

New records of Tortricidae from south Italy (Insecta: Lepidoptera)

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Abstract

We report new records for ninety-one species of Lepidoptera Tortricidae from southern Italy and Sicily. Twelve species are new to the fauna of the Basilicata region, twelve from Calabria and one from Sicily. One species is new for the Italian fauna: *Bactra simpliciana* Chrétien, 1915. We provide information on DNA barcodes and chorotypes for all species.

Keywords: Insecta, Lepidoptera, Tortricidae, new data, fauna, DNA barcoding, Italy.

Nuevos registros de Tortricidae en el sur de Italia (Insecta: Lepidoptera)

Resumen

Reportamos nuevos registros de noventa y una especies de Lepidoptera Tortricidae del sur de Italia y Sicilia. Doce especies son nuevas en la fauna de la región de Basilicata, doce de Calabria y una de Sicilia. Una especie es nueva para la fauna italiana: *Bactra simpliciana* Chrétien, 1915. Proporcionamos información sobre los códigos de barras de ADN y los corotipos de todas las especies.

Palabras clave: Insecta, Lepidoptera, Tortricidae, nuevos datos, fauna, código de barras de ADN, Italia.

Nuove registrazioni di Tortricidae dall'Italia meridionale (Insecta: Lepidoptera)

Riassunto

Vengono riportati nuovi dati per novantuno specie di Lepidotteri Tortricidae dell'Italia meridionale e della Sicilia. Dodici specie sono nuove per la fauna della regione Basilicata, dodici per la Calabria e una per la Sicilia. Una specie è nuova per la fauna italiana: *Bactra simpliciana* Chrétien, 1915. Per tutte le specie vengono fornite informazioni sul DNA barcoding e sui corotipi.

Parole chiave: Insecta, Lepidoptera, Tortricidae, nuovi dati, fauna, DNA barcoding, Italia.

Introduction

Several contributions have been made regarding the family Tortricidae (Lepidoptera) of Calabria (southern Italy). Trematerra (1990, 1991) provided information on the Pollino mountains, while Trematerra et al. (1994) focused on a chestnut-growing area of the Sila Massif. Baldizzzone and Scalercio (2018) collected some species in the Aspromonte Massif and the estuary of river Amendolea. Trematerra et al. (2018)

summarised the knowledge of Calabrian tortricids, specifically those from the northern part of the Pollino and Sila mountains, citing 181 species, many of which are of biogeographical interest. Trematerra et al. (2023) presented additional investigations on the Sila Massif and surrounding area. This report presents the findings of a study conducted on specimens collected from 2013 to 2023 in the Calabrian, Basilicata, and Sicily and adds genetic data (COI barcoding) for all investigated species.

Material and Methods

The material was identified morphologically and confirmed molecularly through the BOLD Identification Engine by DNA barcoding (COI 5'), following the Canadian Centre for DNA Barcoding protocol (Ratnasingham and Hebert, 2007). Intraspecific and interspecific distances were assessed for the specimens using the distance synthesis tool available among the sequence analysis options in BOLD Systems. Barcode Index Numbers (BINs) are provided for each species. When more BINs are available for a given species, records belonging to a different BIN were separated accordingly.

For each species, the text provides information on the region, province, municipality, and collection site, including the altitude above sea level and geographical coordinates, Distribution in Italy and Chorotype. Additionally, the date of collection, number of specimens collected, name(s) of the collector(s), and BOLD specimen ID number are indicated.

The genitalia of specimens were prepared using standard methods, where the abdomen was macerated in 10% KOH and sectioned under a stereoscopic microscope. Male and female genitalia were then separated and mounted in Euparal on a slide. New species for one or more locations under study are marked by an asterisk. The chorotype of each species was determined based on Vigna Taglianti et al. (1992, 1999).

The specimens studied were from the following collections:

CREA-FL: Collection of the Research Centre for Forestry and Wood (Rende, Italy);
ZSM (SNSB): Bavarian State Collection of Zoology (Munich, Germany).

TORTRICIDAE TORTRICINAE Cochylini

**Cochylis flaviciliana* (Westwood, 1854)

Records: Calabria, Mt. Pollino, 0.8 km SW Gipfel, 2000 m, 39.9012°N-16.1811°E, 1 ♂, 09-VIII-2017, leg. A. Hausmann, BC ZSM Lep 101644 (SNSB-ZSM).

Genetic Data - Bin: Bold:ADR8529; intra-BIN variation (maximum distance): 0.64%; nearest neighboring BIN: *Cochylis flaviciliana* (1.27%) (intraspecific BIN-split).

Distribution in Italy: Reported in northwestern Italy, central Italy, Sicily and Sardinia. **New for Calabria.**
Chorotype: West Palaearctic.

**Cochylidia rupicola* (Curtis, 1834)

Records: Calabria, Cosenza, 1.5 km E Orsomarso F. Argentino, 140 m, 39.7946°N-15.9234°E, 1 ♂, 22-VIII-2018, leg. A. Hausmann, BC ZSM Lep 104339 (SNSB-ZSM); Basilicata, Piano dei Peri/ Trecchina, 280 m, 39.9913°N-15.1938°E, 1 ♀, 24-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85029 (SNSB-ZSM).

Genetic Data - Bin: Bold:AAJ6914; intra-BIN variation (maximum distance): 0.8%; nearest neighboring BIN: *Cybillia hubbardana* (Busck) (6.12%).

Distribution in Italy: Present in most regions. **New for Basilicata.**
Chorotype: Turano-European.

Cochylidia heydeniana (Herrich-Schäffer, 1851)

Records: Calabria, Rende, 205 m, 39.3675°N-16.2282°E, 1 ♂, 21-IV-2022, leg. S. Scalercio, LEP-SS-05574 (CREA-FL).

Genetic Data - Bin: BOLD:AAD7781; intra-BIN variation (maximum distance): 2.36%; nearest neighboring BIN: *Cochylidia implicitana* (Wocke) (3.05%).

Distribution in Italy: Present in various regions.

Chorotype: Trans-Palaearctic.

Cochylimorpha straminea (Haworth, 1811)

Records: Basilicata, 3 km S Trecchina, Mte. S. Maria, 1035 m 40.0038°N-15.7682°E, 2 exx. (1 ♀, BC ZSM Lep 59320; 1 ♂, BC ZSM Lep 59321) 05-IX-2016, leg. A. Hausmann (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAJ0624; intra-BIN variation (maximum distance): 1.28%; nearest neighboring BIN: unidentified *Cochylimorpha* species (1.92%).

Distribution in Italy: Present in several regions.

Chorotype: Centralasiatic-European-Mediterranean.

Cochylimorpha scalerciana (Trematerra, 2019)

Records: Calabria, Sila, Vivaio Sbanditi (CS), 1351 m, 39.3889°N-16.6022°E, 1 ♂, 18-VI-2015, leg. Scalercio and Infusino, LEP-SS-00831 (CREA-FL).

Genetic Data - Bin: BOLD:ADN5386; intra-BIN variation (maximum distance): N/A (only one barcode on BOLD); nearest neighboring BIN: *Cochylimorpha alternana* (Stephens) (6.83%).

Distribution: Calabria: various locations of the Sila mountains, Cosenza (Trematerra, 2019a).

Distribution in Italy: So far, recorded only for Calabria.

Chorotype: South-Apenninic.

Cochylimorpha decolorella (Zeller, 1839)

Records: Calabria, Marcellinara, 260 m, 38.9188°N-16.5035°E, 1 ♂, 2-IV-2019, leg. S. Scalercio, LEP-SS-05341 (CREA-FL).

Genetic Data - Bin: BOLD:ADM4859; intra-BIN variation (maximum distance): 0.17%; nearest neighboring BIN: "*Cochylimorpha decolorella*" (3.69%), the large split into two BINs requiring further integrative study.

Distribution in Italy: Recorded in Tuscany, Latium, Calabria, Sicily, and Sardinia

Chorotype: Mediterranean.

Neocochylis hybridella (Hübner, [1813])

Records: Basilicata, Potenza, S. p. Mad. di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 2 exx. (1 ♀, BC ZSM Lep 104321; 1 ♂, BC ZSM Lep 104344), 31-VIII-2018, leg. A. Hausmann (SNSB-ZSM), 1 ♂, 09-VIII-2019, leg. A. Hausmann, BC ZSM Lep 109587 (SNSB-ZSM); Basilicata, Mt. Sirino N, Felswand, 1390 m, 40.16°N-15.84°E, 1 ♂, 29-VIII-2013, leg. A. Hausmann, BC ZSM Lep 78448 (SNSB-ZSM); Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 1 ♀, 27-VIII-2023, leg. A. Hausmann, BC_ZSM_Lep_119173 (SNSB-ZSM); Calabria, Sila, 1 km N Lg. Ariamacina, 1390 m, 39.3434°N-16.5435°E, 1 ♂, 25-VIII-2016, leg. A. Hausmann, BC ZSM Lep 94679 (SNSB-ZSM); Calabria, Simeri-Crichi, 425 m, 38.9567°N-16.6489°E, 1 ♂, 05-IX-2019, leg. S. Scalercio, LEP-SS-05271 (CREA-FL); Calabria, San Fili, 740 m, 38.9567°N-16.6489°E, 1 ♂, 25-VI-2015, leg. S. Scalercio & M. Infusino LEP-SS-05273 (CREA-FL).

Genetic Data - Bin: BOLD:AAJ0623; intra-BIN variation (maximum Distance): 1.62%; nearest neighboring BIN: *Neocochylis dubitana* (Hübner) (4.1%).

Distribution in Italy: Present in Calabria, this species has been reported primarily in northern and central Italy.

Chorotype: Turano-European.

**Neocochylis sannitica* (Trematerra, 1995)

Records: Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 1 ♀, 27-VIII-2023, leg. A. Hausmann, BC_ZSM_Lep_119140 (SNSB-ZSM); Calabria, Sellia, 161 m, 38.9586°N-16.6192°E, 1 ♂, 24-VII-2019, leg. S. Scalercio, LEP-SS-05270 (CREA-FL).

Genetic Data - Bin: BOLD:ADL5171; intra-BIN-variation (maximum Distance): 0.16%; nearest

neighboring BIN: *Neocochylis salebrana* (Mann) (4.01%).

Distribution in Italy: Collected only in central and southern Italy. **New for Calabria.**

Chorotype: East-Mediterranean.

Pontoturania posterana (Zeller, 1847)

Records: Basilicata, Mt. Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 09-VIII-2019, leg. A. Hausmann, BC_ZSM_Lep_109567 (SNSB-ZSM); Basilicata, 3 km S Trecchina, Mte. S. Maria, 40.0038°N-15.7682°E, 1 ♀, 05-IX-2016, leg. A. Hausmann, BC_ZSM_Lep_59325 (SNSB-ZSM); Calabria, Cosenza, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 1 ♀, 22-VIII-2021, leg. A. Hausmann, BC_ZSM_Lep_114889 (SNSB-ZSM), 1 ♂, 07-IX-2021, leg. A. Hausmann, BC_ZSM_Lep_115110 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAO2590; intra-BIN variation (maximum distance): 1.28%; nearest neighbor: "*Pontoturania posterana*" (4.01%), the large split into two BINs requiring further integrative study.

Distribution in Italy: Present in most regions.

Chorotype: Palaearctic.

Agapeta zoegana (Linnaeus, 1767)

Records: Calabria, S. p. Mad. Di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 09-VIII-2019, leg. A. Hausmann, BC_ZSM_Lep_109586 (SNSB-ZSM); Calabria, Sila, 1 km N Lg. Ariamacina, 1390 m, 39.3434°N-16.5435°E, 1 ♂, 25-VIII-2016, leg. A. Hausmann, BC_ZSM_Lep_94675 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACJ6816; intra-BIN variation (maximum distance): 1.77%; nearest neighboring BIN: "*Agapeta zoegana*" (3.89%), the large split into two BINs requiring further integrative study.

Distribution in Italy: Present in most regions.

Chorotype: Europe-Asia Minor.

**Aethes rubigana* (Treitschke, 1830)

Records: Basilicata, S. p. Mad. Di Sirino, 3 km E Lagonegro, 1065 m, 40.119°N-15.802°E, 1 ♂, 27-VII-2020, leg. A. Hausmann, BC_ZSM_Lep_111819 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC2885; intra-BIN variation (maximum distance): 2.25%; nearest neighboring BIN: *Aethes kyrkii* Itamies and Mutanen (3.66%).

Distribution in Italy: Present throughout Italy. **New for Basilicata.**

Chorotype: European-Mediterranean.

Aethes francillana (Fabricius, 1794)

Records: Calabria, Praia a Mare Ort, 10 m, 39.8933°N-15.7827°E, 1 ♂, 08-VI-2023, leg. A. Hausmann, BC_ZSM_Lep_118628 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAP7561; intra-BIN variation (maximum distance): 1.44%; nearest neighboring BIN: unidentified *Aethes* species (3.3%).

Distribution in Italy: Present in most regions.

Chorotype: West-Palaearctic.

Aethes williana (Brahm, 1791)

Records: Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 1 ♂, 01-VI-2023, leg. A. Hausmann, BC_ZSM_Lep_118633 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAF5281; intra-BIN variation (maximum distance): 2.09%; nearest neighboring BIN: *Aethes margarotana* (Duponchel) (2.37%).

Distribution in Italy: Present throughout Italy.

Chorotype: Palaearctic.

Phtheochroa rugosana (Hübner, [1799])

Records: Basilicata, Mt. Sirino, 3km E Lagonegro, 1065 m, 40.119°N-15.802°E, 1 ♀, 11-VI-2022, leg. A. Hausmann, BC_ZSM_Lep_116368 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAL5376; intra-BIN variation (maximum distance): 2.09%; nearest

neighboring BIN: *Phtheochroa annae* Huemer (4.3%).

Distribution in Italy: Mentioned only in some regions of north-western Italy and Calabria.

Chorotype: European.

Phtheochroa duponchelana (Duponchel, 1843 in Godart)

Records: Calabria, Praia a Mare Ort, 10 m, 39.8933°N-15.7827°E, 1 ♂, 08-VI-2023, leg. A. Hausmann, BC_ZSM_Lep_118620 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAL5363; intra-BIN variation (maximum distance): 1.12%; nearest neighboring BIN: *Phtheochroa accurata* Tsvetkov (5.13%).

Distribution in Italy: Found only in a few regions in central and southern Italy.

Chorotype: Mediterranean.

Phalonidia contractana (Zeller, 1847)

Records (BIN BOLD:ACJ7428): Calabria, S. Domenica Talao, 5 km E Scalea, 240 m, 39.821°N-15.783°E, 1 ♀, 19-VIII-2013, leg. A. Hausmann, BC_ZSM_Lep_78455 (SNSB-ZSM).

Records (BIN BOLD:ADZ8563): Calabria, Praia a Mare Ort, 10 m, 39.8933°N-15.7827°E, 1 ♀, 08-VI-2023, leg. A. Hausmann, BC_ZSM_Lep_118629 (SNSB-ZSM).

Genetic Data - Two BINs: BOLD:ACJ7428: intra-BIN variation (maximum distance): 0%; nearest neighboring BIN: unidentified *Phalonidia* species (2.88%) and BOLD:ADZ8563: intra-BIN variation (maximum distance): 0.48%; nearest neighboring BIN: *Phalonidia contractana* (1.6%).

Distribution in Italy: Present in most regions.

Chorotype: Centralasiatic-European-Mediterranean.

Cnephasiini

Eana penziana (Thunberg & Becklin, 1791)

Records: Calabria, Mt. Pollino, 0.8 km SW Gipfel, 2000 m, 39.9012°N-16.1811°E, 1 ♀, 09-VIII-2017, leg. A. Hausmann, BC_ZSM_Lep_101654 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ABV9984; intra-BIN variation (maximum distance) 0.48%; nearest neighboring BIN: *Eana nirvana* Joannis (3.04%).

Distribution in Italy: Cited in northern Italian regions, Abruzzo and Calabria.

Chorotype: Central-European.

Cnephasia cupressivorana (Staudinger, 1871)

Records: Basilicata, Fme Noce, Aue, nr. Parutta, 110 m, 40.0035°N-15.7983°E, 1 ♂, 15-IV-2018, leg. A. Hausmann, BC_ZSM_Lep_102410 (SNSB-ZSM); Basilicata, Fm Noce, Piano dei Peri/Trecchina, 280 m, 39.9914°N-15.7939°E, 1 ♀, 11-III-2019, leg. A. Hausmann, BC_ZSM_Lep_105177 (SNSB-ZSM), 1 ♂, 31-III-2016, leg. A. Hausmann, BC_ZSM_Lep_94145 (SNSB-ZSM); Calabria, Cosenza, 6 km S Cosenza, Pianette di Dipignano, 750 m, 39.2303°N-16.2497°E, 1 ♂, 01-V-2015 leg. G. Posa, BC_ZSM_Lep_91881 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAQ1950; intra-BIN variation (maximum distance): 1.26%; nearest neighboring BIN: *Cnephasia alticolana* (Herrich-Schäffer) (6.12%).

Distribution in Italy: Present in several regions.

Chorotype: Centralasiatic-European.

Cnephasia communana (Herrich-Schäffer, 1851)

Records: Basilicata, 3 km S Trecchina, Mte. S. Maria, 960 m, 40.005°N-15.778°E, 1 ♀, 15-VI-2022, leg. A. Hausmann, BC_ZSM_Lep_116372 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAI4103; intra-BIN variation (maximum distance): 1.61%; nearest neighboring BIN: *Cnephasia alfacarana* Razowski (3.68%).

Distribution in Italy: Widely distributed in Italy, absent from Sardinia.

Chorotype: Centralasiatic-European-Mediterranean.

Cnephasia longana (Haworth, 1811)

Records: Calabria, Praia a Mare Ort, 10 m, 39.8933°N-15.7827°E, 2 ♂, 17-VI-2022, leg. A. Hausmann, (BC_ZSM_Lep_116380, BC_ZSM_Lep_118624) (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC7742; intra-BIN variation (maximum distance): 2.08%; nearest neighboring BIN: *Cnephasia hellenica* Obraztov (4.65%).

Distribution in Italy: Present in northern, central and southern Italy.

Chorotype: Holarctic

**Cnephasia alticolana* (Herrich-Schäffer, 1849)

Records: Basilicata, 1.7 km N Mad. del Sirino, 1000 m, 40.1371°N-15.8175°E, 1 ♀, 28-VIII-2023, leg. A. Hausmann, BC_ZSM_Lep_118623 (SNSB-ZSM); Calabria, Longobucco, 1325 m, 39.3930°N-16.6149°E, 2 exx. (1 ♂, LEP-SS-05299; 1 ♀, LEP-SS-5300), 01-VI-2018, leg. S. Scalercio (CREA-FL); Calabria, Saracena, 1431 m, 39.7804°N-16.0675°E, 1 ♂, 06-VI-2016, leg. S. Scalercio, LEP-SS-05557 (CREA-FL).

Genetic Data - Bin: BOLD:ACF2531; intra-BIN variation (maximum distance): 0.96%; nearest neighboring BIN: *Cnephasia asseclana* ([Denis & Schiffermüller]) (1.39%).

Distribution in Italy: Found in northern and central Italy but absent in Sicily. **New record in Basilicata and Calabria.**

Chorotype: Sibero-European.

Cnephasia genitalana (Pierce & Metcalfe, 1915)

Records: Calabria, Porta Sole, 5 m, 38.4929°N-15.917°E, 1 ♂, 13-V-2018, leg. Domenico Bonelli, LEP-SS-00911 (CREA-FL).

Genetic Data - Bin: BOLD:AAC7742; intra-BIN variation (maximum distance): 2.08%; nearest neighboring BIN: *Cnephasia hellenica* Obraztov (4.65%).

Distribution in Italy: Present in several regions, not recorded in Sardinia.

Chorotype: European.

Cnephasia chrysanthæana (Duponchel, 1843)

Records: Calabria, Rende, 205 m, 39.3675°N-16.2282°E, 1 ♂, 15-V-2022, leg. S. Scalercio, LEP-SS-05573 (CREA-FL).

Genetic Data - Bin: BOLD:AEF6417; intra-BIN variation (maximum distance): 1.93%; nearest neighboring BIN: *Doloploca punctulana* ([Denis & Schiffermüller]) (6.10%).

Distribution in Italy: Present in several regions.

Chorotype: West-Palaeartic.

Tortricodes alternella ([Denis & Schiffermüller], 1775)

Records: Basilicata, Fm Noce, Piano dei Peri/Trecchina, 280 m, 39.9914°N-15.7939°E, 1 ♀, 11-III-2019, leg. A. Hausmann, BC_ZSM_Lep_105169 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAI0647; intra-BIN variation (maximum distance): 2.25%; nearest neighboring BIN: unidentified *Platynota* species (5.18%).

Distribution in Italy: Present in several regions, not recorded in Sardinia.

Chorotype: European.

**Pseudargyrotoza conwagana* (Fabricius, 1775)

Records (BIN: BOLD:AAC8984): Calabria, Cosenza, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 1 ♀, 20-VIII-2019, leg. A. Hausmann, BC_ZSM_Lep_109557 (SNSB-ZSM).

Records (BIN: BOLD:AAC8983): Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 1 ♂, 04-VI-2023, leg. A. Hausmann, BC_ZSM_Lep_118630 (SNSB-ZSM).

Genetic Data: Two BINs: BOLD:AAC8984: intra-BIN variation (maximum distance): 0.8%; nearest neighboring BIN: *Pseudargyrotoza conwagana* (2.98%) and BOLD:AAC8983: intra-BIN variation (maximum distance): 2.02%; nearest neighbor: *Pseudargyrotoza conwagana* (2.98%).

Distribution in Italy: It is widely distributed, not reported in Puglia. **New for Calabria.**

Chorotype: Palaearctic.

Tribe Grapholitini

Cydia triangulella (Goeze, 1783)

Records: Basilicata, 1.7 km N Mad. del Sirino, 1800 m, 40.1371°N-15.8175°E, 1 ♀, 28-VIII-2017, leg. A. Hausmann, BC ZSM Lep 101662 (SNSB-ZSM); Basilicata, Fm Noce, Piano dei Peri/Trecchina, 280 m, 39.991°N-15.794°E, 3 exx. (1 ♀, BC ZSM Lep 112100; 1 ♂, BC ZSM Lep 112104; 1 ♀, BC ZSM Lep 85026), 11-X-2020, leg. A. Hausmann (SNSB-ZSM); Basilicata, 3 km S Trecchina, Mte. S. Maria, 40.0038°N-15.7682°E, 1 ♀, 05-IX-2016, leg. A. Hausmann, BC ZSM Lep 59322 (SNSB-ZSM); Calabria, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 1 ♀, 07-VIII-2021, leg. A. Hausmann, BC ZSM Lep 114909 (SNSB-ZSM); Calabria, 2 km S Aieta, 670 m, 39.9123°N-15.8145°E, 1 ♀, 04-IX-2023, leg. A. Hausmann, BC_ZSM_Lep_119165 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC0640; intra-BIN variation (maximum distance): 3.75%; nearest neighboring BIN: *Cydia illutana* (Herrich-Schäffer) (5.6%).

Distribution in Italy: Present in most regions.

Chorotype: Palaearctic.

Cydia fagiglandana (Zeller, 1841)

Records (BIN: BOLD:AAC5023): Basilicata, Fme Noce, Flussaue, 40 m, 39.956°N-15.7702°E, 1 ♀, 21-VIII-2017, leg. A. Hausmann, BC ZSM Lep 101673 (SNSB-ZSM); Basilicata, Potenza, Mt. Pollino, Spezzavummulo, 1680 m, 39.9149°N-16.1776°E, 1 ♀, 13-VIII-2015, leg. A. Hausmann, BC ZSM Lep 91916 (SNSB-ZSM); Calabria, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 1 ♀, 20-VIII-2019, leg. A. Hausmann, BC ZSM Lep 109559 (SNSB-ZSM); Calabria, P. del faggio, Acquaformosa (CS), 1357 m, 39.7587°N-16.0763°E, 1 ♂, 01-VI-2016, leg. Scalercio and Infusino, LEP-SS-00829 (Coll. Trematerra); Sicilia, 1 km NW Zafferana Etnea, 670 m, 37.7003°N-15.1008°E, 1 ♀, 25-VIII-2021, leg. A. Hausmann, BC ZSM Lep 114601 (SNSB-ZSM).

Records (BIN: BOLD:ACS3074): Basilicata, S. p. Mad. Di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♀, 09-VIII-2019, leg. A. Hausmann, BC ZSM Lep 109583 (SNSB-ZSM); Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 2 ♀ (BC_ZSM_Lep_119168, BC_ZSM_Lep_119169), 27-VIII-2023, leg. A. Hausmann (SNSB-ZSM); Basilicata, Piano dei Peri/ Trecchina, 280 m, 39.9913°N-15.1938°E, 1 ♀, 24-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85025 (SNSB-ZSM).

Genetic Data - Two Bins: BOLD:AAC5023: intra-BIN variation (maximum distance): 2.76%; nearest neighboring BIN: *Cydia fagiglandana* (2.63%) and BIN: BOLD:ACS3074: intra-BIN variation (maximum distance): 0.64%; nearest neighboring BIN: *Cydia fagiglandana* (1.44%). The large intraspecific divergence requires further integrative taxonomic research.

Distribution in Italy: Present in most regions.

Chorotype: W-Palaearctic.

Cydia pomonella (Linnaeus, 1758)

Records: Basilicata, Potenza, S. p. Mad. di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♀, 31-VIII-2018, leg. A. Hausmann BC ZSM Lep 104316 (SNSB-ZSM), 1 ♂, 11-VI-2022, leg. A. Hausmann, BC ZSM Lep 116166 (SNSB-ZSM); Calabria, Cosenza, 6 km S Cosenza, Pianette di Dipignano, 750 m, 39.2303°N-16.2497°E, 1 ♂, 01-VI-2015, leg. G. Posa, BC ZSM Lep 91908 (SNSB-ZSM); Sicilia, 1 km NW Zafferana Etnea, 670 m, 37.7003°N-15.1008°E, 1 ♂, 25-VIII-2021, leg. A. Hausmann, BC ZSM Lep 114604 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAA3532; intra-BIN variation (maximum distance): 3.42%; nearest neighboring BIN: *Cydia pyrivora* Danilivsky (4.41%).

Distribution in Italy: Present throughout Italy.

Chorotype: Palaearctic.

Cydia amplana (Hübner, [1799])

Records: Calabria, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 1 ♀, 20-VIII-2019, leg. A. Hausmann BC ZSM Lep 109558 (SNSB-ZSM), 1 ♀, 07-IX-2021, leg. A. Hausmann, BC ZSM Lep 114910 (SNSB-

ZSM); Calabria, 2 km S Aieta, 670 m, 39.9123°N-15.8145°E, 2 ♂, 04-IX-2023, leg. A. Hausmann, BC_ZSM_Lep_119170, BC_ZSM_Lep_119171 (SNSB-ZSM); Sicilia, 1 km NW Zafferana Etnea, 670 m, 37.7003°N-15.1008°E, 1 ♂, 25-VIII-2021, leg. A. Hausmann, BC ZSM Lep 114597 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ABW2550; intra-BIN variation (maximum distance): 1.19%; nearest neighboring BIN: *Cydia rymarczyki* Varenne & Nel (5.92%).

Distribution in Italy: Present in most regions.

Chorotype: Turanian-European.

**Cydia rymarczyki* (Varenne & Nel, 2013)

Records: Basilicata, Fm Noce, Piano dei Peri/Trecchina, 280 m, 39.991°N-15.794°E, 2 exx. (1 ♀), BC ZSM Lep 112103; 1 ♂, BC ZSM Lep 112105), 11-X-2020 leg. A. Hausmann (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACF9264; intra-BIN variation (maximum distance): 1.28%; nearest neighboring BIN: *Cydia amplana* (5.92%).

Distribution in Italy: Cited only for Veneto. **New for southern Italy and Basilicata.**

Chorotype: South-European.

Cydia succedana ([Denis & Schiffermüller], 1775)

Records (BIN BOLD:ACF3585): Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 1 ♂, 01-VI-2023, leg. A. Hausmann, BC_ZSM_Lep_118626 (SNSB-ZSM).

Records (BIN BOLD:AAB7159): Calabria, Praia a Mare Ort, 10 m, 39.8933°N-15.7827°E, 1 ♂, 08-VI-2023, leg. A. Hausmann, BC_ZSM_Lep_118644 (SNSB-ZSM).

Genetic Data - Two BINs: BOLD:AAB7159 and BOLD:ACF3585; intra-BIN variation (maximum distances): 1.17% resp. 1.32%; minimum distance between both BINs 1.32%. Requiring further integrative taxonomic research.

Distribution in Italy: Present in most regions.

Chorotype: Centralasiatic-European-Mediterranean.

Cydia pyrivora (Danilevsky, 1947)

Records: Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 1 ♂, 27-VIII-2023, leg. A. Hausmann, BC_ZSM_Lep_119166 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACJ4811; intra-BIN variation (maximum distance): 0.76%; nearest neighboring BIN: *Cydia pomonella* (4.41%).

Distribution in Italy: A rather rare species found in a few regions, including Sicily and Sardinia.

Chorotype: Centralasiatic-European-Mediterranean.

Grapholita molesta (Busck, 1916)

Records: Calabria, Praia a Mare Ort, 10 m, 39.8933°N-15.7827°E, 1 ♀, 20-VIII-2019, leg. A. Hausmann, BC ZSM Lep 109536 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAB0523; intra-BIN variation (maximum distance): 0.81%; nearest neighboring BIN: *Grapholita dimorpha* Komai (4.17%).

Distribution in Italy: Present in a few regions.

Chorotype: Centralasiatic-European-Mediterranean.

Grapholita funebrana (Treitschke, 1835)

Records: Calabria, Cosenza, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 1 ♀, 22-VIII-2021, leg. A. Hausmann, BC ZSM Lep 114908 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAB9236; intra-BIN variation (maximum distance): 0.36%; nearest neighboring BIN: "*Grapholita funebrana*" (5.01%) the large split into two BINs requiring further integrative study.

Distribution in Italy: Distributed in various regions.

Chorotype: Palaearctic.

Lathronympha strigana (Fabricius, 1775)

Records: Basilicata, S. p. Mad. Di Sirino, 3 km E Lagonegro, 1065 m, 40.119°N-15.802°E, 1 ♂, 27-VII-2020, leg. A. Hausmann, BC ZSM Lep 111821 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC1866; intra-BIN variation (maximum distance): 2.64%; nearest neighboring BIN: *Lathronympha strigana* (1.2%).

Distribution in Italy: Present in most regions.

Chorotype: Sibirian-European.

**Dichrorampha sedatana* (Busck, 1906)

Records: Basilicata, 3 km S Trecchina, Mte. S. Maria, 1035 m, 40.0038°N-15.7682°E, 2 ♂, 05-IX-2016, leg. A. Hausmann, (BC ZSM Lep 59323, BC ZSM Lep 94655) (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAA8636; intra-BIN variation (maximum distance): 1.93%; nearest neighboring BIN: *Dichrorampha petiverella* (Linnaeus) (4.5%).

Distribution in Italy: The presence of this species has been reported in a limited number of northern regions as well as in Molise. **New for Basilicata.**

Chorotype: Holarctic.

Pammene fasciana (Linnaeus, 1761)

Records: Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 1 ♀, 27-VIII-2023, leg. A. Hausmann, BC_ZSM_Lep_119163 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC8302; intra-BIN variation (maximum distance): 1.77%; nearest neighboring BIN: *Pammene gallicolana* (Lienig & Zeller) (3.85%).

Distribution in Italy: Present throughout Italy.

Chorotype: Turanian-European.

Pammene gallicolana (Lienig & Zeller, 1846)

Records: Basilicata, Piano dei Peri/ Trecchina, 280 m, 39.9913°N-15.1938°E, 1 ♀, 24-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85027 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACS0107; intra-BIN variation (maximum distance): 2.08%; nearest neighboring BIN: *Pammene fasciana* (Linnaeus) (3.85%).

Distribution in Italy: Cited mainly from central and southern Italy.

Chorotype: European.

Strophedra weirana (Douglas, 1850)

Records: Calabria, Taverna, 1262 m, 39.0947°N-16.5902°E, 1 ♂, 1-VII-2019, leg. S. Scalercio and C. Di Marco, LEP-SS-05293 (CREA-FL); Calabria, Spezzano Sila, 1402 m, 39.3328°N-16.4143°E, 1 ♀, 16-VII-2018, leg. S. Scalercio, LEP-SS-05294 (CREA-FL).

Genetic Data - Bin: BOLD:AAF3264; intra-BIN variation (maximum distance): 0.37%; nearest neighboring BIN: *Strophedra nitidana* (Fabricius) (1.77%).

Distribution in Italy: Present in few regions, not recorded in Sardinia.

Chorotype: European with Anatolian-Caucasian extension.

Eucosmini

**Epinotia immundana* (Fischer von Röslerstamm, 1839)

Records: Basilicata, Fme Noce, Aue, nr. Parutta, 110 m, 40.0035°N-15.7983°E, 1 ♂, 15-IV-2018, leg. Axel Hausmann, BC ZSM Lep 102412 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC9103; intra-BIN variation (maximum distance): 0%; nearest neighboring BIN: *Epinotia immundana* (2.55%).

Distribution in Italy: Reported in northern and central Italy, and Calabria, absent in Sicily and Sardinia.

New for Basilicata.

Chorotype: Turanian-European.

Epinotia tenerana ([Denis & Schiffermüller], 1775)

Records: Basilicata, S. p. Mad. Di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♀, 09-VIII-2019, leg. A. Hausmann BC ZSM Lep 109584 (SNSB-ZSM), 1 ♂, 04-XI-2021, leg. A. Hausmann, BC ZSM Lep 115167 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAD1776; intra-BIN variation (maximum distance): 0.96%; nearest neighboring BIN: *Epinotia momonana* (Kearfott) (2.17%).

Distribution in Italy: Distributed in various regions, not recorded in Sardinia.

Chorotype: Palaearctic.

**Epinotia tedella* (Clerck, 1759)

Records: Basilicata, S. p. Mad. Di Sirino, 3 km E Lagonegro, 1065 m, 40.119°N-15.802°E, 1 ♀, 27-VII-2020, leg. A. Hausmann, BC ZSM Lep 111826 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAD1782; intra-BIN variation (maximum distance): 1.84%; nearest neighboring BIN: *Epinotia granitana* (Herrich-Schäffer) (4.73%).

Distribution In Italy: The species has been reported in northern and central Italy, absent in southern regions, including Sicily and Sardinia. **New for Basilicata.**

Chorotype: North-Central Europe and Japan.

**Epinotia maculana* (Fabricius, 1775)

Records: Calabria, Longobucco, 1350 m, 39.3888°N- 16.6025°E, 1 ♂, 13-X-2014, leg. S. Scalercio, LEP-SS-05525 (CREA-FL).

Genetic Data - Bin: BOLD:AAF4061; intra-BIN variation (maximum distance): 1.28%; nearest neighboring BIN: *Epinotia solandriana* (Linnaeus) (8.03%).

Distribution In Italy: Cited in the northern regions, in Abruzzo and Calabria, not recorded in Sicily and Sardinia. **New for Calabria.**

Chorotype: Palaearctic.

**Rhopobota naevana* (Hübner, [1817])

Records: Basilicata, Potenza, S. p. Mad. di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 31-VIII-2018, leg. A. Hausmann, BC ZSM Lep 104319 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAA9812; intra-BIN variation (maximum distance): 3.99%; nearest neighboring BIN: unidentified *Rhopobota* species (3.47%).

Distribution in Italy: Present in most regions. **New for Basilicata.**

Chorotype: Sub-Cosmopolitan.

Crociosema plebejana (Zeller, 1847)

Records: Basilicata, Fm Noce, Piano dei Peri/Trecchina, 280 m, 39.9914°N-15.7939°E, 1 ♂, 11-III-2019, leg. A. Hausmann BC ZSM Lep 105176 (SNSB-ZSM), 1 ♀, 31-III-2016, leg. A. Hausmann, BC ZSM Lep 94146 (SNSB-ZSM); Calabria, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 1 ♀, 20-VIII-2019, leg. A. Hausmann BC ZSM Lep 109539 (SNSB-ZSM), 2 ♀, 08-XI-2021, leg. A. Hausmann, (BC ZSM Lep 114904; BC ZSM Lep 115102) (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACE9795; intra-BIN variation (maximum distance): 1.58%; nearest neighboring BIN: *Crociosema plebejana* (1.41%).

Distribution in Italy: Present in most regions.

Chorotype: Cosmopolitan.

Eucosma hohenwartiana ([Denis & Schiffermüller], 1775)

Records: Basilicata, Mt. Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 09-VIII-2019, leg. A. Hausmann, BC ZSM Lep 109581 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAB4295; intra-BIN variation (maximum distance): 3.05%; nearest neighboring BIN: *Eucosma crassana* (McDunnough) (4.64%).

Distribution in Italy: Present in most regions.

Chorotype: Asiatic-European.

**Eucosma cana* (Haworth, 1811)

Records: Basilicata, S. p. Mad. Di Sirino, 3 km E Lagonegro, 1065 m, 40.119°N-15.802°E, 1 ♀, 27-VII-2020, leg. A. Hausmann BC ZSM Lep 111813 (SNSB-ZSM), 1 ♂, 11-VI-2022, leg. A. Hausmann, BC ZSM Lep 116161 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAB4296; intra-BIN variation (maximum distance): 1.66%; nearest neighboring BIN: *Eucosma subvittana* (Staudinger) (2.08%).

Distribution in Italy: Reported in all regions of Italy. **New for Basilicata.**

Chorotype: Asiatic-European.

Notocelia uddmanniana (Linnaeus, 1758)

Records: Basilicata, S. p. Mad. Di Sirino, 3 km E Lagonegro, 1065 m, 40.119°N-15.802°E, 1 ♀, 27-VII-2020, leg. A. Hausmann BC ZSM Lep 111820 (SNSB-ZSM), 40.1192°N, 15.8018°E, 1 ♀, 11-VI-2022, leg. A. Hausmann, BC_ZSM_Lep_116167 (SNSB-ZSM); Basilicata, Piano dei Peri/ Trecchina, 280 m, 39.9913°N-15.1938°E, 1 ♀, 24-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85023 (SNSB-ZSM); Calabria, Cosenza, 6 km S Cosenza, Pianette di Dipignano, 750 m, 39.2303°N-16.2497°E, 1 ♂, 01-V-2015, leg. G. Posa, BC ZSM Lep 91892 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC1148; intra-BIN variation (maximum distance): 1.28%; nearest neighboring BIN: unidentified *Notocelia* species (3.29%).

Distribution in Italy: Present in most regions.

Chorotype: Palaearctic.

Notocelia incarnatana (Hübner, [1799])

Records: Basilicata, Mt. Sirino N, Erlenwald, 1230 m, 40.154°N-15.822°E, 1 ♀, 29-VIII-2013, leg. A. Hausmann BC ZSM Lep 78447 (SNSB-ZSM), 1390 m, 40.16°N-15.84°E, 1 ♂, 29-VIII-2013, leg. A. Hausmann, BC ZSM Lep 78452 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAY8762; intra-BIN variation (maximum distance): 2.69%; nearest neighboring BIN: *Notocelia incarnatana* (6.87%) the large split into two BINs requiring further integrative study.

Distribution in Italy: Present in most regions.

Chorotype: Palaearctic.

Pelochrista agrestana (Zeller, 1841)

Records: Sicilia, 1 km NW Zafferana Etnea, 670 m, 37.7003°N-15.1008°E, 1 ♂, 25-VIII-2021, leg. A. Hausmann, BC ZSM Lep 114603 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ADL5479; intra-BIN variation (maximum distance): 0.64%; nearest neighboring BIN: *Pelochrista mancipiana* (Staudinger) (2.4%).

Distribution in Italy: Cited in central and southern Italy, not recorded in north Italy and Sardinia.

Chorotype: South-European.

**Clavigesta purdeyi* (Durrant, 1911)

Records: Sicilia, Catania, 1 km NW Zafferana Etnea, 670 m, 37.7003°N-15.1008°E, 1 ♀, 25-VIII-2021, leg. A. Hausmann, BC ZSM Lep 114873 (SNSB-ZSM); Calabria, Cosenza, Sila gr., 1 km SW Magara, 1390 m, 39.3223°N-16.4749°E, 1 ♀, 01-IX-2015, leg. A. Hausmann, BC ZSM Lep 91912 (SNSB-ZSM); Calabria, Sila, 1 km N Lg. Ariamacina, 1390 m, 39.3434°N-16.5435°E, 3 exx. (1 ♂), BC ZSM Lep 94682; 1 ♂, BC ZSM Lep 94684; 1 ♀, BC ZSM Lep 94674), 25-VIII-2016, leg. A. Hausmann, (SNSB-ZSM).

Genetic Data - Bin: BOLD:ADF3131; intra-BIN variation (maximum distance): 0.8%; nearest neighboring BIN: *Clavigesta purdeyi* (1.92%).

Distribution in Italy: There are few reports from northern and central Italy, and none from Sardinia. **New for Sicily.**

Chorotype: North-Central Europe.

Rhyacionia pinicolana (Doubleday, 1850)

Records: Calabria, Sila, Lago Cecita, Longobucco, 1170 m, 39.3865°N-16.552°E, 1 ♀, 13-VIII-2014,

leg. A. Hausmann, BC ZSM Lep 85008 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC4601; intra-BIN variation (maximum distance): 0.8%; nearest neighboring BIN: *Gravata marmarotana* (Heinemann) (4.65%).

Distribution in Italy: Reported in north Italy, Calabria, and Sicily.

Chorotype: Asiatic-European.

Rhyacionia pinivorana (Zeller, 1846)

Records: Calabria, Sila-Mangiatoie, 1275 m, 39.2369°N-16.6625°E, 1 ♂, 11-V-2016, leg. Scalercio-Infusino, LEP-SS-00669 (CREA-FLC); Calabria, Quaresima-Aprigliano, 1310 m, 39.2129°N-16.4552°E, 1 ♂, 15-VI-2015, leg. Scalercio and Infusino LEP-SS-00670 (CREA-FLC).

Genetic Data - Bold:AAB9878; intra-BIN variation (maximum distance): 1.77%; nearest neighboring BIN: *Rhyacionia dativa* Heinrich (2.4%).

Distribution in Italy: Reported only in north Italy and Calabria.

Chorotype: Asiatic-European.

**Thiodia citrana* (Hübner, [1799])

Records: Cosenza, 6 km S, Pianette di Dipignano, 750 m, 39.2303°N-16.2497°E, 1 ♂, 01-VI-2015, leg. G. Posa, BC ZSM Lep 91904 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACY8824; intra-BIN variation (maximum distance): N/A (only one barcode on BOLD); nearest neighboring BIN: unidentified *Thiodia* species (7.53%).

Distribution In Italy: Absent in Friuli and Puglia has been observed in almost all regions. **New for Calabria.**

Chorotype: Siberian-European.

Epiblema costipunctana (Haworth, 1811)

Records: Basilicata, 3 km S Trecchina, Mte. S. Maria, 960 m, 40.005°N-15.778°E, 1 ♂, 15-VI-2022, leg. A. Hausmann, BC_ZSM_Lep_116391 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC0718; intra-BIN variation (maximum distance): 2.65%; nearest neighboring BIN: *Epiblema turbidana* (Treitschke) (6.94%).

Distribution in Italy: Present in most regions.

Chorotype: European.

Tortricini

Acleris hastiana (Linnaeus, 1758)

Records: Cosenza, 1.5 km E Orsomarso F. Argentino, 140 m, 39.7946°N-15.9234°E, 1 ♀, 22-VIII-2018, leg. A. Hausmann, BC ZSM Lep 104288 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAA9796; intra-BIN variation (maximum distance): 0.45%; nearest neighboring BIN: *Acleris hippophaeana* (Heyden) (1.92%).

Distribution in Italy: Present in most regions.

Chorotype: Holarctic

Acleris rhombana ([Denis & Schiffmüller], 1775)

Records: Basilicata, Potenza, S. p. Mad. di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 31-VIII-2018, leg. A. Hausmann BC ZSM Lep 104317 (SNSB-ZSM); 1 ♂, 09-X-2020, leg. A. Hausmann BC ZSM Lep 112068 (SNSB-ZSM), 2 ♀ (BC ZSM Lep 115166; BC ZSM Lep 115600), 04-XI-2021, leg. A. Hausmann (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAE3741; intra-BIN variation (maximum distance): 2.57%; nearest neighboring BIN: *Acleris foliana* (Wasingham) (4.48%).

Distribution in Italy: Present in most regions.

Chorotype: Holarctic.

**Acleris sparsana* ([Denis & Schiffmüller], 1775)

Records: Basilicata, Mt. Sirino, 3km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 09-X-2020,

leg. A. Hausmann BC ZSM Lep 112069 (SNSB-ZSM), 1 ♂, 04-XI-2021, leg. A. Hausmann, BC ZSM Lep 115165 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAD2160; intra-BIN variation (maximum distance): 0.32%; nearest neighboring BIN: *Acleris cervinana* Fernald (2.62%).

Distribution in Italy: The presence of this species has been reported in northern and central Italy, absent in southern regions and Sicily. **New for Basilicata.**

Chorotype: European with Anatolian-Caucasian extension.

Acleris variegana ([Denis & Schiffermüller], 1775)

Records: Basilicata, Potenza, Fm Noce, Piano dei Peri/Trecchina, 290 m, 39.9914°N-15.7939°E, 1 ♂, 03-XI-2021, leg. A. Hausmann BC ZSM Lep 115157 (SNSB-ZSM), 1 ♀, 22-XI-2015, leg. A. Hausmann, BC ZSM Lep 91158 (SNSB-ZSM); Basilicata, Potenza, S. p. Mad. di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♀, 04-XI-2021, leg. A. Hausmann, BC ZSM Lep 115161 (SNSB-ZSM); Basilicata, 3 km S Trecchina, Mte. S. Maria, 1035 m, 40.0038°N-15.7682°E, 1 ♂, 5-IX-2016, leg. A. Hausmann, BC ZSM Lep 59324 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACE3007; intra-BIN variation (maximum distance): 0.65%; nearest neighboring BIN: *Acleris variegana* (0.97%).

Distribution in Italy: Present in most regions.

Chorotype: Holarctic.

Acleris cristana ([Denis & Schiffermüller], 1775)

Records: Basilicata, Potenza, Fm Noce, Piano die Peri/Trecchina, 280 m, 39.9913°N-15.7942°E, 1 ♂, 04-XII-2022, leg. A. Hausmann, BC_ZSM_Lep_117055 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAF7935; intra-BIN variation (maximum distance): 0.96%; nearest neighboring BIN: unidentified *Acleris* species (3.94%).

Distribution in Italy: Distributed in various regions, not recorded from Sicily and Sardinia.

Chorotype: Asiatic-European.

Acleris ferrugana ([Denis & Schiffermüller], 1775)

Records: Calabria, Sila, Vivaio Sbanditi (CS), 1350 m, 39.3888°N-16.6022°E, 1 ♂, 27-X-2017, leg. S. Scalercio, LEP-SS-00828 (Coll. Trematerra).

Genetic data - Bin: BOLD:AAC3487; intra-BIN variation (maximum distance): 1.47%; nearest neighboring BIN: *Acleris cervinana* (2.81%).

Distribution in Italy: Reported mainly in northern regions, less so in central and southern regions, not recorded in Sicily.

Chorotype: Turanian-European.

**Acleris hippophaeana* (Heyden, 1865)

Records: Calabria, Rende, 205 m, 39.3675°N-16.2282°E, 1 ♂, 18-XII-2022, leg. S. Scalercio, LEP-SS-01432 (CREA-FL).

Genetic Data - Bin: BOLD:ABZ6730; intra-BIN variation (maximum distance): 1.83%; nearest neighboring BIN: *Acleris hastiana* (Linnaeus) (1.92%).

Distribution in Italy: Reported in northern regions, not recorded in Sicily and Sardinia. **New for Calabria.**

Chorotype: West-Palaearctic.

**Acleris hyemana* (Haworth, 1811)

Records: Calabria, Sellia, 470 m, 38.9886°N-16.6218°E, 2 ♀ (LEP-SS-01527; LEP-SS-01556), 12-III-2021, leg. S. Scalercio (CREA-FL).

Genetic Data - Bin: BOLD:AAD4495; intra-BIN variation (maximum distance): 0.81%; nearest neighboring BIN: *Acleris maximana* (Barnes & Busck) (3.56%).

Distribution in Italy: Collected in Veneto, Umbria and Latium. **New for Calabria.**

Chorotype: European.

Acleris kochiella (Goeze, 1783)

Records: Calabria, Simeri-Crichi, 425 m, 38.9567°N-16.6489°E, 1 ♂, 24-VII-2019, leg. S. Scalercio, LEP-SS-01575 (CREA-FL).

Genetic Data - Bin: BOLD:AAJ2884; intra-BIN variation (maximum distance): 0.83%; nearest neighboring BIN: *Acleris boscanoides* Razowski (2.09%).

Distribution in Italy: Present throughout Italy.

Chorotype: European.

Aleimma loeflingiana (Linnaeus, 1758)

Records: Calabria, 6 km S Cosenza, Pianete di Dipignano, 750 m 39.2303°N-16.2497°E, 1 ♂, 31-V-2016, leg. G. Posa, BC ZSM Lep 59330 (SNSB-ZSM); Calabria, Praia a Mare Ort, 10 m, 39.893°N-15.783°E, 1 ♀, 10-VI-2022, leg. A. Hausmann, BC ZSM Lep 116371 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC3136; intra-BIN variation (maximum distance): 0.97%; nearest neighboring BIN: *Tortrix viridana* Linnaeus (4.92%).

Distribution in Italy: Present throughout Italy.

Chorotype: West-Palaearctic.

Archipini

Clepsis consimilana (Hübner, [1817])

Records: Calabria, Cosenza, 1.5 km E Orsomarso F. Argentino, 140 m, 39.7946°N-15.9234°E, 1 ♂, 22-VIII-2018, leg. A. Hausmann, BC ZSM Lep 104289 (SNSB-ZSM); Basilicata, Piano dei Peri/ Trecchina, 280 m, 39.9913°N-15.1938°E, 1 ♀, 24-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85021 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC4212; intra-BIN data (maximum distance): 1.93%; nearest neighboring BIN: *Clepsis siciliana* (Ragonot) (2.24%).

Distribution in Italy: Present in most regions.

Chorotype: Cosmopolitan.

**Clepsis dumicolana* (Zeller, 1847)

Records: Calabria, Marina di Tortora, F. Noce-Mdg., 10 m, 39.9248°N-15.7607°E, 1 ♂, 08-VI-2022, leg. A. Hausmann, BC ZSM Lep 116163 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAJ3885; intra-BIN variation (maximum distance): 0.17%; nearest neighboring BIN: *Clepsis davisi* Austin & Dombroskie (6.01%).

Distribution in Italy: Not reported in Basilicata, but widespread. **New for Calabria.**

Chorotype: South-European-Anatolian.

Pandemis heparana ([Denis & Schiffermüller], 1775)

Records: Calabria, Cosenza, 1.5 km E Orsomarso F. Argentino, 140 m, 39.7946°N-15.9234°E, 1 ♀, 22-VIII-2018, leg. A. Hausmann, BC ZSM Lep 104290 (SNSB-ZSM); Calabria, Sila, Lago Cecita, Longobucco, 1170 m, 39.3865°N-16.552°E, 1 ♀, 13-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85009 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAA9254; intra-BIN variation (maximum distance): 1.47%; nearest neighboring BIN: *Pandemis heparana* (1.52%).

Distribution in Italy: Present in most regions of Italy, not recorded in Sicily and Sardinia.

Chorotype: Asiatic-European.

Cacoecimorpha pronubana (Hübner, [1799])

Records: Calabria, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 2 ♂ (BC ZSM Lep 109540; BC ZSM Lep 109541), 20-VIII-2019, leg. A. Hausmann (SNSB-ZSM); Basilicata, Fm Noce, Piano dei Peri/Trecchina, 280 m, 39.991°N-15.794°E, 1 ♂, 11-X-2020, leg. A. Hausmann, BC ZSM Lep 112101 (SNSB-ZSM), 2 ♀ (BC ZSM Lep 85019; BC ZSM Lep 85028), 24-VIII-2014, leg. A. Hausmann, (SNSB-ZSM).

Genetic Data: BIN - BOLD:AAD3477; intra-BIN variation (maximum distance): 0.96%; nearest neighboring BIN: *Cacoecimorpha pronubana* (1.96%).

Distribution in Italy: Present throughout Italy.

Chorotype: Cosmopolitan.

Archips podana (Scopoli, 1763)

Records: Sicilia, 1 km NW Zafferana Etnea, 670 m, 37.7003°N-15.1008°E, 1 ♂, 25-VIII-2021, leg. A. Hausmann, BC ZSM Lep 114610 (SNSB-ZSM); Basilicata, Piano dei Peri/ Trecchina, 280 m, 39.9913°N-15.1938°E, 1 ♀, 24-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85020 (SNSB-ZSM); Calabria, 3 km E Orosmarso, Fiume Argentino, 185 m, 39.7944°N-15.9227°E, 1 ♂, 27-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85075 (SNSB-ZSM); Calabria, 6 km S Cosenza, Pianette di Dipignano, 750 m, 39.2303°N-16.2497°E, 1 ♂, 01-V-2015, leg. G. Posa, BC ZSM Lep 91882 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAB5839; intra-BIN variation (maximum distance): 2.96%; nearest neighboring BIN: unidentified Tortricidae species (1.28%).

Distribution in Italy: Present throughout Italy.

Chorotype: Palearctic.

**Avaria hyerana* (Millière, 1858)

Records: Cosenza, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 1 ♂, 08-XI-2021, leg. A. Hausmann, BC ZSM Lep 114901 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AEH8576; intra-BIN variation (maximum distance): 0.32%; nearest neighboring BIN: *Avaria hyerana* (1.28%).

Distribution in Italy: Citations are only provided for Piedmont, Sicily, and Sardinia. **New for Calabria.**

Chorotype: Mediterranean.

Ditula angustiorana (Haworth, 1811)

Records: Calabria, Donnici, 550 m, 39.2577°N-16.2857°E, 1 ♂, 12-V-2014, leg. S. Scalercio, BC ZSM Lep 84831 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAA8699; intra-BIN variation (maximum distance): 1.99%; nearest neighboring BIN: *Dichelia atristrigana* Meyrick (7.76%).

Distribution in Italy: Present in most regions of Italy, not recorded Sicily.

Chorotype: W-Palearctic.

Argyrotaenia ljugiana (Thunberg, 1797)

Records: Basilicata, Piano dei Peri/ Trecchina, 280 m, 39.9913°N-15.1938°E, 1 ♀, 24-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85022 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAA2955; intra-BIN variation (maximum distance): 4.01%; nearest neighboring BIN: *Argyrotaenia velutinana* (Walker) (1.17%).

Distribution in Italy: Present in most regions of Italy, not recorded Sicily and Sardinia.

Chorotype: Holarctic.

Syndemis musculana (Hübner, [1799])

Records: Calabria, 6 km S Cosenza, Pianete di Dipignano, 750 m, 39.2303°N-16.2497°E, 1 ♂, 31-V-2016, leg. G. Posa, BC ZSM Lep 94707 (SNSB-ZSM); Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 1 ♀, 04-VI-2023, leg. A. Hausmann, BC ZSM Lep 118622 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ABY7128; intra-BIN variation (maximum distance): 0.96%; nearest neighboring BIN: *Syndemis musculana* (1.29%).

Distribution in Italy: Present in most regions of Italy, not recorded in Sardinia.

Chorotype: Asiatic-European.

Paramesia gnomana (Clerck, 1759)

Records: Basilicata, Potenza, Mt. Pollino, Spezzavummula, 1680 m, 39.9149°N-16.1776°E, 1 ♀, 13-VIII-2015, leg. A. Hausmann, BC ZSM Lep 91917 (SNSB-ZSM); Calabria, Mt. Pollino, 0.8 km SW Gipfel, 2000 m, 39.9012°N-16.1811°E, 2 exx. (1 ♀, BC ZSM Lep 101648; 1 ♂, BC ZSM Lep 101649), 09-VIII-2017, leg. A. Hausmann (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACY8692; intra-BIN variation (maximum distance): 0%; nearest neighboring BIN: *Paramesia gnomana* (2.88%).

Distribution in Italy: Present in most regions of Italy.

Chorotype: Turanian-European.

Olethreutini

**Endothenia oblongana* (Haworth, 1811)

Records: Calabria, Cosenza, 1.5 km E Orsomarso F. Argentino, 140 m, 39.7946°N, 15.9234°E, 1 ♀, 22-VIII-2018, leg. A. Hausmann, BC ZSM Lep 104292 (SNSB-ZSM); Calabria, S. Domenica Talao, 5 km E Scalea, 240 m, 39.821°N-15.783°E, 1 ♀, 19-VIII-2013, leg. A. Hausmann BC ZSM Lep 78458 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC5902; intra-BIN variation (maximum distance): 1.18%; nearest neighboring BIN: *Endothenia gentianaeana* Hübner (1.63%).

Distribution in Italy: The species has been reported in northern and central Italy, including Sicily and Sardinia. **New for southern Italy.**

Chorotype: European.

Endothenia marginana (Haworth, 1811)

Records: Basilicata, Potenza, S. p. Mad. di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 09-VIII-2019, leg. A. Hausmann, BC ZSM Lep 109585 (SNSB-ZSM); Calabria, 3 km E Orosmarso, Fiume Argentino, 185 m, 39.7944°N-15.9227°E, 1 ♂, 27-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85080 (SNSB-ZSM); Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 2 exx. (1 ♀, BC_ZSM_Lep_119162; 1 ♂, BC_ZSM_Lep_119164), 27-VIII-2023, leg. A. Hausmann (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC9535; intra-BIN variation (maximum distance): 1.12%; nearest neighboring BIN: unidentified *Endothenia* species (1.76%).

Distribution in Italy: Distributed in various regions.

Chorotype: Palaearctic.

**Endothenia ustulana* (Haworth, 1811)

Records: Basilicata, Potenza, Fm Noce, Piano dei Peri/Trecchina, 290 m, 39.991°N-15.794°E, 1 ♂, 11-VIII-2021, leg. A. Hausmann, BC ZSM Lep 115141 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACE5169; intra-BIN variation (maximum distance): 0.53%; nearest neighboring BIN: *Endothenia gentianaeana* (1.12%).

Distribution in Italy: Reported only in some northern and central Italian regions, absent in Sicily and Sardinia. **New for Basilicata.**

Chorotype: Centralasiatic-European.

Endothenia gentianaeana (Hübner, [1799])

Records: Calabria, 2km S Aieta, 670 m, 39.9123°N-15.8145°E, 1 ♀, 04-IX-2023, leg. A. Hausmann, BC_ZSM_Lep_119172 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC5902; intra-BIN variation (maximum distance): 1.18%; nearest neighboring BIN: *Endothenia gentianaeana* (1.63%).

Distribution in Italy: Distributed in various regions.

Chorotype: Palaearctic.

Celypha lacunana ([Denis & Schiffermüller], 1775)

Records: Basilicata, Potenza, S. p. Mad. di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 31-VIII-2018, leg. A. Hausmann, BC ZSM Lep 104318 (SNSB-ZSM); Calabria, Cosenza, 3 km E Orosmarso, Fiume Argentino, 185 m, 39.7944°N-15.9227°E, 1 ♂, 27-VIII-2014, leg. A. Hausmann, BC ZSM Lep 85084 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC3531; intra-BIN variation (maximum distance): 1.85%; nearest neighboring BIN: *Celypha lacunana* (1.12%).

Distribution in Italy: Present in most regions, not recorded Sicily.

Chorotype: Asiatic-European.

Bactra lancealana (Hübner, [1799])

Records: Basilicata, Potenza, S. p. Mad. di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N, 15.8018°E, 2 exx. (1 ♀, BC ZSM Lep 104320; 1 ♂, BC ZSM Lep 104322), 31-VIII-2018 leg. A. Hausmann (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAB8686; intra-BIN variation (maximum distance): 1.69%; nearest neighboring BIN: *Bactra baetrana* (Kennel) (3.02%).

Distribution in Italy: Distributed in various regions.

Chorotype: Sub-Cosmopolitan.

**Bactra simpliciana* Chrétien, 1915 (Figure 1)

Records: Calabria, Marcellinara, 195 m, 38.9180°N-16.4961°E, 1 ♂, 10-VI-2019, leg. S. Scalercio, (CREA-FL), dissected (gen.praep.: CREA-0259, figure 2).

Genetic Data - Bin: BOLD:ABX8158; intra-BIN variation (maximum distance): 1.61%; nearest neighboring BIN: *Bactra minima* Meyrick (3.69%).

Distribution in Italy: **New to the Italian fauna.**

Chorotype: Turanian-Mediterranean.

Figures 1-2. 1. Adult male of *Bactra simpliciana* Chrétien (Marcellinara, Calabria, Italy). 2. Male genitalia of *Bactra simpliciana* Chrétien (Marcellinara, Calabria, Italy, CREA-0259).



Bactra baetrana (Kennel, 1901)

Records: Cosenza, Praia a Mare, 10 m, 39.8933°N-15.7827°E, 1 ♂, 08-XI-2021, leg. A. Hausmann, BC ZSM Lep 114911 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAL5788; intra-BIN variation (maximum distance): 0.16%; nearest neighboring BIN: *Bactra baetrana* (1.89%).

Distribution in Italy: Distributed in various regions, not recorded in Sardinia.

Chorotype: Sub-Cosmopolitan.

Bactra venosana (Zeller, 1847)

Records: Calabria, Praia a Mare Ort, 10 m, 39.8933°N-15.7827°E, 1 ♀, 17-VI-2022, leg. A. Hausmann, BC_ZSM_Lep_116370 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAL5788; intra-BIN variation (maximum distance): 0.16%; nearest neighboring BIN: *Bactra baetrana* (1.89%).

Distribution in Italy: Present in most regions.

Chorotype: Sub-Cosmopolitan.

**Lobesia virulenta* (Bae & Komai, 1991)

Records: Basilicata, Potenza, S. p. Mad. di Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 31-VIII-2018, leg. A. Hausmann, BC ZSM Lep 104334 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACD8827; intra-BIN variation (maximum distance): 0.32%; nearest neighboring BIN: "*Lobesia virulenta*" (4.44%) the large split into two BINs requiring further integrative study.

Distribution in Italy: Trentino-Alto Adige is the only region for which data has been reported. **New for southern Italy.**

Chorotype: Asiatic-European.

Lobesia botrana ([Denis & Schiffermüller], 1775)

Records: Calabria, Praia a Mare Ort, 10 m, 39.8933°N-15.7827°E, 1 ♂, 20-VIII-2019, leg. A. Hausmann, BC ZSM Lep 109563 (SNSB-ZSM), 1 ♂, 10-VI-2022, leg. A. Hausmann, BC_ZSM_Lep_116373 (SNSB-ZSM).

Genetic Data - Bin: BOLD:ACH2178; intra-BIN variation (maximum distance): 1.7%; nearest neighboring BIN: *Lobesia reliquana* (Hübner) (4.15%).

Distribution in Italy: Present throughout Italy.

Chorotype: Cosmopolitan.

Olethreutes arcuella (Clerck, 1759)

Records: Calabria, 6km S Cosenza, Pianette di Dipignano, 750 m, 39.2303°N-16.2497°E, 1 ♂, 1-VI-2015, leg. G. Posa, BC ZSM Lep 91896 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC2510; intra-BIN variation (maximum distance): 0.64%; nearest neighboring BIN: *Phiaris palustrana* (Lienig & Zeller) (5.33%).

Distribution in Italy: Distributed in various regions, not recorded in Sardinia.

Chorotype: Centralasiatic-European.

Piniphila bifasciana (Haworth, 1811)

Records: Calabria, Sila, 1 km N Lg. Ariamacina, 1390 m, 39.3434°N-16.5435°E, 1 ♂, 25-VIII-2016, leg. A. Hausmann, BC ZSM Lep 94677 (SNSB-ZSM); 1 ♀, Calabria, Praia a Mare Ort, 10 m, 39.8933°N-15.7827°E, 08-VI-2023, leg. A. Hausmann, BC_ZSM_Lep_118627 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAC5440; intra-BIN variation (maximum distance): 2%; nearest neighboring BIN: *Olethreutes atrodentana* (Fernald) (4%).

Distribution in Italy: Distributed in various regions.

Chorotype: Palaearctic.

Gypsonoma aceriana (Duponchel, 1843)

Records: Calabria, Marina di Tortora, F. Noce-Mdg, 10 m, 39.9248°N-15.7607°E, 1 ♂, 08-VI-2022, leg. A. Hausmann, BC ZSM Lep 116160 (SNSB-ZSM).

Genetic data - Bin: BOLD:AAB0379; intra-BIN variation (maximum distance): 1.86%; nearest neighboring BIN: *Capua deuterastis* Meyrick (7.05%).

Distribution in Italy: Present in most regions.

Chorotype: West-Palaearctic.

Hedya nubiferana (Haworth, 1811)

Records: Basilicata, Mt. Sirino, 3 km E Lagonegro, 1065 m, 40.1192°N-15.8018°E, 1 ♂, 11-VI-2022, leg. A. Hausmann, BC ZSM Lep 116165 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAA4552; intra-BIN variation (maximum distance): 2.9%; nearest neighboring BIN: *Hedya pruniana* (Hübner) (5.61%).

Distribution In Italy: Present throughout Italy.

Chorotype: Holarctic.

Enarmoniini

Ancylis obtusana (Haworth, 1811)

Records: Basilicata, Sirino NW, 2 km N Lagonegro, 1000 m, 40.1563°N-15.7607°E, 1 ♀, 04-VI-2023, leg. A. Hausmann, BC_ZSM_Lep_118625 (SNSB-ZSM).

Genetic Data - Bin: BOLD:AAE1260; intra-BIN variation (maximum distance): 0.38%; nearest

neighboring BIN: *Ancylis comptana* (Froelich) (4.33%).

Distribution in Italy: Distributed in various regions, not recorded in Sicily.

Chorotype: Holarctic.

Discussions and Conclusions

Despite the recent works concerning the family of Tortricidae in southern Italy (Baldizzone & Scalercio, 2018; Trematerra et al. 2018; Trematerra, 2019; Trematerra et al. 2023), these territories continue to reveal interesting novelties. The studies by Trematerra and colleagues have provided a comprehensive overview of the geological, biological and environmental characteristics of these regions, highlighting both the peculiarities and evolutionary dynamics of the territory. Nevertheless, new research and discoveries suggest that exploring different habitats will increase tortricid diversity of the region as yet experienced for Macrolepidoptera (Rijllo et al. 2024). These recent findings provide a basis for further scientific investigation and may contribute significantly to our overall understanding of the biodiversity and natural resources of southern Italy.

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Conflict of Interest

The authors declare that there is no known financial interest or personal relationship that could have influence the work presented in this article.

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