pastures.

Piana di Catania (8) (Figure 5), the prevalent agriculture in the Catania plain is citrus with an almost absolute prevalence of orange, but there are also olive groves, cereal and legume cultivation.



Figures 2-3. Peloritani Mounts: Riserva Naturale Orientata Fiumedinisi e Monte Scuderi, Fiumedinisi (Messina), 302 m/asl. Nebrodi Mounts: Riserva Orientata Naturale Bosco di Malabotta, Montalbano Elicona (Messina), 1224 m/asl.



Figures 4-5. Etna Mounts: Monte Pomiciaro, Zafferana Etnea (Catania), 1432 m/asl. Piana di Catania: Oasi del Simeto (Catania), 1m/asl.

Agrigento area (9) (Figure 6), the area comprises three different habitats: a natural wooded area, dominated by *Quercus pubescens* and by *Q. ilex*, a reforested evergreen pine area comprising *Pinus halepensis* and *Cupressus sempervirens*, and a section of the reforested pine area that was transformed by silvicultural management to include *Quercus*, *Fraxinus*, *Acer* and *Ulmus*.

Iblei Mounts (10) (Figure 7), environment characterized by scattered crops and carob trees (*Ceratonia siliqua*). In Longarini and Pantano Cuba there are *Salicornia*, *Salsola*, *Arthrocnemum*, *Limonium*, *Juncus* and in the less salty areas *Carex* and *Phragmites*.

Pantelleria Island (11), territory characterized by the presence of a natural wood of *Pinus pinaster* var. *coisyra*, woods of *P. halepensis*, mediterranean bush, vineyards, cultivation of figs and capers. *Quercus ilex*, *Erica multiflora* and *E. arborea*, *Arbutus unedo*, and *Cistus* are also present.

List of Sicilian localities and sites visited

1 – Lipari Island

Lipari - Isole Eolie (Messina)

2 – Vulcano Island

Vulcano - Isole Eolie (Messina)

3 – Peloritani Mounts

Peloritani1 - Ali Superiore (Messina), Contrada Ferrera (Monte Scuderi), 550 m

Peloritani2 - Fiumedinisi (Messina), 301 m

Peloritani3 - Fiumedinisi (Messina), 550 m

Peloritani4 - Taormina (Messina), 100 m

4 – Madonie Mounts

Madonie1 - Cefalù (Palermo), Mazzaformo, 30 m

Madonie2 - Collesano (Palermo), Contrada Volpignano, 900 m

Madonie3 - Isnello (Palermo), Piano Zucchi, 1000 m

Madonie4 - Petralia Sottana (Palermo), Portella Arena, Piano Battaglia, 1520 m

Madonie5 - Petralia Sottana (Palermo), Piano Battaglia, 1850 m

5 – Nebrodi Mounts

Nebrodi1 - Caronia (Messina), Fiumara Caronia, 50 m

Nebrodi2 - Cesarò (Messina), Contrada Radica, 1300 m

Nebrodi3 - Cesarò (Messina), Biviere di Cesarò, 1300 m

Nebrodi4 - Cesarò (Messina), Portella Calacudera, 1300 m

Nebrodi5 - Cesarò (Messina), Monte Soro, 1572 m

Nebrodi6 - Montalbano Elicona (Messina), Bosco di Malabotta, 1204 m

Nebrodi7 - Torrenova (Messina)

6 – Etna Mount

Etna1 - Aci Catena (Catania), Contrada Tor di Casalotto, 225 m

Etna2 - Aci Sant'Antonio (Catania), Santa Maria la Stella, località Boschetto, 366 m

Etna3 - Acireale (Catania), Pennisi, località Sciare Torrisi, 460 m

Etna4 - Belpasso (Catania), Milia, Monte San Leo, 1040 m

Etna5 - Biancavilla (Catania), Milia, Rugoso Grosso, 1500 m

Etna6 - Bronte (Catania), Ponte di Serravalle, 563 m

Etna7 - Castiglione di Sicilia (Catania), Bosco Ragabo, Caserma Pitarrone, 1480 m

Etna8 - Castiglione di Sicilia (Catania), Vallone Medda, 530 m

Etna9 - Catania, Cibali, 86 m

Etna10 - Catania, Monte Po, 100 m

Etna11 - Catania, Cittadella Universitaria, 150 m

Etna12 - Catania, Orto Botanico

Etna13 - Catania, San Giovanni Galermo, 296 m

Etna14 - Catania, Sant'Agata li Battiati, 300 m

Etna15 - Trecastagni (Catania), Cozzarelle, 791 m

Etna16 - Pedara (Catania), 600 m

Etna17 - Nicolosi (Catania), località Ragala, 950 m

Etna18 - Etna Nord (Catania), Bosco di betulle, Rifugio Citelli, 1600-1700 m

Etna19 - Etna Sud (Catania), Starda Nicolosi, Rifugio Sapienza, 1000-1600 m

Etna20 - Fiumefreddo di Sicilia (Catania), 5 m

Etna21 - Giarre (Catania), Cava Grande, 327 m

Etna22 - Linguaglossa (Catania), Contrada Salici, 570 m

Etna23 - Linguaglossa (Catania), 966 m

Etna24 - Linguaglossa (Catania), Bosco Ragabo, Rifugio Brunek, 1400 m

Etna25 - Linguaglossa (Catania), Monte Baracca, 1723 m

Etna26 - Monte Etna, versante orientale (Catania), Rifugio Citelli, 1700 m

Etna27 - Maletto (Catania), Fontana Murata, 1000 m

Etna28 - Mascalucia (Catania), Bosco di Massa Annunziata, 550 m

Etna29 - Mascalucia (Catania), Massa Annunziata, 550 m

Etna30 - Milo (Catania), Bosco Nicolosi, 750 m

Etna31 - Milo (Catania), 800-1000 m

Etna32 - Milo (Catania), Fornazzo, 824 m

Etna33 - Milo (Catania), Località Casa Pietra Cannone, 1150 m

Etna34 - Monte Etna Sud (Catania), 1900 m

Etna35 - Monte Etna (Catania), Nicolosi, località Ragala, 950 m

Etna36 - Monte Etna (Catania), Belpasso, 1100 m

Etna37 - Monte Etna (Catania), Nicolosi, contrada Camercia, 1100 m

Etna38 - Monte Etna (Catania), Zafferana, contrada Cerrita, 1350 m

Etna39 - Monte Etna (Catania), Zafferana, Piano delle Donne, 1500 m

Etna40 - Monte Etna (Catania), Zafferana, Rifugio Citelli, 1746 m



Figures 6-7. Agrigento area: Riserva Naturale Orientata Monte Cammarata, Santo Stefano Quisquina (Agrigento), 968 m/asl. Iblei Mounts: Sortino (Syracuse), 368 m/asl.

Etna41 - Monte Etna, versante Sud (Catania), Sciarre di Mascalucia (Pedara), 500 m
 Etna42 - Monte Etna, versante Sud (Catania), Ragala, 800 m
 Etna43 - Monte Etna, versante Sud (Catania), Castagneti di Pedara, 900-1000 m
 Etna44 - Monte Etna, versante Sud (Catania), Monte Faggi, 1650 m
 Etna45 - Monte Etna, versante Sud (Catania), Piano del Vescovo, 1700 m
 Etna46 - Monte Etna, versante Sud (Catania), dintorni Grand Hotel, 1900 m
 Etna47 - Monte Etna, versante occidentale (Catania), Frutt. Intralco, 1380 m
 Etna48 - Monte Etna, versante occidentale (Catania), Piano Falanea, 1500 m
 Etna49 - Monte Etna versante occidentale (Catania), Pineta, 1600-1800 m
 Etna50 - Monte Etna, versante occidentale (Catania), Albergo Serra la Neve, 1650 m
 Etna51 - Monte Etna, versante occidentale (Catania), Citelli, 1700 m
 Etna52 - Monte Etna versante occidentale (Catania), Pineta, 1700 m
 Etna53 - Nicolosi (Catania), Monti Rossi, 750 m
 Etna54 - Piedimonte Etneo (Catania), Presa, 606 m
 Etna55 - Piedimonte Etneo (Catania), Vena, 771 m
 Etna56 - Ragalna (Catania), Milia, 1250 m
 Etna57 - Ragalna (Catania), Milia, 1260 m
 Etna58 - Ragalna (Catania), Milia, 1326 m
 Etna59 - Ragalna (Catania), Piano Vetore, 1700 m
 Etna60 - Randazzo (Catania), Monte Santa Maria, 1400 m
 Etna61 - Randazzo (Catania), Lago Trearie, 1420 m
 Etna62 - San Gregorio di Catania (Catania), Contrada Cerza, 120 m
 Etna63 - San Gregorio di Catania (Catania), Complesso Immacolatelle e Micio Conti, 200 m
 Etna64 - San Gregorio di Catania (Catania), Complesso Immacolatelle, 294 m
 Etna65 - Sant'Agata li Battiati (Catania), 325 m
 Etna66 - Sant'Alfio (Catania), Magazzeni, 1020 m
 Etna67 - Sant'Alfio (Catania), Magazzeni, località Pietrafucile, 1100 m
 Etna68 - Sant'Alfio (Catania), Contrada Cerrita, 1358 m
 Etna69 - Sant'Alfio (Catania), Monti Sartorius, 1700 m
 Etna70 - Sant'Alfio (Catania), Rifugio Citelli, 1746 m
 Etna71 - Santa Venerina (Catania), Monachella, 300 m
 Etna72 - Trecastagni (Catania), Monte Cicirello, 965 m
 Etna73 - Tremestieri Etneo (Catania), 450 m
 Etna74 - Viagrande (Catania), Monte Serra, 504 m
 Etna75 - Zafferana (Catania), Valle San Giacomo, 700 m
 Etna76 - Zafferana (Catania), 1500 m
 Etna77 - Zafferana Etnea (Catania), Valle San Giacomo, 600 m
 Etna78 - Zafferana Etnea (Catania), Valle San Giacomo, 740 m
 Etna79 - Zafferana Etnea (Catania), Piano Dell'Acqua, 742 m
 Etna80 - Zafferana Etnea (Catania), Monte Zoccolaro, 1000 m
 Etna81 - Zafferana Etnea (Catania), Case del Vescovo, 1374 m
 Etna82 - Zafferana Etnea (Catania), Valle del Tripodo, 1460 m

7 – Erei Mounts

Erei - Nicosia (Enna), 688 m

8 – Piana di Catania

Piana di Catania1 - Catania, Contrada Primosole, 0-5 m
 Piana di Catania2 - Catania, Contrada Spina Santa, 0-5 m
 Piana di Catania3 - Catania, Contrada Spina Santa, 18 m
 Piana di Catania4 - Catania, Contrada Torre Allegra, 0-5 m
 Piana di Catania5 - Catania, Foce fiume Simeto, 0-5 m
 Piana di Catania6 - Catania, Oasi del fiume Simeto, Contrada Primosole, 0-5 m
 Piana di Catania7 - Catania, Foce del fiume Simeto, 3 m
 Piana di Catania8 - Catania, Foce fiume San Leonardo, 0-5 m
 Piana di Catania9 - Catania, Plaia Pineta

9 – Agrigento Area

Agrigento1 - Santo Stefano Quisquina (Agrigento), 940 m
 Agrigento2 - Siculiana (Agrigento), Torre Salsa, Valle Pantano, 50 m

10 – Iblei Mounts

Iblei1 - Vizzini (Catania), Fiume Vizzini, 320 m
 Iblei2 - Vizzini (Catania), Fiume Vizzini, Contrada Rubalà, 320 m
 Iblei3 - Vizzini (Catania), Contrada Paradiso, 510 m
 Iblei4 - Vizzini (Catania), Fiume Vizzini, Contrada Poggio Lago, 580 m
 Iblei5 - Monterosso Almo (Ragusa), Monte Lauro, 750 m

Iblei6 - Ragusa, 400 m
 Iblei7 - Santa Croce Camerina (Ragusa)
 Iblei8 - Vittoria (Ragusa), Riserva Naturale Pino d'Aleppo, 91 m
 Iblei9 - Augusta (Siracusa), Castelluccio, 15 m
 Iblei10 - Avola (Siracusa), Fiume Cassibile, 39 m
 Iblei11 - Noto (Siracusa), Cava Carosello, 322 m
 Iblei12 - Noto (Siracusa), Fiume Manghisi, Ponte SS 287, 396 m
 Iblei13 - Noto (Siracusa), Testa dell'Acqua, 590 m
 Iblei14 - Pachino (Siracusa), Marzamemi, 0-5 m
 Iblei15 - Pachino (Siracusa), Pantano Longarini, 0-5 m
 Iblei16 - Portopalo di Capo Passero (Siracusa), Capo Isola delle Correnti, 0-5 m
 Iblei17 - Sortino (Siracusa), Valle Fiume Anapo, Contrada Fusco, 200 m
 Iblei18 - Sortino (Siracusa), 368 m

11 – Pantelleria Island

Pantelleria - Isola di Pantelleria (Trapani), Sateria, 10 m

List of taxa Tortricidae

Subfamily Tortricinae

Tribe Tortricini

Tortrix viridana Linnaeus, 1758

MATERIAL EXAMINED. Madonie1: 3 females, 10.VI.1993. Etna5: 1 male, 28.VI.1995; 5 males, 25.VI.1996; 1 male, 16.VII.1996. Etna6: 1 female, 31.V.2000.

DISTRIBUTION. A West Palaearctic species: NW Africa, Europe from Iberian Peninsula to Ural Mts, Georgia, Azerbaijan, Asia Minor, Iran and W Kazakhstan. (Italy: N, C, S, Si, Sa).

CHOROTYPE. W- Palaearctic.

Aleimma loeflingiana (Linnaeus, 1758)

MATERIAL EXAMINED. Etna5: 1 male, 28.VI.1995; 1 male and 6 females, 16.VII.1996. Etna6: 1 male, 31.V.2000. Etna63: 1 female, 8.XI.1991.

DISTRIBUTION. Europe, Ural Mts, Caucasus, Syria and Asia Minor. (Italy: N, C, S, Si, Sa).

CHOROTYPE. W-Palaearctic.

Acleris forsskaleana (Linnaeus, 1758)

MATERIAL EXAMINED. Nebrodi5: 1 male, 3.VIII.1992.

DISTRIBUTION. Europe, Caucasus, Transcaucasia, Turkmenia and Iran. Introduced in North America. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Turano-European.

Acleris sparsana ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Etna15: 1 male, 5.IX.2020.

DISTRIBUTION. European species: from Spain to Caucasus, northern part included also Faeroe Islands, Asia Minor and Transcaucasia. (Italy: N, C, S, Si, Sa).

CHOROTYPE. European with Anatolian-Caucasian extension.

Acleris rhombana ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Peloritani1: 1 male, 4.X.1995. Nebrodi5: 1 male, 3.VIII.1992. Etna5: 1 male and 1 female, 20.X.1993; 2 males, 8.IX.1994; 1 female, 19.IX.1995; 1 male and 3 females, 15.X.1996; 1 female, 20.VIII.1999. Etna15: 1 male, 5.IX.2020. Etna30: 1 male, 24.X.1994. Etna47: 1 male, 30.X.1949. Etna48: 1 male, 30.X.1949. Etna56: 1 female, 5.IX.1995. Etna58: 1 female, 29.VIII.1991; 1 male, 8.IX.1995. Etna77: 2 males and 2 females, 3.VII.1995. Etna78: 1 female, 3.VII.1995. Etna82: 5 males and 2 females, 3.X.1994. Erei: 1 male, II.2000.

DISTRIBUTION. West Palaearctic: Europe to Caucasus, Armenia and Turkmenia; also Asia Minor and North America. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Holarctic.

Acleris variegana ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Etna2: 1 female, 21.VI.1996. Etna21: 1 male, 6.X.1991. Etna22: 1 female, 8.X.1996. Etna70: 2 females, 17.VI.1997.

Etna77: 1 female, 3.II.1995; 1 male and 1 female, 3.VII.1995. Etna78: 1 female, 17.XI.1996. Iblei5: 2 males, 5.VI.2001. Iblei10: 1 male, 5.VI.1992. Iblei17: 3 males, 10.XI.1996; 2 males and 2 females, 8.XII.1996; 1 male, 24.V.1998; 1 male, 20.XI.1998.

DISTRIBUTION. A Palearctic species, occurring in Iceland, W Europe to Kazakhstan and South-Central Siberia; also North America. (Italy: N, C, S, Si).

CHOROTYPE. Holarctic.

Acleris hastiana (Linnaeus, 1758)

MATERIAL EXAMINED. Iblei17: 1 female, 20.VII.1996; 1 male, 1.V.1999.

DISTRIBUTION. A Holarctic species known from W-Europe to Japan, Morocco, Siberia and North America south as far California. (Italy: N, C, S, Sa; new to the Sicilian fauna).

CHOROTYPE. Holarctic.

Acleris notana (Donovan, [1806])

MATERIAL EXAMINED. Nebrodi5: 1 female, 11.VII.1993.

DISTRIBUTION. Palearctic species distributed from Iberian Peninsula (British Is. and Scandinavia included) to Japan. Introduced to North America. (Italy: N, S, Sa; new to the Sicilian fauna).

CHOROTYPE. Holarctic.

Acleris quercinana (Zeller, 1849)

MATERIAL EXAMINED. Peloritani4: 1 female, 8.VI.1950. Etna16: 1 male, 24.XI.1948.

DISTRIBUTION. Europe excluded the northern territories except Sweden, Asia Minor, Transcaucasia, Iraq, Iran and W Kazakhstan. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Turano-European.

Acleris literana (Linnaeus, 1758)

MATERIAL EXAMINED. Etna24: 1 male, 3.VI.1997.

DISTRIBUTION. Known from entire Europe. (Italy: N, C, S, Si, Sa).

CHOROTYPE. European.

Tribe Cochylini

Phtheochroa ochralana (Chrétien, 1915)

MATERIAL EXAMINED. Etna22: 1 male, 15.XI.1997. Iblei17: 1 male, 28.XI.1997.

DISTRIBUTION. Known from Tunisia, Algeria, Libya, Malta, Greece, Saudi Arabia and Central Arabia. New to the Italian fauna.

CHOROTYPE. Mediterraneo-Sindian.

DIAGNOSIS. Wing span 15-16 mm. Ground colour of forewing whitish or cream often with yellow admixture; costal dots yellowish. Markings pale brownish yellow (often weak) with much darker dots consisting of median

fascia and two broad fasciae in distal third of wing. Cilia cream. Hindwing cream tinged brownish on periphery; cilia white (Figure 8). It is similar to *P. fulvicinctana* (Constant), closely allied to *P. krulikovskiji* (Obraztsov) distinct in having larva slender, much smaller cornuti, broader aedeagus and median part of transtilla (Figure 9).

BIOLOGY. Adults collected in September to November. Larvae recorded on *Haloxylon articulatum* (Razowski, 2009).

Phtheochroa duponchelana (Duponchel, 1843)

MATERIAL EXAMINED. Peloritani4: 1 male, 16.IV.1950; 1 male, 21.V.1950. Etna11: 1 male, 22.IV.1996. Iblei2: 1 male, 16.V.1999. Iblei10: 2 males, 25.IV.1992.

DISTRIBUTION. SW Europe from France to Greece, Asia Minor, NW Africa (Morocco and Algeria), Asia Minor, Syria and Lebanon. (Italy: C, S, Si).

CHOROTYPE. Mediterranean.

Cochylimorpha decolorella (Zeller, 1839)

MATERIAL EXAMINED. Vulcano: 2 males, V.1972.

DISTRIBUTION. Known from Canary Is to Iberian Peninsula, Corsica, Malta, Morocco, Egypt and Turkey. Also Asia Minor and Bulgaria. (Italy: C, Si, Sa).

CHOROTYPE. Mediterranean.

Cochylimorpha straminea Haworth, 1811

MATERIAL EXAMINED. Piana di Catania5: 1 male, 28.I.1996; 1 female, 27.IV.1997. Piana di Catania8: 1 male, 12.III.2000. Iblei1: 1 male, 1.V.1991. Iblei2: 3 males, 23.IV.1993. Iblei10: 1 male and 1 female, 20.IX.1992. Iblei13: 1 male, 17.XI.1994.

DISTRIBUTION. Known from Europe, Canary I., NW Africa, Asia Minor, Egypt, Iran, Transcaucasia, Ural Mts and part of C Asia. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Centralasiatic-European-Mediterranean.

Phalonidia albipalpana (Zeller, 1847)

MATERIAL EXAMINED. Piana di Catania6: 2 males, 4.IX.2020. Iblei15: 1 male, 20.VII.1996.

DISTRIBUTION. Europe excluded northern parts from Corsica to Ural Mts, then Caucasus, Asia Minor and C Asia. (Italy: N, C, S, Si).

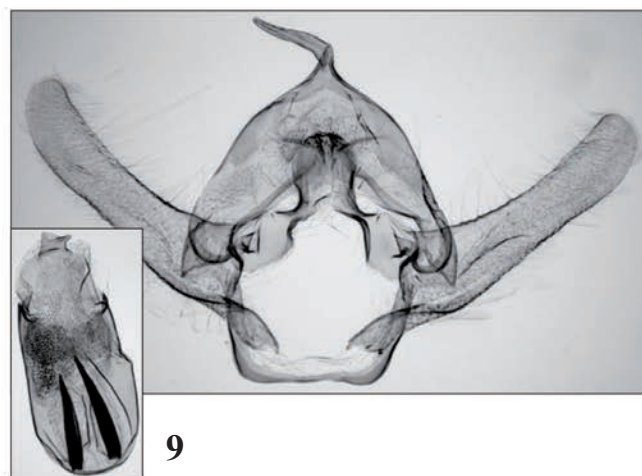
CHOROTYPE. Centralasiatic-European.

Phalonidia contractana (Zeller, 1847)

MATERIAL EXAMINED. Piana di Catania5: 1 male, 22.V.1991. Piana di Catania6: 1 male, 4.IX.2020. Iblei3: 2 males, 24.VIII.1995. Iblei10: 1 female, 20.IX.1992.

DISTRIBUTION. Widely distributed from Iberian Peninsula to Ural Mts; found also in N-Africa, Asia Minor, Israel, Transcaucasia, Iran, Afghanistan, Kashmir and Central Asia. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Centralasiatic-European-Mediterranean.



Figures 8-9. *Phtheochroa ochralana* (Chrétien, 1915) (wing) (8); aedeagus and male genitalia (9).

Fulvoclysia forsteri (Osthelder, 1938)

MATERIAL EXAMINED. Piana di Catania3: 1 female, 26.IV.1994.

DISTRIBUTION. Known from Azerbaijan and Iran. New to the European fauna.

CHOROTYPE. Turano-Mediterranean.

DIAGNOSIS. Wing span 27-28 mm. Ground colour of forewing cream with slight yellowish hue; cilia paler. Hindwing brownish, rather dark; cilia cream (Figure 10). Comparable with *F. rjabovi* V.I. Kuznetsov but *F. forsteri* with broad socius, more curved sacculus terminating in broad thorn and longer aedeagus. Female genitalia, surroundings of ostium bursae rather weakly sclerotized, elongate; corpus bursae with sparse spinulation (Figure 11)

BIOLOGY. Moths collected in July, food plant and habitat not known (Razowski, 2009). Our specimen was collected on late April.

Eupoecilia angustana (Hübner, [1796-1799])

MATERIAL EXAMINED. Nebrodi5: 1 male, 11.VII.1993.

DISTRIBUTION. Palearctic species excluded N-Africa: Europe, Transcaucasia, Ural Mts, Siberia, China, Russian Far East, Korea and Japan. (Italy: N, C, S, Si).

CHOROTYPE. Asiatic-European.

Aethes margarotana Duponchel, 1836

MATERIAL EXAMINED. Etna22: 1 female, 9.V.1995. Etna27: 1 female, 9.VII.1995. Etna72: 1 female, 22.VI.1993. Etna77: 1 female, 3.X.1996.

DISTRIBUTION. West Palearctic species occurring from Iberian Peninsula (British Is included) to Armenia. Known also from Siberia, China, Russian Far East and NW Africa. (Italy: N, C, S, Si).

CHOROTYPE. Palearctic.

Aethes williana (Brahm, 1791)

MATERIAL EXAMINED. Madonie3: 1 female, 14.V.2000. Etna4: 1 male, 28.IV.1994. Piana di Catania8: 1 female, 5.IX.1994. Iblei2: 2 males, 26.IV.1997.

DISTRIBUTION. West Palearctic: NW Africa and Europe, from Iberian Peninsula to Ural Mts, Transcaucasia, C Asia, SW Siberia; Mongolia also Asia Minor. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Palearctic.

Aethes tesserana ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Etna6: 3 males, V.1999. Etna27: 2 males, 9.VII.1995; 1 female, 7.VI.1998. Etna64: 1 male, 3.V.1997.

DISTRIBUTION. Europe, Asia Minor, Transcaucasia, Iran and S-Siberia. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Centralasiatic-European.

Aethes beatricella Walsingham, 1898

MATERIAL EXAMINED. Etna27: 1 female, 7.VI.1998. Etna63: 1 female, 23.IV.1994.

DISTRIBUTION. West Palearctic species known from NW Africa and Iberian Peninsula to British Is, Sweden, Italy and Balkan Peninsula. Budashkin (1993) recorded it from Crimea, Voronezh Distr. in Russia and Daghestan. (Italy: N, C, S, Si).

CHOROTYPE. European with Maghreb extension.

Aethes francillana (Fabricius, 1794)

MATERIAL EXAMINED. Etna2: 1 male, 21.V.1993. Etna6: 1 female, 31.V.2000. Etna22: 1 female, 18.V.1994; 1 male, 9.V.1995. Etna35: 1 female, 17.VI.2008. Etna54: 1 male, 17.VI.1993. Iblei7: 1 female, 6.VI.2001.



Figures 10-11. *Fulvoclysia forsteri* (Osthelder, 1938) (wing) (10); female genitalia (11).

DISTRIBUTION. Europe, Canary Is and NW-Africa to Transcaucasia, Iran, Afghanistan, Kazakhstan, Tadjikistan and W-Siberia. (Italy: N, C, S, Si, Sa).

CHOROTYPE. W-Palaeartic.

Aethes bilbaensis (Rössler, 1877)

MATERIAL EXAMINED. Peloritani4: 1 male, 17.V.1950. Nebrodi6: 1 male, 10.IX.2020. Etna35: 2 males, 12.VI.2008; 2 males, 14.VI.2008. Etna41: 1 male, 20.VI.1949. Etna77: 1 male and 1 female, 3.VII.1995. Iblei11: 3 males, 7.IX.2020.

DISTRIBUTION. W Palaeartic species; its area extends from NW Africa and Iberian Peninsula to Greece and S Ural Mts, known also from Asia Minor, N Lebanon, Iran, Afghanistan, Pakistan and Turkmenia. Budaskin (1993) found it in Crimea, Caucasus, Transcaucasia and W Kazakhstan. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Centralasiatic-European-Mediterranean.

Aethes tornella (Walsingham, 1898)

MATERIAL EXAMINED. Iblei10: 1 male, 5.VI.1992.

DISTRIBUTION. Europe excluded northern parts from Iberian Peninsula to Bulgaria; also Asia Minor, Transcaucasia and C Asia. (Italy: N, C, Si, Sa).

CHOROTYPE. Centralasiatic-European.

Aethes rubiginana (Walsingham, 1903)

MATERIAL EXAMINED. Iblei15: 1 male, 23.VI.1996.

DISTRIBUTION. Known from NW Africa: Morocco and Algeria; Europe: Denmark, Corsica and Italy. (Italy: S, Si, Sa).

CHOROTYPE. European-Mediterranean.

Cochylidia rupicola Curtis, 1834

MATERIAL EXAMINED. Peloritani1: 3 males, 29.VI.1995. Peloritani2: 1 male, 9.IX.2020.

DISTRIBUTION. West Palaeartic species recorded from Europe, Asia Minor, Lebanon, Transcaucasia, Turkmenistan and Iran. (Italy: N, C, S, Sa; new to the Sicilian fauna).

CHOROTYPE. Turano-European.

Cochylidia moguntiana (Rössler, 1864)

MATERIAL EXAMINED. Peloritani3: 1 female, 9.IX.2020.

DISTRIBUTION. Transpalaeartic species widely distributed in Europe (from Iberian Peninsula to Ural Mts). Also E Afghanistan, NE Pakistan, China and Korea. (Italy: N, C, S; new to the Sicilian fauna).

CHOROTYPE. Asiatic-European.

Cochylidia implicitana (Wocke, 1856)

MATERIAL EXAMINED. Etna82: 1 male, 23.V.1994.

DISTRIBUTION. Europe from Iberian Peninsula and NW Africa to Ural Mts, W Siberia, Kazakhstan, Kyrgyzstan and SW Siberia. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Palaeartic.

Cochylis nana (Haworth, [1811])

MATERIAL EXAMINED. Etna18: 5 males and 4 females, 13.VI.2002. Etna39: 1 female, 18.VI.2008.

DISTRIBUTION. Holarctic species known from entire Europe, Asia Minor, Siberia and Russian Far East. Also North America. (Italy: N, Si).

CHOROTYPE. Holarctic.

Cochylis epilnana (Duponchel, 1842)

MATERIAL EXAMINED. Iblei2: 1 male, 9.V.1994.

DISTRIBUTION. West Palaeartic, except for British Is. From Canary Is, NW Africa and Iberian Peninsula to Ural Mts, Transcaucasia, Asia Minor, Near East. (Italy: N, C, S, Si, Sa).

CHOROTYPE. W-Palaeartic.

Cochylis hybridella (Hübner, [1810-1813])

MATERIAL EXAMINED. Etna15: 5 males, 5.IX.2020. Etna30: 1 female, 5.IX.2001. Etna32: 1 male and 1 female, 4.VIII.1998. Etna54: 1 female, 17.VI.1993. Etna77: 1 female, 3.VII.1995.

DISTRIBUTION. Europe, Asia Minor, Transcaucasia, Ural Mts, Kazakhstan, W-S Siberia, China, Russian Far East, Korea, and Japan. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Asiatic-European.

Cochylis sannitica Trematerra, 1995

MATERIAL EXAMINED. Iblei2: 1 male, 17.VI.1991; 1 male, 6.VIII.1991.

DISTRIBUTION. Known in Europe from former Yugoslavia and Italy. (Italy: C, S; new to the Sicilian fauna).

CHOROTYPE. E-Mediterranean.

Cochylis molliculana Zeller, 1847

MATERIAL EXAMINED. Piana di Catania3: 1 female, 26.IV.1994. Agrigento2: 2 males, 5.VII.1996.

DISTRIBUTION. Great Britain and from Spain to Greece. (Italy: N, C, S, Si).

CHOROTYPE. European-Mediterranean.

Cochylis pallidana (Herrich-Schäffer, 1847)

MATERIAL EXAMINED. Nebrodi6: 1 female, 10.IX.2020.

DISTRIBUTION. West Palaeartic species: Europe from Iberian Peninsula to Scandinavia and Greece, E-Europe and N-Africa. Also recorded from Asia Minor, Middle East, Turkmenistan, Russia (Altaj) and S Siberia. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Palaeartic.

Cochylis posterana Zeller, 1847

MATERIAL EXAMINED. Peloritani1: 1 male, 21.VII.1996. Etna2: 1 female, 21.VII.1993. Etna8: 1 male, 4.V.1993. Etna78: 1 male, 31.V.1995; 1 male, 3.VII.1995. Iblei1: 1 male, 6.VIII.1991. Iblei2: 1 male, 26.IV.1997. Iblei10: 1 male, 25.IV.1992. Iblei13: 3 males, 20.VIII.1995.

DISTRIBUTION. W-Palaeartic species occurring east far as Transcaspiya, Central Asia and W-Siberia. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Palaeartic.

Tribe Cnephasiini

Tortricodes selma Koçak, 1991

MATERIAL EXAMINED. Etna2: 1 male, 19.III.1994. Etna22: 2 females, 13.III.1994. Etna74: 3 males, 2.III.1994. Etna78: 2 males, 4.II.1998.

DISTRIBUTION. Described from Turkey by Koçak in 1991. New to the European fauna.

CHOROTYPE. Mediterranean.

DIAGNOSIS. Wing span 21-22 mm. Fore wing narrow, shiny brownish gray, stretched almost straight in males, evenly curved in females; outer edge sloping; apex pointed. Hindwings are light brown gray (Figure 12). *T. selma* is closed to *T. alternella* (Den. & Shiff.), differs from the latter in the shape of the valve and the aedeagus in males (Figure 13), in the shape of the signum and bursa in females.

BIOLOGY. Adults described from Kuzca Pinari 1,300 m (Turkey) in March in a side with *Quercus pubescens* mixed to *Populus tremula*. Food plant unknown (Koçak, 1991).

Eana incanana Stephens, 1852

MATERIAL EXAMINED. Nebrodi5: 1 female, 21.VI.1992; 2 males and 1 female, 11.VII.1993; 2 males, 23.VII.1993.

DISTRIBUTION. Palaeartic species occurring from Spain to Transural, Transcaucasia, Siberia, also Far East (Amur Territory, Primorsk). (Italy: N, C, S, Si).

CHOROTYPE. Sibero-European.

Eana joannisi (Schawerda, 1929)

MATERIAL EXAMINED. Nebrodi5: 1 female, 3.VIII.1992. Iblei10: 1 male and 1 female, 5.VI.1992.

DISTRIBUTION. Known only for Europe in France, Corsica and Italy. (Italy: Sa; new to the Sicilian fauna).

CHOROTYPE. Tirrenic endemic.

Eana italica (Obraztsov, 1950)

MATERIAL EXAMINED. Madonie3: 1 male, 12.VII.1994.

DISTRIBUTION. Known from SE Europe: Italy, former Yugoslavia, Albania and Greece. (Italy: C, S; new to the Sicilian fauna).

CHOROTYPE. S-European.

Cnephasia incertana (Treitschke, 1835)

MATERIAL EXAMINED. Etna22: 2 males, 18.V.1994.

DISTRIBUTION. Western Palaeartic from Iberian Peninsula to

Transcaucasia. (Italy: N, C, S, Si, Sa).
CHOROTYPE. W-Palaeartic.

Cnephasia stephensiana (Doubleday, 1850)

MATERIAL EXAMINED. Nebrodi2: 1 female, 4.V.1997. Etna22: 1 female, 9.V.1995. Etna70: 1 female, V.1997.

DISTRIBUTION. Western part of our region from Iberian Peninsula to Kazakhstan, Near East, Transcaucasia, Central Asia and Asia Minor; also in SW Siberia, Russian Far East, China, Korea and Japan. Introduced to Canada. (Italy: N, C, S, Si, Sa).
CHOROTYPE. Holarctic.

Cnephasia pasiuana (Hübner, [1796-1799])

MATERIAL EXAMINED. Iblei5: 1 male and 1 female, 5.VI.2001.

DISTRIBUTION. Europe, Morocco, Libya, Egypt, Asia Minor, Syria and Transcaucasia. (Italy: N, C, S, Si).
CHOROTYPE. W-Palaeartic.

Cnephasia communana (Herrich-Schäffer, 1851)

MATERIAL EXAMINED. Madonie2: 1 female, 16.V.1993. Nebrodi5: 1 female, 3.VIII.1992. Etna5: 1 female, 14.V.1994; 4 males, 23.V.1996. Etna22: 1 female, 9.V.1995. Iblei12: 1 female, 5.IV.1995. Iblei17: 1 female, 25.III.1996.

DISTRIBUTION. Western Palaeartic from Iberian Peninsula to Scandinavia (British Is included) and Caucasus; Transcaucasia, Morocco, Asia Minor, C Asia, SW Siberia. (Italy: N, C, S, Si).
CHOROTYPE. Centralasiatic-European-Mediterranean.

Cnephasia cupressivorana (Staudinger, 1871)

MATERIAL EXAMINED. Madonie2: 3 males and 1 female, 16.V.1993. Nebrodi5: 3 males and 1 female, 2.VI.2000. Etna4: 1 male, 24.IV.1993. Etna5: 1 female, 23.V.1996. Etna57: 1 male, 24.III.2000; 1 male and 1 female, 17.IV.2000. Etna61: 1 male, 1.V.1998. Etna66: 1 male, 21.IV.1993. Iblei12: 1 male, 17.XI.1994. Iblei17: 1 male, 18.II.2001.

DISTRIBUTION. SW Europe from Iberian Peninsula to Balkan Peninsula up to Greece, north to Romania, Mediterranean Isles, Asia Minor and Kyrgyzstan. (Italy: N, C, S, Si, Sa).
CHOROTYPE. Centralasiatic-European.

Cnephasia etnana Razowski and Trematerra, 1999

MATERIAL EXAMINED. Etna4: 1 male, 28.IV.1994. Etna43: 1 male, 5.V.1949; 2 males and 1 female, 26.V.1949. Iblei4: 1 female, 2.V.1994.

DISTRIBUTION. Endemic in Sicily. (Italy: Si).
CHOROTYPE. Sicilian endemic.

Cnephasia chrysanteana (Duponchel, 1842)

MATERIAL EXAMINED. Etna22: 1 male, 18.V.1995; 1 female, 20.V.1995. Etna57: 1 female, 15.V.2000. Iblei1: 1 female, 23.V.1992.

DISTRIBUTION. W Palaeartic species occurring from Iberian Peninsula to Ukraine; also Morocco, Algeria, Transcaucasia, Asia Minor and Near East. (Italy: N, S, Si, Sa).

CHOROTYPE. W-Palaeartic.

Cnephasia longana (Haworth, [1811])

MATERIAL EXAMINED. Lipari: 1 male, 20-27.V.1972. Etna63: 1 male, 27.V.1991. Piana di Catania9: 1 female, 18.V.1949.

DISTRIBUTION. Known from Europe: from Iberian Peninsula to British Is and Scandinavia up to Mediterranean (Greece and Crete) and east to western European Russia; also Canary Islands, NW Africa, Asia Minor, C Asia and N America (Introduced). (Italy: N, C, S, Si, Sa).

CHOROTYPE. Holarctic.

Cnephasia bizensis Réal, 1953

MATERIAL EXAMINED. Pantelleria: 2 males and 1 female, 24.IV.2003.

DISTRIBUTION. Known only from France, Italy and former Yugoslavia. (Italy: Si).
CHOROTYPE. S-European.

Cnephasia futurata Rebel, 1940

MATERIAL EXAMINED. Iblei1: 1 male, 23.V.1992. Iblei17: 1 male, 24.V.1999.

DISTRIBUTION. Known in Europe only from Iberian Peninsula, France and Italy, also recorded from N-Africa (Algeria) and Asia Minor. (Italy: C, S; new to the Sicilian fauna).

CHOROTYPE. European-N-African.

Cnephasia gueneana (Duponchel, 1836)

MATERIAL EXAMINED. Piana di Catania6: 1 male, 12.V.1996.

DISTRIBUTION. Known from Great Britain and S Europe; also Canaries Is, NW Africa, Cyprus and Crete. (Italy: N, Si, Sa).

CHOROTYPE. European with Maghreb-Macaronesia extension.

Cnephasia amseli (Lucas, 1942)

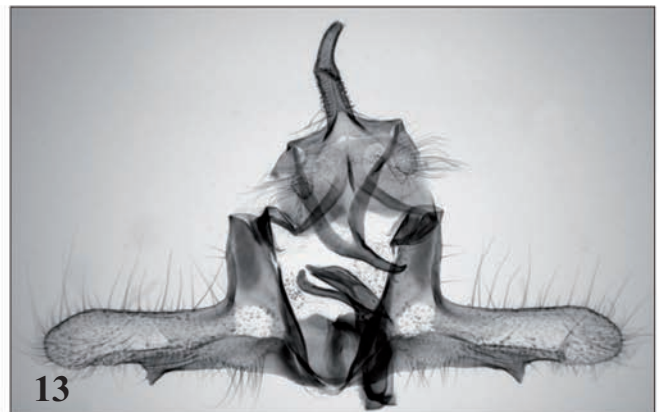
MATERIAL EXAMINED. Pantelleria: 8 males and 2 females, 24.IV.2003.

DISTRIBUTION. Known from Italy, Malta and Tunisia. (Italy: Si).

CHOROTYPE. N-African.

Cnephasia ecullyana Réal, 1951

MATERIAL EXAMINED. Etna2: 1 female, 21.VI.1996. Etna35: 1 female, 12.VI.2008.



Figures 12-13. *Torricodes selma*, Koçak, 1991 (wing) (12); male genitalia (13).

DISTRIBUTION. Known from Central Southern Europe. (Italy: N, C, S, Si, Sa).
CHOROTYPE. S-European.

Cnephasia fragosana (Zeller, 1847)

MATERIAL EXAMINED. Etna42: 1 male, 23.V.1949.

DISTRIBUTION. In Europe spread from France, Italy and Greece; also from NW Africa (Morocco, Mauritania and Algeria) and Asia Minor. (Italy: Si, Sa).

CHOROTYPE. Mediterranean.

Tribe Archipini

Paramesia gnomana (Clerck, 1759)

MATERIAL EXAMINED. Nebrodi5: 3 males and 5 females, 3.VIII.1992; 1 male, 11.VIII.1991; 1 male, 18.VIII.1991; 1 male, 11.VII.1993; 1 male, 23.VII.1993. Etna5: 1 male, 20.VIII.1999. Etna14: 1 female, 5.IX.2020. Etna24: 1 male and 1 female, 12.VII.1998. Etna68: 1 male, VII.1997; 1 male, 19.VIII.1999. Etna70: 1 male, 17.VI.1997; 2 males, 2.VII.1997; 1 male, 13.X.1997. Etna82: 2 males and 1 female, 16.VIII.1993; 2 males, 26.VII.1994.

DISTRIBUTION. Known from Iberian Peninsula (included British Is and Scandinavia) to Balkan Peninsula and Ural Mts, then Caucasus, Transcaucasia, W Kazakhstan and W Siberia; also Asia Minor and Iran. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Turano-European.

Paramesia diffusana (Kennel, 1899)

MATERIAL EXAMINED. Etna30: 1 female, 30.VII.1994. Etna60: 1 male, 26.VIII.1996. Etna65: 1 female, 7.V.1993.

DISTRIBUTION. SE Europe (Spain, Corsica, Italy, Greece and Estonia). (Italy: S, Si).

CHOROTYPE. SE-European.

Avaria hyerana Milliere, 1858

MATERIAL EXAMINED. Nebrodi5: 1 male, 14.X.1993. Etna2: 1 female, 17.X.1996.

DISTRIBUTION. Known from Western part of Palaearctic region, excl. the northern areas. Europe (France, Spain, Portugal, Malta, Italy, former Yugoslavia, Greece and Crete), Canary Isles and NW Africa. (Italy: N, Si, Sa).

CHOROTYPE. Mediterranean.

Archips betulanus (Hübner, [1787])

MATERIAL EXAMINED. Peloritani3: 1 female, 9.IX.2020.

DISTRIBUTION. Known from Europe to Japan. (Italy: N, C; new to the Sicilian fauna).

CHOROTYPE. Palaearctic.

Archips podanus (Scopoli, 1763)

MATERIAL EXAMINED. Peloritani1: 1 female, 21.VII.1996. Etna20: 1 male, 29.XI.1995.

DISTRIBUTION. Known from Europe; Asia Minor, Caucasus, Transcaucasia, Ural Mts, Siberia also Japan. Introduced in North America. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Holarctic.

Archips crataeganus (Hübner, [1796-1799])

MATERIAL EXAMINED. Etna78: 1 male, 3.VII.1995.

DISTRIBUTION. W-Palaearctic, Kazakhstan, Siberia, China, Korea, Japan. (Italy: N, C, S; new to the Sicilian fauna).

CHOROTYPE. Palaearctic.

Archips xylosteanus (Linnaeus, 1758)

MATERIAL EXAMINED. Peloritani1: 1 male, 21.VIII.1996. Nebrodi2: 2 males, 4.VIII.1997. Etna59: 2 females, 5.IX.1995. Etna77: 3 males, 3.VII.1995. Iblei17: 1 male, 18.V.1996; 1 male, 15.VI.1996.

DISTRIBUTION. Palaearctic Region from W-Europe to Asia Minor, Caucasus, Iran, Central Asia, China, Russian Far East, and Japan. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Asiatic-European.

Archips rosanus (Linnaeus, 1758)

MATERIAL EXAMINED. Etna6: 2 males, V.1999. Etna22: 1 female, 7.IX.1996.

DISTRIBUTION. Palaearctic species; in Sweden up to 66°. By the end of XIX

century introduced to North America. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Holarctic.

Choristoneura hebenstreitella Muller, 1764

MATERIAL EXAMINED. Etna71: 1 male, 12.VI.1997.

DISTRIBUTION. Known from Europe, Asia Minor, Caucasus, Transcaucasia, Ural Mts, W Kazakhstan and Iran. (Italy: N, C, S, Si).

CHOROTYPE. Turano-European.

Pandemis cerasana (Hübner, 1786)

MATERIAL EXAMINED. Nebrodi5: 2 males, 3.VIII.1992; 4 males, 11.VII.1993.

DISTRIBUTION. Transpalaeartic species widely distributed in Europe, from Iberian Peninsula as far as to Ural Mts and Caucasus, then S-Siberia, Kazakhstan, Mongolia, China and Far East; also Asia Minor and Iran. Introduced to North America. (Italy: N, C, S; new to the Sicilian fauna).

CHOROTYPE. Holarctic.

Cacoecimorpha pronubana (Hübner, [1796-1799])

MATERIAL EXAMINED. Etna4: 1 female, 4.V.1993. Etna11: 1 male, 1994. Etna22: 1 female, 11.X.1993; 1 male, 20.V.1995; 1 female, 8.X.1996; 1 female, 23.X.1996. Etna28: 1 female, 22.III.1997. Etna29: 1 male, 8.V.1993. Etna63: 1 male, 23.IV.1994. Etna62: 1 female, 15.VI.1993; 1 female, 8.X.1995; 1 male, VI.1998. Etna80: 1 male, 29.IX.1991. Agrigento2: 2 females, 5.VII.1996. Iblei6: 1 female, 16.VI.1999. Iblei10: 2 females, 26.VI.1992. Iblei16: 1 male, VIII.1992.

DISTRIBUTION. Western Palaearctic from Europe, Morocco, Algeria and Tunisia to Lebanon, Asia Minor, Near East, Crimea and Japan. Introduced to South Africa and North America. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Cosmopolitan.

Aphelia (Zelotheres) ferugana (Hübner, 1793)

MATERIAL EXAMINED. Nebrodi3: 1 male, 4.VI.1999; 1 male, 4.VI.2000. Etna5: 1 male, 9.VI.1996.

DISTRIBUTION. Europe, Caucasus, Asia Minor, Syria, Iraq and Iran. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Turano-European.

Clepsis dumicolana (Zeller, 1847)

MATERIAL EXAMINED. Etna12: 1 female, 12.V.1949. Etna14: 1 male, 7.V.1993. Etna22: 2 males, 23.V.1990; 2 males, 15.V.1998.

DISTRIBUTION. S-Europe, Asia Minor, Syria and Lebanon. (Italy: N, C, S, Si, Sa).

CHOROTYPE. S-European-Anatolic.

Clepsis consimilana (Hübner, [1814-1817])

MATERIAL EXAMINED. Peloritani1: 1 female, 21.VII.1996; 1 male, 26.VII.1996. Peloritani2: 5 males and 1 female, 9.IX.2020. Peloritani4: 1 male, 9.VI.1950; 2 males, 16.X.1994. Nebrodi2: 2 males, 4.VIII.1997. Nebrodi5: 1 male, 11.VII.1993. Nebrodi6: 1 male, 10.IX.2020. Etna2: 3 males, 23.VI.1991; 2 males, 9.X.1992; 3 females, 21.V.1993; 1 male, 22.V.1994; 2 males and 3 females, 26.V.1994; 2 males and 2 females, 21.VI.1996; 1 male and 1 female, 17.VII.1996. Etna6: 1 male, V.1999. Etna8: 1 male, 14.V.1993. Etna9: 1 female, 19.IV.2001. Etna17: 1 male and 1 female, 23.VI.2008. Etna22: 1 male, 9.V.1995; 1 female, 27.IX.1996; 1 female, 16.X.1996; 1 male, 15.V.1998. Etna28: 1 male, 18.IX.1998. Etna30: 2 females, 15.IX.1994. Etna55: 1 male, 20.V.1993. Etna62: 1 male, 20.IX.1995; 1 male and 1 female, 8.X.1995; 1 male, XI.1996; 1 female, 17.IX.1997; 1 male, 22.IX.1997; 1 female, 1998; 1 male, 15.V.1999; 1 male, 15.IX.1999. Etna63: 1 male, 27.V.1991; 1 male, 18.IV.1994; 1 male, 25.X.1995. Etna70: 1 male, 3.VI.1997. Etna73: 1 female, 3.X.1993; 1 male, 26.IX.1995. Etna74: 2 males, 12.V.1994; 1 male, 7.VII.1994. Etna77: 4 males, 3.VII.1995; 1 female, 17.XI.1996. Etna79: 1 female, 8.X.1993. Piana di Catania4: 1 male, 26.IV.1994. Agrigento1: 1 male, 11.IX.2020. Iblei3: 1 male, 24.VIII.1995. Iblei10: 1 male, 25.IV.1992; 4 males, 26.VI.1992; 1 male, 20.IX.1992. Iblei11: 3 males, 7.IX.2020. Iblei15: 1 female, 10.XI.1996. Iblei17: 1 female, 9.X.1996; 1 female, 29.IV.1998; 1 male, 15.V.1999; 1 male and 1 female, 24.VIII.1999. Iblei18: 6 males and 3 females, 6.IX.2020.

DISTRIBUTION. W-Europe to E-European Russia; W-Africa to Lebanon, Asia Minor, Nearctic and Ethiopian region (introduced). (Italy: N, C, S, Si, Sa).

CHOROTYPE. Cosmopolitan.

Clepsis siciliana Ragonot, 1894

MATERIAL EXAMINED. Madonie5: 1 male and 1 female, 14.VII.1993.

DISTRIBUTION. Known from Iberian Peninsula, S France, Italy, Algeria and Crete. (Italy: Si).

CHOROTYPE. Mediterranean.

Lozotaeniodes formosanus Kawabe, 1968

MATERIAL EXAMINED. Etna24: 1 female, VII.1997.

DISTRIBUTION. Chiefly southern Europe, from Iberian Peninsula to Italy and Corsica; also Great Britain, France, Germany, Switzerland and Belgium; in N Europe from Denmark; also southern part of Ukraine and Russia. (Italy: N, S, Si).

CHOROTYPE. European.

Subfamily Chlidanotinae

Tribe Polyorthini

Olindia schumacherana (Fabricius, 1787)

MATERIAL EXAMINED. Peloritani1: 3 males, 4.X.1995.

DISTRIBUTION. Europe from Spain, British Is and Scandinavia to Italy and Corsica; also E Europe. (Italy: N, C, S, Sa; new to the Sicilian fauna).

CHOROTYPE. European.

Subfamily Olethreutinae

Tribe Bactrini

Bactra furfurana (Haworth, [1811])

MATERIAL EXAMINED. Iblei15: 1 male, 18.V.1996.

DISTRIBUTION. Known from whole Europe to Japan; also Nearctic Region (North America). (Italy: N, C, Si).

CHOROTYPE. Holarctic.

Bactra bactrana (Kennel, 1901)

MATERIAL EXAMINED. Nebrodi5: 1 male, 21.VI.1992. Etna11: 1 male, 5.IV.1991. Etna22: 1 female, 18.X.1996. Etna62: 2 males, 10.X.1997. Etna74: 1 female, 7.VII.1994; 6 males and 1 female, 28.IX.1994. Nebrodi3: 2 males, 4.VI.1999. Piana di Catania4: 1 male, 23.XI.1998.

DISTRIBUTION. From Europe: Iberian Peninsula, France, Corsica, Italy, Malta, Greece, former Yugoslavia and former USSR countries. In addition, Canary Is, Morocco, Algeria, Egypt, Asia Minor, Arabia, Mesopotamia, Iraq, Iran, Caucasus, Transcaucasia, Afghanistan, Caspian area, Tadjikistan, Uzbekistan. Including Oriental (Pakistan, India) and Ethiopian regions (Madagascar). (Italy: N, C, S, Si).

CHOROTYPE. Subcosmopolitan.

Bactra lancealana (Hübner, [1796-1799])

MATERIAL EXAMINED. Nebrodi3: 1 female, 4.VI.2000. Iblei15: 1 male, 7.V.1995.

DISTRIBUTION. Palaearctic region, probably excluded Japan; known from North Africa, Europe from Iberian Peninsula to Ural Mts, Kazakhstan, then Siberia to Mongolia, China and Russian Far East; known also from Transcaucasia, Asia Minor, C Asia, Iran, Afghanistan and Kamchatka. In Oriental region noticed in Sri Lanka and in Nearctic Region (USA and Canada). (Italy: N, C, S, Si, Sa).

CHOROTYPE. Subcosmopolitan.

Bactra robustana (Christoph, 1872)

MATERIAL EXAMINED. Nebrodi3: 1 male, 4.VI.2000; 1 male, 14.VII.2001. Nebrodi5: 3 males, 11.VII.1993.

DISTRIBUTION. Europe; N Africa: Morocco; Asia Minor, Caucasus, Transcaucasia, Iran, Ural Mts, Afghanistan, Kazakhstan, Kyrgyzstan, S Siberia, Mongolia, Russian Far East and Japan (Honshu). (Italy: N, C, S, Si, Sa).

CHOROTYPE. Palaearctic.

Bactra venosana (Zeller, 1847)

MATERIAL EXAMINED. Peloritani3: 5 males, 9.IX.2020. Etna2: 1 male,

23.V.1991; 1 female, 9.X.1992. Etna22: 1 male, 18.X.1996. Etna74: 1 male, 7.VII.1994.

DISTRIBUTION. Known from SW Europe; from Madeira and Canary Is: Gran Canaria; N Africa: Morocco and Algeria; Arabian Peninsula; Japan; Afrotropical region: Sudan; Oriental region: India, Sri Lanka, Thailand, Philippines, Indonesia, North and South Vietnam, South China, Taiwan; Australian region: Marianas Is, Caroline Is, Fiji, Australia; noticed also in Hawaii. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Subcosmopolitan.

Tribe Olethreutini

Endothenia marginana (Haworth, [1811])

MATERIAL EXAMINED. Etna2: 5 males, 21.VI.1996. Etna5: 1 male, 25.VI.1996. Etna54: 1 female, 17.VI.1993. Etna63: 1 male, 8.IV.1996; 1 male, 28.IV.1996. Agrigento2: 1 male, 5.VII.1996. Iblei1: 1 male, 17.VI.1991.

DISTRIBUTION. Europe, NW-Africa, Transcaucasia, Asia: from Ural Mts to Mongolia, China and the Russian Far East. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Palaearctic.

Lobesia (Lobesia) botrana ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Etna2: 1 male, 13.VIII.1993. Etna13: 1 male and 1 female, 27.IV.2000. Etna22: 1 male, 22.IV.1993. Etna28: 1 male, 29.IX.1999. Etna62: 1 male, 8.V.1997. Piana di Catania6: 2 males, 12.V.1996. Iblei14: 2 males, 6.VIII.1993. Pantelleria: 2 males, 20.VII.2021.

DISTRIBUTION. From W-Europe to Ural Mts, N-Africa, Asia Minor, Near East, Iraq, Iran, Transcaucasia, Turkmenistan, Kazakhstan, and Japan. N-S America (introduced). (Italy: N, C, S, Si, Sa).

CHOROTYPE. Cosmopolitan.

Lobesia (Lobesia) reliquana Hübner, [1825]

MATERIAL EXAMINED. Iblei13: 1 male, 20.VIII.1995.

DISTRIBUTION. Palaearctic species known from Europe; Caucasus; Transcaucasia; Iran; Siberia; Russian Far East: Primorsk; China; Korea and Japan: Hokkaido, Honshu, Shikoku. (Italy: N, C, Si, Sa).

CHOROTYPE. Asiatic-European.

Lobesia (Lobesia) bicinctana (Duponchel, 1844)

MATERIAL EXAMINED. Agrigento2: 1 female, 5.VII.1996. Iblei17: 1 male, 24.VI.1998.

DISTRIBUTION. Europe; Asia Minor; Transcaucasia; Russia: S Siberia, Transbaikalia, Russian Far East (Primorsk); Mongolia; China: Manchuria; Korea; Japan: Hokkaido, Honshu; also from Canada. (Italy: N, C, S, Si).

CHOROTYPE. Holarctic.

Lobesia (Lobesia) quaggana Mann, 1855

MATERIAL EXAMINED. Iblei17: 1 female, 15.V.1999.

DISTRIBUTION. Spread in SW Europe from Portugal to Dalmatia also Asia Minor. (Italy: N, C, S, Si, Sa).

CHOROTYPE. S-European with Anatolian extension.

Lobesia (Lobesia) porrectana (Zeller, 1847)

MATERIAL EXAMINED. Etna8: 1 male, 14.V.1993.

DISTRIBUTION. Europe (France, Iberian Peninsula, Corsica, Malta and Italy); also Asia Minor. (Italy: S, Si, Sa).

CHOROTYPE. S-European with Anatolian extension.

Lobesia (Lobesia) indusiana (Zeller, 1847)

MATERIAL EXAMINED. Iblei9: 2 males, 5.X.2002. Iblei15: 1 male, 10.XI.1996.

DISTRIBUTION. Known from SE Europe; also Caucasus and Daghestan. (Italy: N, C, Si, Sa).

CHOROTYPE. Turano-European.

Lobesia (Lobesia) littoralis (Humphreys and Westwood, 1845)

MATERIAL EXAMINED. Iblei15: 1 female, 15.VI.1996.

DISTRIBUTION. Known in Europe excluded eastern parts; also North Africa and Asia Minor. Italy (N, C, S, Si, Sa).

CHOROTYPE. W-Palaearctic.

Eudemis profundana ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Nebrodi2: 1 male, 4.VIII.1997; 1 female, 4.VIII.2000. Etna5: 2 males, 16.VII.1996; 3 males, 12.IX.1996; 1 female, 20.VIII.1999. Etna24: 1 male, 17.VIII.1999; 1 female, 9.VII.2000. Etna30: 1 male, 22.VIII.1998. Etna57: 1 male, 18.VI.1997.

DISTRIBUTION. This species occurs in W Palearctic as it was recorded in Europe from Spain to W Ukraine and Ural Mts, except for the northern belt; also Asia Minor and Arzebaijan. (Italy: N, C, S, Si, Sa).

CHOROTYPE. European with Anatolian extension.

Hedya nubiferana (Haworth, [1811])

MATERIAL EXAMINED. Etna2: 1 male, 26.V.1994. Iblei3: 1 females, 31.V.1992.

DISTRIBUTION. W-Europe to Ural Mts, Caucasus, Asia Minor, Iraq, Turkmenistan, Iran, Kazakhstan, W-Siberia. North America (Canada). (Italy: N, C, S, Si, Sa).

CHOROTYPE. Holarctic.

Metendothenia atropunctana (Zetterstedt, 1839)

MATERIAL EXAMINED. Madonie4: 1 male, 20.VII.1992. Nebrodi5: 2 female, 21.VI.1992; 1 male, 3.VIII.1992; 1 male, 11.VIII.1993.

DISTRIBUTION. Europe, from Iberian Peninsula included British Is and Scandinavia to Kola Pns., and Ural Mts; Caucasus, Armenia, Kazakhstan, Russia (Altaj, Siberia and Transbaikalia) and Far East: Primorsk, Kamchatka, Kuril Is (Kunashir); Mongolia; NW China; Korea; Japan. North America: USA (Alaska) and NW Canada. (Italy: N, C, S, Si).

CHOROTYPE. Holarctic.

Olethreutes arcuella (Clerck, 1759)

MATERIAL EXAMINED. Etna5: 2 males, 9.VI.1996. Etna57: 1 male, 29.V.1997. Etna24: 1 male, 31.V.1998. Etna67: 1 male, 9.V.1999.

DISTRIBUTION. From Europe to Caucasus; Asia Minor, Iran, Kazakhstan, W-Siberia, and NW-China. (Italy: N, C, S, Si).

CHOROTYPE. Centralasiatic-European.

Tribe Enarmoniini***Ancylis mitterbacheriana*** ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Etna43: 1 male, 26.V.1949. Etna78: 1 female, 3.VII.1995.

DISTRIBUTION. Europe from Spain, British Is and Scandinavia to Mediterranean and Balkan Peninsula, east to Ural Mts and Transcaucasia; also Asia Minor and China (Shandong). (Italy: N, C, S, Si).

CHOROTYPE. Asiatic-European.

Tribe Eucosmini***Thiodia major*** (Rebel, 1903)

MATERIAL EXAMINED. Etna5: 2 males, 25.VI.1996. Etna68: 1 male, 12.VI.1997; 2 males, VII.1997; 2 males, 12.VII.1997. Etna70: 2 males, 2.VII.1997. Etna75: 1 male, 12.VI.2002. Etna76: 1 male and 1 female, 17.VI.1999.

DISTRIBUTION. Known from S-Europe, from S-France and Italy to Balkan peninsula. (Italy: C, S, Si, Sa).

CHOROTYPE. S-European.

DIAGNOSIS. Adult (Figure 14) – Wingspan 16-21 mm. Ground colour of forewing light ivory yellow; strigulation weak brownish; costal strigulae cream, dividings brownish sprinkled of blackish scales; speculum slightly paler than wing with some blackish inner spots in form of longitudinal strigulae on a median suffusion. Markings umber light brown, scales black sprinkles, with pale walnut hues. Cilia light ivory. Hindwing brownish; cilia concolour, with light ivory basal strip.

Male genitalia (Figure 15). Uncus very short; socius short, haired; tegument simple, cup shaped; ventral edge of sacculus curved; angle of sacculus rather distinct; neck of valva broad; ventral incision of sacculus deep; row of hairs extending from angle of cucullus; two large processes at base of caudal edge of cucullus; aedeagus simple, large and developed, terminal part of aedeagus spatuliform, without subterminal thorns; numerous long cornuti.

Female genitalia (Figure 16). Ovipositor slightly elongated; papillae anales very small, slender; apophyses posteriors long; sterigma fused with sclerite of colliculum slightly expanding distally, very short beyond ostium bursae;

membranous broadening between this last and cingulum; cingulum a slender tubular asymmetrical sclerite in post median part of ductus bursae; ductus bursae elongate; two signa differing in size, one in the shape of a very developed spine.

According to Razowski (2003) *T. major* is closed to *T. citrana* (Hübner) and confused with *T. citrana* var. *sardiniana* Schawerda.

BIOLOGY. Species of the genus *Thiodia* (Hübner) have one generation a year; larvae in spun leaves, flowers and twigs.

Rhopobota naevana (Hübner, [1814-1817])

MATERIAL EXAMINED. Nebrodi5: 1 male, 27.VIII.1995. Nebrodi5: 1 male, 11.VII.1993.

DISTRIBUTION. From Europe to Ural Mts, Caucasus, Transcaucasia, India, Sri-Lanka, Siberia, Far East, Mongolia, China, Korea and Japan. In the Nearctic Region occurs ssp. *illicifoliata* Kearfott, 1907. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Subcosmopolitan.

Spilonota ocellana ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Nebrodi2: 1 male, 4.VIII.1997. Nebrodi5: 1 male and 1 female, 3.VIII.1992; 3 males and 1 female, 11.VII.1993. Etna1: 1 male, 3.IV.1991. Iblei10: 1 female, 5.VI.1992.

DISTRIBUTION. Europe, N-Africa, Caucasus, Asia Minor, Transcaucasia, Iran, Kazakhstan, Turkmenia, Uzbekistan, Tadzhikistan, Russian Far East, Siberia, China, Korea and Japan. Also Nearctic Region. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Holarctic.

Acroclita subsequana Herrich-Schäffer, 1851

MATERIAL EXAMINED. Peloritani4: 1 male, 2.XII.1949. Etna63: 1 male, 25.X.1995.

DISTRIBUTION. Recorded from Europe (Great Britain, France, Iberian Peninsula, Malta and Italy); also Canary Is and Morocco. (Italy: Si, Sa).

CHOROTYPE. SW-European.

Epinotia festivana (Hübner, 1799)

MATERIAL EXAMINED. Etna2: 2 males, 21.VI.1996; 1 male and 1 female, 17.VII.1996. Etna32: 1 male, 4.VIII.1998. Etna77: 2 males, 3.VII.1995.

DISTRIBUTION. Europe: from Iberian Peninsula to south and east part of the region (excluded northern territories) also Crimea, Caucasus, Ciscaucasia, Transcaucasia, Asia Minor, Dagestan, Iran and N-Africa. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Turano-European-Mediterranean.

Epinotia thapsiana (Zeller, 1847)

MATERIAL EXAMINED. Peloritani1: 1 male, 21.VII.1996; 1 male, 26.VII.1996. Etna22: 2 males, 20.IV.1994. Etna36: 1 female, 16.VI.2008. Piana di Catania7: 1 male, 4.IX.2020.

DISTRIBUTION. Canary Is, southern and median belts of Europe to E European Russia, Transcaucasia, Asia Minor, Iran, SW Siberia, Kazakhstan, Tadzhikistan, Turkmenia and Korea. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Asiatic-European.

Epinotia dalmatana Rebel, 1891

MATERIAL EXAMINED. Peloritani1: 2 males, 26.VII.1996. Iblei10: 1 male, 26.VI.1992. Iblei12: 1 male, 20.VII.1995.

DISTRIBUTION. S Europe from Iberian Peninsula and France to Dalmatia, part of E Europe; also Asia Minor, Iran, Iraq, Syria and Transcaucasia. (Italy: N, S; new to the Sicilian fauna).

CHOROTYPE. Turano-European.

Epinotia demarniana (Fischer von Röslerstamm, 1840)

MATERIAL EXAMINED. Etna25: 1 male, 29.VII.1998. Etna69: 1 female, 9.VIII.1996.

DISTRIBUTION. N and C belts of Europe; also Ural Mts, SW Siberia, Russian Far East, China and Japan. (Italy: N, C, S, Si).

CHOROTYPE. Asiatic-European.

Epinotia ramella (Linnaeus, 1758)

MATERIAL EXAMINED. Etna40: 1 female, 2.VII.1997; 4 males and 1 female, 28.VIII.1997. Etna57: 1 male, VII.1997. Etna68: 1 male, 12.VI.1997. Etna69: 1 male, 9.VIII.1996.

DISTRIBUTION. Europe from Iberian Peninsula and British Is to Scandinavia

and Balkan Peninsula, E Europe, Kazakhstan, Russian Far East (Primure, S Primorsk, S Sakhalin), China, Korea and Japan. (Italy: N, Si).

CHOROTYPE. Asiatic-European.

Epinotia bilunana Haworth, 1811

MATERIAL EXAMINED. Etna18: 1 male and 2 females, 13.VI.2002. Etna70: 1 female, 2.VII.1997.

DISTRIBUTION. Europe from Iberian Peninsula, British Is and Scandinavia to Balkan Peninsula, E Europe, Kazakhstan, Siberia and Russian Far East. (Italy: N, Si).

CHOROTYPE. Sibero-European.

Zeiraphera rufimitrana Herrich-Schäffer, 1851

MATERIAL EXAMINED. Etna24: 1 male, 9.VII.2000.

DISTRIBUTION. Europe from Spain and Great Britain to Scandinavia, in the south from Italy to Balkan Peninsula and Greece, E Europe, Siberia, Russian Far East (Siberia, Primure, S Primorsk, S Sakhalin, S Kuril Is), Mongolia, China, Korea and Japan. (Italy: N, Si).

CHOROTYPE. Asiatic-European.

Zeiraphera isertana Fabricius, 1794

MATERIAL EXAMINED. Madonie2: 2 males and 2 females, 14.VII.1993. Etna5: 1 male, 16.VII.1996.

DISTRIBUTION. Europe from Iberian Peninsula to Albania and from British Is to Scandinavia, E Europe to Priurale, excluding northern and SE parts; also Transcaucasia (Armenia). (Italy: N, C, S, Si, Sa).

CHOROTYPE. European.

Crociosema plebejana Zeller, 1847

MATERIAL EXAMINED. Peloritani1: 1 female, 26.VII.1996. Peloritani4: 1 female, 16.X.1994. Etna2: 1 male, 28.IV.1994; 1 male, 1.V.1994; 1 female, 21.V.1996. Etna9: 2 males, 21.III.2001; 1 male, 18.IV.2001. Etna10: 1 male, 31.V.1994. Etna25: 1 male and 1 female, 29.VII.1998. Etna28: 1 male, VII.1998. Etna30: 1 male: Milo, 18.VII.1996. Etna37: 1 female, 20.VI.2008. Etna62: 1 female, 21.VI.1997; 1 male, 15.XI.1997; 1 female, VI.1998; 1 female, 15.V.1999. Piana di Catania6: 1 male, 12.V.1996. Iblei10: 1 female, 5.VI.1992. Iblei16: 1 male, VIII.1992.

DISTRIBUTION. Entire Europe, N-Africa, Asia Minor, Arabia, Iran, Transcaucasia, Turkmenia, India, Taiwan, Australia, North America and South America. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Cosmopolitan.

Pelochrista mollitana (Zeller, 1847)

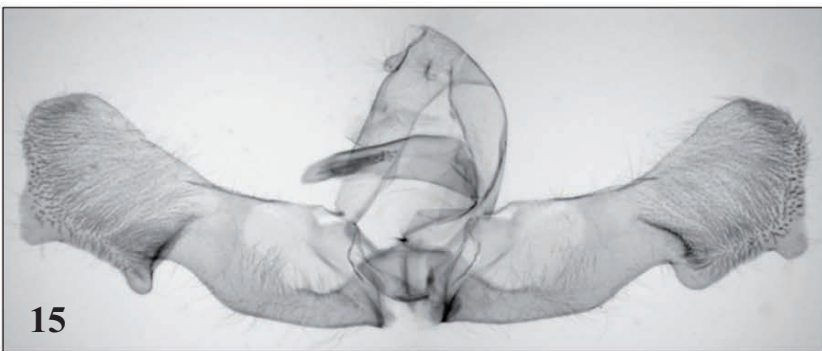
MATERIAL EXAMINED. Nebrodi1: 1 male, 17.V.1995. Iblei10: 1 male, 5.VI.1992.

DISTRIBUTION. W Europe from France to S Scandinavia; Mediterranean from Iberian Peninsula to Greece, and Bulgaria; N Africa; E Europe from East Balticum to Crimea, Caucasus; also Kazakhstan. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Turano-European-Mediterranean.

Pelochrista agrestana (Treitschke, 1830)

MATERIAL EXAMINED. Nebrodi2: 1 male, 4.VIII.1997. Etna2: 7 males, 21.VI.1996; 3 males, 17.VII.1996. Etna28: 1 male, 6.VII.2000. Etna32: 1 male, 4.VIII.1998. Etna58: 2 males, 1.IX.1991. Etna74: 3 males,



Figures 14-16. *Thiodia major* (Rebel, 1903) (adult female) (14); male genitalia (15); female genitalia (16).

7.VII.1994. Etna77: 1 male, 17.VIII.1991; 5 males, 3.VII.1995. Etna78: 1 male, 31.V.1995. Piana di Catania5: 2 males and 1 female, 27.IV.1997. Agrigento2: 1 male, 5.VII.1996. Iblei2: 2 males, 17.VI.1991; 3 males, 11.IX.1991. Iblei3: 2 males, 24.VIII.1995. Iblei10: 1 male, 26.VI.1992; 2 males, 20.IX.1992. Iblei17: 1 male, 14.VIII.1996.
DISTRIBUTION. Known chiefly from Lithuania, SW-Europe (France, Italy, Austria and former Yugoslavia) and Asia Minor. (Italy: C, S, Si).
CHOROTYPE. S-European.

Pelochrista cannatana Trematerra, 2000

MATERIAL EXAMINED. Iblei15: 1 male and 1 female, 4.VI.1995.
DISTRIBUTION. Known only from Sicily. (Italy: Si).
CHOROTYPE. Sicilian endemic.

Eucosma cana (Haworth, [1811])

MATERIAL EXAMINED. Nebrodi2: 3 males and 1 female, 4.VIII.1997. Nebrodi5: 1 male, 21.VI.1992; 3 males, 3.VIII.1992; 4 males, 11.VII.1993. Etna2: 1 female, 9.X.1992; 1 male, 21.V.1996. Etna8: 2 males, 14.V.1993. Etna22: 1 male, 18.V.1994. Etna62: 1 male, 15.V.1991. Etna64: 1 female, 3.V.1997. Etna74: 1 male, 12.V.1994.
DISTRIBUTION. Europe, Asia Minor, Caucasus, Transcaucasia, Kazakhstan, C-Asia, S-Siberia, Russian Far East, China and Japan. (Italy: N, C, S, Si, Sa).
CHOROTYPE. Asiatic-European.

Eucosma hohenwartiana ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Etna22: 2 females, 18.V.1994; 1 female, 9.V.1995.
DISTRIBUTION. N Africa, Europe from British Is to Scandinavia to Mediterranean, E Europe, Transcaucasia, Asia Minor, W and S Siberia to Altaj, Central Asia, W China and Japan. (Italy: N, C, S, Si, Sa).
CHOROTYPE. Asiatic-European.

Eucosma obumbratana (Lienig and Zeller, 1846)

MATERIAL EXAMINED. Nebrodi5: 1 male, 3.VIII.1992.
DISTRIBUTION. W Europe from Shetland Is and N Scandinavia to Mediterranean, E Europe from Onega Lake to N Caucasus, Transcaucasia, Middle East, Siberia, Kazakhstan, Russian Far East (Primure, S Primorsk) and NE China. (Italy: N, C; new to the Sicilian fauna).
CHOROTYPE. Sibero-European.

Gypsonoma imparana (Muller-Rutz, 1914)

MATERIAL EXAMINED. Peloritani3: 1 male, 9.IX.2020.
DISTRIBUTION. Europe: France, Italy, Switzerland, Germany and Austria. Also from Russia: Khabarovsk Krai. (Italy: N, Si).
CHOROTYPE. Asiatic-European.

Epiblema scutulanum ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Nebrodi3: 1 female, 14.VII.2001.
DISTRIBUTION. Palaearctic species widely distributed in Europe from Iberian Peninsula to Ural Mts, known also from Siberia, Kazakhstan and Russian Far East (S Primorsk, Amur, Khabarovsk Krai); also Morocco. (Italy: N, C, S, Si).
CHOROTYPE. Palaearctic.

Epiblema cirsiarum Zeller, 1843

MATERIAL EXAMINED. Iblei2: 1 male, 2.V.1999. Iblei8: 1 male, 15.VII.2001.
DISTRIBUTION. Known from Spain to Ural Mts, then Siberia and from Kazakhstan to Russian Far East. (Italy: S; new to the Sicilian fauna).
CHOROTYPE. Sibero-European.

Epiblema graphanum (Treitschke, 1835)

MATERIAL EXAMINED. Etna68: 1 male, 12.VI.1997.
DISTRIBUTION. W Europe from Spain to S Scandinavia, south to Balkan Peninsula, Asia Minor, Caucasus, Iran, Transcaucasia, Afghanistan, Kazakhstan, SW Siberia, Transbaikal and China. (Italy: N, C, S; new to the Sicilian fauna).
CHOROTYPE. Centralasiatic-European.

Epiblema chretieni Obraztsov, 1952

MATERIAL EXAMINED. Etna68: 1 male, 12.VI.1997.
DISTRIBUTION. Europe: France, Italy, Switzerland, Hungary and Albania. (Italy: N, Si).

CHOROTYPE. S-European.

Notocelia cynosbatella (Linnaeus, 1758)

MATERIAL EXAMINED. Madonie2: 1 male, 16.V.1993. Nebrodi3: 1 female, 4.VI.2000.
DISTRIBUTION. Europe, Ural Mts, Near East, Caucasus, Transcaucasia, Asia Minor, Iran, Kazakhstan, Central Asia, Mongolia, Siberia and Russian Far East. (Italy: N, C, S, Si).
CHOROTYPE. Asiatic-European.

Notocelia uddmanniana (Linnaeus, 1758)

MATERIAL EXAMINED. Nebrodi5: 1 male, 11.VII.1993. Nebrodi6: 1 male, 10.IX.2020. Etna70: 1 male, 2.VII.1997. Etna77: 4 males, 3.VII.1995.
DISTRIBUTION. Europe, N-Africa, Asia Minor, Near east, Caucasus, Transcaucasia, Transural, Iran, Kazakhstan, Tadjhikistan and S-Siberia. (Italy: N, C, S, Si, Sa).
CHOROTYPE. Palaearctic.

Notocelia aquana Hübner, [1796-1799]

MATERIAL EXAMINED. Nebrodi5: 4 males, 11.VII.1993.
DISTRIBUTION. W-Europe, Morocco, Ural Mts, Caucasus, Transcaucasia, Asia Minor, Iran, Kazakhstan, C-Asia, W-Siberia and China. (Italy: N, C, S, Si).
CHOROTYPE. Palaearctic.

Notocelia incarnatana (Hübner, 1800)

MATERIAL EXAMINED. Nebrodi6: 2 females, 10.IX.2020. Etna5: 1 male, 8.IX.1994; 1 male and 1 female, 25.VI.1996; 1 male, 12.IX.1996; 1 male, 20.VIII.1999. Etna53: 1 female, 20.IX.1995. Etna62: 1 male, 19.VI.1994. Etna68: 1 female, 20.VIII.1996. Etna71: 1 male, 11.V.1992. Iblei10: 2 males, 20.IX.1992.
DISTRIBUTION. Europe from Iberian Peninsula, British Is and Scandinavia to N parts of European Russia, south to Asia Minor, Caucasus, Transcaucasia, Siberia, Kazakhstan, Turkmenia, Pribaikalie, Mongolia, Russian Far East (W-Tuva, Amur, Priamure, S Primorsk, Khabarovsk Krai), N China and Morocco. (Italy: N, C, S, Si, Sa).
CHOROTYPE. Palaearctic.

Notocelia trimaculana (Haworth, [1811])

MATERIAL EXAMINED. Nebrodi5: 2 males, 3.VIII.1992.
DISTRIBUTION. N Africa (Morocco), Europe from Spain, British Is and Scandinavia to Balkan Peninsula and Asia Minor, E Europe, Caucasus, Transcaucasia, Near East, Iran and Kazakhstan. (Italy: N, C, S, Si).
CHOROTYPE. W-Palaearctic.

Pseudococcyx tessulatana (Staudinger, 1871)

MATERIAL EXAMINED. Etna8: 1 male, 14.V.1993.
DISTRIBUTION. N Africa, SW Europe: Iberian Peninsula, France, Malta, Italy, Switzerland, Greece, Crete, Balkan Peninsula and part of E Europe; also Asia Minor. (Italy: N, C, S, Si, Sa).
CHOROTYPE. S-Europeo-Mediterranean.

Rhyacionia pinicolana (Doubleday, 1849)

MATERIAL EXAMINED. Etna7: 1 female, 20.VIII.1991. Etna49: 1 male, 1.VIII.1948. Etna59: 1 male and 1 female, 5.IX.1995. Etna73: 1 male, 28.VIII.1997; 1 male, 13.X.1997.
DISTRIBUTION. Europe from Iberian Peninsula, British Is and Scandinavia to Romania, Cisural, Caucasus, Transcaucasia, Siberia, Russian Far East (Amur-Zeya area, S Primorsk, S Kuril Is), China, Korea and Japan (Hokkaido). (Italy: N, S, Si).
CHOROTYPE. Asiatic-European.

Rhyacionia hafneri (Rebel, 1937)

MATERIAL EXAMINED. Etna68: 1 male, 12.VI.1997.
DISTRIBUTION. Known from Europe: Slovenia, Czech Republic, Hungary, former Yugoslavia, Bulgaria, Italy and Greece. (Italy: N, Si).
CHOROTYPE. E-European.

Clavigesta sylvestrana (Curtis, 1850)

MATERIAL EXAMINED. Etna81: 1 female, 28.VIII.2000.
DISTRIBUTION. W Europe: from Spain and British Is to Italy, the Netherlands and Germany; East Europe and Greece. (Italy: N, C, S, Si).
CHOROTYPE. European.

Tribe Grapholitini

Cydia plumbiferana Staudinger, 1871

MATERIAL EXAMINED. Etna24: 1 female, 31.V.1998.

DISTRIBUTION. Known from Europe (France, Italy, Greece and Crete) and Lebanon. (Italy: N, C, Si).

CHOROTYPE. Mediterranean.

Cydia medicaginis Kuznetsov, 1962

MATERIAL EXAMINED. Agrigento2: 1 female, 5.VII.1996.

DISTRIBUTION. distributed from W Europe to Transcaucasia, known also from Kazakhstan, S Siberia and W Tuva. (Italy: N; new to the Sicilian fauna).

CHOROTYPE. Centralasiatic-European.

Cydia succedana ([Denis and Schiffermüller], 1775)

MATERIAL EXAMINED. Etna19: 1 male, 13.VI.2002.

DISTRIBUTION. Known from W and C Palaearctic: Europe from Iberian Peninsula (included British Is and Scandinavia) to Morocco, Asia Minor, Transcaucasia, Iran, Afghanistan, Kazakhstan, C Asia, S Siberia and Mongolia. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Centralasiatic-European-Mediterranean.

Cydia cythisantana Burmann and Pröse, 1988

MATERIAL EXAMINED. Etna70: 1 male, 2.VII.1997.

DISTRIBUTION. Known only from Italy and Switzerland. (Italy: N; new to the Sicilian fauna).

CHOROTYPE. S-European.

Cydia ulicetana (Haworth, [1811])

MATERIAL EXAMINED. Nebrodi2: 1 male, 2.VI.2000. Piana di Catania1: 1 male, 26.IV.1998. Piana di Catania3: 1 male, 2.III.1999; 1 male, 26.III.1999. Iblei2: 4 males, 26.IV.1997; 1 male, 2.V.1999.

DISTRIBUTION. Known from British Is, Germany, France and former USSR countries, in southern Europe recorded from Iberian Peninsula, Italy and Malta. Also Turkey and N Africa. (Italy: N, C, S, Sa; new to the Sicilian fauna).

CHOROTYPE. European with Anatolian-Maghreb extension.

Cydia derrai Pröse, 1988

MATERIAL EXAMINED. Etna30: 1 female, 5.IX.2001. Piana di Catania5: 1 female, no data.

DISTRIBUTION. Known only from Corsica and Italy. (Italy: C, Sa; new to the Sicilian fauna).

CHOROTYPE. Tirrenic endemic.

Cydia trogodana Pröse, 1988

MATERIAL EXAMINED. Lipari: 1 female, 20-27.V.1972. Etna2: 1 female, 17.VII.1991; 1 male, 21.V.1996; 1 male, 21.VI.1996. Etna5: 1 female, 12.IX.1996. Etna19: 10 males and 5 females, 13.VI.2002. Etna24: 1 male, 19.VIII.2001. Etna32: 2 females, 4.VIII.1998. Etna34: 1 male and 1 female, 4.VII.1994. Etna35: 1 female, 12.VI.2008; 1 male, 14.VI.2008. Etna40: 1 male, 15.VI.2008. Etna42: 1 female, 23.V.1949. Etna46: 1 male, 17.VI.2008. Etna50: 1 female, 15.VIII.1949. Etna51: 1 male, 4.VII.1948. Etna52: 1 male, 29.VIII.1949. Etna53: 1 female, 18.VI.1996. Etna68: 1 male, 19.VII.1999. Etna70: 1 female, 3.VIII.1994. Etna75: 1 female, 12.VI.2002. Etna82: 1 male, 16.VIII.1993; 3 males, 26.VII.1994. Iblei17: 1 male, 29.IV.1998.

DISTRIBUTION. Europe (Spain, Italy, Greece and Crete) and Cyprus. (Italy: S, Si).

CHOROTYPE. Mediterranean.

Cydia conicolana Heylaerts, 1874

MATERIAL EXAMINED. Etna68: 1 female, 12.VI.1997.

DISTRIBUTION. Known from Western part of the region, from Spain and British Is to Greece, Asia Minor and Caucasus. (Italy: C, Si).

CHOROTYPE. European with Anatolian-Caucasian extension.

Cydia pomonella (Linnaeus, 1758)

MATERIAL EXAMINED. Peloritani1: 1 female, 21.VII.1996; 1 male, 26.VII.1996; 1 female, 21.VIII.1996. Nebrodi4: 2 females, 27.VIII.1995. Etna32: 1 male, 4.VIII.1998. Etna78: 1 male, 3.VII.1995. Piana di Catania6: 1 male, 12.V.1996. Agrigento2: 1 female, 5.VII.1996. Iblei12: 1

male, 26.VI.1992; 2 males, 20.VII.1995. Iblei17: 1 female, 15.V.1999. Iblei18: 1 male, 6.IX.2020.

DISTRIBUTION. Covers the area of distribution of wild apple-tree, Europe, Asia, NS-America, Australia and New Zealand. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Cosmopolitan.

Cydia pyrivora Danilevsky, 1947

MATERIAL EXAMINED. Nebrodi5: 1 female, 11.VIII.1993. Etna62: 1 female, 14.V.2001.

DISTRIBUTION. Known from Europe, excluded northern parts, as far as Transcaucasia, Asia Minor, N Syria, Siberia, Uzbekistan and Thian Shan in Asia; also Algeria. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Centralasiatic-European-Mediterranean.

Cydia leguminana Lienig & Zeller, 1846

MATERIAL EXAMINED. Nebrodi2: 1 male, 2.VI.2000.

DISTRIBUTION. Palaearctic region: N Africa, Europe, Asia Minor, Kazakhstan, S Siberia, NW China, Korea and Russian Far East (Kamchatka). (Italy: N; new to the Sicilian fauna).

CHOROTYPE. Palaearctic.

Cydia triangulella (Goeze, 1783)

MATERIAL EXAMINED. Peloritani2: 1 male, 9.IX.2020. Nebrodi2: 1 female, 4.VIII.1997. Nebrodi4: 1 male and 1 female, 27.VIII.1999. Nebrodi6: 6 males and 1 female, 10.IX.2020. Etna2: 1 female, 28.IX.1992; 1 male, 9.X.1992. Etna5: 1 male, 19.IX.1995; 1 female, 12.IX.1996; 1 male, 20.VIII.1999. Etna15: 4 males and 3 females, 5.IX.2020. Etna22: 1 male, 11.III.1994; 1 male and 1 female, 17.IX.1994. Etna23: 7 males and 1 female, 8.IX.2020. Etna30: 4 males and 6 females, 15.IX.1994; 1 female, 3.VIII.1999. Etna33: 1 female, 31.VII.1996. Etna62: 1 female, 18.I.1995; 1 female, 8.VIII.1997. Etna68: 2 males and 1 female, 19.VIII.1999. Etna70: 1 female, 17.VI.1997; 1 male and 1 female, 2.VII.1997. Etna73: 1 male, 3.X.1994. Etna78: 1 male, 9.VI.1991; 1 female, 21.VIII.1992. Etna82: 1 male and 1 female, 16.VIII.1993; 1 male, 3.X.1995. Iblei18: 1 male, 6.IX.2020.

DISTRIBUTION. Palearctic region till Japan, its area covers that of oaks. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Palaearctic.

Cydia fagiglandana (Zeller, 1841)

MATERIAL EXAMINED. Peloritani1: 1 male: C. Ferrera, 21.VIII.1996. Nebrodi4: 1 male, 27.VIII.1995. Nebrodi5: 4 males, 3.VIII.1992; 1 male and 1 female, 11.VII.1993; 1 male, 23.VII.1993. Etna2: 1 male, 21.VII.1993. Etna3: 1 male, 15.VIII.1991. Etna5: 1 male, 20.VIII.1999. Etna22: 1 male, 28.VII.1992; 2 males, 18.VIII.1995. Etna23: 4 males and 1 female, 8.IX.2020. Etna30: 1 male and 1 female, 15.IX.1994; 1 female, 4.X.1994. Etna64: 1 male, 6.VII.1997. Etna70: 1 male, 2.VII.1997. Etna78: 1 male, 21.VIII.1992; 1 female, 28.VII.2000. Agrigento1: 6 males and 1 female, 11.IX.2020. Iblei3: 1 female, 24.VIII.1995. Iblei13: 1 male, 20.VIII.1995. Iblei18: 15 males and 2 females, 6.IX.2020.

DISTRIBUTION. Europe, Madeira, NW-Africa, Asia Minor, Syria, Iran, and Caucasus. (Italy: N, C, S, Si, Sa).

CHOROTYPE. W-Palaearctic.

Cydia magnesia Trematerra and Colacci, 2017

MATERIAL EXAMINED. Agrigento1: 2 males, 11.IX.2020. Iblei18: 1 male, 6.IX.2020.

DISTRIBUTION. Europe: Greece. New to the Italian fauna.

CHOROTYPE. Mediterranean.

DIAGNOSIS. Externally *Cydia magnesia* looks like *Grapholita funebrana* (Treitschke), but in the genitalia it is similar to *Cydia fagiglandana* (Zeller). From the latter species it differs by the conformation of valvae, the caudal angle of the sacculus, by cucullus and by aedeagus having basal part enlarged. The female genitalia differ by the post-ostial part of the sterigma, the cingulum being elongated, the presence of a weak sclerite at base of ductus seminalis, and by the absence of a diverticulum (Trematerra and Colacci, 2017) (Figures 17-18).

BIOLOGY. Moths collected in June and September. Larval foodplant unknown (Trematerra and Colacci, 2017).

Cydia amplana (Hübner, [1796-1799])

MATERIAL EXAMINED. Peloritani1: 1 male, 21.VIII.1996. Etna23: 4 males

and 5 females, 8.IX.2020. Etna30: 3 males and 3 females, 15.IX.1994. Etna32: 1 male, 13.IX.1991. Etna74: 1 male, 28.IX.1995.
DISTRIBUTION. W Palaearctic species known from whole Europe, included British Islands and Sweden; Transcaucasia; Asia Minor and Syria. Bound rather with southern territories. (Italy: N, C, S, Si, Sa).
CHOROTYPE. Turano-European.

Cydia inquinatana (Hübner, [1796-1799])

MATERIAL EXAMINED. Nebrodi5: 1 male, 21.VI.1992; 1 male, 11.VII.1993.
DISTRIBUTION. Known from Sweden, Finland, Norway, Russia (St Petersburg), Central and Southern Europe, as far as to lower Volga River territory, Crimea and Caucasus. (Italy: N, C, S, Si).
CHOROTYPE. Europeo-Anatolic.

Lathronimpha balearici Diakonoff, 1972

MATERIAL EXAMINED. Peloritani1: 1 male, 26.VII.1996. Etna70: 1 male, 17.VI.1997. Iblei13: 2 males, 23.XI.1994.
DISTRIBUTION. Europe (Estonia, Spain, Italy and Greece). (Italy: C, S; new to the Sicilian fauna).
CHOROTYPE. European.

Selania leplastriana (Curtis, 1831)

MATERIAL EXAMINED. Etna2: 1 female, 6.IX.1997. Etna63: 1 female, 21.IV.1996. Iblei16: 1 male, VIII.1992.
DISTRIBUTION. A West Palaearctic species known from Madeira, N Africa, Europe included Great Britain and Sweden, also Asia Minor. (Italy: N, C, S, Si, Sa).
CHOROTYPE. Turano-European-Mediterranean.

Selania capparidana (Zeller, 1844)

MATERIAL EXAMINED. Pantelleria: 1 male, 20.IV.2019; 2 females, 20.VII.2021.
DISTRIBUTION. North Africa and SW Europe (Spain to Greece). (Italy: N, S, Si, Sa).
CHOROTYPE. Mediterranean.

Grapholita pallifrontana Lienig and Zeller, 1846

MATERIAL EXAMINED. Piana di Catania2: 1 male, 22.VI.1999. Piana di Catania3: 1 male, 22.VI.1999. Piana di Catania8: 1 male, 12.III.2000.
DISTRIBUTION. A Palaearctic species distributed from W Europe included British Is and S Scandinavia through Siberia to Far East (S Primorsk); also Asia Minor, Caucasus, Transbaikal and Japan. (Italy: N, C, S; new to the Sicilian fauna).
CHOROTYPE. Asiatic-European.

Grapholita lunulana ([Denis and Schiffmüller], 1775)

MATERIAL EXAMINED. Etna22: 1 female, 27.IV.1998. Etna67: 2 males, 9.V.1995.

DISTRIBUTION. W and C parts of Palaearctic region: Entire Europe as far as Karelia and Ural Mts. Also C-N Africa, Asia Minor, Caucasus, mountains of C Asia as far as Altaj. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Centralasiatic-European-Mediterranean.

Grapholita orobana Treitschke, 1830

MATERIAL EXAMINED. Etna43: 1 female, 5.V.1949. Etna61: 1 male, 1.V.1998.
DISTRIBUTION. Europe (excluded Portugal and Ireland), Asia Minor, Transcaucasia, N-Iran, Kazakhstan, Russian Far East and Siberia. (Italy: N, C, S, Si).
CHOROTYPE. Sibero-European.

Grapholita janthinana (Duponchel, 1835)

MATERIAL EXAMINED. Iblei6: 4 females, 16.VI.1999.
DISTRIBUTION. Europe, Asia Minor, Crimea, Transcaucasia and Kazakhstan. (Italy: N, C, S, Si, Sa).
CHOROTYPE. Turano-European.

Pammene querceti Gozmány, 1957

MATERIAL EXAMINED. Iblei18: 2 males, 6.IX.2020.
DISTRIBUTION. Known from Europe (Czech Republic, Slovakia, France, Austria, Italy, Hungary and former Yugoslavia). (Italy: C, S; new to the Sicilian fauna).
CHOROTYPE. S-European.

Pammene giganteana (Peyerimhoff, 1863)

MATERIAL EXAMINED. Nebrodi7: 1 male, 3.IV.1997.
DISTRIBUTION. Distributed in Europe from British islands, S-Scandinavia and Italy to E-Europe. (Italy: N, C, S, Si).
CHOROTYPE. European.

Pammene obscurana Stephens, 1834

MATERIAL EXAMINED. Etna28: 1 female, 18.IV.1999.
DISTRIBUTION. Palaearctic region: Europe, Siberia, Kazakhstan, Mongolia, Amur Region in the Russian Far East and Japan. (Italy: N, S; new to the Sicilian fauna).
CHOROTYPE. Asiatic-European.

Pammene rhediella (Clerck, 1759)

MATERIAL EXAMINED. Nebrodi3: 1 female, 4.VI.1999.
DISTRIBUTION. W Palaearctic: Europe north to Scotland, S-Scandinavia and Karelia; Asia Minor, Transcaucasia, mountains of Turkmenia, and Central Asia. (Italy: N, C, S, Si).
CHOROTYPE. Centralasiatic-European.

Pammene castanicola Trematerra, 2009

MATERIAL EXAMINED. Nebrodi4: 1 male, 4.VIII.1997. Nebrodi5: 1 male and 1 female, 3.VIII.1992. Etna31: 3 males, 26.IV.2007.
DISTRIBUTION. Known only for Sicily. (Italy: Si).
CHOROTYPE. Sicilian endemic.



Figures 17-18. *Cydia magnesiae* Trematerra and Colacci, 2017 (wing) (17); male genitalia (18).

DIAGNOSIS. Adult - Wingspan 14-18 mm (Figure 19). Ground color of forewing white forming a large dorsal patch extending almost to subapical area where tinged creamy; costal strigulae grey divided with brown-grey; speculum cream ochreous with black inner spots and silvery lines. Remaining area of wing suffused and strigulated grey or brownish grey, paler to dorsal patch than beyond it where grey brown with some black spots. Terminal part of wing with brownish-black or ochreous Change "soffusions" with: suffusions. Cilia brownish grey. Hindwing brownish paler in basal area or brown. Cilia whitish, brownish at apex. In male genitalia it is similar to *P. fasciana*, the differences are small (Trematerra and Clausi, 2009) (Figure 20).

Female. Postostial plate of sterigma concave with lateral edges limited by ribs; anteostial part slender; median portion cup-shaped fused with colliculum; this last often with dorsal V-shaped sclerite and median sclerite; ductus bursae very short; cingulum usually extending in middle distally; ductus seminalis broad basally originating at base of ductus bursae; signa well developed. Seventh sternite more or less elongate postero-lateral corners limited from concavities by well sclerotized ribs (Figure 21).

BIOLOGY: Larva found in October-April in fruits of *Castanea sativa*. Pupa in March-May. Adults in flight from April till August.

***Strophedra weirana* (Douglas, 1850)**

MATERIAL EXAMINED. Nebrodi5: 1 male, 3.VIII.1992.

DISTRIBUTION. A West Palaearctic specie known from Europe, Caucasus and Asia Minor. (Italy: N, C, S; new to the Sicilian fauna).

CHOROTYPE. European with Anatolian-Caucasian extension.

***Dichrorampha acuminatana* (Lienig and Zeller, 1846)**

MATERIAL EXAMINED. Etna5: 5 males, 19.IX.1995. Etna59: 1 male and 1 female, 5.IX.1995. Etna60: 1 male and 1 female, 8.IX.1995.

DISTRIBUTION. West Palaearctic species known from Spain (British Is and Scandinavia included) to Karelia and Crimea; also Morocco and Asia Minor. Reported from N America. (Italy: N, C, S, Si, Sa).

CHOROTYPE. Holarctic.

***Dichrorampha gemellana* (Zeller, 1847)**

MATERIAL EXAMINED. Peloritani1: 1 male, 21.VIII.1996. Etna22: 1 female, 2.X.1993; 1 male, 5.X.1994. Etna23: 1 male, 8.IX.2020. Etna24: 1 male and 1 female, 27.VIII.1996; 1 male, 30.VIII.1996. Etna30: 1 male, 4.X.1994. Etna34: 7 males and 7 females, 4.VII.1994. Etna44: 1 male, 17.VIII.1948. Etna52: 2 males and 1 female, 29.VII.1949. Etna63: 1 male, 13.IV.1994. Etna74: 1 female, 28.IX.1994.

DISTRIBUTION. Known from Europe (France, Corsica and Italy). (Italy: N, S, Si, Sa).

CHOROTYPE. Tirrenic.

***Dichrorampha flavidorsana* Knaggs, 1867**

MATERIAL EXAMINED. Etna80: 1 female, 18.VIII.2000. Etna82: 1 male, 16.VIII.1993.

DISTRIBUTION. Europe, from Spain to Russia, W and S-Siberia. (Italy: N, C, S, Si).

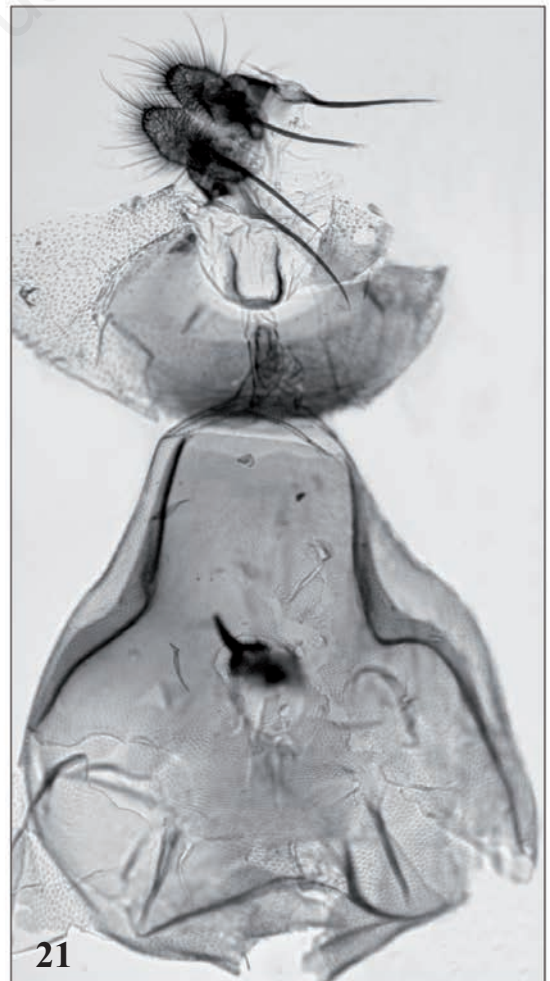
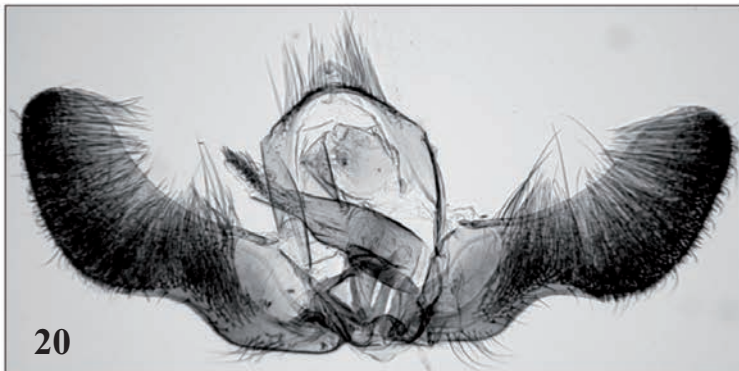
CHOROTYPE. Sibero-European.

***Dichrorampha klimeschiana* Toll, 1955**

MATERIAL EXAMINED. Etna19: 6 males and 6 females, 13.VI.2002. Etna26: 1 male, 4.VII.1948. Etna34: 2 male, 4.VII.1994. Etna38: 1 male, 18.VI.2008. Etna45: 1 male, 19.VI.2008.

DISTRIBUTION. In Europe known from Italy and former USSR countries; also Kazakhstan, S Siberia and Russian Far East. (Italy: N, S, Si).

CHOROTYPE. Sibero-European.



Figures 19-21. *Pammene castanicola* Trematerra, 2009 (wing) (19); male genitalia (20); female genitalia (21).

Considerations on the Tortricidae fauna collected in Sicily

A list of 155 species of Lepidoptera Tortricidae collected in Sicily is reported. The two most numerous tortricids subfamilies recorded are the Olethreutinae and Tortricinae, which has 84 species and 70 species, respectively; the subfamily Chlidanotinae is represented by 1 species. Species belonging to almost all the tribes cited in the Italian fauna (Trematerra, 2003) have been found (Tortricini with 10 species, Cochylini 26, Cnephasiini 18, Archipini 16, Polyorthini 1, Bactrini 5, Olethreutini 12, Enarmoniini 1, Eucosmini 33, and Grapholitini 33), with the exception of the members of the tribes Sparganothini and Euliini.

Referring to the individual localities, in Lipari Island were collected 2 specimens, in Vulcano Island 1, on Erei Mounts 1, on Etna Mount 93, on Iblei Mounts 50, on Madonie Mounts 9, on Nebrodi Mounts 46, on Peloritani Mounts 23, in Piana di Catania 20, Agrigento area 10, and in Pantelleria Island 4.

Phtheochroa ochralana and *Cydia magnesia* are new to Italian fauna; *Fulvoclysia forsteri* and *Tortricodes selma* are recorded for first time in Europe. The females of *Thiodia major* and *Pammene castanicola* are described. The following species are cited for first time in Sicily: *Acleris hastiana*, *A. notana*, *Cochylidia rupicola*, *C. moguntiana*, *Cochylis sannitica*, *Eana joannisi*, *E. italica*, *Cnephasia fulgurata*, *Archips betulanus*, *A. crataeganus*, *Pandemis cerasana*, *Olindia schumacherana*, *Epinotia dalmatana*, *Eucosma obumbratana*, *Epiblema cirasianum*, *E. graphanum*, *Cydia medicaginis*, *C. cythisantana*, *C. ulicetana*, *C. derrai*, *C. leguminana*, *Lathronimpha balearici*, *Grapholita pallifrontana*, *Pammene querceti*, *P. obscurana*, and *Strophedra weirana* (Kocak, 1991; Trematerra, 2003; Razowski, 2009; Aarvik, 2013; Trematerra and Clausi, 2009; Trematerra and Colacci, 2017).

A biogeographic study on the Tortricidae found in Sicily and here reported, using chorological analysis, was carried out. More than 60% of the species show a wide Palaearctic distribution; in this grouping, the species with the chorotypes Asiatic-European (11.0%), Palaearctic (9.7%), W-Palaearctic and Turano-European (6.5%), Centralasiatic-European (5.2%), Sibero-European and Centralasiatic-European-Mediterranean (4.5%) are well represented. A few of the other chorotypes have percentages from 1.9% to 0.6%. About of 11% of the collected taxa are tortricids with European distribution; the elements belonging to this chorotype show mostly S-European (5.2%) and European (4.5%) distribution. The Mediterranean taxa are shown by 10.3% of the recorded species including Mediterranean (6.5%) and Tirrenic (1.9%). Holarctic and Cosmopolitan and Subcosmopolitan distributions are represented by 9.7% and 5.8% respectively. Furthermore, three species are Endemic Italian species.

Below are the data referring to the macro areas with the greatest number of species.

Peloritani Mounts. More than 52% of the species show a wide Palaearctic distribution (52.2%), the taxa with the chorotypes Turano-European (17.4%), Palaearctic (13%) and Asiatic-European (13%) are well represented in this grouping. In the chorological category of Cosmopolitan and Subcosmopolitan distribution (with 17.4%), cosmopolitan species are 13%. Of the species with European distribution (13.0%) more than 8% are European and 4.3% are SW-European. With Mediterranean distribution (8.7%) are included Mediterranean and Tirrenic species with 4.3% each. Species with Holarctic distribution are 8.7%.

Nebrodi Mounts. In this locality wide part of species show a Palaearctic distribution 65.2%, with Palaearctic 17.4% and Asiatic-European 10.9%; the other taxa have Cosmopolitan and

Subcosmopolitan distribution 10.9% in which Subcosmopolitan are 6.5%, Holarctic distribution 13.0%, Mediterranean and European distributions 4.3%, each.

Etna Mount. More than 55% have wide Palaearctic distribution, with Asiatic-European 11.8% and Palaearctic 9.7%. European distribution (14.0%), with European (5.4%) and S-European (5.4%). Holarctic distribution (10.8%). Mediterranean distribution (9.7%), of which Mediterranean 6.5%. Cosmopolitan and Subcosmopolitan distribution (7.5%). Two are Endemic Italian species.

Piana di Catania. About 57% of listed taxa have wide Palaearctic distribution, with Asiatic-European (10.5%) and Centralasiatic-European-Mediterranean 10.5%. The other species are of Cosmopolitan and Subcosmopolitan distribution (26.3%). Holarctic distribution (5.3%). S-European distribution and Tirrenic distribution each have 5.3%.

Iblei Mounts. Species collected in this area have wide Palaearctic distribution (58%), with W-Palaearctic (12%) and Palaearctic (8%). Cosmopolitan distribution (10%). Holarctic distribution (12%). Mediterranean distribution (8%), and S-European distribution (4%). Two are Endemic Italian species.

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