

THE COCCINELLIDAE (COLEOPTERA: CUCUJIFORMIA, COCCINELLOIDEA) OF SICILY: RECENT RECORDS AND UPDATED CHECKLIST

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ABSTRACT. This paper compiles an updated checklist of Sicilian (including the circum-Sicilian islets) species of Coccinellidae based on historical bibliographical data along with new Sicilian material collected by the author and other entomologists in the last few decades. A total of 90 species are reported, including new data for many species often rare in Sicily. *Nephus (Bipunctatus) bicinctus* (Mulsant & Godart 1872); *Scymnus (Pullus) impexus* Mulsant, 1850, *Scymnus (Scymnus) femoralis* (Gyllenhal, 1827), *Hyperaspis algerica* Crotch, 1874, *Sospita vigintiduopunctata* Linnaeus, 1758, were recorded for the first time from Sicily.

1. Introduction

Coccinellids are very charismatic insects, and they are the so called “lady-beetles” for the Virgin Mary was usually named “Our Lady” by catholic tradition. Many species are well known also to be largely predators of agricultural pests like other insects or mites, and only a few species are phytophagous or mycophagous (Hodek, van Emden, and Honěk 2012). With over 6000 species (Vandenberg 2002; Kovář 2007) in about 375 genera (Nedvěd 2020), Coccinellidae is by far the largest of the coccinelloid families (Robertson *et al.* 2015). Coccinellids are small-medium beetles (0,8-16 mm in length), oval roundish in shape and black with red, yellow, or orange elytra (Iablokoff-Khnzorian 1982; Vandenberg 2002). The largest species, belong to Chilocorini, Coccinellini and Epilachnini tribes, were easily observed and known better than every others beetles by non-expert people, so many faunistic and ecological data came from observation made by citizen science like: “UK Ladybird Survey” in Great Britain¹, the “Lost Ladybug Project” in USA², or “The Ladybird Experiment” in Sweden³, and the recent application for smartphone for European species identification (Skuhrovec *et al.* 2021). The predation of agricultural pests and other insects or mites give to this family a great economic importance and played a significant role in

¹<https://www.brc.ac.uk/scheme/uk-ladybird-survey>

²<https://www.citizenscience.gov/catalog/418/#>

³<https://eu-citizen.science/project/2>

the development of biological control strategies (Obrycki and Kring 1998). Even if the first successful case of classical biological control dates to the late 1800s, when *Novius* (= *Rodolia*) *cardinalis* (Mulsant, 1850) was introduced in California from Australia to control the cottony cushion scale, *Icerya purchasi* Maskell, 1878, accidentally introduced from Australia in USA (Caltagirone and Doult 1989). Use for biological control in agriculture has been the major factor in the movement of coccinellids between countries worldwide. The introduction of some big and voracious species of ladybirds like *Harmonia axyridis* Pallas, 1773 around the world (Roy *et al.* 2016) recently rose an alarm on the real environmental problems linked with species introduction. Many species have now stabilized populations in many European countries and in Italy and Sicily (Bella, Catania, and Baviera 2021, 2023). A total of about 130 species of Coccinellidae were listed for Italy (Audisio *et al.* 1995; Canepari 2003). As the Catalogue of Sicilian Coleoptera published by Ragusa did not include the Coccinellidae, the only catalogue for this family in Sicily was published by Vitale with the papers: “Contributo allo studio dei Coleotteri di Sicilia. I Coccinellidi” (Vitale 1905) followed by “Correzioni ed aggiunte al catalogo dei Coccinellidi siciliani” (Vitale, 1927a). Sicilian records of Coccinellidae reported by (Porta 1934) or (Luigioni 1929) are often related to Vitale’s published data on taxonomy, biology, and distribution of this beetles in Sicily (Vitale 1902a,b, 1903a,b, 1906, 1927a, 1934). Like for others groups of beetles (Baviera and Bellò 2016), the Vitale’s collection of coccinellids comprised data of many interesting species (526 specimens and 59 species (Baviera 2004)). Some data about Sicilian coccinellids are scattered in recent paper deals on coccinellids in agriculture (Longo and Benfatto 1987; Baviera 1998, 2000; Longo 2018; Bella, Catania, and Baviera 2021) or on taxonomy of some groups (Canepari 1983). The number of coccinellid taxa recorded for Sicily increased from 76 (3 with doubt) of the Checklist of Italian Fauna (Audisio *et al.* 1995), to 83 in the update of Canepari (2003). The European Checklist lists in 2007 76 taxa from Sicily. The recent field guide of European Coccinellidae lists 77 species from Sicily (Nedvěd and Djuic 2022). The aim of the present contribution is to provide an updated account of the presence and distribution of ladybirds from Sicily as done for Nitidulidae and Kateretidae (Baviera and Audisio 2014), Chrysomelidae Alticini (Baviera and Biondi 2015), Cerambycidae (Baviera *et al.* 2017), Elateridae (Baviera and Platia 2018), Histeridae (Baviera and Vienna 2019), Curculionidae Curculioninae (Baviera and Caldara 2020), Chrysomelidae Cassidinae and Cryptocephalini (Baviera and Sassi 2020), Chrysomelidae Bruchinae (Baviera 2024).

2. Materials and methods

Data came from sampling carried out all over Sicily (see Fig. 1), concentrated in the best-preserved habitats especially in mountain ranges (Sicani, Madonie, Nebrodi, Peloritani, Erei, Iblei and Mount Etna) and on Sicilian islands. Many listed specimens were obtained during research carried out aiming for a better knowledge of the Sicilian Coleoptera (Baviera 2010; Baviera and Liberti 2010; Toševski *et al.* 2011; Caldara, Casalini, and Baviera 2012; Toševski *et al.* 2014; Baviera 2015; Toševski *et al.* 2015; Bellò, Osella, and Baviera 2017; Baviera *et al.* 2024). In particular data came from Sicilian northern mountains chains of Peloritani, Nebrodi and Madonie, were, in the last years where founded many interesting species endemic, often new to science (Baviera 2007, 2008; Baviera and Magnano 2010;



FIGURE 1. Map showing administrative provinces of Sicily.

Bellò and Baviera 2011; Magrini and Baviera 2011; Baviera 2015; Bellò, Osella, and Baviera 2019). The specimens were collected directly on flowers or trees also with the aid of sweep netting, beating sheets, and in the superficial soil and leaf litter by sifting and indirectly, using pitfall traps, light traps, and window traps. For identification of specimens were used main bibliography (Fürsch 1962, 1967; Fürsch, Kreissl, and Capra 1967; Gourreau 1974; Iablokoff-Khnzorian 1974; Canepari and Tedeschi 1977; Iablokoff-Khnzorian 1982; Canepari 1983; Canepari, Fürsch, and Kreissl 1985; Canepari 2000). Obtained data have been compared and combined with available literature records of regional presence. The systematic and the nomenclature follows the recent analysis of a large molecular dataset (Che *et al.* 2021) and, for Palearctic distribution, the catalogue by Kovář (2007). For each species, the following data are reported: nomenclatural combinations, chorotype (according to the categories proposed by Vigna Taglianti *et al.* (1992, 1999) based on the distribution provided by Kovář (2007), trophic category (mainly essential prey), based on main bibliography (Hodek 1967, 1970; Hodek, van Emden, and Honěk 2012; Klausnitzer 2019; Patlar *et al.* 2021) and new records (grouped by provinces). New records were reported with data written on labels pinned under the specimens, standardized as follows: locality (with municipality and province), date, collecting method and habitat, surname, and initials of name of collector. For records taken from the literature, the source is given after the mentioned locality or the generic regional record. The acronym “FEI” reported citations from photos identified in the site “Forum Entomologi Italiani”.

CHOROTYPE ACRONYMS

0.01 COS = Cosmopolitan
0.02 SCO = Sub-Cosmopolitan
1.01 OLA = Holartic
1.02 PAL = Palaearctic
1.04 ASE = Asiatic-European
1.05 SIE = Sibiric-European
1.06 CEM = Central-European-Mediterranean
1.07 CAE = Central-Asiatic-European
1.09 TEM = Turanic-European-Mediterranean
1.11 TUM = Turanic-Mediterranean
1.12 EUM = European-Mediterranean
2.03 CEU = Centro-European
2.04 CEU = South-European
2.05 WEU = West-European
3.01 MED = Mediterranean
3.02 WME = West-Mediterranean
3.04 NAF = North-African
4.03 INM = Indian-Mediterranean

ENDEMIC DISTRIBUTION TYPE ACRONYMS

SICI = Sicilian Endemic

TROPHIC GROUP ACRONYMS

MIT = Mite predators
ALE = Aleyrodidae predators
APH = Aphids predators
COC = Coccids predators
PSE = Pseudococids predators
CHR = Chrysomelidae predators
PHY = Plant feeders (also pollen eaters)
MYC = Mycetophagous

3. Results

List of species

FAMILY COCCINELLIDAE LATREILLE, 1807**Subfamily Microweiseinae Leng, 1920**

Tribe Serangiini Pope, 1962

Genus *Delphastus* Casey, 1899

Delphastus catalinae (Horn, 1895)

Chorotype – SCO

Trophic group – ALE (*Aleyrodes kelloggi* Bemis, 1904, *Aleurocanthus woglumi* Ashby, 1915, *Aleurothrixsus floccosus* (Maskell, 1896), *Bemisia tabaci* (Gennadius, 1889), *Dialeurodes citri*, *Dialeurodes citrifolii*, *Trialeurodes vaporariorum* (Westwood, 1856), *Trialeurodes abutiloneus* (Haldeman, 1850), *Aleurocanthus spiniferus* (Quaintance, 1903)

New records – **Messina** Aeolian Archipelago, Lipari, 10.VIII.2023, Baviera C. (BCPC).

Notes. A species described from California but very probably with central America origins (Gordon 1994). Used since a long time for biological control programs against Aleyrodidae in America, this species was introduced firstly from Central to North America and then to Europe (France) for biological control programs. Now used for the biological control of whiteflies indoors in many EPPO countries since 1993 (Belgium, Czechia, Denmark, Finland, France, Germany, Greece, Jordan, the Netherlands, Poland, Russia, Spain, Tunisia, the UK (restricted under license)) but not in Italy (EPPO 2002). Only recently recorded for the first time from southern Italy and Sicily (Ragusa, by Nugnes *et al.* (2020)). *D. catalinae* is the only Italian and Sicilian allochthonous ladybird species from the Neotropical and the presence of a breeding population in Sicily in *Citrus* groves, were recently confirmed (Catania, Acireale: Bella, Catania, and Baviera (2023)). Newly recorded from Aeolian Archipelago.

Genus *Serangium* Blackburn, 1889

Serangium sp.

Trophic group – ALE

Notes. This genus is distributed in Africa (Madagascar), Australia, Palearctic (especially in the Oriental regions). A single Sicilian specimen was collected in Acireale (Bella, Catania, and Baviera 2021) but wasn't identified to species level. The presence of a breeding population of *Serangium montazerii* Fürsch, 1995 (sensu Booth and Polaszek (1996) in Sicily was recently confirmed (Cocuzza *et al.* 2023). There are still some problems to the identification of Sicilian specimens, as many characters does not fit with Fürsch's description of *S. montazerii* (Fürsch, 1995).

Subfamily COCCINELLINAE Latreille, 1807

Tribe Stethorini Dobzhansky, 1924

Genus *Stethorus* Weise 1885

Stethorus pusillus (Herbst, 1797) (= *punctillum*)

Chorotype – EUR

Trophic group – MIT (*Panonychus ulmi* (Koch, 1836), *Tetranychus bimaculatus* Harvey, 1892

New records – **Messina**: Gioiosa Guardia, 04.VII.1999, Baviera C. (BCPC); Peloritani, Portella S. Rizzo, 465m a.s.l., 25.IX.2011, Baviera C. (BCPC); Nebrodi, Biviere di Cesarò, 1278m a.s.l., 03.VII.1999, Baviera C. (BCPC); Portella Maulazzo, 08.VIII.2001, Baviera C. (BCPC); **Catania**: Etna Northern slope, Piano Provenzana dint 1900m a.s.l., 23.VI.2001, Baviera C. (BCPC); ditto, 2050m a.s.l., 15.VI.2013, Baviera C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Palermo**: Bosco Ficuzza, 20.VI.2001, 800m a.s.l., on *Quercus*, Baviera C. (BCPC); **Trapani**: Castellammare del Golfo, R.N.O. Zingaro, 13-14.XI.2003, Baviera C. (BCPC).

Notes. This species is in Sicily quite uncommon even if widespread.

Stethorus gilvifrons (Mulsant 1850)

Chorotype – INM

Trophic group – MIT (*Aceria oleae* (Nalepa, 1900), *Tegolophus hassani* (Keifer, 1959) *Panonychus ulmi*, *Tetranychus cinnabarinus* (Boisduval, 1867), *Tetranychus urticae* C.L. Koch, 1836) (Koch, 1836), *Tetranychus bimaculatus* (Harvey, 1892)

New records – **Messina**: Città, Annunziata, on *Quercus* sp., 28.VI.1997, Baviera C. (BCPC); Rometta, Gimello, San Leone, 11.VIII.1993, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 05.V.2004, Baviera C. (BCPC); **Agrigento**: Raffadali, 03.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Enna**: Agira 2, 500m a.s.l., sifting *Olea*, 17.III.2016, Baviera C. and Bellò C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Palermo**: Bosco Ficuzza, Alpe Cucco 3, 22.XII.2013, sifting under stones, Baviera C. (BCPC); Isola di Ustica, 28-29.IX.2002, Baviera C. (BCPC).

Notes. This very common species in Sicily was recently collected for the first time in Aeolian Islands (Baviera in prep.). A species recorded also from Pantelleria (Canepari 1995).

Tribe **Coccinellini** Latreille, 1807 (including Halyziini, Singhikalini, Discotomini, Tytthaspidini)

Genus *Hippodamia* Dejean 1833*Hippodamia (Hippodamia) tredecimpunctata* (Linnaeus 1758)

Chorotype – ASE

Trophic group – APH (*Brachycaudus cardui* (Linnaeus, 1758), *Hyalopterus pruni* (Geoffroy, 1762))**Notes.** This is a very rare species in Sicily.*Hippodamia (Adonia) variegata* (Goeze 1777)

Chorotype – PAL

Trophic group – APH (*Acyrtosiphon pisum* (Harris, 1776), *Acyrtosiphon gossypii* Mordvilko, 1914, *Aphis craccivora* Koch, 1854, *Aphis fabae* Scopoli, 1763, *Aphis glycines* Matsumura, 1917, *Aphis nerii* Boyer de Fonscolombe, 1841, *Aphis pomi* De Geer, 1773, *Brachycaudus cardui*, *Diuraphis noxia* (Kurdjumov, 1913), *Dysaphis crataegi* (Kaltenbach, 1843), *Hyalopterus pruni*, *Macrosiphonia artemisiae* (Boyer de Fonscolombe, 1841), *Macrosiphum rosae* (Linnaeus, 1758), *Schizaphis graminum* (Rondani, 1852)); LEP (*Palpita unionalis* (Hübner, 1796).

New records – **Messina:** Torre Faro Contr. Granatari, 27.V-05.VI.2000, Baviera C. (BCPC); Ganzirri, 5m a.s.l., 25.X.2016, Baviera C. (BCPC); Mortelle Lido, sifting dune plants, 11.III.2000, Baviera C. (BCPC); ditto, 19.VI.2002, Baviera C. (BCPC); Patti, Oliveri, Laghetti Marinello, 02.III.2002, Baviera C. (BCPC); Mongiove, Galice, 14.VII.2002, Baviera C. (BCPC); Peloritani, Itala, Croce, 4-5.X.2003, Camino F. (CFPC); **Catania:** Etna Northern slope, Piano Provenzana dint 1800m a.s.l., 14.VIII.1999, Baviera C. (BCPC); ditto, 04.VIII.2000, Baviera C. (BCPC); ditto, 08.VI.2000, Baviera C. (BCPC); Calatabiano, San Marco, foce Alcantara, 21.VII.2010, Baviera C. (BCPC); ditto, 19.V.2010, Baviera C. (BCPC); ditto, 19.IV.2010, Baviera C. (BCPC); ditto, 11.III.2011, Baviera C. (BCPC); **Siracusa:** Augusta, 15.VII.1997, on *Citrus*, Benfatto L. (BCPC); **Palermo:** Capaci, città, 27.IV.1968, Romano M. (BCPC); ditto, 07.IV.1968, Romano M. (BCPC); Isola delle Femmine, VI.1967, Romano M. (BCPC); Isola di Ustica, 28-29.IX.2002, Baviera C. (BCPC); **Trapani:** Castellammare del Golfo, R.N.O. Zingaro, 13-14.XI.2003, Baviera C. (BCPC).

Notes. A species recorded also from Lampedusa and Pantelleria (Canepari, 1995), and Aeolian Archipelago (Lipari: (Della Beffa 1913) (sub *Adonia*); Vulcano: Baviera in prep.).

Genus *Anisosticta* Chevrolat 1836*Anisosticta novemdecimpunctata* (Linnaeus 1758)

Chorotype – SIE

Trophic group – APH

Notes. This ladybird, living in marshy places, is rare in Sicily. Even if not recorded in Vitale's catalogue (1905) there are some specimens in Vitale collection (Messina: Antillo, Camaro, Castronovo, (Baviera, 2004)).

Genus *Adalia* Mulsant 1846*Adalia bipunctata* (Linnaeus 1758)

Chorotype – PAL

Trophic group – APH (*Adelges laricis* Vallot, 1836, *Acyrtosiphon pisum*, *Aphis fabae* Scopoli, 1763, *Aphis hederae* Kaltenbach, 1843, *Aphis pomi*, *Aphis sambuci* Linnaeus, 1758, *Aphis punicae* Passerini, 1863, *Aulacorthum solani* (Kaltenbach, 1843), *Betulaphis quadrituberculata* (Kaltenbach, 1843), *Brachycaudus helichrysi* (Kaltenbach, 1843), *Brachycaudus persicae* Passerini, 1860, *Brachycaudus tragopogonis* (Kaltenbach, 1843), *Cavariella aegopodii* (Scopoli, 1763), *Chaitophorus capreae* (Mosley, 1841), *Chaitophorus leucomelas* Koch, 1854, *Chromaphis juglandicola* (Kaltenbach, 1843), *Cinara wahluca* Hottes, 1952, *Drepanosiphum platanoidis* (Schrank, 1801), *Eucallipterus tiliae* (Linnaeus, 1758), *Euceraphis punctipennis* (Zetterstedt, 1828), *Hyalopterus pruni*, *Hyalopterus amygdali* (Blanchard, 1840), *Macrosiphum rosae*, *Microlophium carnosum*, *Mindarus abietinus*, *Myzocallis boernerii* Stroyan, 1957, *Myzocallis carpini* (Koch, 1855), *Myzocallis castanicola* Baker, 1917, *Myzocallis coryli* (Goeze, 1778), *Myzus cerasi* (Fabricius, 1775), *Myzus persicae* (Sulzer, 1776), *Neomyzus circumflexus* (Buckton, 1876), *Periphyllus lyropictus* (Kessler, 1886), *Phorodon humuli* (Schrank, 1801), *Phyllaphis fagi* (Linnaeus, 1767), *Pinus pini* (Macquart, 1819), *Pterocallis alni* (DeGeer, 1773), *Rhopalosiphum maidis* (Fitch, 1856), *Rhopalosiphum padi* (Linnaeus, 1758), *Schizaphis graminum*, *Sitobion avenae* (Fabricius, 1775), *Tuberculatus annulatus* (Hartig, 1841), *Tuberolachnus salignus* (Gmelin, 1790), *Uroleucon cirsii* (Linnaeus, 1758))

New records – **Messina:** Francavilla di Sicilia, Le Gurne, Alcantara river, 29.VI.2010, Baviera C. (BCPC); Peloritani, Itala, Monte Scuderi, 600m a.s.l., Torrente Lampiello, 14.IV.2004, Baviera C. (BCPC); ditto, 23.VII.2000, Baviera C. (BCPC); Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 27.VII.1999, Baviera C. (BCPC); Nebrodi, San Fratello, 1200m a.s.l., on *Quercus ilex*, 26.V.2004, Baviera C. (BCPC); Monte Soro, 1800m a.s.l., on *Fagus*, 11.VIII.1998, Baviera C. (BCPC); ditto, 03.VII.1999, Baviera C. (BCPC); Biviere di Cesarò, 1278m a.s.l., 11.X.2001, Baviera C. (BCPC); Floresta, 1200m a.s.l., 11.X.2001, Baviera C. (BCPC); Nebrodi, Portella Maulazzo, 1400m a.s.l., 08.VIII.2001, Baviera C. (BCPC); **Catania:** Etna, Easten slope, Sant' Alfio, Bosco Cerrita, 1500m a.s.l., on *Quercus*, 23.VI.2001, Baviera C. (BCPC); Rifugio Brunek 1500m a.s.l., sifting *Quercus*, 20.VI.2006, Baviera C. (BCPC); Etna South slope, Rifugio Sapienza, 1800m a.s.l., 02.VII.1999, Baviera C. (BCPC); Etna North slope, Piano Provenzana, 1800m a.s.l., on *Pinus nigra*, 14.VIII.1999, Baviera C. (BCPC); ditto, 14.VIII.1999, Baviera C. (BCPC); ditto, 02.VII.1999, Baviera C. (BCPC); ditto, 08.VI.2000, Baviera C. (BCPC); ditto, 23.VI.2001, Baviera C. (BCPC); ditto, 1600m a.s.l., 04.VIII.2000, Baviera C. (BCPC); ditto, 2000m a.s.l., Monte Nero, 16.V.2002, Baviera C. (BCPC); Calatabiano, San Marco, foce Alcantara, 19.V.2010, Baviera C. (BCPC); **Siracusa:** Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Palermo:** Piana degli Albanesi, Maganoce, 11.XII.1974, Romano M. (RMPC); Piana degli Albanesi, Lago, 600m a.s.l., 02.I.2007, Baviera C. (BCPC); Bosco Ficuzza, 31.V.1976, Romano M. (BCPC); ditto, 31.V.1970, Romano M. (BCPC); ditto, 25.V.1997, Romano M. (BCPC); ditto, 20.VI.2001, Baviera C. (BCPC); Madonie, Isnello, Piano Zucchi, 1100m a.s.l., 03.VI.2000, Baviera C. (BCPC); ditto, 19.VII.2006, Baviera C. (BCPC); Piano Battaglia, 12.VI.1969, Romano M. (BCPC); Petralia on *Pinus*, 07.VI.1972, Romano M. (BCPC); Portella Colla, 1450m a.s.l., 03.VI.2000, Baviera C. (BCPC); **Trapani:** Castellammare del Golfo, R.N.O. Zingaro, 22-24.IV.2003, Baviera C. (BCPC); ditto, 19-21.V.2003, Baviera C. (BCPC).

Notes. This aphidophagous species eat also pollen especially in early spring (Hemptinne and Desprets 1986; Hemptinne, Naisse, and Os 1988). Together with *C. septempunctata* (but with significantly smaller numbers of specimens) was found in estivation on Etna Mount

(Longo 2018). A species recorded also from Vulcano and Salina in Aeolian Archipelago (Lo Cascio *et al.* 2006; Lo Cascio, Altadonna, and Ponel 2022), and from Lampedusa (Canepari 1995).

Adalia decempunctata (Linneaus 1758)

Chorotype – PAL

Trophic group – APH (*Aphis pomi*, *Aphis punicae*, *Aphis sambuci*, *Brachycaudus persicae*, *Chaitophorus capreae*, *Cinara palestinensis* Hille Ris Lambers, 1948, *Cinara (Cupressobium) tujafilina* (Del Guercio, 1909), *Drepanosiphum platanoidis*, *Eucallipterus tiliae*, *Euceraphis punctipennis*, *Myzocallis boernerii*, *Myzocallis coryli*, *Phyllaphis fagi*, *Rhopalosiphum maidis*, *Rhopalosiphum padi*, *Thelexes dryophila*, *Tuberculatus annulatus*); COC (*Matsucoccus josephi* Bodenheimer & Harpaz, 1955)

New records – **Messina**: Torre Faro Contr. Granatari, 12.VII.2003, Baviera C. (BCPC); Città Annunziata, 21.IV.1992, Baviera C. (BCPC); Patti, Oliveri, Laghetti Marinello, 02.III.2002, Baviera C. (BCPC); Rometta, Gimello, San Leone, 29.IV.2000, Baviera C. (BCPC); ditto, 07.VIII.1999, Baviera C. (BCPC); ditto, 28.VII.1999, Baviera C. (BCPC); ditto, 11.VIII.1993, Baviera C. (BCPC); Forte S. Jachiddu, 375m a.s.l., 30.V.2011, Baviera C. (BCPC); Campo Italia, 442m a.s.l., *Castanea sativa*, at lighth, Infusino M. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 27.VII.1999, Baviera C. (BCPC); ditto, 04.VI.2000, Baviera C. (BCPC); ditto, 27.VII.1999, Baviera C. (BCPC); ditto, 27.VI.1997, Baviera C. (BCPC); Patti, Oliveri, Laghetti di Marinello, 07.VII.2008, at light, Infusino M. (BCPC); Nebrodi, San Fratello, ss 289, on *Quercus ilex*, 03.VII.1999, Baviera C. (BCPC); ditto, 1300m a.s.l., 20.V.2000, Baviera C. (BCPC); ditto, 1200m a.s.l., on *Quercus ilex*, 08.VIII.2001, Baviera C. (BCPC); ditto, 26.IV.2004, Baviera C. (BCPC); Nebrodi, Portella Maulazzo, 1400m a.s.l., 23.VI.2001, Baviera C. (BCPC); ditto, 17.V.2001, Baviera C. (BCPC); ditto, 08.VIII.2001, Baviera C. (BCPC); ditto, 14.V.2004, Baviera C. (BCPC); Longi, 23.VI.1984, Baviera C. (BCPC); Biviere di Cesarò, 1278m a.s.l., 11.IV.2002, Baviera C. (BCPC); **Catania**: Etna Northern slope, Piano Provenzana dint, 1800m a.s.l., 08.VI.2000, Baviera C. (BCPC); ditto, 2000m a.s.l., 23.VI.2001, Baviera C. (BCPC); ditto, 10.VIII.1998, Baviera C. (BCPC); ditto, Monte Nero, 2000m a.s.l., 04.VIII.2000, Baviera C. (BCPC); ditto, 16.V.2002, Baviera C. (BCPC); ditto, 15.VI.2003, Baviera C. (BCPC); Linguaglossa, 16.V.2003, Baviera C. (BCPC); Etna, Easten slope, Sant'Alfio, Bosco Cerrita, 1500m a.s.l., on *Quercus*, 23.VI.2001, Baviera C. (BCPC); ditto, 14.VI.2002, Baviera C. (BCPC); Rifugio Brunek 1500m a.s.l., sifting *Quercus*, 16.V.2002, Baviera C. (BCPC); Etna East slope, 1200m a.s.l., 02.VII.1999, Baviera C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Palermo**: Capaci, Città, 16.V.1970, Baviera C. (BCPC); Bosco Ficuzza, 25.V.1997, Romano M. (BCPC); ditto, 800m a.s.l., 20.VI.2001, Torre Faro Contr. Granatari, 24.VI-01.VII.2001, Baviera C. (BCPC); Madonie, Castelbuono, 22.V.1974, Baviera C. (BCPC); Madonie, Isnello, Piano Zucchi, 1100m a.s.l., 21.VI.2001, Baviera C. (BCPC); **Trapani**: Isola di Pantelleria, 20- 27.V.2000, Fabbri A. (BCPC);); Castellammare del Golfo, R.N.O. Zingaro, 22-24.IV.2003, Baviera C. (BCPC); ditto, 19-21.V.2003, Baviera C. (BCPC); ditto, 23-25.VI.2003, Baviera C. (BCPC); ditto, 13-14.XI.2003, Baviera C. (BCPC).

Notes. A species commonly collected in Sicily on *Quercus ilex*. Recorded also from Pantelleria (Canepari 1995), and, only recently, from Lipari, Vulcano and Salina in Aeolian Archipelago (Lo Cascio, Altadonna, and Ponel 2022).

Genus *Coccinula* Dobzhansky 1925*Coccinula quatuordecimpustulata* (Linnaeus 1758)

Chorotype – ASE

Trophic group – APH New records – **Messina**: Nebrodi, Floresta, 13.VIII.2002, Baviera C. (BCPC); Caronie, Portella Cerasa, 21.VI.1991, Carapezza A. (BCPC); **Catania**: Etna Northern slope, Piano Provenzana dint 1900m a.s.l., 03.VIII.1998, Baviera C. (BCPC); **Palermo**: Sicani, Bosco Ficuzza, 27.VII.1992, Romano M. (BCPC); ditto, 11.IV.1967, Romano M. (BCPC); ditto, 31.V.1970, Romano M. (BCPC); ditto, 04.X.1966, Romano M. (BCPC); ditto, 05.IV.1968, Romano M. (BCPC); ditto, 20.IV.1969, Romano M. (BCPC); ditto, 13.V.1969, Romano M. (BCPC); ditto, 800m, 20.VI.2001, Baviera C. (BCPC); Monte Cammarata, 1000m a.s.l., 27.V.2007, Baviera C. (BCPC); Madonie, Isnello, Piano Zucchi, 1100m a.s.l., 03.VI.2000, Baviera C. (BCPC); ditto, 17.VIII.2016, Baviera C. (BCPC); Baita del Faggio, 1400m a.s.l., 22.VI.2001, Baviera C. (BCPC); Piano Battaglietta, 1600m a.s.l., 16.V.2008, Baviera C. and Rando A. (BCPC); Bosco Pomieri, 1450m a.s.l., in Windows trap, 17.21.VII.2016, Baviera C. (BCPC); Piano Quacella, sotto sassi, 23.I.1974, Romano M. (BCPC).

Notes. A species commonly collected in Sicily sifting leaf litter by Vitale (1905).

Coccinula sinuatomarginata (Faldermann 1837)

Chorotype – PAL

Trophic group – APH

Notes. This is a rare species in Sicily.

Genus *Coccinella* Linnaeus 1758*Coccinella (Coccinella) septempunctata* Linnaeus 1758

Chorotype – PAL

Trophic group – APH (*Aphis craccivora*, *Aphis fabae* Scopoli, 1763, *Aphis glycines*, *Aphis gossypii* Glover, 1877, *Aphis jacobaeae*, *Aphis nerii*, *Aphis urticata*, *Aphis hederiae*, *Aphis sambuci*, *Brevicoryne brassicae*, *Cinara (Schizolachnus) pineti*, *Cinara (Cinara) piniphila*, *Cinara pinivora*, *Cinara (Cupressobium) tujafilina*, *Diuraphis noxia*, *Hyalopterus pruni*, *Hyperomyzus lactucae*, *Lipaphis pseudobrassicae*, *Longiunguis donacis*, *Macrosiphoniella artemisiae*, *Megoura viciae* Buckton, 1876, *Metopolophium dirhodum* (Walker, 1849), *Microlophium carnosum* (Buckton, 1876), *Myzus cerasi*, *Myzus persicae*, *Rhopalosiphum maidis*, *Rhopalosiphum padi*, *Schizaphis graminum*, *Sitobion avenae*, *Uroleucon aeneus* (Hille Ris Lambers, 1939), *Uroleucon cirsii*); COC (*Saissetia oleae* (Olivier, 1791), *Euphyllura straminea* (Loginova); LEP *Cacoecimorpha pronubana* (Hübner, 1799), *Palpita unionalis* (Hübner, 1796)).

New records – **Messina**: Torre Faro Contr. Granatari, 12.V.2001, Baviera C. (BCPC); Patti, Olivieri, Laghetti Marinello, 02.III.2002, Baviera C. (BCPC); Peloritani, Colli San Rizzo, 600m a.s.l., 05.IV.1998, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 27.VII.1999, Baviera C. (BCPC); ditto, 05.VII.1999, Baviera C. (BCPC); Peloritani, Montalbano Eli-cona, Bosco di Malabotta, 1200m a.s.l., 24.IV.2006, Baviera C. (BCPC); ditto, 02.X.2007, Baviera C.

(BCPC); Nebrodi, Sella Tre Arie, 1400m a.s.l., 03.VII.2009, Baviera C. (BCPC); Nebrodi, Monte Pajumoru, 1400m a.s.l., 14.VIII.1998, Baviera C. (BCPC); Biviere di Cesarò, 1278m a.s.l., 03.VII.1999, Baviera C. (BCPC); ditto, 11.IV.2002, Baviera C. (BCPC); Monte Soro, 1800m a.s.l., sifting *Fagus*, 11.VIII.1998, Baviera C. (BCPC); ditto, 03.VIII.1999, Baviera C. (BCPC); ditto, 20.V.2000, Baviera C. (BCPC); ditto, 08.VIII.2001, Baviera C. (BCPC); Tortorici, Batana, 787m a.s.l., 20.III.2015, Baviera C. (BCPC); Aeolian Archipelago, Isola di Stromboli, 22.IX.2006, Baviera C. (BCPC); Isola di Vulcano, 09-10.V.2007, Baviera C. (BCPC); **Catania**: Calatabiano, San Marco, foce Alcantara, 11.III.2011, Baviera C. (BCPC); Etna Northern slope, Piano Provenzana dint 1800m a.s.l., 11.X.1998, Baviera C. (BCPC); ditto, 03.VIII.1998, Baviera C. (BCPC); ditto, 08.VI.2000, Baviera C. (BCPC); ditto, 04.VIII.2000, Baviera C. (BCPC); ditto, 23.VI.2001, Baviera C. (BCPC); ditto, 2050m a.s.l., 09.X.2001, Baviera C. (BCPC); Etna South slope, Rifugio Sapienza, 1800m a.s.l., 02.VII.1999, Baviera C. (BCPC); Linguaglossa, 22.IV.2000, Baviera C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Caltanissetta**: Biviere di Gela, 05.IV.1994, Baviera C. (BCPC); **Palermo**: Sicani, Godrano dint., 10.III.2001, Baviera C. (BCPC); Sicani, Bosco Ficuzza, 800m a.s.l., 20.VI.2001, Baviera C. (BCPC); Madonie, Pizzo Cabonara, 1500m a.s.l., sifting *Fagus*, 19.VII.2016, Baviera C. (BCPC); Castelbuono, Piano Imperiale, 1600m a.s.l., 13.VI.2013, Baviera C. (BCPC); Piano Battaglietta, Inghiottoio, 1600m a.s.l., sifting, 23.VI.2007, Baviera C. (BCPC); Piano Battaglietta, sifting *Acer*, 1600m a.s.l., sifting, 23.IX.2010, Baviera C. (BCPC); Piano Battaglia, 1400m a.s.l., 12.VI.1969, Baviera C. (BCPC); Madonie, Isnello, Piano Zucchi, 1100m a.s.l., 03.VI.2000, Baviera C. (BCPC); Madonie, Monte Spina Puci, 1700m a.s.l., 2-9.VIII.2015, Baviera C. (BCPC); **Trapani**: Selinunte Foce Morone, 09.IV.1998, Baviera C. (BCPC); Castellammare del Golfo, R.N.O. Zingaro, 26-29.III.2003, Baviera C. (BCPC); Isole Egadi, Isola di Favignana, 17.V.2006, Baviera C. (BCPC); Isola di Levanzo, 23.IV.2007, Baviera C. (BCPC).

Notes. This species is common everywhere, especially in summer on the highest Sicilian mountains (like Etna Mount) in estivation (Vitale 1905; Longo 2018). This is the biggest coccinellid on herbaceous plants and is considered as the dominant aphidophagous ladybird in a wide range of agricultural crops and natural environments in whole Europe. *C. septempunctata* feeds mostly on Sternorrhyncha (Psyllidae, Aleyrodidae, Coccidae), Acari, Thysanoptera, and larvae of Diptera, Coleoptera, and Lepidoptera (F. A. Schilder and M. Schilder 1928; Kanervo 1940; Hodek 1967, 1970), but also on pollens, nectars and fungal spores (Putman 1964; Hemptinne and Desprets 1986; Hemptinne, Naisse, and Os 1988). Recorded also from Lipari (Della Beffa 1913), Stromboli and Filicudi (Lo Cascio *et al.* 2006) and Vulcano, Alicudi and Salina (Lo Cascio, Altadonna, and Ponel 2022) in Aeolian Archipelago, and Lampedusa (Ragusa 1892)

Coccinella (Spilota) undecimpunctata Linnaeus 1758

Chorotype – EUR

Trophic group – APH (*Aphis fabae* Scopoli, 1763, *Aphis pomi*, *Brachycaudus cardui*, *Laingia psammae*, *Metopolophium dirhodum*, *Myzus persicae*, *Sitobion avenae*); COC (*Pollinia pollini* (A. Costa)); ALE (*Aleyrodes proletella*); LEP (*Palpita unionalis*)

New records – **Trapani**: Saline di Trapani, Torrente Baiata, 09.VI.1994, Sparacio I. (BCPC).

Notes. A very rare species in Sicily, only a single specimen preserved in Vitale collection collected in Nebrodi, Ucria (Baviera 2004). Also the subspecies *C. undecimpunctata menetriesi* Mulsant, 1850 recorded in Sicily only from Lampedusa by Canepari (1995) with the subspecies *C. undecimpunctata arabica* Mader, 1931.

Genus *Oenopia* Mulsant 1846

Oenopia doublieri Mulsant 1846

Chorotype – MED

Trophic group – APH (*Hyalopterus pruni*)

New records – **Messina:** Lido Mortelle, on *Tamarix*, 23.V.2000, Baviera C. (BCPC); Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 19.V.2010, Baviera C. (BCPC); ditto, 29.VI.2010, Baviera C. (BCPC); **Trapani:** Trapani, 20.VII.1987, Gigli legit (FEI)⁴.

Notes. A common species in Sicily, often on *Tamarix* sp., Vitale described the ab. *uniconjuncta* (Vitale 1920, 1927a). In Vitale collection there are specimens only from Messina province (Rodia, Piano Torre, Sinnaro, Niceto) (Baviera 2004).

Oenopia conglobata (Linnaeus 1758)

Chorotype – PAL

Trophic group – APH (*Aphis pomi*, *Aphis berberidiorum* Ortego & Mier Durante, 1997, *Aphis hederae*, *Aphis punicae*, *Aphis sambuci*, *Brachycaudus persicae*, *Cavariella* (*Cavariella*) *aegopodii*, *Aulacorthum solani*, *Cavariella* (*Cavariella*) *aegopodii*, *Cinara* (*Cinara*) *curvipes*, *Cinara palestinensis*, *Cinara* (*Cupressobium*) *tujafilina*, *Cinara wahluca*, *Eucallipterus tiliae*, *Hyalopterus amygdali*, *Rhopalosiphum padi*, *Rhopalosiphum maidis*, *Schizaphis graminum*, *Eulachnus nigricola*, *Panaphis juglandis*); CHR (*Galerucella lineola*); COC (*Matsucoccus josephi*)

New records – **Messina:** Città, Annunziata, on *Quercus* sp., 03.V.2000, Baviera C. (BCPC); ditto, 30.VI.2001, Baviera C. (BCPC); Torre Faro Contr. Granatari, 07.IV.1998, Baviera C. (BCPC); ditto, 25.VII.1999, Baviera C. (BCPC); ditto, 22.27.VII.2000, Baviera C. (BCPC); Peloritani, Itala, Monte Scuderi, 1100m a.s.l., 22.V.2004, Baviera C. (BCPC); Rometta, Gimello, San Leone, 29.IV.2000, Baviera C. (BCPC); Forte S. Jachiddu, 375m a.s.l., 28.IV.2010, Baviera C. (BCPC); ditto, 30.V.2011, Baviera C. (BCPC); **Catania:** Calatabiano, San Marco, foce Alcantara, 21.VII.2010, Baviera C. (BCPC); **Siracusa:** Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Palermo:** Monti Sicani, Piana degli Albanesi, Maganoce, 11.XII.1974, Romano M. (RMPC); Lago Piana Albanesi, 600m a.s.l., 02.I.2007, Baviera C. (BCPC).

Notes. A very common species in Sicily, often on *Citrus* groves.

Oenopia lyncea (Olivier 1808)

Chorotype – CEU

Trophic group – APH

⁴<http://www.entomologiitaliani.net/public/forum/phpBB3/viewtopic.php?f=250&t=10065&hilit=Oenopia+doublieri>

New records – [*Oenopia lyncea lyncea*] **Trapani**: Castellammare del Golfo, R.N.O. Zingaro, 23-25.VI.2003, Baviera C. (BCPC); [*Oenopia lyncea agnata* (Rosenhauer 1847)] **Messina**: Peloritani, Musolino, 08.VIII.1998, Baviera C. (BCPC); Peloritani, Montalbano Elicona, Bosco di Malabotta, 1200m a.s.l., 24.IV.2006, Baviera C. (BCPC); Nebrodi, Portella Maulazzo, 1400m a.s.l., 14.V.2004, Baviera C. (BCPC); ditto, 23.VI.2001, Baviera C. (BCPC); ditto, 08.VIII.2001, Baviera C. (BCPC); San Fratello, 1200m a.s.l., on *Q. ilex*, 08.VIII.2001, Baviera C. (BCPC); ditto, 03.VIII.1999, Baviera C. (BCPC); ditto, 25.VI.2001, Baviera C. (BCPC); **Catania**: Etna Northern slope, Piano Provenzana, dint Monte Nero, 2050m a.s.l., 15.VI.2003, Baviera C. (BCPC); ditto, 1500m a.s.l., 23.VI.2001, Baviera C. (BCPC); **Palermo**: Madonie, Portella Colla, 1450m a.s.l., 03.VI.2000, Baviera C., (BCPC); Madonie, Isnello, Piano Zucchi, 18.IV.2006, Baviera C. (BCPC); ditto, 03.VI.2000, Baviera C. (BCPC).

Notes. The nominal subspecies is rare in Sicily. Even if *O. lyncea agnata* was reported to live mainly on deciduous oaks, many specimens of this subspecies were collected also on evergreen oaks (*Quercus ilex*) as already observed (Canepari 2011).

Genus *Harmonia* Mulsant 1846

Harmonia quadripunctata (Pontoppidan 1763)

Chorotype – PAL

Trophic group – APH (*Cinara* (*Schizolachnus*) *pineti*, *Cinara* (*Cupressobium*) *tujafilina*, *Eucallipterus tiliae*, *Eulachnus tuberculostemmatus* (Theobald, 1915), *Mindarus abietinus*) New records – **Messina**: Torre Faro Contr. Granatari, 24.VI-01.VII.2001, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 27.VII.1999, Baviera C. (BCPC); Calvaruso, 03.VII.2003, Camino F. (BCPC); Spadafora, 25.III.2009, on *Eucaliptus*, Baviera C. (BCPC); Nebrodi, Floresta, 16.VIII.2000, Baviera C. (BCPC); **Catania**: Piano Provenzana dint Monte Nero 2050m a.s.l., on *Populus tremula*, 16.V.2002, Baviera C. (BCPC); ditto, 04.VIII.2000, Baviera C. (BCPC); ditto, on *Pinus nigra*, 08.VI.2000, Baviera C. (BCPC); ditto, 1800m a.s.l., on *Pinus nigra*, 14.VIII.1999, Baviera C. (BCPC); ditto, 10.VIII.1998, Baviera C. (BCPC); **Palermo**: Sicani, Bosco Ficuzza, 800m a.s.l., 20.VI.2001, Baviera C. (BCPC).

Notes. In Sicily this species is recorded also from Vulcano and Stromboli in Aeolian Archipelago (Lo Cascio *et al.* 2006; Lo Cascio, Altadonna, and Ponel 2022).

Harmonia axyridis (Pallas 1773)

Chorotype – SCO

Trophic group – APH (*Acyrtosiphon pisum*, *Adelges tsugae*, *Aphis craccivora*, *Aphis fabae* Scopoli, 1763, *Aphis glycines*, *Aphis pomi*, *Brevicoryne brassicae*, *Capitophorus elaeagni*, *Cavariella* (*Cavariella*) *aegopodii*, *Hyalopterus pruni*, *Hyperomyzus carduellinus*, *Megoura viciae*, *Myzus persicae*, *Nasonovia lactucae*, *Neophyllaphis podocarpi*, *Periphyllus californensis*, *Rhopalosiphum padi*, *Schizaphis graminum*, *Sitobion ibarae*), COC, LEP (*Ephestia kuehniella*), PSI (*Diaphorina citri*). New records – **Messina**: Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 28.V.2016, Baviera C. and R. (BCPC); Aeolian Archipelago, Vulcano, Piano, 16.VIII.2016, G. Altadonna legit (FEI)⁵;

⁵<http://www.entomologiitaliani.net/public/forum/phpBB3/viewtopic.php?f=250&t=93977&hilit=Harmonia+axyridis>

Catania: Etna Northern slope, Piano Provenzana dint Monte Nero 2050m a.s.l., on *Populus tremula*, 28.VI.2019, Baviera C. (BCPC); **Palermo:** Madonie, Piano Battaglia, 1600m a.s.l., 15.VII.2016, Baviera C. (BCPC).

Notes. This species, largely used as biological control agent, is one of the most invasive insects of the world (Roy et al. 2016). Native to Eastern Asia, this species has been introduced in Italy in the late 1990s but only recently recorded from Sicily (Catania, Bicocca; Siracusa; Augusta; Carletini; Lentini; Buccheri; Menchetti *et al.* (2016). The most common form in Sicily seems to be the form *succinea*, which is the most common color form also in Asia, as well as in most invasive populations (Roy et al. 2016), even if also forms *spectabilis* and *cospicua* are recorded.^{6,7,8,9} Only recently recorded also from Vulcano in Aeolian Archipelago (Lo Cascio, Altadonna, and Ponel 2022). The spread of this species, described as one of the “worst” invasive alien species of Europe (Nentwig *et al.* 2018), should be a great problem for Sicilian biodiversity for the negative effect not only on native insects, such as causing local ladybird populations to decline (Mizell III 2007; Roy *et al.* 2012; Masetti *et al.* 2018), but also on food production and human health (Koch 2003; Pickering *et al.* 2004; Koch and Galvan 2008). This species has been included among the insects for which it is necessary to adopt cultural, mechanical, chemical and biological control actions since 2015.¹⁰

Genus *Myrrha* Mulsant 1846

Myrrha octodecimguttata (Linnaeus 1758)

Chorotype – CEM

Trophic group – APH (*Pineus pini*, *Eulachnus tuberculostemmatum*)

New records – [*M. octodecimguttata octodecimguttata* (Linnaeus 1758)] **Catania:** Etna Northern slope, Piano Provenzana dint Monte Nero 2050m a.s.l., 16.V.2002, Baviera C. (BCPC). [*M. octodecimguttata formosa* (Costa 1849)] **Messina:** Torre Faro Contr. Granatari, 27.V-05.VI.2000, Baviera C. (BCPC); Ganzirri, 25.X.2016, Baviera C. (BCPC); Peloritani, Itala, Monte Scuderi, 1100m a.s.l., 31.V.2005, Baviera C. (BCPC); Curcuraci, 300m a.s.l., at light, 12.VII.2011, Infusino M. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 04.VI.2000, Baviera C. (BCPC); ditto, 16.V.2007, Baviera C. (BCPC); ditto, 28.V.2016, Baviera C. and R. (BCPC); Villafranca, Serro, 14.III.2005, Camino F. (CFPC); Patti, Oliveri, Laghetti di Marinello, 07.VII.2008, at light, Infusino M. (BCPC); Nebrodi, Floresta, 1400m a.s.l., 16.VIII.2000, Baviera C. (BCPC); Nebrodi, Portella Maulazzo, 1400m a.s.l., 23.VI.2001, Baviera C. (BCPC); Aeolian Archipelago, Isola di Vulcano, loc. Piano, 24-29.VI.2001, Baviera C. (BCPC); Aeolian Archipelago, Isola di Salina, 10- 12.V.2007, Baviera C. (BCPC); **Catania:** Etna Northern slope, Piano Provenzana dint Monte Nero 2050m a.s.l., 23.IV.2001, Baviera C. (BCPC); ditto, 1600m a.s.l., 04.VIII.2000, Baviera C. (BCPC); ditto, 1850m a.s.l., 16.VIII.1998, Baviera C. (BCPC); ditto, 14.VIII.1999, Baviera C. (BCPC); **Agrigento:** Isola di Lampedusa, VII. 2001, Nardi M. (BCPC); **Palermo:** Capaci, spiaggia, 10.IV.1970, Romano M.

⁶Milazzo: <https://www.inaturalist.org/observations/190048244>

⁷Catania: <https://www.inaturalist.org/observations/139015847>

⁸Etna: <https://www.inaturalist.org/observations/90553572>

⁹Acireale: <https://www.inaturalist.org/observations/4853114>

¹⁰See technical factsheet at <https://plantwisepiusknowledgebank.org/doi/10.1079/PWKB.Species.26515>

(BCPC); Sicani, Bosco Ficuzza, 800m a.s.l., 20.VI.2001, Baviera C. (BCPC); Isola di Ustica, 28-29.IX.2002, Baviera C. (BCPC); **Trapani**: Castellammare del Golfo, R.N.O. Zingaro, 23-25.VI.2003, Baviera C. (BCPC); Isole Egadi, Isola di Marettimo, 16-18.IV.2006, Baviera C. (BCPC).

Notes. The typical form was recorded by Vitale (1940) (sub *M. octodecimguttata* ab. *silvicola*) on *Pinus* in Messina, but the rarity of this species led to consider this data as wrong until 2002 when it was confirmed (Peloritani, Antennamare) (Baviera and Sparacio 2002). The subspecies *M. octodecimguttata formosa* (Costa 1849) is very common in Sicily and recorded also from Stromboli and Vulcano in Aeolian Archipelago (Lo Cascio *et al.* 2006; Lo Cascio, Altadonna, and Ponel 2022) and Pantelleria (Canepari 1995). Kovář (2007) considers *M. octodecimguttata formosa* as a synonym of the nominal form, while Canepari (2011), following Sainte-Claire Deville (1914), consider the subspecies *M. octodecimguttata formosa* as a true biological race living on southern species of the genus *Pinus* (*P. pinaster*, *P. nigra*, *P. halepensis*), while the nominal subspecies lives on *P. sylvestris*. Rarity of the nominal subspecies in Sicily don't allow to do any consideration, even if, having collect the two "subspecies" in Etna Mount (Piano Provenzana) and in Peloritani (Antennamare), on the same trees, support the hypothesis of synonymy.

Genus *Sospita* Mulsant 1846

Sospita vigintiguttata (Linnaeus 1758)

Chorotype – EUR

Trophic group – APH

New records – **Messina**: Nebrodi, Floresta Sorgente San Giacomo, 1300m a.s.l., 21.VII.2010, Baviera C. (BCPC).

Notes. This species was classified as very rare in Europe by Fürsch (1967). The sparsity of European records of this species is well comprehensible if we consider the rareness of these ladybird beetles (Godeau and Ceryngier 2011). This species is recorded from Sicily for the first time.

Genus *Myzia* Mulsant 1846

Myzia oblongoguttata (Linnaeus 1758)

Chorotype – CEM

Trophic group – APH (*Cicer arietinum*, *Phaseolus coccineus*, *P. vulgaris*, *Vicia faba*)

New records – **Messina**: Nebrodi, Portella Maulazzo dint., Baviera C. (BCPC); **Catania**: Etna, Northern slope, Piano Provenzana dint Monte Nero 2050m a.s.l., on *Populus tremula*, 28.VI.2019, Baviera C. (BCPC); Etna, Easten slope, Sant'Alfio, Bosco Cerrita, 1500m a.s.l., on *Quercus*, 15.VI.2003, Baviera C. (BCPC); Sant'Alfio, 16.V.2002, Baviera C. (BCPC).

Notes. Vitale recorded this species as very rare in Sicily in Botanical Garden of Messina in 1926 (Vitale 1927b), sub *Mysia oblongoguttata* ab. *Fleischeri*. Thereafter the presence of this

species in Sicily was confirmed by specimens collected in Messina (Peloritani, Antennamare Mount) and Palermo (Madonie, Portella Colla) (Baviera and Sparacio 2002).

Genus **Calvia** Mulsant 1846

Calvia quatuordecimguttata (Linnaeus, 1758)

Chorotype – OLA

Trophic group – APH, PSI, CHR (*Melasoma aenea*)

Trophic category - MON

New records – **Palermo**: Madonie, Piano Zucchi, 03.VI.2000, Baviera C. (BCPC).

Notes. This species was not recorded from Sicily in Italian and European checklist (Audisio *et al.* 1995). The collected specimens allow to confirm the presence of this species in Sicily where is probably less common than in the past.

Genus **Propylea** Mulsant 1846

Propylea quatuordecimpunctata (Linnaeus 1758)

Chorotype – PAL

Trophic group – APH (*Acyrtosiphon pisum*, *Aphis fabae* Scopoli, 1763, *Aphis glycines*, *Brachycaudus helichrysi*, *Diuraphis noxia*, *Eucallipterus tiliae*, *Macrosiphum* (*Macrosiphum*) *euphorbiae*, *Macrosiphum rosae*, *Metapolophium dirhodum*, *Myzocallis* (*Myzocallis*) *boernerii*, *Pterocallis alni*, *Rhopalosiphum maidis*, *Schizaphis graminum*, *Sitobion avenae*, *Thelaxes suberi* (Del Guercio, 1911), *Tuberculatulus maximus* Hille Ris Lambers, 1974, *Uroleucon cirsii*, *Uroleucon jaceae* (Linnaeus, 1758)); COC (*Saissetia oleae*; CHR (*Oulema* spp. larvae).

New records – **Messina**: Città, Annunziata, on *Quercus* sp., 30.IV.2001, Baviera C. (BCPC); Tipoldo, 16.IV.1992, Baviera C. (BCPC); Torre Faro Contr. Granatari, 07.IV.1998, Baviera C. (BCPC); ditto, 25-28.V.2000, Baviera C. (BCPC); ditto, 12.V.2001, Baviera C. (BCPC); Francavilla di Sicilia, Le Gurne, Alcantara river, 19.IV.2010, Baviera C. (BCPC); ditto, 25.V.2002, Baviera C. (BCPC); Peloritani, Salice, 28.X.2006, Baviera C. (BCPC); Musolino, 08.VIII.1998, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., 27.VI.1997, Baviera C. (BCPC); ditto, 23.VII.2000, Baviera C. (BCPC); ditto, 04.VI.2000, Baviera C. (BCPC); ditto, 09.IV.2002, Baviera C. (BCPC); Nebrodi, Floresta Sorgente San Giacomo, 29.VI.2010, Baviera C. (BCPC); Tortorici, Batana, 787m a.s.l., 20.III.2015, Baviera C. (BCPC); Biviere di Cesarò, 1278m a.s.l., 11.IV.2002, Baviera C. (BCPC); Monte Soro, 1800m a.s.l., sifting *Fagus*, 7.VI.2008, Baviera C. (BCPC); ditto, 1500m a.s.l., 25.VI.2001, Baviera C. (BCPC); San Fratello, 1300m a.s.l., 25.VI.2001, Baviera C. (BCPC); Patti, Oliveri, Laghetti Marinello, 02.III.2002, Baviera C. (BCPC); Floresta - Monte Poggjummoru, 26/07/1996, Sparacio I. (SIPC); **Catania**: Etna, North slope, Piano Provenzana dint Monte Nero 2050m a.s.l., 23.VI.2001, Baviera C. (BCPC); ditto, 1500m a.s.l., 23.VI.2001, Baviera C. (BCPC); Calatabiano, San Marco, foce Alcantara, 21.VII.2010, Baviera C. (BCPC); ditto, 29.VI.2010, Baviera C. (BCPC); ditto, 19.V.2010, Baviera C. (BCPC); **Agrigento**: Agrigento - Cattolica Eraclea - Laghetto Gorgo, 16/05/1996, Sparacio I. (SIPC); **Caltanissetta**: Biviere di Gela, 29.V.2006, Baviera C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); **Ragusa**: Giarratana, 500m a.s.l., 04.V.2010, Baviera C. (BCPC); **Palermo**: Contessa Entellina - S. Maria del Bosco, 03/07/1991, Carapezza A. (CAPC); Capaci, città, 18.VI.1999, Romano M. (BCPC); ditto, 04.IV.1968, Romano

M. (BCPC); ditto, 29.IV.1998, Romano M. (BCPC); ditto, 03.XI.1967, Romano M. (BCPC); ditto, 15.VII.1969, Romano M. (BCPC); 03.IX.1972, Romano M. (BCPC); Madonie, Piano Battaglia, 1600m a.s.l., 08.VIII.2015, Baviera C. (BCPC); Piano Zucchi, dint. 1200m a.s.l., 03.VI.2000, Baviera C. (BCPC); Madonie - Montaspro 800m s.l.m., 20/06/1996, Sparacio I. (SIPC); **Trapani**: Castellamare del Golfo, R.N.O. Zingaro, 23- 25.VI.2003, Baviera C. (BCPC).

Notes. This is a very common and widespread species in Sicily, an aphidophagous species, but also a pollen eater, especially in early spring (Hemptinne and Desprets 1986; Hemptinne, Naisse, and Os 1988). A species also recorded from Lipari, Alcudi and Salina in Aeolian Archipelago (Lo Cascio *et al.* 2006; Lo Cascio, Altadonna, and Ponel 2022).

Genus *Tythaspis* Crotch 1874

Tythaspis phalerata A. Costa, 1849

Chorotype – NAF

Trophic group – APH

New records – **Messina**: Casabianca, 12.VII.2010, at light, Infusino M. (BCPC); San Pier Niceto, Contr. Terra Salata, 250m a.s.l., 11.X.2012, Baviera C. (BCPC); Peloritani, Montalbano Elicona, Bosco di Malabotta, 1200m a.s.l., 23.V.2006, Baviera C. (BCPC); Biviere di Cesarò, 1278m a.s.l., 19.VI.2002, Baviera C. (BCPC); ditto, 02.VII.2005, Baviera C. (BCPC); Patti, Oliveri, Laghetti di Marinello, 18.X.2002, Baviera C. (BCPC); Nebrodi, Floresta Sorgente San Giacomo, 29.VI.2010, Baviera C. (BCPC); Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 29.VI.2010, Baviera C. (BCPC); Milazzo, Porto dint 26.IV.2024, Baviera C. (BCPC); **Catania**: Mojo Alcantara, Fiume Alcantara, 11.VI.2004, Baviera C. (BCPC); Calatabiano, San Marco, foce Alcantara, 19.V.2010, Baviera C. (BCPC); **Caltanissetta**: Biviere di Gela, 29.V.2006, Baviera C. (BCPC); **Agrigento**: Palma di Montechiaro, 120m a.s.l., 17.XI.2018, sifting *Olea* and *Smilax*, Baviera C. and Bellò C. (BCPC); **Enna**: Regalbuto, 520m a.s.l., 15.VI.2002, Baviera C. (BCPC); Barrafranca, 08.XI.2011, Capici S. (FEI)¹¹; **Siracusa**: Fontanebianche, 02.VII.1996, Lisa R. (BCPC); **Palermo**: Lago di Piana degli Albanesi, 12.V.1992, Canepari, C. (BCPC); ditto, 02.I.2007, sifting leaf litter, Baviera C. (BCPC); Piana Albanesi, 19.III.1996, Carapezza A. (CAPC); ditto, 21.V.1996, Carapezza A. (CAPC); ditto, M.te Maganoce, 750m, 16.I.2009, Degiovanni A. (FEI)¹²; Monte Cammarata, 1000m a.s.l., 27.V.2007, Baviera C. (BCPC); Madonie, Isnello, Piano Zucchi, 26.VII.1992, Saltini L. (SLPC); ditto, dint. Lago artificiale, 1200m a.s.l., 07.VIII.2015, Baviera C. (BCPC); **Trapani**: Selinunte, Acropoli, 30.IV.2000, Baviera C. (BCPC).

Notes. This North African species (Algeria and Tunisia) in Europe is known only from Spain and Sicily (Nedvěd and Djuic 2022). A species also recorded from Lampedusa (Failla-Tedaldi 1887)

¹¹<http://www.entomologiitaliani.net/public/forum/phpBB3/viewtopic.php?f=250&t=28581&hilit=Tythaspis+phalerata>

¹²<http://www.entomologiitaliani.net/public/forum/phpBB3/viewtopic.php?f=250&t=3309&hilit=Tythaspis+phalerata>

Tythaspis sedecimpunctata (Linnaeus 1758)

Chorotype – CEM

Trophic group – APH; MYC

Notes. A very rare species in Sicily.Genus **Psyllobora** Dejean 1833*Psyllobora vigintiduopunctata* (Linnaeus 1758)

Chorotype – PAL

Trophic group – MYC (Erysiphaceae, *Sphaerotheca* spp.)

New records – **Messina**: Torre Faro Contr. Granatari, 07.IV.1998, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus*, 27.VII.1999, Baviera C. (BCPC); ditto, 23.VII.2000, Baviera C. (BCPC); Massa San Giovanni, 23.VIII.1997, Baviera C. (BCPC); Patti, Oliveri, Laghetti Marinello, 02.III.2002, Baviera C. (BCPC); Nebrodi, Floresta Sorgente San Giacomo, 29.VI.2010, Baviera C. (BCPC); Nebrodi, Biviere di Cesarò, 1278m a.s.l., 11.VIII.1998, Baviera C. (BCPC); ditto, 26.V.2004, Baviera C. (BCPC); ditto, 11.IV.2002, Baviera C. (BCPC); ditto, 11.X.2001, Baviera C. (BCPC); Portella Maulazzo, 08.VIII.2001, Baviera C. (BCPC); Monte Soro, 1800m on *Fagus*, 27.VI.2008, Baviera C. (BCPC); Portella Femmina Morta, 1542m a.s.l., 25.VI.2001, Baviera C. (BCPC); Aeolian Archipelago, Isola di Salina, 10-12.V.2007, Baviera C. (BCPC); Aeolian Archipelago, Isola di Stromboli, 07-09.IV.2006, Baviera C. (BCPC); **Caltanissetta**: Biviere di Gela, 29.V.2006, Baviera C. (BCPC); **Ragusa**: Giarratana, 500m a.s.l., 04.V.2010, Baviera C. (BCPC); **Palermo**: Termini Imerese, sifting *Olea*, 27.V.2007, Baviera C. and Bellò C. (BCPC); Madonie, Piano Zucchi, 19.VII.2006, Baviera C. (BCPC); Bosco Ficuzza, 13.IV.1968, Romano M. (BCPC); ditto, 05.VII.1967, Romano M. (BCPC); **Trapani**: Marausa, 20.VII.2009, Barraco L. (FED)¹³.

Notes. This species in Sicily was recorded also from Lampedusa (Canepari 1995) and from Vulcano and Lipari in Aeolian Archipelago (Lo Cascio, Altadonna, and Ponel 2022).

Genus **Halyzia** Mulsant 1846*Halyzia sedecimguttata* (Linnaeus 1758)

Chorotype – SIE

Trophic group – MYC (*Phyllactinia guttata* (Wallr.), *Podosphaera* spp. Kunze). New records – **Messina**: Peloritani, Montalbano Elicona, Bosco di Malabotta, 1200m a.s.l., 12.IX.2014, Baviera C. (BCPC); Nebrodi, Portella Maulazzo, 1400m a.s.l., 23.VI.2001, Baviera C. (BCPC); Caronia 4, 1300m a.s.l., on *Ilex*, 29.V.2015, Baviera C. (BCPC); San Fratello dint., 1300m a.s.l., 17.V.2002, Baviera C. (BCPC); **Catania**: Etna, Northern slope, Piano Provenzana dint Monte Nero 2050m a.s.l., on *Populus tremula*, 28.VI.2019, Baviera C. (BCPC); **Palermo**: Madonie, Piano Battaglia, 1600m a.s.l., 15.VII.2016, Baviera C. (BCPC).

¹³<http://www.entomologiitaliani.net/public/forum/phpBB3/viewtopic.php?f=250&t=2851&hilit=Psyllobora+vigintiduopunctata>

Notes. A quite rare species in Sicily, more common in higher mountains. Only a single specimen in Vitale collection (Palermo, (Baviera 2004)).

Genus **Vibidia** Mulsant 1846

Vibidia duodecimguttata (Poda 1761)

Chorotype – ASE

Trophic group – MYC (*Sphaerotheca pannosa* (Perisporiales, Erysiphaceae))

New records – **Messina**: Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 19.V.2010, Baviera C. (BCPC); Peloritani, Montalbano Elicona, Bosco di Malabotta, 1200m a.s.l., 23.V.2006, Baviera C. (BCPC); [Nebrodi], Longi, 23/06/1984, Carapezza A. (CAPC); Biviere di Cesarò, 1278m a.s.l., 31.V.2003, Baviera C. (BCPC); **Catania**: Castel di Judica 2, 11.V.2015, Baviera C. (BCPC); **Palermo**: Madonie, Piano Zucchi, 19.VII.2006, Baviera C. (BCPC); Madonie, Piano Battaglia, 1600m a.s.l., 07.VII.1968, Romano M. (BCPC); ditto, 15.VII.2016, Baviera C. (BCPC).

Notes. A quite uncommon species in Sicily, recorded only in best preserved habitats on Peloritani, Nebrodi and Madonie.

Tribe **Epilachnini** Dejean 1836

Genus **Henosepilachna** Li & Cook 1961

Henosepilachna argus (Geoffroy 1762)

Chorotype – EUM

Trophic group – PHY

New records – **Catania**: Scordia 12.IX.201, Chiarenza G. (FEI)¹⁴.

Notes. This is an uncommon species in Sicily.

Genus **Chnootriba** Chevrolat, 1837

Chnootriba elaterii (Rossi 1794)

Chorotype – EUR

Trophic group – PHY (*Ecballium elaterium* (L.) A. Rich) New records – **Messina**: Patti, Mongiove, Galice, 14.VII.2002, Baviera C. (BCPC); **Trapani**: Saline di Trapani e Paceco, salina Vecchia, 29.IV.2004, Baviera C. (BCPC); ditto, Fiume Lenzi Baiata, 29.IV.2004, Baviera C. (BCPC).

¹⁴<http://www.entomologiitaliani.net/public/forum/phpBB3/viewtopic.php?f=250&t=64126&hilit=Henosepilachna+argus>

Notes. A common species in Sicily on the host plant *Ecballium elaterium*.

Genus **Subcoccinella** Agassiz, 1845

Subcoccinella vigintiquatuorpunktata (Linnaeus 1758)

Chorotype – PAL

Trophic group – PHY New records – **Messina:** Peloritani, Monte Antennamare, 1133m a.s.l., 27.IV.2010, Baviera C. (BCPC); ditto, 06.X.2008, Baviera C. (BCPC); ditto, 17.X.1998, Baviera C. (BCPC); Nebrodi, Lago Tre Arie, 1600m a.s.l., 02.VII.2005, Baviera C. (BCPC); Itala, Monte Scuderi, 22.V.2004, Camino F. (BCPC); **Catania:** Etna Northern slope, Piano Provenzana, Monte Nero, dint 2000m a.s.l., 15.VI.2003, Baviera C. (BCPC); Etna North slope, Rifugio Brunek 1500m a.s.l., sifting *Quercus*, 31.V.2008, Baviera C. (BCPC); **Palermo:** Madonie, Piano Battaglietta, 1800m a.s.l., 24.IV.2008, sifting *Fagus* and *Acer*, Baviera C. and Rando A. (BCPC); ditto, 1600m a.s.l., 18.V.2013, Baviera C. (BCPC); ditto, 23.IX.2010, Baviera C. (BCPC).

Notes. As referred by Vitale (1905) this species is very common in Sicily often collected sifting under *Erica* and *Quercus*.

Tribe **Noviini** Mulsant, 1846

Genus **Novius** Mulsant 1846

Novius cruentatus (Mulsant 1850)

Chorotype – EUM

Trophic group – COC

New records – **Catania:** Etna Northern slope, Piano Provenzana, dint 1800m a.s.l., 14.VIII.1999, Baviera C. (BCPC).

Notes. This species is very rare in Sicily. The cited specimens were collected in Etna Mount in the same sites of *N. cardinalis*. Recorded also from Pantelleria (Canepari 1995).

Novius cardinalis (Mulsant 1850)

Chorotype – COS

Trophic group – COC (*Icerya purchasi* Maskell, 1879)

New records – **Messina:** Torre Faro Contr. Granatari, 03-20.VIII.2001, Baviera C. (BCPC); ditto, 25.VII.1999, Baviera C. (BCPC); ditto, 06.VIII.1994, Baviera C. (BCPC); ditto, 24.VI-01.VII.2001, Baviera C. (BCPC); ditto, 18-23.V.2000, Baviera C. (BCPC); ditto, 12.V.2001, Baviera C. (BCPC); Forte S. Jachiddu, 375m a.s.l., 23.III.2010, Baviera C. (BCPC); Aeolian Archipelago, Isola di Vulcano, loc. Piano, 24-29.VI.2001, Baviera C. (BCPC); Aeolian Archipelago, Stromboli, Ginostra, VII.1997, Fabbri A. (BCPC); **Catania:** Etna Northern slope, Piano Provenzana, Monte Nero, dint 2000m a.s.l., 04.VIII.2000, Baviera C. (BCPC); ditto, 10.VII.2002, Baviera C. (BCPC); **Siracusa:**

Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Palermo**: Capaci Città, 14.IV.1968, Romano M. (BCPC); **Trapani**: Castellammare del Golfo, R.N.O. Zingaro, 23-25.VI.2003, Baviera C. (BCPC).

Notes. This species was imported in 1888 in America from Australia and New Zeland, and from there, in 1901, in Sicily for the first example of classical biological control of *I. purchasi* on *Citrus*. Now is very common and widely distributed in all the Island, with many different colour patterns (Vitale 1924). Often founded on *Citrus* and on all the plants which hosts *I. purchasi*. Recorded also from Lipari, Vulcano, Panarea, Salina and Stromboli in Aeolian Archipelago (sub *Rodolia* (Lo Cascio *et al.* 2006; Lo Cascio, Altadonna, and Ponel 2022)) and from Pantelleria (sub *Rodolia* (Canepari 1995)).

Tribe **Scymnini** Mulsant, 1846

Genus **Clitostethus** Weise 1885

Clitostethus arcuatus (Rossi 1794)

Chorotype – EUM

Trophic group – ALE (*Siphoninus phillyreae* (Haliday, 1835), *Dialeurodes citri* (Ashmead, 1885), *Aleurodes prolethella* (Linnaeus, 1758), *Aleurotuba jelinekii* (Frauenfeld, 1867), *Siphoninus phillyreae* (Haliday, 1835), *Siphoninus immaculatus* (Heeger, 1836), *Aleurothrixsus floccosus*, *Bemisia tabaci*, *Trialeurodes vaporariorum*) – APH (*Aphis sambuci*) – MIT (*Tetranychus urticae*)

New records – **Messina**: Torre Faro Contr. Granatari, 12.V.1993, Baviera C. (BCPC); Peloritani, Salice, *Quercusilex*, in pit-fall trap, Baviera C. (BCPC); 21.IV-05.V.2004, Baviera C. (BCPC); Peloritani, Graniti, Postoleone, 40m a.s.l., sifting *Olea* and *Quercus*, Baviera C. (BCPC); **Catania**: Nebrodi, Maniace, Petrosino, 04.IV.2013, sifting *Quercus*, Baviera C. (BCPC); ditto, Foresta Vecchia, 22.IV.2014, Baviera C. (BCPC); ditto, portella Segheria, 04.IV.2013, sifting *Quercus*, Baviera C. (BCPC); **Siracusa**: Augusta, 08.VII.1997, on *Citrus*, Benfatto L. (BCPC); **Trapani**: Castellammare del Golfo, R.N.O. Zingaro, 19-21.V.2003, Baviera C. (BCPC).

Notes. This species, recorded as rare in Sicily by Vitale (1905), is probably not uncommon but localized, as after the same author consider it very common in Licata (Vitale 1927b). Liotta (1979) consider this species as very common in Palermo *Citrus* groves since February-March, as a very efficient predator of *Tetranychus urticae*.

Genus **Nephus** Mulsant 1846

Nephus (Bipunctatus) bicinctus (Mulsant & Godart 1872)

Chorotype – TEM

Trophic group – PSE (*Planococcus vovae* (Nasonov, 1908)). New records – **Messina**: Calatabiano San Marco Foce Alcantara 19.IV.2010, Baviera C. (BCPC).

Notes. This species was described from Algeria as *Scymnus (Pullus) bicinctus* and after redescribed as a simple variety of *Scymnus kiesenwetteri* (var. *africanus*) by Sicard (1892). The validity of this species was confirmed by Canepari (1978) on specimens from Tunisia, Sicily, and Algeria. This species wasn't recorded for Sicilian fauna in Italian and European checklists. The presence of this very rare taxon in Sicily (and Europe) is so confirmed.

Nephus (Bipunctatus) bipunctatus (Kugelann 1794)

Chorotype – ASE

Trophic group – PSE (*Planococcus vovae* (Nasonov, 1908); APH.

New records – **Messina:** Peloritani, Monte Antennamare, 1133m a.s.l., 05.VII.1999, Baviera C. (BCPC); Mojo Alcantara, sifting *Olea*, 12.V.2009, Baviera C. (BCPC); **Catania:** Mazzarino per San Cono, 489m a.s.l., sifting *Olea*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); **Palermo:** Camporeale - Roccamena, 09.III.2014, Bellò C. (BCPC); Ciminà 570m a.s.l., 22.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Trapani:** Salemi, 28.XI.2015, sifting *Olea*, Baviera C. and Bellò C. (BCPC).

Notes. This is a quite uncommon but widespread species in Sicily.

Nephus (Bipunctatus) bisignatus Fürsch, 1965

Chorotype – EUR

Trophic group – PSE (*Planococcus citri* (Risso, 1813), *Planococcus vovae*); APH

New records – **Messina:** Torre Faro Contr. Granatari, 30.IV.1993, Baviera C. (BCPC); ditto, 11.VII.1993, Baviera C. (BCPC); ditto, 07.VI.1998, Baviera C. (BCPC); ditto, 21.VI.1998, Baviera C. (BCPC); ditto, 25.XII.1998, Baviera C. (BCPC); ditto, 01.VIII.1999, Baviera C. (BCPC); ditto, 27.V-05.VI.2000, Baviera C. (BCPC); ditto, 28.IV.2010, Baviera C. (BCPC); ditto, 12.V.1993, Baviera C. (BCPC); ditto, 07.VI.1994, Baviera C. (BCPC); ditto, 12.VIII.1994, Baviera C. (BCPC); ditto, 12.V.2001, Baviera C. (BCPC); Nebrodi, Monte Pojumoru, 1400m a.s.l., 14.VIII.1998, Baviera C. (BCPC); Monte Soro, 1800m on *Fagus*, 11.VIII.1998, Baviera C. (BCPC); **Catania:** Etna Northern slope, Piano Provenzana dint 1900m a.s.l., 03.VIII.1998, Baviera C. (BCPC); **Siracusa:** Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC).

Notes. Fürsch (1965) described a new subspecies of *N. bisignatus*, *N. (B.) bisignatus etesiacus* Fürsch, 1965 from Dalmatia (Croatia) and consider *N. (B.) bisignatus bisignatus* distributed only in northern Europe. After the same Author (Fürsch, 1984) described *N. (B.) bisignatus claudiae* Fürsch, 1984 from southern Germany. In Sardinia and Italian mainland was recorded only *N. (B.) bisignatus bisignatus* (Canepari 2011), recorded also from Lipari and Vulcano Islands in Aeolian Archipelago (Lo Cascio *et al.* 2006). *N. bisignatus* was't recorded from Italy in Palearctic checklist (Kovář 2007).

Nephus (Bipunctatus) conjunctus Wollaston, 1870 (= *inclusens* Kirsch, 1871)

Chorotype – SCO

Trophic group – PSE (*Planococcus citri*)

Notes. A species not common in Sicily. Recorded often on *Citrus* (Baviera 2000). Known also from Messina (sub *N. includens*) (Longo and Benfatto 1987; Baviera 2004). This introduced species is used as biological control species in Italy.

Nephus (Bipunctatus) kiesenwetteri Mulsant 1850

Chorotype – MED

Trophic group – APH

New records – **Messina:** Gesso 2, 27.XII.2012, Baviera C. (BCPC); Foce S. Stefano, 06.V.1989, Carapezza A.(BCPC); **Caltanissetta:** Biviere di Gela, 29.V.2006, Baviera C. (BCPC)

Notes. A quite common species in Sicily. Recently recorded also from Vulcano and Salina in Eole Islands (Lo Cascio, Altadonna, and Ponel 2022).

Nephus (Bipunctatus) nigricans Weise 1879

Chorotype – MED

Trophic group – PSE

New records – **Messina:** Torre Faro Contr. Granatari, 25.V-05.VI.2000, Baviera C. (BCPC); ditto, 21.VI.1998, Baviera C. (BCPC); ditto, 28.IV.2010, Baviera C. (BCPC); Forte S. Jachiddu, 375m a.s.l., 28.IV.2010, Baviera C. (BCPC); Mortelle, Canale degli Inglesi, 28.IV.2010, Baviera C. (BCPC); Monti Peloritani, San Pier Niceto, 945m a.s.l., 02.III.2008, Baviera C. (BCPC).

Notes. This species and *N. (B.) bisignatus* have a very similar male genital apparatus and distinguishing features are only in external characters. This is a rare species in Sicily. Also recorded from Lipari and Panarea in Aeolian Islands (Lo Cascio *et al.* 2006; Lo Cascio, Altadonna, and Ponel 2022).

Nephus (Nephus) ludyi (Weise 1897)

Chorotype – MED

Trophic group – PSE

New records – **Messina:** Peloritani, Monte Antennamare, 1133m a.s.l., 27.VII.1999, Baviera C. (BCPC); ditto, 17.IV.1998, Baviera C. (BCPC); ditto, 26.IV.2000, Baviera C. (BCPC); ditto, 17.X.2002, Baviera C. (BCPC); ditto, 09.IV.2002, Baviera C. (BCPC); Peloritani, Musolino, 06.VII.2002, Baviera C. (BCPC); Itala, Monte Scuderi, 25.VI.2005, Baviera C. (BCPC); ditto, 29.IX.2005, Baviera C. (BCPC); **Catania:** Calatabiano, San Marco, foce Alcantara, 11.III.2011, Baviera C. (BCPC); **Palermo:** Madonie, Piano Battaglia, 1600m a.s.l., 15.VII.2016, Baviera C. (BCPC); **Trapani:** Isole Egadi, Isola di Marettimo, 22.IV.2007, sifting *Quercus*, Baviera C. (BCPC).

Notes. This is a rare, even if widespread, species in Sicily.

Nephus (Nephus) redtenbacheri (Mulsant 1846)

Chorotype – EUM

Trophic group – APH

Notes. This is a very rare species in Sicily.

Nephus (Nephus) schatzmayri Canepari & Tedeschi 1977

Chorotype – SEU

Trophic group – PSE, COC, APH

New records – **Messina:** Torre Faro Contr. Granatari, 11.VII.1993, Baviera C. (BCPC); ditto, 06.VIII.1994, Baviera C. (BCPC); Ortoliuzzo, sifting *Olea*, 27.XII.2012, Baviera C. (BCPC); San Pier Niceto, Torrente Niceto, sifting *Populus*, 03.V.2014, Baviera C. (BCPC); Aeolian Archipelago, Isola di Vulcano, 02.IV.1994, Baviera C. (BCPC); Aeolian Archipelago, Isola di Stromboli, 07-09.IV.2006, Baviera C. (BCPC); **Catania:** Etna North slope, Piano Provenzana, 1800m a.s.l., on *Pinus nigra*, 14.VIII.1999, Baviera C. (BCPC); ditto, 05.IX.2010, Baviera C. (BCPC); **Trapani:** Castellammare del Golfo, R.N.O. Zingaro, 26-29.III.2003, Baviera C. (BCPC); ditto, 23-25.IV.2003, Baviera C. (BCPC); Marsala, 10.X.1973, Carapezza A. (BCPC).

Notes. This species was described as subspecies of *Nephus quadrimaculatus* (Herbst, 1783) from Siracusa, (23.II.1926, leg. A, Schatzmayr: Canepari and Tedeschi (1977), recorded thereafter from Siracusa (Pachino), Messina (Montalbano), Palermo (Madonie, Piano Zucchi; Sicani, Bosco Ficuzza Torretta Torre) by Canepari (2009). Recently collected in Aeolian Archipelago (Vulcano and Stromboli: Baviera in prep.). The record of *Nephus (N.) gr. quadrimaculatus* (Herbst, 1783) from Panarea probably referred to this species (Lo Cascio, Altadonna, and Ponel 2022). This species is probably the most common and widespread species of *Nephus* s.str. in Sicily.

Nephus (Sidis) hiekei (Fürsch, 1965)

Chorotype – EUM

Trophic group – PSE (*Planococcus citri* (Risso, 1813)

New records – **Messina:** Torre Faro Contr. Granatari, 21.VII.1998, Baviera C. (BCPC); Peloritani, Salice, 28.X.2006, Baviera C. (BCPC); **Catania:** Bosco di Santo Pietro, sifting *Quercus*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); **Ragusa:** Iblei Chiaromonte Gulfi, Santa Margherita, 21.XII.2013, Baviera C. and Bellò C. (BCPC); **Enna:** Nissoria, 750m a.s.l., 17.III.2016, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Trapani:** Trapani Est, 100m a.s.l., 06.III.2013, Baviera C. and Bellò C. (BCPC).

Notes. This is a rare species in Sicily recently recorded from Ragusa (Pozzallo) (**Canepari; 2000**).

Nephus (Sidis) levaillanti (Mulsant, 1850)

Chorotype – ASE

Trophic group – PSE

Notes. This is a very rare species in Sicily. This species by Canepari (2001) was correctly defined as belonged to genus *Nephus* and not *Scymnus* following Weise (1879) opinion. Canepari (2001) considered the *Scymnus* sensu stricto species, “*S. levaillanti* Mulsant, 1850”, should be considered under the name “*S. nubilus* Mulsant, 1850”. *Nephus levaillanti* was described from Sicily and occurs, in Italy, also in Apulia. From Sicily was recorded

only the neotype fixed by Canepari (2001) from Agrigento (foce F. Platani, 16.V.1996 Leg. Angelini F.).

Genus *Scymniscus* Dorzhanskiy 1928

Scymniscus anomus (Mulsant & Rey 1852)

Chorotype – SEU

Trophic group – PSE, COC (*Leucaspis* sp.)

New records – **Messina**: Torre Faro Contr. Granatari, 21.VI.1998, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133 m a.s.l., 27.VI.1997, Baviera C. (BCPC); Peloritani, Montalbano Elicona, Basicò, 588 m a.s.l., sifting *Olea*, 30.XI.2015, Baviera C. and Bellò C. (BCPC); Nebrodi, Monte Soro, 1800m a.s.l., on *Fagus*, 01.VI.2007, Baviera C. (BCPC); ditto, 04.VI.2009, Baviera C. (BCPC); **Catania**: Bosco di Santo Pietro, sifting *Quercus*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); **Agrigento**: Burgio, 900m a.s.l., 18.III.2008, sifting *Quercus* and *Olea*, Baviera C. and Bellò C. (BCPC); Campobello di Licata, sifting *Olea*, 21.XII.2013, Baviera C. and Bellò C. (BCPC); Palma di Montechiaro, 120m a.s.l., 11.XII.2014, sifting *Olea* and *Smilax*, Baviera C. and Bellò C. (BCPC); **Enna**: Monte Altesina, 738m a.s.l., 27.XI.2015, Baviera C. (BCPC); Agira 3, 455m a.s.l., sifting *Olea*, 18.III.2016, Baviera C. and Bellò C. (BCPC); **Siracusa**: Pachino, Punta delle Formiche, 09.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Palermo**: Madonie Piano Battaglietta, 1800m a.s.l., 24.IV.2008, sifting *Fagus* and *Acer*, Baviera C. and Rando A. (BCPC); Piano Quacella, under stones, 23.I.1974, Romano M. (BCPC); Sicani, Rocca Palumba, 18.III.2008, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Piana Albanesi, under bark of *Eucalyptus*, 10-13.III.2009, Baviera C. and Bellò C. (BCPC); Portella della Ginestra, 800m a.s.l., sifting, 25.IV.2008, Baviera C. and Bellò C. (BCPC); Sicani, Palazzo Adriano, Casale Borgia, 1000m a.s.l., 22.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Trapani**: Monte Sparagio, 475m a.s.l., 03.IV.2011, Baviera C. and Bellò C. (BCPC); Bruca, 350m a.s.l., 18.III.2009, De Giovanni A. (BCPC); Trapani bivio per Salemi, sifting *Olea*, 06.III.2013, Baviera C. and Bellò C. (BCPC); Erice 3 under falesia, sifting *Chamaeropsis*, 250m a.s.l., 08.III.2014, Baviera C. and Bellò C. (BCPC).

Notes. A quite common species in Sicily, recorded from Messina and Palermo (Ficuzza Wood) (Canepari 2000).

Scymniscus helgae (Fürsch 1965)

Chorotype – MED

Trophic group – PSE

New records – **Messina**: Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus*, 05.VII.1999, Baviera C. (BCPC); Mandanici, 560m a.s.l., sifting *Olea*, 19.XII.2013, Baviera C. and Bellò C. (BCPC); San Pier Niceto, Torrente Niceto, Area Liarusa, 245m a.s.l., sifting, 10.III.2013, Baviera C. (BCPC); **Catania**: Mazzarino per San Cono, 489m a.s.l., sifting *Olea*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); **Enna**: Nissoria 2, 547m a.s.l., 17.III.2016, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Agrigento**: Sant' Angelo Muxaro, 125m a.s.l., 10.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Bivona, sifting *Olea*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); Burgio, 900m a.s.l., 18.III.2008, sifting *Quercus* and *Olea*, Baviera C. and Bellò C. (BCPC); Raffadali, 03.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Monte Cammarata, 1400m a.s.l., sifting *Quercus*, 25.X.2006, Baviera C. and Bellò C. (BCPC); **Caltanissetta**: Niscemi 5, Poggio, sifting *Olea*, 250 a.s.l.,

22.XII.2013, Baviera C. and Bellò C. (BCPC); **Ragusa**: Iblei Chiaromente Gulfi, Santa Margherita, 11.XII.2014, Baviera C. and Bellò C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); **Palermo**: Camporeale - Roccamena, 09.III.2014, Bellò C. (BCPC); Termini Imerese, sifting *Olea*, 15.III.2008, Baviera C. and Bellò C. (BCPC); Baucina, 22.XII.2013, Baviera C. and Bellò C. (BCPC); Ciminà 570m a.s.l., 22.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Madonie, Piano Battaglietta, 1600m a.s.l., 18.X.2013, sifting *Acer*, Baviera C. (BCPC); **Trapani**: Alcamo, Monte Bonifato 2, sifting *Olea*, 16.III.2008, Baviera C. and Bellò C. (BCPC) Santa Ninfa, sifting *Olea*, 17.III.2008, Baviera C. and Bellò C. (BCPC); Erice 3 under falesia, sifting *Chamaeropsis*, 250m a.s.l., 08.III.2014, Baviera C. and Bellò C. (BCPC).

Notes. A quite common species in Sicily, recorded from Trapani (Castellammare del Golfo; Mazara del Vallo, Gorgi Tondi), Messina and Palermo. Also recorded from Lampedusa island (sub *Nephus (Sidis) helgae*)(Canepari 1995). In Vitale collection there are specimens from Messina and Palermo (Sicani: Palazzo Adriano, (Baviera 2004)).

Scymniscus semirufus (Weise 1885)

Chorotype – SEU

Trophic group – PSE

New records – **Messina**: Torrente Tono, 16.X.2011, sifting *Olea*, Baviera C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); Vendicari 4, 20m a.s.l., 09.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Palermo**: Madonie, Isnello, Piano Zucchi, 1100m a.s.l., sifting *Quercus ilex*, 25.IV.2008, Baviera C. and Rando A. (BCPC); **Trapani**: Castellammare del Golfo, Monte Inici, per Terre Segestane, 29.XI.2015, Baviera C. and Bellò C. (BCPC).

Notes. A very rare species in Sicily, recorded until now only from Marettimo (Egadi Island) by Canepari (2000). It is the commonest species of the *Scymniscus* genus in Sardinia (Canepari 2000, 2011). Not recorded for Sicily in European checklists of 2007, and for Italy in the Palearctic checklist (Kovář 2007).

Scymniscus tristiculus (Weise 1929)

Chorotype – SEU

Trophic group – PSE

New records – **Catania**: Calatabiano, San Marco, foce Alcantara, 01.III.2013, Baviera C. (BCPC); **Agrigento**: Palma di Montechiaro, sifting *Olea*, *Smilax*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); **Siracusa**: Pachino, Punta delle Formiche, 09.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC).

Notes. This very rare and localized species was recorded from Sicily, until now, only from Agrigento (Sambuca di Sicilia) and Trapani (Mazara del Vallo, Gorgi Tondi) (Canepari 2000). Not recorded from Sicily in the Nedvěd and Djuic European field guide (Nedvěd and Djuic 2022).

Genus **Scymnus** Kugelann 1794

Scymnus (Mimopullus) flagellisiphonatus (Fürsch 1969)

Chorotype – ASE

Trophic group – APH (*Cinara pilicornis*(Hartig, 1841) New records – **Messina**: Nebrodi, Bosco Scavioli limiti, 01.VI.2007, sifting *Quercus*, Baviera C. and Bellò C. (BCPC); Peloritani, Campogrande, 150m a.s.l., 02.V.2014, Baviera C. and Bellò C. (BCPC); Portella Mandrazzi, 1150m a.s.l., 03.V.2014, Baviera C. and Bellò C. (BCPC); Rodia, Monte Campanò, 06.V.2014, Baviera C. (BCPC); **Catania**: Castiglione di Sicilia, 600m a.s.l., 04.IV.2013, Baviera C. (BCPC); Etna East slope, Bosco Cerrita, 1600m a.s.l., 24.VII.2004, sifting *Quercus* and *Betula*, Baviera C. (BCPC); Nebrodi, Maniace, Petrosino, 01.IV.2013, sifting *Quercus*, Baviera C. (BCPC); **Agrigento**: Burgio, 900m a.s.l., 18.III.2008, sifting *Quercus* and *Olea*, Baviera C. and Bellò C. (BCPC); Raffadali, 03.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Palama di Montechiaro, 120m a.s.l., 03.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Mineo, Licodia, 18.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Sicani, Monte Cammarata, 1400m a.s.l., 25.XI.2006, sifting *Quercus*, Baviera C. and Bellò C. (BCPC); **Enna**: Nissoria 2, 547m a.s.l., 17.III.2016, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Niscemi 3, 03.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Ragusa**: Iblei, Chiaromonte Gulfi, loc. Santa Margherita, 488m a.s.l., 10.IV.2016, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Siracusa**: Floridaia Monti Climiti, sifting *Olea*, 13.III.2014, Bellò C. and Chemello S. (BCPC); **Palermo**: Madonie Piano Battaglietta, 1800m a.s.l., 24.IV.2008, sifting *Fagus* and *Acer*, Baviera C. and Rando A. (BCPC); ditto, 16.V.2008, sifting *Fagus*, Baviera C. and Bellò C. (BCPC); ditto, 1600m a.s.l., 18.X.2013, sifting *Acer*, Baviera C. and Bellò C. (BCPC); Madonie, Castelbuono, La Liccìa, 700m a.s.l., 30.V.2007, sifting *Quercus*, Baviera C. (BCPC); Isnello, Piano Zucchi, 1100m a.s.l., sifting *Quercus ilex*, 17.IV.2010, Baviera C. (BCPC); Sicani, Rocca Palumba, 18.III.2008, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Bosco Ficuzza, 740m a.s.l., 04.III.2013, Baviera C. and Bellò C. (BCPC); Camporeale - Roccamena, 09.III.2014, Bellò C. (BCPC); Baucina, 22.XII.2013, Baviera C. and Bellò C. (BCPC); Contessa Entellina, 11.III.2009, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Termini Imerese, sifting *Olea*, 21.IV.2010, Baviera C. and Bellò C. (BCPC); Monte Pellegrino, 370m a.s.l., 28.XI.2009, sifting *Rubus*, Baviera C. and Bellò C. (BCPC); ditto, 20.III.2010, Baviera C. and Bellò C. (BCPC).

Notes. This species was considered a rare species in Sicily especially in the Est. In Vitale collection there is only a specimen from Messina (Spadafora). This species wasn't recorded from Sicily in Italian or European checklists (Audisio *et al.* 1995; Canepari 2003). The collected specimens confirm the presence of this species in Sicily. Not recorded from Sicily in the Nedvěd and Djuic European field guide (Nedvěd and Djuic 2022).

Scymnus (Mimopullus) fulvicollis Mulsant 1846

Chorotype – TEM

Trophic group – APH

Notes. This extremely rare species in Italy was recorded only in 6 specimens in the last 100 years, firstly recorded from Sicily with a single specimen from Siracusa(Lentini, 17.V.2000, on *Citrus* (Baviera and Sparacio 2002).

Scymnus (Mimopullus) marinus Mulsant, 1850 (= *mediterraneus*)

Chorotype – WME

Trophic group – COC (*Saissetia oleae*); APH

New records – **Messina**: Peloritani, Monte Antennamare, 1133m a.s.l., 26.IV.2000, Baviera C. (BCPC); Torre Faro Contr. Granatari, 12.VII.2003, Baviera C. (BCPC); **Catania**: Calatabiano, San

Marco, foce Alcantara, 18.XII.2013, Baviera C. (BCPC); **Agrigento**: Naro, 244m a.s.l., sifting *Olea*, 21.XII.2013, Baviera C. and Bellò C. (BCPC); **Enna**: Agira, R.N.O. Vallone Piano della Corte, 17.III.2016, Baviera C. and Bellò C. (BCPC); **Caltanissetta**: Mazzarrone, 03.III.2012, sifting *Olea*, 385m a.s.l., Baviera C. and Bellò C. (BCPC); Riesi, 02.III.2013, Baviera C. and Bellò C. (BCPC); Niscemi 5, Poggio, sifting *Olea*, 250 a.s.l., 22.XII.2013, Baviera C. and Bellò C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); Pachino, Punta delle Formiche, 09.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Pachino 2, 02.XI.2010, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Pachino Buonomini, 30m a.s.l., 08.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Vendicari 3, 20m a.s.l., 01.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Ragusa**: Iblei Chiaromonte Gulfi, Santa Margherita, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Acate, Museo del Carrubo, 21.XII.2013, Baviera C. and Bellò C. (BCPC); **Palermo**: Ciminà 570m a.s.l., 22.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Monte Pellegrino, 370m a.s.l., 28.XI.2009, sifting *Rubus*, Bellò C. (BCPC); ditto, 20.III.2010, sifting *Rubus*, Baviera C. (BCPC); Sicani, Chiusa Scalfani, 720m a.s.l., 11.III.2009, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Madonie, Castelbuono, La Liccia, 700m a.s.l., 28.V.1989, Liberti (BCPC); Pomieri, 1400m a.s.l., sifting *Fagus* 16.IV.2008, Baviera C. and Rando A. (BCPC); Rocca Palumba, 18.III.2008, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Ustica Island, 28-29.IX.2002, Baviera C. (BCPC); **Trapani**: Santa Ninfa, sifting *Olea*, 17.III.2008, Baviera C. and Bellò C. (BCPC); Saline di Trapani e Paceco, salina Anselmo, 28.IV.2004, Baviera C. (BCPC); Saline di Trapani e Paceco, salina Vecchia, 28.IV.2004, Baviera C. (BCPC); Santa Ninfa 2, 17.IX.2009, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Castellammare del Golfo, R.N.O. Zingaro, 23- 24.IV.2003, Baviera C. (BCPC).

Notes. One of the most common and widely distributed species in Sicily, collected also on *Citrus* (Baviera 2000) firstly recorded from Ustica Island.

Scymnus (Mimopullus) pharaonis Motschulsky, 1851 (= *araraticus*)

Chorotype – TUM

Trophic group – COC; APH

New records – **Messina**: Zafferia, 16.III.2011, Baviera C. (BCPC); Graniti, Posto Leone, 19.XII.2013, sifting *Olea* and *Quercus*, Baviera C. and Bellò C. (BCPC); Mandanici 2, 1050m a.s.l., 29.III.2014, Baviera C. and Bellò C. (BCPC); Monte Scuderi, 29.IX.2005, sifting *Olea* and *Quercus*, Baviera C. (BCPC); **Catania**: Castiglione di Sicilia, 04.IV.2013, sifting *Olea*, Baviera C. (BCPC); Caltagirone, San Cono, 450m a.s.l., 04.IV.2014, Baviera C. and Bellò C. (BCPC); ditto, 03.III. 2013, Baviera C. and Bellò C. (BCPC); Mazzarino 2, 470m a.s.l., 3.III.2013, Baviera C. and Bellò C. (BCPC); **Caltanissetta**: Mazzarino 3, 03.III.2013, Baviera C. and Bellò C. (BCPC); **Siracusa**: Noto, Cassibile Terre Bianche, 1.III.2013, sifting *Olea*, *Triticum*, Baviera C. (BCPC); Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); Florida, Grotta Monello, 01.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Florida Monti Climiti, sifting *Olea*, 19.XII.2013, Baviera C. and Bellò C. (BCPC); **Agrigento**: Mineo, sifting *Olea*, 18.III.2016, Bellò (BCPC); Palma di Montechiaro, sifting *Olea*, *Smilax*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); Monte Cammarata, 1400m a.s.l., sifting *Quercus*, 25.X.2006, Baviera C. and Bellò C. (BCPC); Raffadali, 03.III.2014, Baviera C. and Bellò C. (BCPC); S. Stefano di Quisquina, Eremo S. Rosalia, 12.III.2009, Baviera C. (BCPC); **Enna**: Monte Altesina, 738m a.s.l., 27.XI.2015, Baviera C. (BCPC); **Palermo**: Bisaquino 2, 18.III.2008, sifting *Olea* and *Quercus*, Baviera C. and Bellò C. (BCPC); Corleone Rocca Busambra, 330m a.s.l., 09.III.2014, Baviera C. and Bellò C. (BCPC); Trabia, Eremo di San Felice, 07.III.2012, Baviera C. (BCPC); Baucina, 22.XII.2013, Baviera C. and Bellò C.

(BCPC); Roccamena, 09.III.2014, Baviera C. and Bellò C. (BCPC); Monti Sicani, Chiusa Sclafani, 17.III.2008, Baviera C. and Bellò C. (BCPC); Alia, 19.III.2008, Baviera C. and Bellò C. (BCPC); Prizzi, 18.III.2008, Baviera C. and Bellò C. (BCPC); Madonie, Piano Battaglietta, 1600m a.s.l., 18.X.2013, sifting Acer, Baviera C. (BCPC); ditto, 23.IX.2010, Baviera C. (BCPC); ditto, 1800m a.s.l., Baviera C. and Bellò C. (BCPC); Piano Zucchi, 1100m a.s.l., 19.VII.2006, Baviera C. (BCPC); **Trapani**: Trapani Est, 06.III.2013, Baviera C. and Bellò C. (BCPC); Alcamo, Monte Bonifato, sifting *Olea*, 16.III.2008, Baviera C. and Bellò C. (BCPC); ditto 2°, sifting *Olea*, 16.III.2008, Baviera C. and Bellò C. (BCPC); Santa Ninfa, sifting *Olea*, 17.III.2008, Baviera C. and Bellò C. (BCPC); Santa Ninfa, Castello Rampinzari, 420m a.s.l., 08.III.2014, Bellò C. and Chemello S. (BCPC); Bosco di Angimbè, 350m a.s.l., sifting *Olea*, 09.III.2009, Baviera C. and Bellò C. (BCPC); Monte Sparagio, 475m a.s.l., 03.IV.2011, Baviera C. and Bellò C. (BCPC); ditto, 550m a.s.l., 16.III.2008, Baviera C. and Bellò C. (BCPC); Castellammare del Golfo, Monte Inici, fontana, 410m a.s.l., 29.XI.2015, Baviera C. and Bellò C. (BCPC); Castellammare del Golfo, bivio Terme Segestane, 10.III.2009, Baviera C. and Bellò C. (BCPC); Isole Egadi, Levanzo, Pizzo del Corvo, 170m a.s.l., 05.XI.2010, Bellò C. (BCPC).

Notes. An uncommon but widespread species in Sicily (Baviera, 2004) found quite common on *Citrus* and in soil litter. Collected for the first time in Egadi Island. This species was collected together with *S. marinus* only in Trapani (Santa Ninfa). Not recorded from Italy in Palearctic catalogue (Kovář 2007).

Scymnus (Neopullus) ater Kugelann 1794

Chorotype – EUR

Trophic group – APH; COC (*Chionaspis salicis* (Linnaeus, 1758))

New records – **Messina**: Peloritani, Salice, *Quercus ilex*, in pit-fall trap, 21.IV-05.V.2004, Baviera C. (BCPC); Nebrodi, Maniace, Porticelle, sifting *Cratagus*, 26.V.2009, Baviera C. (BCPC); **Palermo**: Madonie, Piano Zucchi, 1100m a.s.l., 19.VII.2006, sifting *Quercus*, Baviera C. and Bellò C. (BCPC).

Notes. A rare species in Sicily recorded by Romano (1849) catalogue and by Vitale (1905). Two specimens from Messina (Gravitelli) in Vitale collection (Baviera 2004). Not recorded from Italy in the Palearctic catalogue (Kovář 2007).

Scymnus (Neopullus) haemorrhoidalis Herbst 1797

Chorotype – SIE

Trophic group – APH

Notes. This rare species in Sicily, was recorded by Vitale (1905) and confirmed by Baviera and Sparacio (2002) with a specimen collected in Catania (Etna Mount).

Scymnus (Pullus) auritus Thünberg 1795

Chorotype – ASE

Trophic group – APH (*Phylloxera glabra* (von Heyden, 1837), *Eucallipterus tiliae*); MIT

New records – **Messina**: Città, Annunziata, 28.VIII.1997, Baviera C. (BCPC); ditto, 03.V.2000, Baviera C. (BCPC); ditto, 30.VI.2001, Baviera C. (BCPC); Torre Faro Contr. Granatari, 18.VIII.1992, Baviera C. (BCPC); ditto, 12.VIII.1993, Baviera C. (BCPC); ditto, 12.VIII.1994, Baviera C. (BCPC);

Castiglione di Sicilia 2, 600m a.s.l., 04.IV.2014, Baviera C. (BCPC); Peloritani, Monte Cavallo, 01.VI.2019, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus*, 27.VII.1999, Baviera C. (BCPC); Portella Chiarino, 600m a.s.l., sifting *Quercus*, 06.VI.2004, Baviera C. (BCPC); Rometta, Gimello, San Leone, 29.IV.2000, Baviera C. (BCPC); Curcuraci 2, sifting *Quercus*, 25.XI.2013, Baviera C. (BCPC); **Catania**: Calatabiano, San Marco, foce Alcantara, 21.VII.2010, Baviera C. (BCPC); Etna North slope, Piano Provenzana, 1800m a.s.l., 23.IV.2001, Baviera C. (BCPC); **Agrigento**: Sicani, Monte Cammarata, 1500m a.s.l., 21.IV.2008, sifting *Quercus*, Baviera C. and Bellò C. (BCPC); ditto, 1400m a.s.l., sifting *Quercus*, Baviera C. and Bellò C. (BCPC); **Enna**: Erice 4, 250m a.s.l., 06.III.2013, Baviera C. and Bellò C. (BCPC); **Palermo**: Sicani, Palazzo Adriano, Casale Borgia, 1000m a.s.l., 22.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); ditto, dint., 975m a.s.l., sifting *Quercus ilex*, Baviera C. and Bellò C. (BCPC); Bosco Ficuzza, 20.VI.2001, 800m a.s.l., on *Quercus*, Baviera C. (BCPC); ditto, 1100m a.s.l., 15.III.2009, De Giovanni A. (BCPC).

Notes. A very common and widespread species in Sicily, often collected on *Quercus ilex*. Also recorded from Stromboli in Aeolian Archipelago (Lo Cascio *et al.* 2006).

Scymnus (Pullus) fraxini Mulsant 1850

Chorotype – ASE

Trophic group – APH

New records – **Messina**: Peloritani, Musolino, 1000m a.s.l., 08.VIII.1998, on *Quercus*, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus*, 04.VI.2000, Baviera C. (BCPC); Rometta, Gimello, San Leone, 29.IV.2000, Baviera C. (BCPC); **Palermo**: Bosco Ficuzza, 20.VI.2001, 800m a.s.l., on *Quercus*, Baviera C. (BCPC); Madonie, Piano Zucchi, 1100m a.s.l., 19.VII.2006, Baviera C. (BCPC).

Notes. This species is quite rare in Sicily.

Scymnus (Pullus) impexus Mulsant 1850

Chorotype – ASE

Trophic group – APH(Adelges piceae)

New records – **Trapani**: Egadi Islands, Marettimo, 14-16.V.2006, Baviera C. (BCPC)

Notes. This species was recorded, until now, only from Northern Italy, this is so the first record from Sicily.

Scymnus (Pullus) subvillosus (Goeze 1777)

Chorotype – EUM

Trophic group – APH(*Hyalopterus pruni*, *Aphis sambuci*, *Aphis berberidorum*, *Aphis spiraeicola* Patch, 1914, *Aphis gossypii*, *Aulacorthum solani*, *Cinara (Cupressobium) tujafilina*, *Eucallipterus tiliae*); COC (*Saissetia oleae*)

New records – **Messina**: Città, Annunziata, 30.VI.2001, Baviera C. (BCPC); ditto, 03.V.2000, Baviera C. (BCPC); ditto, 28.VI.1997, Baviera C. (BCPC); Acqualadroni, dune, 22.V.2000, Baviera C. (BCPC); Torre Faro Contr. Granatari, 18.VIII.1992, Baviera C. (BCPC); ditto, 11.VII.1993, Baviera C. (BCPC); ditto, 12.VIII.1994, Baviera C. (BCPC); ditto, 14.V.2002, Baviera C. (BCPC); ditto,

12.VII.2003, Baviera C. (BCPC); ditto, 09.VI.2000, Baviera C. (BCPC); ditto, 28.IV.2010, Baviera C. (BCPC); ditto, 25-30.VI.2008, light trap, Baviera C. (BCPC); ditto, VII.2009, light trap, Baviera C. (BCPC); Peloritani, Massa San Giovanni, in torrente, 05.IV.1998, Baviera C. (BCPC); Forte S. Jachiddu, 375m a.s.l., 23.III.2010, Baviera C. (BCPC); ditto, 28.IV.2010, Baviera C. (BCPC); Colli San Rizzo, 600m a.s.l., 05.IV.1998, Baviera C. (BCPC); Casalvecchio, SS. Pietro e Paolo, 22.X.2013, sifting *Olea*, Baviera C. (BCPC); Monte Scuderi, Lampiello river, 14.IV.2004, sifting, Baviera C. (BCPC); Rometta, Gimello, San Leone, 29.IV.2000, Baviera C. (BCPC); ditto, 09.VIII.1998, Baviera C. (BCPC); San Pier Niceto, Fonte Paola, 400m a.s.l., sifting in *Quercus*, 01.IV.2013, Baviera C. (BCPC); Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 19.V.2010, Baviera C. (BCPC); Francavilla di Sicilia, Le Gurne, Alcantara river, 19.IV.2010, Baviera C. (BCPC); ditto, 29.III.2010, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus*, 27.VI.1997, Baviera C. (BCPC); Nebrodi, Longi cascata, 12.IV.2015, Baviera C. (BCPC); Isole Aeolian Archipelago, Isola di Stromboli, 07-09.IV.2006, Baviera C. (BCPC); ditto, Ginostra, VII.1997, Fabbri A. (BCPC); Isola di Vulcano, 09-10.V.2007, Baviera C. (BCPC); ditto, loc. Piano, 300m a.s.l., 24-29.VI.2001, Baviera C. (BCPC); Isola di Alicudi, 30.IX.2006, Baviera C. (BCPC); Isola di Salina, 10-12.V.2007, Baviera C. (BCPC); **Catania**: Etna North slope, Piano Provenzana, Monte Nero, 2000m a.s.l., 15.VI.2003, Baviera C. (BCPC); Linguaglossa, 22.V.2000, Baviera C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Palermo**: Termini Imerese, sifting *Olea*, 03.III.2011, Baviera C. and Bellò C. (BCPC); Capaci città, 17.IV.1973, Romano M. (BCPC); Sicani, Bosco Ficuzza, 800m a.s.l., 20.VI.2001, Baviera C. (BCPC); **Trapani**: Castelvetro, Foce fiume Belice, 29.IV.2000, Zoia S. and Polese F. (BCPC); Selinunte Foce Morone, 09.IV.1998, Baviera C. (BCPC); Castellammare del Golfo, R.N.O. Zingaro, 22-24.IV.2003, Baviera C. (BCPC); ditto, 19-21.V.2003, Baviera C. (BCPC); Isole Egadi, Isola di Favignana, 19.IV.2007, Baviera C. (BCPC); Isola di Levanzo, 23.IV.2007, Baviera C. (BCPC).

Notes. This species is probably the commonest species of the subgenus *Pullus* in Sicily. An arboreal species, in Sicily often on *Citrus* (Baviera 1998, 2000). In Sicily Vitale (1927b) recorded this species as very common on *Tamarix* sp. with the aberrations *S. subvillosus juniperi* Mots. and *S. subvillosus pubescens* Panz.. Newly recorded from Egadi Archipelago. This species was already recorded in Aeolian Archipelago from Lipari (Lo Cascio *et al.* 2006), Vulcano, Stromboli and Filicudi (Lo Cascio *et al.* 2006), newly recorded from Alicudi and Salina. Also recorded from Lampedusa and Pantelleria (Canepari 1995).

Scymnus (Pullus) suturalis Thünberg 1795

Chorotype – EUM

Trophic group – APH (*Adelges tsugae* (Annand, 1928))

New records – **Messina**: Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus*, 27.VII.1999, Baviera C. (BCPC); ditto, 05.VII.1999, Baviera C. (BCPC); 04.VI.2000, Baviera C. (BCPC); ditto, 24.IX.2011, Baviera C. (BCPC); Musolino, 1000m a.s.l., 28.IV.2001, on *Quercus*, Baviera C. (BCPC); Città, Annunziata, 03.V.2000, Baviera C. (BCPC); ditto, 30.V.2004, Baviera C. (BCPC); Nebrodi, Monte Pojummoru, 1400m a.s.l., 14.VIII.1998, Baviera C. (BCPC); Aeolian Archipelago, Isola di Vulcano Loc. Piano, 24-29.VII.2001, Baviera C. (BCPC); Lipari, loc. Fiume Bianco, 430m a.s.l., *Quercus ilex*, in pit-fall trap 10-26.VI.2014, Baviera C. (BCPC); **Palermo**: Bosco Ficuzza, 20.VI.2001, 800m a.s.l., on *Quercus*, Baviera C. (BCPC); Madonie, Piano Zucchi, 1100m a.s.l., 19.VII.2006, Baviera C. (BCPC); **Trapani**: Egadi Islands, Marettimo, 16-18.IV.2006, Baviera C. (BCPC).

Notes. An uncommon and localized species in Sicily. Recently recorded from Aeolian Archipelago (Lipari and Alicudi: (Lo Cascio, Altadonna, and Ponel 2022), Vulcano: Baviera in prep.) and newly recorded from Egadi Islands.

Scymnus (Scymnus) apetzi Mulsant 1846

Chorotype – MED

Trophic group – APH (*Aphis craccivora*, *Hyalopterus pruni*); COC (*Saissetia oleae*)

New records – **Messina:** Città, Annunziata, on *Quercus* sp., 03.V.2000, Baviera C. (BCPC); ditto, 21.IV.1992, Baviera C. (BCPC); Torre Faro Contr. Granatari, 03.V.1992, Baviera C. (BCPC); ditto, 13.VIII.1993, Baviera C. (BCPC); ditto, 27.V-05.VI.2000, Baviera C. (BCPC); ditto, 01.VIII.1999, Baviera C. (BCPC); ditto, 08.VII.2002, Baviera C. (BCPC); ditto, 28.IV.2010, Baviera C. (BCPC); ditto, 12.VII.2003, Baviera C. (BCPC); ditto, 12.V.2001, Baviera C. (BCPC); ditto, 21.VI.2005, Baviera C. (BCPC); Camaro Superiore, 24.IV.2000, Baviera C. (BCPC); Massa San Giovanni, 23.VIII.1997, Baviera C. (BCPC); Gioiosa Guardia, 04.VII.1999, Baviera C. (BCPC); San Pier Niceto, Contr. Terra Salata, 250m a.s.l., 02.V.2015, Baviera C. (BCPC); Forte S. Jachiddu, 375m a.s.l., 28.IV.2010, Baviera C. (BCPC); ditto, 23.III.2010, Baviera C. (BCPC); Peloritani, Musolino, 08.VIII.1998, Baviera C. (BCPC); ditto, 04.VI.2000, Baviera C. (BCPC); ditto, 06.VII.2002, Baviera C. (BCPC); Peloritani, Portella S. Rizzo, 465m a.s.l., 27.IV.2010, Baviera C. (BCPC); Pizzo Chiarino, 845m a.s.l., 27.IV.2010, Baviera C. (BCPC); Rometta, Gimello, San Leone, 29.IV.2000, Baviera C. (BCPC); ditto, 07.VIII.1999, Baviera C. (BCPC); Campo Italia, 435m a.s.l., *Quercus suber*, at lighth, Infusino M. (BCPC); Peloritani, Campogrande, 02.V.2014, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus*, 27.VI.1997, Baviera C. (BCPC); ditto, 27.VII.1999, Baviera C. (BCPC); ditto, 04.VI.2000, Baviera C. (BCPC); ditto, 23.VII.2000, Baviera C. (BCPC); ditto, 26.VI.2001, Baviera C. (BCPC); ditto, 17.X.2002, Baviera C. (BCPC); ditto, 06.X.2008, Baviera C. (BCPC); Acquedolci, 08.VIII.2001, Baviera C. (BCPC); Itala, Monte Scuderi, vetta 1200m a.s.l., in pit-fall trap, 25.VI-29.XI.2005, Baviera C. (BCPC); ditto, 1100m a.s.l., 25.VI.2005, Baviera C. (BCPC); ditto, 1100m a.s.l., 29.IX.2005, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 1200m a.s.l., 25.VII.2006, Baviera C. (BCPC); Nebrodi, Monte Pojummoru, 1400m a.s.l., 14.VIII.1998, Baviera C. (BCPC); Mojo Alcantara, Fiume Alcantara, 15.IV.2005, Baviera C. (BCPC); **Catania:** Calatabiano, San Marco, foce Alcantara, 19.IV.2010, Baviera C. (BCPC); ditto, 19.V.2010, Baviera C. (BCPC); Etna North slope, Piano Provenzana dint 1900m a.s.l., 03.VIII.1998, Baviera C. (BCPC); ditto, 10.VIII.1998, Baviera C. (BCPC); Rifugio Brunek 1500m a.s.l., sifting *Quercus*, 20.VI.2006, Baviera C. (BCPC); **Agrigento:** Raffadali, 03.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Caltanissetta:** Biviere di Gela, 29.V.2006, Baviera C. (BCPC); **Siracusa:** Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Palermo:** Poggioreale, Gibellina, 08.III.2014, Baviera C. and Bellò C. (BCPC); Madonie, Isnello, Piano Zucchi, 1100m a.s.l., 03.VI.2000, Baviera C. (BCPC); ditto, 19.VII.2006, Baviera C. (BCPC); ditto, yellow dishes, 20.VII.2014, Baviera C. (BCPC); Baita del Faggio, 1400m a.s.l., 22.VI.2000, Baviera C. (BCPC); Bosco Pomieri, 1450m a.s.l., in Windows trap, 17.21.VII.2016, Baviera C. (BCPC); Madonie, Piano Battaglia, 1600m a.s.l., 08.VIII.2015, Baviera C. (BCPC); **Trapani:** Castellammare del Golfo, R.N.O. Zingaro, 22- 24.IV.2003, Baviera C. (BCPC); ditto, 19-21.V.2003, Baviera C. (BCPC); Mazara del Vallo, Gorghetti Tondi, 30.IV.2000, Zoia S. and Polese F. (BCPC).

Notes. This is probably the commonest and widespread species of *Scymnus* in Italy and Sicily. Some females shows red legs instead of black. Rarely collected in soil litter in winter. This species was recorded from Lipari, Salina (Canepari 1983) and Vulcano (Baviera, in

prep.) in Aeolian Archipelago and from Lampedusa and Pantelleria (Canepari 1995).

Scymnus (Scymnus) bivulnerus Capra et Fürsch 1967

Chorotype – MED

Trophic group – APH (*Aphis fabae* Scopoli, 1763, *Mindarus abietinus*).

New records – **Messina**: Città, Annunziata, on *Quercus* sp., 28.V.2006, Baviera C. (BCPC); Torre Faro Contr. Granatari, 30.IV.1993, Baviera C. (BCPC); ditto, 07.IV.1998, Baviera C. (BCPC); ditto, 09.VI.2000, Baviera C. (BCPC); Peloritani, Musolino, 08.VIII.1998, Baviera C. (BCPC); Francavilla di Sicilia, Le Gurne, Alcantara river, 29.III.2010, Baviera C. (BCPC); Aeolian Archipelago, Isola di Salina, 10-12.V.2007, Baviera C. (BCPC); Isola di Salina, Lingua, VII.1995, Lo Cascio P. (BCPC); Isola di Filicudi, 01.X.2006, Baviera C. (BCPC); Isola di Alicudi, 30.IX.2006, Baviera C. (BCPC); **Catania**: Etna South slope, Randazzo, Maletto, 1000m a.s.l., 12.V.2009, Baviera C. (BCPC); Etna, North slope, Piano Provenzana dint Monte Nero 2050m a.s.l., 10.VIII.1998, Baviera C. (BCPC); **Caltanissetta**: Mazzarino 3, 03.III.2013, Baviera C. and Bellò C. (BCPC); Biviere di Gela, 29-30.V.2006, Baviera C. (BCPC); **Siracusa**: Floridia Monti Climiti, sifting *Olea*, 19.XII.2013, Baviera C. and Bellò C. (BCPC); Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); Buccheri, Bosco Pisano, on *Zelkova sicula*, 28.V.2010, Baviera C. (BCPC); **Trapani**: Castellammare del Golfo, R.N.O. Zingaro, 22-24.IV.2003, Baviera C. (BCPC); ditto, 23-25.VI.2003, Baviera C. (BCPC); ditto, 19-21.V.2003, Baviera C. (BCPC); Alcamo, Monte Bonifato 2, sifting *Olea*, Baviera C. and Bellò C. (BCPC).

Notes. A species described from Pantelleria and recorded from Palermo and Messina (Fürsch, Kreissl, and Capra 1967). In Aeolian recorded from Lipari (Lo Cascio *et al.* 2006), Salina and Stromboli (Lo Cascio, Altadonna, and Ponel 2022). Recently collected also in Vulcano (Baviera in prep.). Newly recorded from Filicudi and Alicudi.

Scymnus (Scymnus) caprai Canepari, 1983

Chorotype – SICI

Trophic group – APH

Notes. A species endemic from Pantelleria (Canepari 1983, 1995).

Scymnus (Scymnus) femoralis (Gyllenhal, 1827)

Chorotype – EUR

Trophic group – APH

New records – **Messina**: Torre Faro Contr. Granatari, 13.IV.2001, Baviera C. (BCPC); Graniti, Posto Leone, 11.III.2015, sifting *Olea* and *Quercus*, Baviera C. and Bellò C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus*, 05.VII.1999, Baviera C. (BCPC); Pizzo Chiarino, 23.V.2010, Baviera C. (BCPC); ditto, 27.VI.2010, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 1200m a.s.l., 12.IX.2014, Baviera C. (BCPC); Basicò, 500m a.s.l., sifting *Olea*, 19.III.2008, Baviera C. and Bellò C. (BCPC); Itala, Monte Scuderi, 25.VI.2005, Baviera C. (BCPC); Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 19.IV.2010, Baviera C. (BCPC); Francavilla di Sicilia, Le Gurne, Alcantara river, 29.VI.2010, Baviera C. (BCPC); Nebrodi, Maniace, Porticelle, sifting *Cratagus*, 26.V.2009, Baviera C. (BCPC); Nebrodi, Floresta Sorgente San Giacomo, 1088m a.s.l., 21.VII.2010, Baviera C. (BCPC); Lago Tre Arie, 1600m a.s.l., 05.V.2015, Baviera C. (BCPC); Monte Soro, 1800m on *Fagus*, 01.VI.2007, Baviera C. (BCPC); **Catania**: Calatabiano, San Marco,

foce Alcantara, 01.III.2013, Baviera C. (BCPC); Etna North slope, Rifugio Brunek 1500m a.s.l., sifting *Quercus*, 31.V.2008, Baviera C. (BCPC); Etna South slope, Rifugio Sapienza, 1800m a.s.l., 02.VII.1999, Baviera C. (BCPC); Etna South slope, Adrano Osservatorio, 1886m a.s.l., pit-fal trap, 12-26.VI.2011, Baviera C. (BCPC); **Siracusa**: Iblei, Monte Casale, 27.V.2010, Baviera C. (BCPC); **Agrigento**: Sicani, Monte Cammarata, 1500m a.s.l., 21.IV.2008, sifting *Quercus*, Baviera C. and Bellò C. (BCPC); **Palermo**: Poggioreale, Gibellina, 08.III.2014, Baviera C. and Bellò C. (BCPC).

Notes. A black species with male genitalia very similar to those of *Scymnus* (*Scymnus*)*interruptus* (Goeze, 1777) (Canepari 1983, 2009). This species could be a black form of the latter and further molecular and ecological studies are necessary to clear its status. Commonly these two taxa were collected separated one from the other (Fürsch, Kreissl, and Capra 1967; Canepari 2009), but there are some rare exceptions (Canovai 1996). This species was never recorded before from Sicily (Audisio *et al.* 1995; Canepari 2003).

Scymnus (*Scymnus*) *interruptus* (Goeze 1777)

Chorotype – PAL

Trophic group – APH (*Aphis spiraeicola*, *Aphis gossypii*, *Caithophorus populeti*, *Caithophorus populialbe*, *Cinara* (*Cupressobium*) *tujafilina*, *Macrosiphum* (*Macrosiphum*) *euphorbiae*, *Phorodon humuli*).

New records – **Messina**: Forte S. Jachiddu, 375m a.s.l., 28.IV.2010, Baviera C. (BCPC); **Trapani**: Castellammare del Golfo, R.N.O. Zingaro, 23-25.VI.2003, Baviera C. (BCPC).

Notes. This species in Sicily was recently collected for the first time in Aeolian Islands (Baviera in prep.).

Scymnus (*Scymnus*) *laetificus* Weise 1879

Chorotype – WME

Trophic group – APH

Notes. This is a rare species in Sicily, recorded from Messina and Palermo (Fürsch, Kreissl, and Capra 1967), some specimens from Messina and Palermo were preserved in Vitale collection (Baviera 2004).

Scymnus (*Scymnus*) *marginalis* (Rossi 1794)

Chorotype – CEM

Trophic group – APH

New records – **Messina**: Torre Faro Contr. Granatari, 28.IV.1992, Baviera C. (BCPC); ditto, 12.VIII.1993, Baviera C. (BCPC); ditto, 11.VII.1993, Baviera C. (BCPC); ditto, 30.IV.1993, Baviera C. (BCPC); ditto, 20.IV.1995, Baviera C. (BCPC); ditto, 27.V-05.VI.2000, Baviera C. (BCPC); 08.VII.2002, Baviera C. (BCPC); 27.VII.2002, Baviera C. (BCPC); ditto, 12.VII.2003, Baviera C. (BCPC); Mortelle Lido, sifting dune plants, 11.III.2000, Baviera C. (BCPC); Aeolian Archipelago, Isola di Stromboli, 07-09.IV.2006, Baviera C. (BCPC); Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 19.IV.2010, Baviera C. (BCPC); ditto, 29.VI.2010, Baviera C. (BCPC); **Catania**: Calatabiano, San Marco, foce Alcantara, 11.III.2011, Baviera C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997,

on *Citrus*, Benfatto L. (BCPC); ditto, 08.VII.1997, Benfatto L. (BCPC); ditto, 15.VII.1997, Benfatto L. (BCPC); **Trapani**: Isole Egadi, Isola di Favignana, 17.V.2006, Baviera C. (BCPC).

Notes. This quite common and widespread species in Sicily was recorded, sub *S. incertus* Mulsant, 1846, from Palermo (Monte Pellegrino and Monte Castellaccio over Monreale: Fürsch, 1962). It was also recorded from Stromboli (Lo Cascio et al., 2006) and Panarea in Aeolian Archipelago (Lo Cascio et al., 2022). Recently collected also in Vulcano Island (Baviera in prep.).

Scymnus (Scymnus) nubilus Mulsant, 1850 (= *levaillanti*)

Chorotype – COS

Trophic group – APH (*Aphis gossypii*)

New records – **Messina**: Torre Faro Contr. Granatari, 18.VIII.1992, Baviera C. (BCPC); **Catania**: Calatabiano, San Marco, foce Alcantara, 29.VI.2010, Baviera C. (BCPC); **Caltanissetta**: Biviere di Gela, 29.V.2006, Baviera C. (BCPC).

Notes. Recorded also from Lipari (Lo Cascio *et al.* 2006) and Stromboli in Aeolian Archipelago (Lo Cascio, Altadonna, and Ponel 2022), and sub *S. levaillanti*, from Lampedusa (sub *S. levaillanti*) (Canepari 1995).

Scymnus (Scymnus) pavesii Canepari 1983

Chorotype – NAF

Trophic group – APH

Notes. A species described from Lampedusa Island but present also in Algeria (Canepari 1983, 1995).

Scymnus (Scymnus) rubromaculatus (Goeze 1778)

Chorotype – EUR

Trophic group – APH (*Aphis (Aphis) craccivora*, *Cinara wahlua*, *Chaetosiphon (Pentatrachopus) tetraerhodum*, *Eucallipterus tiliae*, *Macrosiphum rosae*)

New records – **Messina**: Torre Faro Contr. Granatari, 01.VIII.1999, Baviera C. (BCPC); San Pier Niceto, Terra Salata, 250m a.s.l., 23.II.2013, Baviera C. (BCPC); Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 19.IV.2010, Baviera C. (BCPC); Francavilla di Sicilia, Le Gurne, Alcantara river, 19.IV.2010, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., 27.VI.1997, Baviera C. (BCPC); ditto, 27.VII.1999, Baviera C. (BCPC); ditto, 09.IV.2002, Baviera C. (BCPC); ditto, 18.V.2000, Baviera C. (BCPC); ditto, 26.IV.2000, Baviera C. (BCPC); ditto, 08.VIII.1998, Baviera C. (BCPC); Montalbano Elicona, 1300m a.s.l., 18-20.VII.2002, Baviera C. (BCPC); Nebrodi, Monte Soro, vetta, 1800m a.s.l., sifting *Fagus*, 01.VI.2007, Baviera C. (BCPC); Maniace, Porticelle, sifting *Cratagus*, 26.V.2009, Baviera C. (BCPC); Biviere di Cesarò 2, sifting *Fagus*, 05.V.2013, Baviera C. (BCPC); **Catania**: Etna South slope, Adrano Osservatorio, 1886m a.s.l., pit-fal trap, 12-26.VI.2011, Baviera C. (BCPC); Calatabiano, San Marco, foce Alcantara, 21.VII.2010, Baviera C. (BCPC); ditto, 19.V.2010, Baviera C. (BCPC); **Trapani**: Selinunte, Foce torrente Morone, 09.IV.1998, Baviera C. (BCPC).

Notes. A common species in Sicily recorded also from Lipari in Aeolian Archipelago (Lo Cascio *et al.* 2006).

Scymnus (Scymnus) rufipes (Fabricius 1798)

Chorotype – WME

Trophic group – APH

New records – **Messina:** Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 19.V.2010, Baviera C. (BCPC); Peloritani, Massa San Giovanni, 23.VIII.1997, Baviera C. (BCPC); Nebrodi, Biviere di Cesarò, 07.IV.1994, Baviera C. (BACO); **Caltanissetta:** Niscemi 5, Poggio, sifting *Olea*, 250 a.s.l., 22.XII.2013, Baviera C. and Bellò C. (BCPC); **Catania:** Calatabiano, San Marco, foce Alcantara, 29.VI.2010, Baviera C. (BCPC); **Enna:** Agira, 455m a.s.l., sifting *Olea*, 17.III.2016, Baviera C. and Bellò C. (BCPC).

Notes. This is a quite uncommon species in Sicily, is also recorded in Aeolian Archipelago from Lipari and Stromboli (Lo Cascio *et al.* 2006) and recently collected in Vulcano Island (Baviera, in prep.). Following the opinion of Canepari (1995) the citation of this species from Lampedusa (Ragusa 1892) is probably to be referred to *S. pavesii*.

Tribe **Platynaspidini** Mulsant, 1846

Genus *Platynaspis* Redtenbacher 1843

Platynaspis luteorubra (Goeze 1777)

Chorotype – CEM

Trophic group – APH

New records – **Messina:** Rometta, Gimello, San Leone, 11.VIII.1993, Baviera C. (BCPC); Mortelle Lido, sifting dune plants, 11.III.2000, Baviera C. (BCPC); Nebrodi, Nebrodi, Floresta, 16.VIII.2000, Baviera C. (BCPC); Nebrodi, Floresta Sorgente San Giacomo, 29.VI.2010, Baviera C. (BCPC); Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 29.VI.2010, Baviera C. (BCPC).

Notes. This is a quite common species in Sicily, recently collected for the first time in Aeolian Archipelago (Baviera, in prep.).

Tribe **Hyperaspidini** Mulsant, 1846

Genus *Hyperaspis* Redtenbacher 1843

Hyperaspis algirica Crotch, 1874

Chorotype – NAF

Trophic group – APH, COC

New records – **Palermo**: Madonie, Pizzo Carbonara, 1750m a.s.l., Windows trap, 16-20.VIII.2016, Baviera C. (BCPC).

Notes. This Maghrebian species, in Italy, until now, was recorded only from Sardinia, where is the commonest species of genus *Hyperaspis* (Canepari 2011). New record from Sicily.

Hyperaspis stigma Olivier, 1808 (= *chevrolati* Canepari 1985)

Chorotype – PAL

Trophic group – APH, COC

New records – **Messina**: Torre Faro Contr. Granatari, 25.VIII.1991, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 17.X.1998, Baviera C. (BCPC); Nebrodi, Floresta - M. Pojummoru, 26.VII.1996, Sparacio I., (SIPC); Aeolian Archipelago, Isola di Vulcano, 14.VI.1985, Baviera C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC).

Notes. This species was recorded from Palermo (Lago di Piana degli Albanesi) and Agrigento (Foce Fiume Platani) by Canepari, Fürsch, and Kreissl (1985). Known also from Lipari and Vulcano in Aeolian Archipelago (Lo Cascio *et al.* 2006; Lo Cascio, Altadonna, and Ponel 2022).

Hyperaspis concolor Suffrian 1843

Chorotype – ASE

Trophic group – APH

New records – **Palermo**: Madonie, Portella Colla, 1450m a.s.l., 03.VI.2000, Baviera C. (BCPC).

Notes. A very rare species in Sicily, recorded until now only from Madonie Mounts (Pizzo Carbonara, Piano Zucchi, Valle Madonie)(Canepari, Fürsch, and Kreissl 1985).

Hyperaspis duvergeri Fürsch 1985

Chorotype – MED

Trophic group – APH

New records – **Messina**: Torre Faro Contr. Granatari, 10.VIII.1994, Baviera C. (BCPC); ditto, 10.VI.1995, Baviera C. (BCPC); ditto, 08.IV.1994, Baviera C. (BCPC); ditto, 06.VIII.1994, Baviera C. (BCPC); ditto, 11.VII.1993, Baviera C. (BCPC); ditto, 23.XII.1994, Baviera C. (BCPC); Forte S. Jachiddu, 375m a.s.l., 28.IV.2010, Baviera C. (BCPC); Mongiove, Galice, 14.VII.2002, Baviera C. (BCPC); **Catania**: Etna Northern slope, Piano Provenzana, dint 1800m a.s.l., 03.VIII.1998, Baviera C. (BCPC); ditto, 04.VIII.2000, Baviera C. (BCPC); **Palermo**: Madonie Piano Battaglietta, 1800m a.s.l., 24.IV.2008, sifting *Fagus* and *Acer*, Baviera C. and Rando A. (BCPC); **Trapani**: Marsala, 04.VIII.1958, A. Goidanich (GAMC); Castellammare del Golfo, R.N.O. Zingaro, 19-21.V.2003, Baviera C. (BCPC).

Notes. This is one of the most common and widespread species of this genus in Sicily. Recorded from: Palermo (Ficuzza; Madonie, Isnello: Madonie Puccia; Monte Pellegrino; Terrasini), Trapani (Castelvetrano), Agrigento, Messina (Milazzo), Siracusa (Fonte Ciane; Porto Palo), Catania (Foce Simeto) (Canepari, Fürsch, and Kreissl 1985).

Hyperaspis hoffmannseggii (Gravenhorst, 1807)

Chorotype – WEU

Trophic group – APH

Notes. A species recorded, in Sicily, only from Palermo (Lago di Piana degli Albanesi) (Canepari, Fürsch, and Kreissl 1985).

Hyperaspis peezi Fürsch 1976

Chorotype – MED

Trophic group – APH

New records – **Messina:** Torre Faro Contr. Granatari, 10.VIII.1994, Baviera C. (BCPC); ditto, 12.VIII.1993, Baviera C. (BCPC); ditto, 16.VIII.1994, Baviera C. (BCPC); ditto, 19.VIII.1992, Baviera C. (BCPC); ditto, 6-16.VI.2002, Baviera C. (BCPC); Zafferia, Torrente San Filippo, pressi foce, VI.2005, Baviera C. (BACO).

Notes. This species, recorded from Messina and Catania (Caltagirone) (Canepari, Fürsch, and Kreissl 1985), is very common in North-Eastern Sicily (Messina and Catania provinces), probably never collected in Western Sicily. A female, probably belonging to this species, was collected in Antennamare Mount (Peloritani). Often recorded on *Citrus* (Baviera 1998). This species was also collected in summer under sepals of *Solanum melongena* L. and on fruits of *Asclepias physocarpa* (E. Mey.) Schltr. 1896 (C. Baviera pers. obs.).

Tribe **Diomini** Gordon, 1999

Genus ***Diomus*** Mulsant, 1850

Diomus rubidus (Motschulsky, 1837)

Chorotype – PAL

Trophic group – COC (*Planococcus citri*)

New records – **Messina:** Torre Faro Contr. Granatari, 12.VIII.1994, Baviera C. (BCPC); ditto, 12.VIII.1993, Baviera C. (BCPC); ditto, 25.VII.1999, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus*, 05.VII.1999, Baviera C. (BCPC); **Enna:** Monte Altesina, 738m a.s.l., 27.XI.2015, Baviera C. (BCPC); **Siracusa:** Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); **Palermo:** Sicani, Bosco Ficuzza, 740m a.s.l., 04.III.2013, Baviera C. and Bellò C. (BCPC).

Notes. This is a quite rare species in Sicily. Recorded also from Lampedusa (sub *Nephus*) (Canepari 1995).

Tribe Chilacorini Mulsant, 1846

Genus *Chilocorus* Leach 1815*Chilocorus bipustulatus* (Linnaeus 1758)

Chorotype – PAL

Trophic group – COC (*Saissetia oleae*; *Euphyllura straminea* Loginova, 1973; *Leucaspis riccae* (Targioni Tozzetti, 1881); *Parlatoria oleae* (Colvée, 1880), *Hemiberlesia lataniae* (Signoret, 1869), *Aspidiotus nerii* Bouché, 1833, *Chrysomphalus aonidum* (Linnaeus, 1758)); APH (*Cinara (Cupressobium) tujafilina*, *Eulachnus tuberculostemmatum*, *Macrosiphum rosae*)

New records – **Messina**: Torre Faro Contr. Granatari, 15.VIII.1990, Baviera C. (BCPC); ditto, 12.VII.1992, Baviera C. (BCPC); ditto, 03-20.VIII.2001, Baviera C. (BCPC); Nebrodi. Maniace, Loc. Porticelle, 1250m a.s.l., 04.VI.2009, Baviera C. (BCPC); Nebrodi, Portella Maulazzo, 08.VIII.2001, Baviera C. (BCPC); Forte S. Jachiddu, 375m a.s.l., 28.IV.2010, Baviera C. (BCPC); Francavilla di Sicilia, Le Gurne, Alcantara river, 29.VI.2010, Baviera C. (BCPC); Rometta, Gimello, San Leone, 28.VII.1999, Baviera C. (BCPC); ditto, 29.IV.2000, Baviera C. (BCPC); Colli San Rizzo, 467m a.s.l., 05.IV.1998, Baviera C. (BCPC); ditto, 27.IV.2010, Baviera C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 26.IV.2000, Baviera C. (BCPC); Aeolian Archipelago, Stromboli, Ginostra, VII.1997, Fabbri A. (BCPC); Isola di Vulcano, loc. Piano, 24-29.VI.2001, Baviera C. (BCPC); **Catania**: Etna Nord, Linguaglossa, 22.V.2000, Baviera C. (BCPC); Etna Eastern slope, Bosco Cerrita, 1600m a.s.l., on *Quercus*, 12.VII.2004, Baviera C. (BCPC); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC); ditto, ditto, 15.VII.1997, Benfatto L. (BCPC); **Palermo**: Madonie, Fiume Pollina, 30.V.1971, Romano M. (BCPC); Sicani, Lago di Piana degli Albanesi, 600m a.s.l., sifting, 02.I.2007, Baviera, C. (BCPC); **Trapani**: Fiume Belice, 17.XI.1974, Romano M. (BCPC); Selinunte, Foce Torrente Morone, 09.IV.1998, Baviera, C. (BCPC); Castellammare del Golfo, R.N.O. Zingaro, 22-24.IV.2003, Baviera C. (BCPC).

Notes. This widely distributed species is probably the commonest of this tribe in Sicily. In Sicily often on *Olea europea* Linnaeus, 1753 as predator of *Saissetia oleae* and on *Citrus*. Recorded also from Lipari, Vulcano, Salina and Panarea in Aeolian Archipelago (Lo Cascio *et al.* 2006; Lo Cascio, Altadonna, and Ponel 2022) and Pantelleria (Canepari 1995).

Genus *Exochomus* Redtenbacher 1843*Exochomus octosignatus* (Gebler, 1830)

Chorotype – EUR

Trophic group – APH

Notes. A species doubtfully present in Sicily. Kovář (2007) recorded two specimens from Sicily, one labeled “Sicilia, Bodenheimer”, and another “Palermo”. Baviera (2004) referred of a specimen labelled “Sicilia” in the Museum of Natural History of Milan and two specimens preserved in Vitale collection (labelled: Messina, Novara di Sicilia, 1911).

Exochomus quadripustulatus Linnaeus, 1758

Chorotype – ASE

Trophic group – COC (*Saissetia oleae*, *Parlatoria oleae*, *Filippia follicularis*, *Chionaspis salicis*, *Dysaphis devecta*, *Dysaphis plantaginea*, *Planococcus citri*, *Pseudohermes fraxini*); APH (*Aphis*

craccivora, *Acyrtosiphon pisum*, *Cinara (Cinara) pilicornis*, *Cinara (Cinara) cedri*, *Cinara (Schizolachnus) pineti* (Fabricius, 1781), *Cinara wahlua*).

New records – **Messina**: Torre Faro Contr. Granatari, 20.VIII.1991, Baviera C. (BCPC); ditto, 11.VII.1993, Baviera C. (BCPC); ditto, 09.VI.2000, Baviera C. (BCPC); ditto, 01.VIII.1999, Baviera C. (BCPC); ditto, 03-20.VIII.2001, Baviera C. (BCPC); Peloritani, Montalbano Elicona, Bosco di Malabotta, 1300m a.s.l., 24.IV.2006, Baviera C. (BCPC); Nebrodi, Biviere di Cesarò, 1278m a.s.l., 26.V.2004, Baviera C. (BCPC); ditto, 14.X.2005, Baviera C. (BCPC); Nebrodi, Portella Maulazzo, 1400m a.s.l., 14.V.2004, Baviera C. (BCPC); Monte Soro, 1800m a.s.l., on *Fagus*, 11.VIII.1998, Baviera C. (BCPC); ditto, 1700m a.s.l., on *Fagus*, 20.V.2000, Baviera C. (BCPC); Acquedolci, on *Quercus ilex*, 08.VIII.2001, Baviera C. (BCPC); **Catania**: Etna Northern slope, Piano Provenzana, dint 1800m a.s.l., 08.VI.2000, Baviera C. (BCPC); Etna Easten slope, Bosco Cerrita, 1500m a.s.l., on *Quercus*, 23.VI.2001, Baviera C. (BCPC); Sicani, Bosco Ficuzza, 800m a.s.l., 20.VI.2001, Baviera C. (BCPC); **Palermo**: Contessa Entellina - S. Maria del Bosco, 03.VII.1991, Carapezza A. (CAPC); Madonie, Isnello, Piano Zucchi, 1100m a.s.l., 21.VI.2001, Baviera C. (BCPC); ditto, 16.V.2008, Baviera C. (BCPC); ditto, 19.VII.2006, Baviera C. (BCPC); **Trapani**: Castellammare del Golfo, R.N.O. Zingaro, 22-24.IV.2003, Baviera C. (BCPC).

Notes. This is the commonest and widely distributed species of *Exochomus* genus in Sicily.

Genus *Parexochomus* Redtenbacher 1843

Parexochomus nigripennis Erichson, 1843

Chorotype – TUM

Trophic group – COC

Notes. A species recorded in Italy only from Lampedusa (sub *Exochomus*) (Canepari 1995).

Parexochomus nigromaculatus Goeze, 1777

Chorotype – TUM

Trophic group – COC (*Peliococcus calluneti* (Lindinger, 1912), *Phyllostroma myrtilli* (Kaltenbach, 1874), *Rhizococcus devoniensis* (Green, 1896); APH.

New records – **Messina**: Torre Faro Contr. Granatari, 20.VIII.1991, Baviera C. (BCPC).

Notes. This species lives commonly in the moorlands, where it feeds on coccids and, sometimes, aphids (Coutanceau 2014). This is a rare species in Sicily, not recorded from Sicily in European Checklist in 2007 and in the Nedvěd and Djuic (2022) field guide.

Parexochomus pubescens Kuster, 1848

Chorotype – MED

Trophic group – COC

Notes. A species recorded in Italy only from Lampedusa (sub *Exochomus*) (Canepari 1995).

Tribe **Coccidulini** Mulsant, 1846Genus **Coccidula** Kugelann 1798*Coccidula scutellata* (Herbst 1783)

Chorotype – SIE

Trophic group – APH (*Hyalopterus pruni*) New records – **Messina**: Nebrodi, Biviere di Cesarò, 1278m a.s.l., 26.V.2004, Baviera C. (BCPC).**Notes.** A typical species of marshy biotopes, recorded from Sicily by de Bertolini (1872) and Vitale (1905) catalogues. Not recorded from Sicily in the European checklist.Genus **Rhyzobius** Stephens 1829*Rhyzobius chrysomeloides* (Herbst 1792)

Chorotype – EUR

Trophic group – COC (*Matsucoccus feytaudi* Ducas, 1941); MYC**Notes.** A species recorded for Sicily by Luigioni (1929) and confirmed by a specimen collected in Messina (Torre Faro, Mortelle Lido, (Baviera 1999)).*Rhyzobius litura* (Fabricius 1787)

Chorotype – EUM

Trophic group – APH (*Sitobion avenae*, *Uroleucon cirsii*, *Uroleucon jaceae*); COC New records – **Messina**: Città, Annunziata, sifting *Quercus* sp., 11.III.2000, Baviera C. (BCPC); ditto, 06.IV.1998, Città, Annunziata, on *Quercus* sp., 28.VI.1997, Baviera C. (BCPC); Torre Faro Contr. Granatari, 23-28.V.2000 Baviera C. (BCPC); ditto, 11.IV.1993, Baviera C. (BCPC); ditto, 20.IV.1995, Baviera C. (BCPC); Lido Mortelle, at light, 30.V.2010, Infusino M. (BCPC); Lido Spiaggia d'oro, 29.V.2011, Baviera C. (BACO); Piano Torre, Contr. Zini, sifting *Olea*, 09.X.2009, Baviera C. (BACO); Campo Italia, 21.IV.2010, Baviera C. (BCPC); Monte Ciccìa, 500m a.s.l., sifting *Quercus*, 29.II.2012, Baviera C. (BCPC); Francavilla di Sicilia, Cuba Bizantina, Alcantara river, 19.IV.2010, Baviera C. (BCPC); ditto, 04.XI.2010, Baviera C. (BCPC); Francavilla di Sicilia, Le Gurne, Alcantara river, 29.VI.2010, Baviera C. (BCPC); Mandanici, 560m a.s.l., 29.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Fiumedinisi, presso Castello, 750m a.s.l., sifting *Castanea*, 14.XII.2013, Baviera C. (BCPC); San Pier Niceto, Contr. Terra Salata, 250m a.s.l., 11.X.2012, Baviera C. (BCPC); Gualtieri sicaminò, loc. Li Pantani, 04.IV.2010, Castoreale 3, 407m, sifting *Olea*, 03.XI.2011, Baviera C. and Bellò C. (BCPC); Castoreale, Piano Margi, 925m, sifting, 03.XI.2011, Baviera C. and Bellò C. (BCPC); Milazzo, Sentiero di Ponente 2, sifting *Olea*, 22.XII.2015, Baviera C. (BCPC); Capo Milazzo, 23.XII.2014, Baviera C. (BCPC); Oliveri, Laghetti Marinello, 02.III.2002, Baviera C. (BCPC); Peloritani, Montalbano Elicona, Basicò, 588m a.s.l., sifting *Olea*, 02.X.2007, Baviera C. and Bellò C. (BCPC); ditto, 30.XI.2015, Baviera C. and Bellò C. (BCPC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 26.IV.2000, Baviera C. (BCPC); ditto, 05.V.2004, Baviera C. (BCPC); ditto, 27.IV.2010, Baviera C. (BCPC); ditto, 09.IV.2002, Baviera C. (BCPC); Portella San Rizzo, 27.IV.2010, Baviera C. (BCPC); Pezzolo 2, 02.XII.2011, Baviera C. (BCPC); Gesso 2, 27.XII.2012,

Baviera C. (BCPC); Salice, 07.IV.2004, Baviera C. (BCPC); Forte S. Jachiddu, 375m a.s.l., 28.IV.2010, Baviera C. (BCPC); Salice, Urni, 380m a.s.l., 23.III.2010, Baviera C. (BCPC); Acqualadronne, dune, 22.V.2000, Baviera C. (BCPC); Nebrodi, Portella Maulazzo, 1400m a.s.l., 07.V.2013, Baviera C. (BCPC); San Marco D'Alunzio 2, 220m a.s.l., sifting *Olea*, 20.III.2015, Baviera C. (BCPC); Portella dell'Obolo, 22VI.2007, Baviera C. (BCPC); Nebrodi, Floresta Sorgente San Giacomo, 19.IV.2010, Baviera C. (BCPC); Nebrodi, Biviere di Cesarò, 1278m a.s.l., 11.IV.2002, Baviera C. (BCPC); San Fratello, 1300m a.s.l., 20.V.2000, Baviera C. (BCPC); Capizzi, 220m a.s.l., sifting *Olea* and *Castanea*, 08.XI.2010, Baviera C. (BCPC); Ficarra 8, 15.VII.2006, Baviera C. (BCPC); ditto, 05.III.2002, Baviera C. (BCPC); Aeolian Archipelago, Isola di Stromboli, 07-09.IV.2000, Baviera C. (BCPC); Aeolian Archipelago, Isola di Vulcano, 18-20.IX.2023, Baviera C. (BCPC); **Catania**: Calatabiano, San Marco, foce Alcantara, 29.VI.2010, Baviera C. (BCPC); Mazzarrone 3, 170m a.s.l., sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Bosco di Santo Pietro, sifting *Quercus*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Etna, North slope, 1500-1700m a.s.l., 22.IV.2004, Baviera C. (BCPC); **Enna**: Monte Altesina, 27.VI.2015, Baviera C. (BCPC); Villarosa, 615m a.s.l., 03.XI.2010, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Agira, 500m a.s.l., sifting *Olea*, 17.III.2016, Baviera C. and Bellò C. (BCPC); Agira 2, 500m a.s.l., sifting *Olea*, 17.III.2016, Baviera C. and Bellò C. (BCPC); **Agrigento**: Sant'Angelo Muxaro, 125m a.s.l., 10.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Palma di Montechiaro, 120m a.s.l., 11.XII.2014, sifting *Olea* and *Smilax*, Baviera C. and Bellò C. (BCPC); Bivona, sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Favara, 365m a.s.l., sifting *Olea*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); Aragona, San Biagio, sifting *Olea*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); Raffadali, sifting *Olea*, 03.III.2013, Baviera C. and Bellò C. (BCPC); Sciara, R.N.O. Monte San Calogero, 550m a.s.l., 07.XI.2010, Baviera C. and Bellò C. (BCPC); **Caltanissetta**: Torre di Manfria, sifting, 02.III.2013, Baviera C. and Bellò C. (BCPC); Niscemi 5, Poggio, sifting *Olea*, 250 a.s.l., 22.XII.2013, Baviera C. and Bellò C. (BCPC); Incrocio per Niscemi, 300m a.s.l., sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Mazzarino per San Cono, 489m a.s.l., sifting *Olea*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); Biviere di Gela, 29.V.2006, Baviera C. (BCPC); **Ragusa**: Acate, Museo del Carrubo, 21.XII.2013, Baviera C. and Bellò C. (BCPC); Iblei Chiaromente Gulfi, Santa Margherita, 21.XII.2013, Baviera C. and Bellò C. (BCPC); ditto, 10.XII.2014, Baviera C. and Bellò C. (BCPC); **Siracusa**: Buccheri, Bosco Pisano, on Zelvova sicula, 28.V.2010, Baviera C. (BCPC); Pachino, 80m a.s.l., sifting, 02.XI.2010, Baviera C., and Bellò C. (BCPC); Pachino, Buonomini, sifting *Olea* and *Prunus*, 09.XII.2014, Baviera C. and Bellò C. (BCPC); Punta delle Formiche, sifting *Olea*, 09.XII.2014, Baviera C., and Bellò C. (BCPC); Melilli, 200m a.s.l., sifting *Olea*, Bellò C. (BCPC); Bosco di Santo Pietro 2, sifting *Quercus*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); **Palermo**: Ciminà 570m a.s.l., 22.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Grotta Molara, sifting, 02.I.2007, Baviera C. (BCPC); Monte Pellegrino, 370m a.s.l., sifting *Rubus*, 04.II.2015, Baviera C. (BCPC); ditto, 28.XI.2009, Baviera C. (BCPC); ditto, 700m, 28.XI.2009, Baviera C. (BCPC); Monti Sicani, Bosco Ficuzza, sotto pietre, 19.II.1995, Sparacio I. (SIPC); ditto dint. Paese, 14.I.1996, Sparacio I. (SIPC); Bosco Ficuzza, Alpe Cucco 3, 22.XII.2013, sifting under stones, Baviera C. (BCPC); Piana degli Albanesi, 21.III.1995, Sparacio I. (SIPC); Bisaquino, 19.III.2008, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Sicani, Chiesa Sciafani, 720m a.s.l., 11.III.2009, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Sicani, Palazzo Adriano, Casale Borgia, 1000m a.s.l., 24.X.2006, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Lago di Piana degli Albanesi, 05.I.2007, Baviera C. (BCPC); Capaci, Città, 17.IV.1973, Romano M. (BCPC); Baucina, 22.XII.2013, Baviera C. and Bellò C. (BCPC); San Mauro di Castelveverde, loc. Ogliastro, sifting *Olea*, 31.V.2007, Baviera C. and Bellò C. (BCPC); Baita del Faggio, 1400m a.s.l., 18.V.2013, Baviera C. (BCPC); Piano Battaglietta, 1600m a.s.l., 18.V.2013, Baviera C. and Rando A. (BCPC); Madonie, Isnello, Piano Zucchi, 1100m a.s.l., 03.VI.2000, Baviera C. (BCPC); Gratteri, 620m a.s.l., 30.XI.2015, Baviera C. and Bellò C. (BCPC); **Trapani**: Trapani Est, 06.III.2013, Baviera C. and Bellò C. (BCPC); Foci F. Birgi, 06.XI.1993, Sparacio I. (SIPC); Salaparuta, sotto

pietre, 19.I.1995, Sparacio I. (SIPC); Saline di Trapani e Paceco, salina Vecchia, 29.IV.2004, Baviera C. (BCPC); ditto, Fiume Lenzi Baiata, 29.IV.2004, Baviera C. (BCPC); Erice, Piano Guastella, 180m a.s.l., sifting *Olea*, 28.XI.2015, Baviera C. and Bellò C. (BCPC); ditto, Erice 3, 250m a.s.l., 06.III.2013, Baviera C. and Bellò C. (BCPC); Alcamo, Monte San Nicola, sifting *Olea*, 30.I.2011, Baviera C. and Bellò C. (BCPC); Castellammare del Golfo, Monte Inici, 684m a.s.l., 28.XI.2006, Baviera C. and Bellò C. (BCPC); Castellammare del Golfo, R.N.O. Zingaro, 23-25.VI.2003, Baviera C. (BCPC); ditto, 22-24.IV.2003, Baviera C. (BCPC); Isole Egadi, Isola di Marettimo, 16-18.IV.2006, Baviera C. (BCPC); ditto, 14-16.V.2006, Baviera C. (BCPC); ditto, Pizzo Capraro, 15.VII.2006, Baviera C. (BCPC).

Notes. This is the most common and widespread species of this genus in Sicily. This is the most common species collected by sifting both forest leaf litter and garrigue soils in Sicily. Recorded also from Lipari and Vulcano in Aeolian Archipelago (Lo Cascio *et al.* 2006) and from Lampedusa (Canepari 1995).

Rhyzobius lophanthae (Blaisdell 1892)

Chorotype – SCO

Trophic group – COC (*Pseudaulacaspis pentagona* (Targioni Tozzetti, 1886) *Aonidiella aurantii* (Maskell, 1879), *Chrysomphalus dictyospermi* (Morgan, 1889) *Aspidiotus nerii*, *Phoenicococcus marlatti* Cockerell, 1899).

New records – **Messina:** Torre Faro Contr. Granatari, 25.VII.1999, Baviera C. (BCPC); ditto, 17.X.1998, Baviera C. (BCPC); ditto, 03.V.1992, Baviera C. (BCPC); ditto, at light, 30.VI.2002, Baviera C. (BCPC); ditto, 28.IV.2010, Baviera C. (BCPC); Casa Bianca, 1m a.s.l., at light, 07.VIII.2010, Infusino M. (BCPC); Monti Peloritani, Montalbano, 10, (ERMIC); Peloritani, Monte Antennamare, 1133m a.s.l., on *Quercus* sp., 17.X.2002, Baviera C. (BCPC); Peloritani, Itala, Monte Scuderi, 1100m a.s.l., 29.IX.2005, Baviera C. (BCPC); Nebrodi, Portella Maulazzo, 1400m a.s.l., 23.VI.2001, Baviera C. (BCPC); **Catania:** Calatabiano, San Marco, foce Alcantara, 21.VII.2010, Baviera C. (BCPC); Easten slope, Bosco Cerrita, 1500m a.s.l., on *Quercus*, 23.VI.2001, Baviera C. (BCPC); **Agrigento:** Sant'Angelo Muxaro, 125m a.s.l., 10.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Caltanissetta:** Mazzarino per San Cono, 489m a.s.l., sifting *Olea*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); **Trapani:** Castellammare del Golfo, R.N.O. Zingaro, 23-25.VI.2003, Baviera C. (BCPC); ditto, 19-21.V.2003, Baviera C. (BCPC); Isole Egadi, Isola di Marettimo, 16-18.IV.2006, Baviera C. (BCPC); Isole Egadi, Isola di Favignana, 19.IV.2007, Baviera C. (BCPC).

Notes. This Australian species was introduced from California and Hawaii islands in Italy in 1901 for biological control of coccids (Homoptera Diaspididae). In Sicily is wide distributed but quite uncommon. Recorded also from Lipari (sub *Rhyzobius* (Lo Cascio *et al.* 2006)), Vulcano, Salina and Panarea (Lo Cascio, Altadonna, and Ponel 2022) in Aeolian Archipelago and from Lampedusa (Canepari 1995).

Genus *Cryptolaemus* Mulsant 1853

Cryptolaemus montrouzieri Mulsant 1853

Chorotype – SCO

Trophic group – COC (*Maconellicoccus hirsutus* (Green, 1908), *Planococcus citri*, *Pulvinaria psidii* Maskell, 1893)

New records – **Messina**: Torre Faro Contr. Granatari, 13.IV.2001, Baviera C. (BCPC); ditto, 22-27.VII.2000, Baviera C. (BCPC); ditto, 24.VI-01.VII.2001, Baviera C. (BCPC); San Pier Niceto, many specimens with different data 2010-2021, on *Araucaria angustifolia* (Bertol.) Kuntze, 1898, Baviera C. (BACO); Ganzirri, Ortopedico, no data, on *Lantana* sp. (BACO); **Siracusa**: Augusta, 05.VIII.1997, on *Citrus*, Benfatto L. (BCPC).

Notes. This Australian species was introduced in Italy in 1907 together with *R. lophanthae* for biological control of Pseudococcids. Found very common in Sicily on Pseudococcids colonies often on *Pittosporum* sp., *Lantana* sp., *Citrus* sp. and *Araucaria* sp. (Baviera, pers. obs.)

Species to be excluded from Sicilian fauna.

[*Pharoscygnus setulosus* (Chevrolat, 1861)]

Notes. This species was recorded in Italy only doubtfully from Sicily (Audisio *et al.* 1995).

[*Coccidula rufa* (Herbst, 1783)]

Notes. In the recent Nedvěd and Djuic (2022) field guide this species is recorded from Sicily while *C. scutellata* is not recorded.

[*Nephus (Geminosipho) reunioni* Fürsch 1974]

Notes. A species used in biological control on *Citrus* (Longo and Benfatto 1987) but seems to be never acclimatized in Sicily.

[*Tetrabrachys connatus* (Creutzer, 1796)]

Notes. This species cited from Sicily by Kapur (1948) is considered doubtfully recorded in the Island by Iablokoff-Knזורian (1974) and never recollected.

[*Coccinella (Coccinella) algerica* Kovář, 1977]

Notes. A species recorded, from Italy, only from Pantelleria (Kovář 2007) and Lampedusa (Canepari 1995). *Coccinella algerica* was described on small morphological differences of North African populations originally thought to be *C. septempunctata*. Marin *et al.* (2010) demonstrated that these two species do not form genetically distinct lineages and synonymized *C. algerica* with *C. septempunctata*. Romanowski *et al.* (2019) propose to synonymise *C. algerica* with *C. septempunctata*.

[*Calvia (Anisocalvia) quindecimguttata* (Fabricius 1777)]

Notes. Erroneously recorded from Sicily in Italian checklist (Audisio *et al.* 1995), while *C. quatuordecimpunctata* is not recorded.

4. Conclusions

With the first report of *Nephus (Bipunctatus) bicinctus*, *Scymnus (Pullus) impexus*, *Scymnus (Scymnus) femoralis*, *Hyperaspis algerica* and *Sospita vigintiguttata*, a total of 90 species are reported from Sicily, the 69% of Italian ladybird fauna. 19 different chorotypes are represented: 53% of the total species shows a widespread distribution in the Palearctic Region (PAL s.l.) (see Figs. 2-3). Equally relevant is the amount of the European (EUR s.l.:

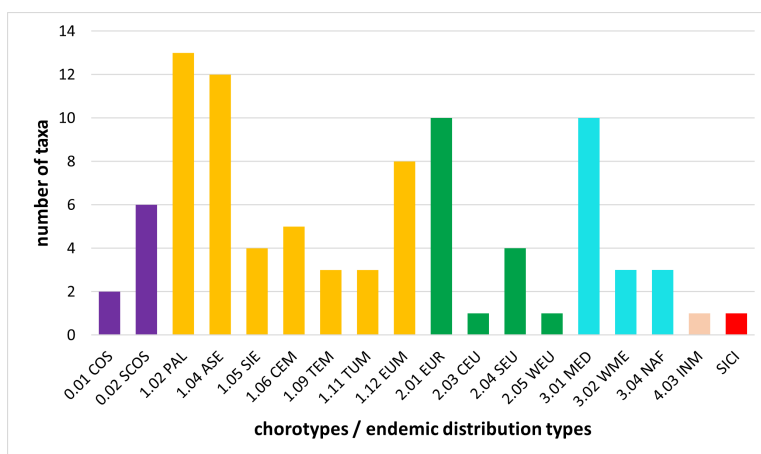


FIGURE 2. Number of Sicilian ladybird subdivided in the different chorotype categories (see Materials and methods for abbreviations).

17% of the total) and Mediterranean component (MED s.l.: 18% of the total), represented by six European and three Mediterranean chorotypes with the more represented chorotype are MED (11 species) and EUR (9 species). Sicily hosts only one endemic species of Coccinellidae in Pelage Islands. The wide distributed species used for biological control are eight (9%), a number very high, which it would be advisable not to increase further to avoid reducing global biodiversity given the high level of competition often shown by these species. The Sicilian ladybird fauna exhibits a very high diversity if compared with the Maltese Islands one which consists of 34 species (Schembri 1993), but also with the 62 species recently listed from Sardinia (Canepari 2011) and the 21 listed for northern Cyprus (Özden and Uygun 2006). Among the species to be excluded from Sicilian fauna, *Pharoscyrnus setulosus*, *Nephus (Geminosopho) reunioni*, and *Lithophilus connatus* are probably occasionally recorded from Sicily but never recollected, while *Coccidula rufa* and *Calvia (Anisocalvia) quindecimguttata*, are probably reported incorrectly from Sicily. Analysing the main trophic groups, except for *P. vigintiduopuntata*, *H. sedecimguttata* and

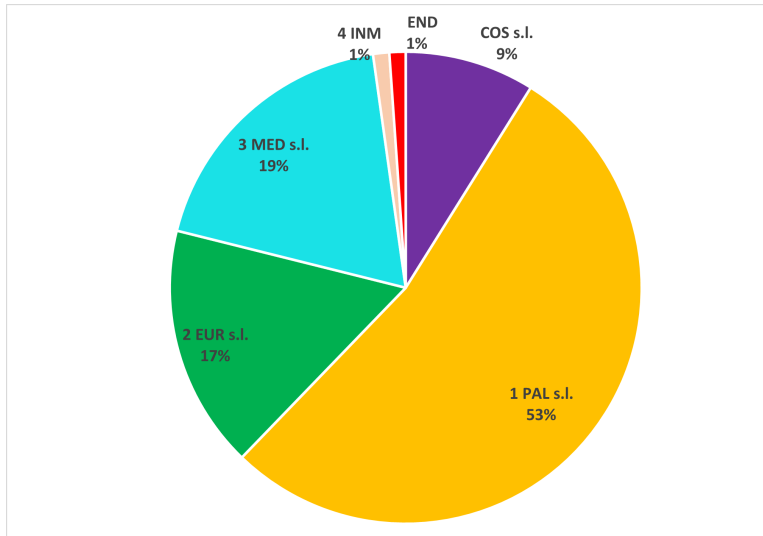


FIGURE 3. Percentage of Sicilian ladybird per grouped chorotype categories (see Materials and methods for abbreviations).

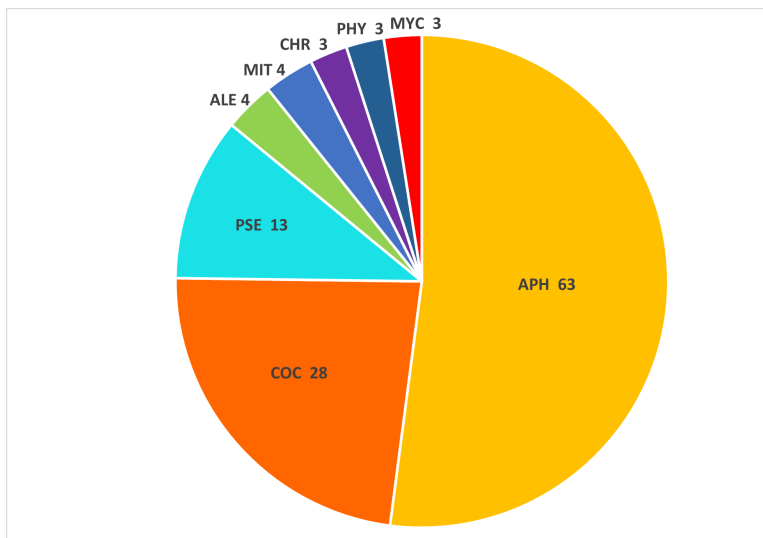


FIGURE 4. Number of Sicilian ladybird by the trophic groups (see Materials and methods for abbreviations).

V. duodecimguttata, which develops on fungi (e.g., Powdery Mildew Fungi (Erysiphales)) (3%), and *S. vigintiquatuorpunctata*, *H. argus* and *C. elaterii* which develops on plants (3%), all the other species of Sicilian coccinellids are predators (even if many species, as

adults, integrate the diet with pollen). More than half (58%) of Sicilian coccinellids feed on aphids (see Fig. 4), followed by the coccidophagous (16%) and species which feeds on pseudococcids (14%). Among the three species which feeds on aleyrodidae two (*Delphastus catalinae* and *Serangium* sp.) are imported respectively from America and Asia. Although the diversity and distribution of Sicilian ladybeetles is currently well known, it cannot be excluded that additional species may be found with future research.

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