

THE CURCULIONINAE (COLEOPTERA: CURCULIONIDAE) OF SICILY: RECENT RECORDS AND UPDATED CATALOGUE

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ABSTRACT. An updated catalogue of the Sicilian species of the weevil subfamily Curculioninae is proposed on the basis of revised bibliographical data and new Sicilian material collected by the authors and other entomologists in the last decades. A total of 167 species is reported with certainty from the main island and surrounding isles, five of them new for Sicily: *Anthonomus conspersus* (Desbrochers des Loges, 1868), *Bradybatus fallax* Gerstaeker, 1860, *Dorytomus rubrirostris* (Gravenhorst, 1807), *Gymnetron stimulosum* (Germar, 1821) and *Tychius longicollis* C.N.F. Brisout de Barneville, 1863. Detailed data for *Anthonomus incurvus* (Panzer, 1795), *A. ulmi* (DeGeer, 1775), *Bradybatus elongatus* (Boheman, 1843), *Curculio propinquus* (Desbrochers des Loges, 1868), *Archarius troglodytes* (Jekel, 1861), *Derelomus subcostatus* Boheman, 1844, *Pachytychius discithorax* Desbrochers des Loges, 1873, and *Sibinia arenariae* Stephens, 1831 are quoted for the first time, being these species previously reported generically from Sicily. The presence of 14 taxa formerly indicated from Sicily is considered as doubtful, whereas for other 16 taxa it is excluded.

1. Introduction

As reported by Oberprieler *et al.* (2007, 2014), the Curculionoidea, with about 62,000 species described and likely four times as many existing, seem to have excelled in colonization of the emerged lands to a much greater degree than any other beetle group. This probably followed the Angiosperm radiation making possible for them to colonize all suitable ecological niches on Earth. Curculionoidea are the most species-rich group of beetles known also in Sicily. The catalogues (and their updates) by Vitale (1892a,b, 1893, 1900, 1901, 1903c, 1905, 1908a) and Ragusa (1906a,b, 1907a,b, 1908, 1922) reported often for the first time the presence, and sometimes the distribution, of Sicilian Curculionoidea. The recent restoration of the Vitale entomological collection, preserved in the Museo Zoológico “Francesco Cambria” at the University of Messina (Baviera 2004), made possible to examine specimens and original identifications of many species of different families of Coleoptera. In the Vitale collection there are several boxes of Curculionoidea and, even if many specimens collected before the earthquake of 1908 have been lost, numerous of them are still preserved (Caldara *et al.* 2010; Baviera and Bellò 2016). Presently, there are four

boxes of (Curculioninae Latreille, 1802) in the Vitale collection, and the recent study of this material yielded many interesting data of this group in Sicily (Caldara *et al.* 2010). We used the above cited checklists by Vitale and by Ragusa, and the more recent ones by Abbazzi and Osella (1992), Abbazzi *et al.* (1995), and Colonnelli (2003), and the last checklist of the Italian Curculionoidea compiled by Abbazzi and Maggini (2009) subsequently updated (Abbazzi and Zinetti 2013). Some checklists concern the Curculionoidea of the Sicilian isles (Osella 1973; Borovec and Osella 1993; Osella and Riti 1995; Osella and Di Marco 1996; Goggi 2004; Diotti *et al.* 2017). The most recent checklist recorded 913 species of Curculionoidea (with exclusion of Scolytidae and Platypodidae) for Sicily. Of them, 753 are Curculionidae, 176 of which belonging to Curculioninae (Abbazzi and Maggini 2009; Abbazzi and Zinetti 2013). Curculioninae is a speciose subfamily since it includes approximately 350 genera and 4500 species worldwide (O'Brien and Wibmer 1978; Thompson 1992; Alonso-Zarazaga and Lyal 1999; Caldara *et al.* 2014). Adults of Curculioninae are usually found on flowers, fruits, leaves and branches of various herbaceous plants and trees in nearly all habitat types, ranging from low plains to high mountains (Caldara *et al.* 2014). Although in need of revision at world level, Curculioninae are provisionally divided into 34 tribes, 12 of which are present in Italy and in Sicily. The purpose of this contribution is to provide an updated critical account on the presence and distribution of each species of Curculioninae in Sicily, as recently done for Nitidulidae and Kateretidae (Baviera and Audisio 2014), Chrysomelidae Alticinae (Baviera and Biondi 2015), Cerambycidae (Baviera *et al.* 2017), Elateridae (Baviera and Platia 2018) and Histeridae (Baviera and Vienna 2019).

2. Materials and methods

Data came from sampling carried out all over Sicily, with a special focus on the best-preserved habitats of mountain chains (Sicani, Madonie, Nebrodi, Peloritani, Erei, Iblei and Etna Mount) and on Sicilian Islands (Aeolian Archipelago: Lipari, Vulcano, Salina, Stromboli, Alicudi, Filicudi and Panarea; Egadi Archipelago: Favignana, Levanzo and Marettimo; Pelagie Archipelago: Lampedusa, Linosa and Lampione; Ustica; Pantelleria). Many of the listed specimens were obtained during researches aiming for better knowledge of the Sicilian Coleoptera (Baviera and Sparacio 2002; Baviera 2006, 2007, 2008, 2009, 2010; Baviera and Liberti 2010; Baviera 2011; Magrini and Baviera 2011; Stroscio *et al.* 2011; Baviera and Audisio 2014; Baviera 2015; Baviera and Biondi 2015; Jelínek *et al.* 2016; Solano *et al.* 2016). A special effort was made to study biodiversity of Curculionidae (Baviera and Magnano 2010; Toševski *et al.* 2011; Caldara *et al.* 2012; Toševski *et al.* 2014, 2015), and in particular of Peritelini (Bellò and Baviera 2011; Baviera and Bellò 2016; Bellò *et al.* 2017, 2019). Specimens were collected directly on plants or trees by sweeping net, or sifting leaf and soil litter then processed by a Berlese funnel and a Winkler elector, but also indirectly by the use of pitfall traps, light traps, and window traps. Sampling data have been compared and combined with available literature records about the presence of these weevils in Sicily. Systematics and nomenclature follow the recent catalogue by Alonso-Zarazaga *et al.* (2017). The genera *Aubeonymus* Jacquelin du Val, 1855 and *Pachytychius* Jekel, 1861, previously considered as Storeini or incertae sedis by Caldara *et al.* (2014), are now placed in the tribe Smicronychini according to Caldara *et al.* (2018). Tribes, genera and species within the subfamily are listed in alphabetical order. For each species the following data are

given: nomenclature, chorotype according to the categories proposed by Vigna Taglianti *et al.* (1992, 1999) integrated with those of the Italian distribution reported by Abbazzi and Maggini (2009) and Abbazzi and Zinetti (2013), host plants, trophic category, and new records (grouped by provinces) when available. Unless otherwise specified, the data on the distribution of each species in the Palaearctic region were taken from Alonso-Zarazaga *et al.* (2017), whereas those on the distribution in Italy were taken from Abbazzi and Maggini (2009) and Abbazzi and Zinetti (2013). Data written on labels pinned under the specimens are reported for each new record as follows: locality (with municipality and province), date, collecting method and habitat, surname and initials of the name of the collector. For records taken from the literature, the source is given after the mentioned locality or the simple regional record. Host plant records were obtained through careful bibliographic screening, and from unpublished observations. Botanical nomenclature follows the last checklist of the Sicilian flora (Raimondo *et al.* 2010) updated when necessary according to the APG IV (2016). As far as the trophic range is concerned, we refer to the terminology used by Biondi (1996) for Chrysomelidae Alticinae and Biondi *et al.* (2013) for the endemism patterns of the Italian leaf beetles. The acronyms are modified as follows: "monophagous" (MON) for species with larvae feeding on one plant genus; "oligophagous" (OLI) for species with larvae feeding on two or more plant genera from the same family; "polyphagous" (POL) for species with larvae feeding on different plant genera from two or more families. The list includes all the species whose presence in Sicily could be confirmed based on specimens personally identified or reported by other authors in a convincing way. Moreover, we reported also several taxa cited by recent checklists without giving the source or detailed localities. These species, requiring further verification for Sicily, are marked by an asterisk (*). Finally, we built up a chapter with those species to be deleted from the Sicilian fauna due to erroneous identification.

COLLECTIONS ACRONYMS

MSNF = Museo di Storia Naturale "La Specola", ex collection Angelini Fernando, Firenze, Italy;

BCPC = Baviera Cosimo, private collection; Messina, Italy.

BRPC = Borovec Roman, private collection; Sloupno, Czech Republic.

CRPC = Caldara Roberto, private collection; Milano, Italy.

CSPC = Casalini Roberto, private collection; Roma, Italy.

DLPC = Diotti Luciano, private collection; Cinisello Balsamo, Italy.

FLPC = Forbicioni Leonardo, private collection; Portoferraio, Italy.

KMPC = Košťál Michael, private collection; Hradec Králové, Czech Republic.

KJPC = Krátký Jiří, private collection; Hradec Králové, Czech Republic.

OGPC = Osella Giuseppe, private collection; Verona, Italy.

PAPC = Paladini Alessandro, private collection; Vicchio, Italy.

CHOROTYPE ACRONYMS

1.01 OLA = Holarctic

1.02 PAL = Palaearctic

1.03 WPA = West-Palaearctic

1.04 ASE = Asiatic-European

1.05 SIE = Sibero-European
 1.06 CEM = Central-European-Mediterranean
 1.07 CAE = Central-Asiatic-European
 1.09 TEM = Turanic-European-Mediterranean
 1.10 TUE = Turanic-European
 1.11 TUM = Turanic-Mediterranean
 1.12 EUM = European-Mediterranean
 2.01 EUR = European
 2.03 CEU = Central-European
 2.04 SEU = South-European
 2.06 EEU = East-European
 3.01 MED = Mediterranean
 3.02 WME = West-Mediterranean
 3.03 EME = East-Mediterranean
 3.04 NAF = North African

ENDEMIC DISTRIBUTION TYPE ACRONYMS

SISR = Sicilian-Sardinian Endemic
 SICI = Sicilian Endemic
 APPS = Southern Apennine Endemic
 APP = Apennine Endemic

PLANT FAMILY ACRONYMS

AST = Asteraceae
 BET = Betulaceae
 CAM = Campanulaceae
 CAR = Caryophyllaceae
 CHE = Chenopodiaceae
 COY = Corylaceae
 CON = Convolvulaceae
 FAB = Fabaceae
 FAG = Fagaceae
 OLE = Oleaceae
 ORO = Orobanchaceae
 PAP = Papaveraceae
 PLA = Plantaginaceae
 PMC = Palmaceae
 POA = Poaceae
 ROS = Rosaceae
 SAL = Salicaceae
 SAP = Sapindaceae (= Aceraceae: APG IV (2016))
 SCR = Scrophulariaceae
 TAM = Tamaricaceae
 ULM = Ulmaceae

3. Results

List of species

***Acalyptini* C. G. Thomson, 1859**

**Acalyptus carpini* (Herbst, 1795)

Chorotype – OLA

Host Plants – SAL (*Salix*)

Trophic category – MON

Notes. This species, common throughout Italy, was firstly recorded from Sicily in the catalogues of Romano (1849) and Vitale (1893, 1901), but no detailed data were reported. It was not found in the Vitale collection (Caldara *et al.* 2010). Therefore, its presence on the isle needs to be confirmed.

***Acentrusini* Alonso-Zarazaga, 2005**

Acentrus histrio (Schoenherr, 1837)

Chorotype – MED

Host Plants – PAP (*Glaucium*)

Trophic category – MON

Notes. Species reported from several regions of Italy, especially along seaside (Osella 1973), collected by Vitale at Contrada Sinnaro (Messina) (Caldara *et al.* 2010) and by Ragusa (1906b) at Sicciana (Palermo). Recorded from the Egadi islands (Favignana, Levanzo) by Osella (1973)).

***Anthonomini* C. G. Thomson, 1859**

**Anthonomus (Anthonomus) bituberculatus* C.G. Thomson, 1868

Chorotype – EUR

Host Plants – ROS (*Crataegus, Prunus*)

Trophic category – OLI

Notes. This species is widely distributed in Italy. However, it is recorded from Sicily only by Vitale (1893, 1900), respectively as synonym of *A. chevrolati chevrolati* Desbrochers des Loges, 1868 and *A. piri* Kollar, 1837 (presently synonym of *A. pyri* Gyllenhal, see below). Its presence in Sicily, although probable, requires verification.

**Anthonomus (Anthonomus) chevrolati chevrolati* Desbrochers des Loges, 1868

Chorotype – SEU

Host Plants – ROS (*Crataegus, Mespilus, Sorbus*)

Trophic category – OLI

Notes. The nominotypic subspecies of this species is distributed although uncommon all over Italy. It was erroneously recorded from Sicily by Vitale (1893, 1900) upon data by Baudi and Ragusa, but subsequently Ragusa (1907b) reported that his specimens were actually *A. pedicularius*. Recently reported from Sicily only by Abbazzi and Maggini (2009) according to Vitale's data. Therefore, its presence in Sicily remains to be confirmed.

Anthonomus (Anthonomus) conspersus (Desbrochers des Loges, 1868)

Chorotype – EUR

Host Plants – ROS (*Crataegus, Sorbus*)

Trophic category – OLI

New records – **Messina**: Monti Nebrodi, Capizzi Tassita, 1450 m, 29.V.2015, Baviera C. (BCPC); Monti Nebrodi, Portella Femmina Morta, 22.V.2010, Diotti L. (DLPC); **Siracusa**: Monti Iblei, Buccheri, 650 m, 28.IV.2007, Angelini F. (MSNF); Monti Iblei, Bauli, 500 m, 24.V.1979, Osella G. (OGPC); **Palermo**: Madonie, Petralia Sottana, road to Piano Battaglia, 29.V.2007, Diotti L. (DLPC); Castelbuono, 600 m, 27.V.1985, Osella G. (OGPC); San Salvatore, 30.V.1985, Osella G. (OGPC); Castelbuono, La Liccia, 800 m, sifting *Quercus*, 18.X.2013, Baviera C. (BCPC); Monti Sicani, Ficuzza, 15.VI.1978, Pace R. (OGPC).

Notes. In Italy this species was previously known only from northern regions (Abbazzi and Maggini 2009). The above reported data are therefore very interesting. It is noteworthy, however, that the male terminalia of specimens from Sicily are slightly different from those from central Europe illustrated by Dieckmann (1968), deserving a more detailed study as suggested by Luciano Diotti (pers. comm.). In fact, according to Michael Košťál (pers. comm.): "The species is probably now under speciation being isolated in colder regions and mountains on *Sorbus* spp., and has several morphotypes related to the area of distribution. The Sicilian specimens are actually significantly different from the central European/Scandinavian ones, whereas another morphotype occurs in Mongolia and Siberia". New to Sicily.

Anthonomus (Anthonomus) incurvus (Panzer, 1795)

Chorotype – SIE

Host Plants – ROS (*Prunus*)

Trophic category – MON

New records – **Messina**: Caronia, under Pizzo Michele, 500 m, 18.VI.1993, Angelini F. (MSNF).

Notes. This species is rare in Italy especially in the south. Ragusa (1907b) quoted *A. incurvus* from Sicily according to data by Baudi and subsequently by specimens collected at Ficuzza (sub *A. humeralis*: Ragusa (1926)). Taxon not recorded from Sicily by Abbazzi and Maggini (2009), being the present one the first certain datum for the isle.

Anthonomus (Anthonomus) multifasciatus Pic, 1926

Chorotype – MED

Host Plants – ROS (*Prunus*)

Trophic category – MON

New records – **Siracusa**: Monti Iblei, Floridia, Grotta Monello, 01.III.2013, Baviera C. and Bellò C.

(BCPC); **Palermo**: road Corleone-Bisacquino, 18.III.2017, sifting, Bellò C. (BCPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 23-24.IV.2003, Baviera C. (BCPC, DLPC); ibid., 19-21.V.2003, Baviera C. (BCPC); Alcamo, Monte Bonifato, 17.III.2017, Baviera C. and Bellò C. (BCPC); Isole Egadi, Marettimo, 16-18.IV.2006, Baviera C. (BCPC).

Notes. A common to very common species in Italian mainland and often considered a serious pest of almond, peach and apricot trees. Reported from Sicily from Palermo and Messina where it was considered very common (sub *A. ornatus* Reiche, 1860) by Vitale (1893, 1900, 1901), Ragusa (1907b), and Vitale (1908a). Detail on its biology in Messina (San Michele) were reported by Vitale (1923).

Anthonomus (Anthonomus) pedicularius (Linnaeus, 1758)

Chorotype – MED

Host Plants – ROS (*Prunus*)

Trophic category – MON

New records – **Siracusa**: Monti Iblei, Floridia, Grotta Monello, 01.III.2013, Baviera C. and Bellò C. (BCPC); **Palermo**: road Corleone-Bisacquino, 18.III.2017, sifting, Bellò C. (BCPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 23-24.IV.2003, Baviera C. (BCPC, DLPC); ibid., 19-21.V.2003, Baviera C. (BCPC); Alcamo, Monte Bonifato, 17.III.2017, Baviera C. and Bellò C. (BCPC); Isole Egadi, Marettimo, 16-18.IV.2006, Baviera C. (BCPC).

Notes. Common species all over Italy. It was recorded from Messina (Passo Badia, Tremonti) by Vitale (1893, 1900, 1901, 1908a) and from Castelbuono (Palermo) by Ragusa (1907b) on *Crataegus oxyacantha* L. and from Ficuzza where it was recently collected also by Stejskal (2004).

Anthonomus (Anthonomus) pomorum (Linnaeus, 1758)

Chorotype – OLA

Host Plants – ROS (*Pyrus, Crataegus, Malus*)

Trophic category – OLI

New records – **Messina**: Monti Nebrodi, 1300 m, 22.V.1981, Cantarini E. (OGPC); San Fratello, 1300 m, 20.V.2000, Baviera C. (BCPC); Cesarò, 20.V.1981, Bellò C. (OGPC); Monti Peloritani, Montalbano Elicona, Bosco di Malabotta, 23.V.2006, Baviera C. (BCPC); Portella Mandrazzi, 25.V.1981, Bellò C. (OGPC); San Pier Niceto, Li Pantani, 700 m, sifting Castanea, 20.VI.2010, Baviera C. (BCPC).

Notes. This species, widely distributed in Italy, was firstly recorded from Sicily by Vitale (1893, 1900, 1901, 1904a). Reported as common around Messina by Vitale (1908a).

Anthonomus (Anthonomus) pyri Gyllenhal, 1835

Chorotype – SEU

Host Plants – ROS (*Pyrus, Crataegus*)

Trophic category – OLI

Notes. Another common species recorded from Sicily by Vitale (1893) as synonym of *A. chevrolati chevrolati* and by Ragusa (1907b) sub its synonym *A. cinctus* Redtenbacher, 1857. The latter author reported the collection of this species in large number at Ficuzza.

Anthonomus (Anthonomus) rubi (Herbst, 1795)

Chorotype – PAL

Host Plants – ROS (*Rubus*, *Crataegus*, *Cotoneaster*, *Prunus*)

Trophic category – OLI

New records – **Messina**: Monti Nebrodi, Portella Femmina Morta, 31.V.2007, Diotti L. (DLPC); Longi, waterfall, 12.IV.2015, Baviera C. (BCPC); Bosco di Mangalaviti, 1300 m, sifting *Crataegus*, Baviera C. (BCPC); Monti Peloritani, Antillo, 500 m, 29.V.2010, Baviera C. (BCPC); Francavilla di Sicilia, Fiume Alcantara, Le Gurne, 19.V.2010, Baviera C. (BCPC); **Palermo**: Monti Sicani, Bisacino, 550 m, 28.V.2007, Baviera C. (BCPC); Madonie, Piano Zucchi, 1200 m, 3.VI.2000, Baviera C. (BCPC).

Notes. This common species, recorded from Messina (Tremonti) by Vitale (1893, 1900, 1901, 1908a) and from Monti Nebrodi by Ragusa (1907b), was recently reported from Palermo (Ficuzza) by Stejskal (2004). Pollini (1998) considered only *Rubus* as host plant of this species.

Anthonomus (Anthonomus) rufus Gyllenhal, 1835

Chorotype – EUR

Host Plants – ROS (*Crataegus*, *Prunus*)

Trophic category – OLI

Notes. This species was recorded from Sicily and Messina (Guidomandri: Vitale (1893, 1900, 1901, 1908a), and from Sicily without more detailed data also by Dieckmann (1968)).

Anthonomus (Anthonomus) spilotus L. Redtenbacher, 1847

Chorotype – SEU

Host Plants – ROS (*Crataegus*, *Prunus*, *Mespilus*)

Trophic category – OLI

New records – **Messina**: Monti Nebrodi, Cesaro 8 km NW, 1500 m, 19.VI.2006, Koštál M. (KMPC); **Siracusa**: Monti Iblei, Agriturismo Bauli, 500 m, 20.V.1979, Osella G. (OGPC).

Notes. This is an uncommon species in southern Italy. It was reported from Messina (Santa Teresa: Vitale (1893, 1900, 1908a)) and recently doubtfully recorded from Palermo (Ficuzza: Stejskal (2004)).

Anthonomus (Anthonomus) stierlini Desbrochers des Loges, 1869

Chorotype – SEU

Host Plants – ROS (*Crataegus*, *Prunus*, *Mespilus*)

Trophic category – OLI

New records – **Palermo**: Madonie, Piano Zucchi, 27.V.2010, Diotti L. (DLPC); **Messina**: Francavilla di Sicilia, 400-500 m, 7-9.V.1995, Borovec R. (KMPC).

Notes. This species is widely distributed in central and southern Italy. It is also known from Sicily sub its synonym *A. faillae* Desbrochers des Loges, 1892, which was described from the isle without more detailed indications. Ragusa (1907b) reported that under this name he received several specimens collected at Castelbuono (Palermo) by Failla.

Anthonomus (Anthonomus) ulmi (DeGeer, 1775)

Chorotype – EUR

Host Plants – ULM (*Ulmus*)

Trophic category – OLI

New records – **Messina**: Monti Nebrodi, Portella Cirasa, 1350 m, 21.V.1991, Carapezza A. (OGPC);

Palermo: Madonie, Piano Sempria, 1260 m, 13.VI.2013, Baviera C. (BCPC).

Notes. This species, which is distributed throughout Italy, was recorded from Sicily by Vitale (1893, 1900) upon data from the Baudi collection. Ragusa (1907b) reported that the specimens in his collection identified by Desbrochers des Loges as *A. ulmi* were actually *A. pedicularius*. Therefore, these are the first certain data on the presence of *A. ulmi* in Sicily.

Bradybatus (Bradybatus) creutzeri Germar, 1823

Chorotype – SEU

Host Plants – SAP (*Acer*)

Trophic category – OLI

New records – **Messina**: Francavilla di Sicilia, Gole dell'Alcantara, 1.V.2016, Casalini R. (CSPC);

Palermo: Monti Sicani, Alia, sifting *Olea* and *Quercus*, 22.IV.2008, Bellò C. (BCPC).

Notes. This species, common in continental Italy, was quoted from Sicily by Vitale (1893, 1900, 1901) according to records from Failla Tedaldi collection, and by Ragusa (1907b) upon specimens he collected in the Palermo province (Castelbuono, Ficuzza).

Bradybatus (Bradybatus) tomentosus Desbrochers des Loges, 1892

Chorotype – EEU

Host Plants – SAP (*Acer*)

Trophic category – OLI

New records – **Messina**: Isole Eolie, Stromboli, 7-9.IV.2006, Baviera C. (BCPC); Monti Nebrodi, Floresta 6 km SE, 1200 m, on *Acer* sp., 30.V.2019, Košťál M. (KMPC); Monti Nebrodi, San Fratello,

1300 m, 17.V.2002, Baviera C. (BCPC); Agrigento: Monti Sicani, Santo Stefano di Quisquina, Eremo Santa Rosalia, 21.IV.2008, Baviera C. and Rando A. (BCPC); **Palermo**: Madonie, Piano Battaglietta, 1600 m, 29.IV.2008, Baviera C. and Bellò C. (BCPC); ibid., 23.IX.2010, sifting *Acer*, Baviera C. and Bellò C. (BCPC); Piano Zucchi, 1100 m, sifting *Quercus*, 24.IX.2010, Baviera C. (BCPC); ibid., 27.V.2010, Diotti L. (DLPC); 27.IX.2016, Baviera C. (BCPC); Gibilmanni, 29.V.1996, Angelini F. (MSNF); Baita del Faggio, 1400 m, 19.VII.2016, Baviera C. (BCPC); La Liccia, 27.IX.2016, Baviera C. (BCPC); Monti Sicani, Bosco della Ficuzza, 26.V.2010, Diotti L. (DLPC); ibid., 24.V.1996,

Angelini F. (MSNF); ibid., Crocifisso, 05.IV.2013, 976 m, Paladini A. (PAPC); ibid., 27.XI.2009, Baviera C. (BCPC); Alia, 500 m, sifting *Olea* and *Quercus*, 22.IV.2008, Baviera C. and Bellò C. (BCPC).

Notes. This species, mainly distributed in central and eastern Europe, is surprisingly known in Italy only from Sicily (Dieckmann 1968). It was recently reported from Palermo (Ficuzza) by Stejskal (2004).

Bradybatus (Nothops) elongatulus (Boheman, 1843)

Chorotype – SEU

Host Plants – SAP (*Acer*)

Trophic category – MON

New records – **Messina:** Monti Peloritani, Montalbano Elicona, Bosco di Malabotta, 22.XII.2016, Baviera C. (BCPC).

Notes. This species is quite common in central and southern Italy and only recently also recorded from Sicily by Abbazzi and Maggini (2009). However, no detailed data are known for this isle.

Bradybatus (Nothops) fallax Gerstaecker, 1860

Chorotype – EUR

Host Plants – SAP (*Acer*)

Trophic category – MON

New records – **Messina:** Monti Nebrodi, Capizzi Tassita, 1450 m, Baviera C. (BCPC); **Palermo:** Madonie, Piano Zucchi, 27.V.2010, Diotti L. (DLPC); ibid., on *Acer* sp., 11.V.2017 (DLPC); Madonie, Castelbuono, Fiume Gonato, 900 m, 13.VI.2013, Baviera C. (BCPC).

Notes. This species is widely distributed in Europe except for the Iberian Peninsula. It was reported as present in northern and central regions of Italy by Colonnelli (2003) and only from Liguria and Lombardia by Abbazzi and Maggini (2009), although it was already quoted from Trieste and Gorizia by Dieckmann (1968), who erroneously considered these towns as belonging to “Yugoslavia” instead of Friuli-Venezia Giulia region of Italy. Therefore, this species is new for Sicily.

Cionini Schoenherr, 1825

Cionellus gibbifrons (Kiesenwetter, 1851)

Chorotype – MED

Host Plants – OLE (*Phillyrea*)

Trophic category – MON

Notes. This species is quite common especially in southern Italy. With regard to Sicily, Ragusa (1908) reported this species from Palermo surroundings, whereas Caldara *et al.* (2010) found one specimen labelled “Messina” in the Vitale collection.

Cionus alauda (Herbst, 1784)

Chorotype – EUM

Host Plants – SCR (*Scrophularia*, *Verbascum*)

Trophic category – OLI

Notes. Species reported from Messina by Vitale (1893, 1900, 1901, 1932) and from Palermo (Zucco, Monte Pellegrino) by Ragusa (1908). Recently collected at Stromboli (Lo Cascio *et al.* 2006). Caldara *et al.* (2010) examined a few specimens from Messina in the Vitale collection. Vitale collected this species on *Scrophularia peregrina* L.

Cionus hortulanus (Geoffroy, 1785)

Chorotype – CEM

Host Plants – SCR (*Scrophularia*, *Verbascum*)

Trophic category – OLI

New records – **Catania:** Ragalna, 08.V.1977, Romano M. (BCPC); Monte Etna, northern side, Linguaglossa, Piano Provenzana, 1800 m, reared from *Scrophularia canina*, 24.VI.2004, Baviera C. (BCPC); **Palermo:** Madonie, Piano Battaglia, 1600 m, 15.VII.2016, Baviera C. (BCPC).

Notes. Very common all over Italy. Reported from Messina by Vitale (1893, 1900, 1901) and from the whole isle by Ragusa (1908). Specimens from Messina are preserved in the Vitale collection (Caldara *et al.* 2010). *C. hortulanus* was considered by Vitale (1903b) as the commonest species of *Cionus* in Messina and recorded it on *Verbascum thapsus* L.. Also reported from Egadi isles (Favignana and Levanzo) by Osella (1973).

Cionus olivieri Rosenschoeld, 1838

Chorotype – TUE

Host Plants – SCR (*Verbascum*)

Trophic category – OLI

New records – **Messina:** Monti Peloritani, Monte Antennammare, 1133 m, 26.VI.2001, Baviera C. (BCPC); Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 11.VI.2004, Baviera C. (BCPC); **Catania:** Monti Nebrodi, Randazzo, 600 m, 26.V.2009, Baviera C. (BCPC); Monte Etna, southern slope, 28.V.2010, Diotti L. (DLPC).

Notes. Common species all over Italy. Reported from Palermo surroundings by Ragusa (1908). Caldara *et al.* (2010) found specimens from Messina (Antillo, “Messina”) in the Vitale collection. Also known from Egadi Islands (Favignana and Levanzo) by Osella (1973).

Cionus scrophulariae (Linnaeus, 1758)

Chorotype – WME

Host Plants – SCR (*Scrophularia*)

Trophic category – MON

Notes. This common species was recorded from Messina (Tremonti) by Vitale (1906, 1932). A specimen collected in “Messina” was found in the Vitale collection (Caldara *et al.* 2010).

Cionus thapsus (Fabricius, 1792)

Chorotype – SIE

Host Plants – SCR (*Scrophularia*, *Verbascum*)

Trophic category – OLI

New records – **Messina**: Monti Peloritani, Patti, Gioiosa Guardia, 04.VII.1999, Baviera C. (BCPC); San Pier Niceto, Torrente Niceto, 25.VIII.2010, Baviera C. (BCPC); **Catania**: Monte Etna, northern side, Lingualessa, 1000 m, 22.IV.2000, Baviera C. (BCPC); Adrano, Fiume Simeto, 28.V.2010, Diotti L. (DLPC); **Caltanissetta**: Gela, Biviere, 29-30.V.2006, Baviera C. (BCPC).

Notes. Very common species in Italy especially on *Verbascum* spp., reported from Messina (Tremonti, Montalbano) by Vitale (1906) and from Palermo by Ragusa (1908). It was reported as common on *Scrophularia peregrina* L. and *S. canina bicolor* (Sibth. and Sm.) Greuter in Messina (Vitale 1903b). Also collected on Lipari island (Lo Cascio *et al.* 2006). Caldara *et al.* (2010) found specimens from Messina (Telegrafo) in the Vitale collection.

Cionus tuberculosus (Scopoli, 1792)

Chorotype – EUR

Host Plants – SCR (*Scrophularia*)

Trophic category – MON

New records – **Messina**: Monti Nebrodi, Floresta, 1100 m, 24.VI.2007, Baviera C. (BCPC); Monte Soro, peak, 1800 m, sifting *Fagus*, 27.VI.2008, Baviera C. and Rando A. (BCPC).

Notes. Another common species all over Italy. Reported from Godrano (Palermo) and Piazza Armerina (Enna) by Ragusa (1908). Caldara *et al.* (2010) found only specimens labeled “Sicilia” in the Vitale collection.

Stereonychus fraxini (De Geer, 1775)

Chorotype – EUM

Host Plants – OLE (*Fraxinus*)

Trophic category – MON

New records – **Messina**: San Pier Niceto, Contrada Terra Salata, sifting *Olea*, 10.X.2009, Baviera C. (BCPC); **Palermo**: Madonie, Sperlinga, 19.III.2017, Bellò C. (BCPC); Chiusa Sclafani, 17.III.2008, Baviera C. (BCPC); **Trapani**: Monte Bonifato, San Nicola, 250 m. sifting *Olea*, 07.XI.2010, Bellò C. (BCPC).

Notes. Common species in Italy, reported from Messina by Vitale (1900, 1901) and from Palermo by Ragusa (1908). Caldara *et al.* (2010) found one specimen collected at “Messina” in the Vitale collection.

Stereonychus phillyreae Chevrolat, 1859

Chorotype – MED

Host Plants – OLE (*Fraxinus*, *Phillyrea*)

Trophic category – OLI

New records – **Palermo**: Monti Sicani, Bisacquino, 550 m, sifting *Quercus*, 11.III.2009, Baviera C. and Bellò C. (BCPC); Rocca Palumba, 18.III.2008, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Chiusa Sclafani, sifting *Olea*, 11.III.2009, Baviera C. and Bellò C. (BCPC); **Trapani**: Santa Ninfa, 380 m, 17.III.2008, sifting *Olea*, Baviera C. and Bellò C. (BCPC); *ibid.*, 10.III.2009, Baviera C. and Bellò C. (BCPC).

Notes. A species reported from Palermo and Madonie (Castelbuono) by Ragusa (1908). Recently quoted also from Messina (Antillo) and Trapani (S. Ninfa) provinces upon specimens collected by Vitale (Caldara *et al.* 2010). It is probable that this species is a junior synonym of *S. fraxini* (Michael Košťál, pers. comm.).

Curculionini* Latreille, 1802Archarius (Archarius) pyrrhoceras* (Marsham, 1802)

Chorotype – EUM

Host Plants – FAG (*Quercus*)

Trophic category – MON

New records – **Messina**: Città, SS.ma Annunziata, 06.IV.1998, Baviera C. (BCPC); *ibid.*, 03.V.2000, Baviera C. (BCPC); 29.I.2006, Baviera C. (BCPC); Forte San Jachiddu, 375 m, 29.V.2010, Baviera C. (BCPC); Portella di Castanea, Monte Ciccia, 28.IV.2016, Casalini R. (CSPC); Francavilla di Sicilia, Fiume Alcantara, Le Gurne, 19.V.2010, Baviera C. (BCPC); 29.III.2010, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 1300 m, 24.IV.2006, Baviera C. (BCPC); Monti Peloritani, Portella Rizzo, 05.VI.1991, Angelini F. (MSNF); Monti Peloritani, Santa Lucia del Mela, Giormella, Crisafulli A. (BCPC); **Catania**: Monte Etna, eastern side, Milo, Bosco Cerrita, 1500 m, 14.VI.2002, Baviera C. (BCPC). Siracusa: Riserva Grotta Monello, 28.VIII.1991, Sabella G. (AP); Gole dell’Alcantara, 30.IV.2016, Casalini R. (CSPC).

Notes. A common species in Italy, known from Messina (Scala) (Vitale 1893, 1900, 1901, 1908a), and Catania (Caltagirone) and Palermo (Balestrate) (Ragusa 1907a) sub *Balanobius pyrrhoceras*). Recently reported from Palermo (Ficuzza) by Stejskal (2004).

Archarius (Archarius) salicivorus (Paykull, 1792)

Chorotype – PAL

Host Plants – SAL (*Salix*)

Trophic category – MON

Notes. Another common species in Italy, recorded from Messina (Scala) and Pantelleria (Vitale 1893, 1900; Ragusa 1907a; Vitale 1908a; Magnano and Osella 1973; Osella and Riti 1995).

Archarius (Archarius) troglodytes (Jekel, 1861)

Chorotype – EME

Host Plants – FAG (*Quercus*)

Trophic category – MON

New records – **Siracusa**: Canicattini Bagni 5 km SW, 430 m, on *Quercus* sp., 27.V.2019, Košt’ál M. (KMPC).

Notes. This uncommon and poorly known species, quoted also from Spain and Greece (Alonso-Zarazaga *et al.* 2017), is reported for Italy from Tuscany, Latium, Campania and Sicily (Abbazzi and Osella 1992; Abbazzi and Maggini 2009). The biology of this species is unknown, although Abbazzi and Maggini (2009) quoted *Salix* as host plant. Recently, Michael Košt’ál (pers. comm.) collected a single specimen of this species on *Quercus*, that we tentatively consider as a possible host plant. Previously, there were no detailed data for Sicily.

Curculio (Curculio) elephas (Gyllenhal, 1835)

Chorotype – SEU

Host Plants – FAG (*Quercus, Castanea*)

Trophic category – OLI

New records – **Messina**: Monti Peloritani, Forte San Jachiddu, 375 m, 26.IX.2011, Baviera C. (BCPC); 29.IX.2011, Baviera C. (BCPC); Musolino, 800 m, 17.X.1998, Baviera C. (BCPC); Monte Scuderi, 1100 m, 29.IX.2005, Baviera C. (BCPC); Rometta Superiore, Gimello, Santuario San Leone, 480 m, 18.V.2007, at light, Baviera C. and Infusino M. (BCPC).

Notes. A common species in the whole Italy, previously reported by Vitale (1893, 1900, 1901, 1908a) and Ragusa (1907a) from Messina (Castanea, Bucceri, Tono) and Palermo (Favorita, Ficuzza).

Curculio (Curculio) glandium (Marsham, 1802)

Chorotype – PAL

Host Plants – FAG (*Quercus*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Forte San Jachiddu, 375 m, 24.IX.2011, Baviera C. (BCPC); Rometta Superiore, Gimello, Santuario San Leone, 480 m, 18.V.2007, at light, Baviera C. and Infusino M. (BCPC); 29.IV.2000, Baviera C. (BCPC); 28.VII.1999, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 1300 m, 08.VIII.2007, at light, Baviera C. (BCPC); 24.IV.2006, Baviera C. (BCPC); 2.X.2007, Baviera C. (BCPC); 22.VIII.2007, Baviera C. (BCPC); pitfall trap, 13.X-12.XI.2005, Baviera C. (BCPC); *ibid.*, 12.IX.2014, Baviera C. (BCPC); Monti Nebrodi, Alcara Li Fusi, 27.IV.2016, Casalini R. (CSPC); Monti Nebrodi, San Fratello, 1200 m, 08.VIII.2001, Baviera C. (BCPC); 27.VI.2008, Baviera C. (BCPC); Biviere di Cesaro, 1200 m, 27.V.2006, Baviera C. (BCPC); Monte Soro, peak, 1800 m, 25.IV.2008, Baviera C. and Bellò C. (BCPC); **Catania**: Monte Etna, eastern side, Milo, Bosco Cerrita, 1500 m, pitfall trap, 16.V-15.VI.2003, Baviera C. (BCPC); *ibid.*, northern side, Linguaglossa, Piano Provenzana, 1800 m, 23.VI.2001, Baviera C. (BCPC); Agrigento: Monte Genuardo, 1180 m, 04.I.2007, Baviera C. and Bellò C. (BCPC); **Palermo**: Monti Sicani, Ficuzza, 800 m, 21.VI.2001, Baviera C. (BCPC); 26.V.2010, Diotti L. (DLPC); Madonie, Gibilmanni, 31.V.2007, Baviera C. and Bellò C. (BCPC).

Notes. The most common and widespread species of *Curculio* in Sicily. Reported from Termini Imerese (Palermo) and Messina by Vitale (1893), where it was considered very common (Vitale (1901, 1908a) sub its synonym *C. turbatus* (Gyllenhal, 1835)) and by Ragusa (1907a) from Palermo province.

**Curculio (Curculio) nucum* Linnaeus, 1758

Chorotype – EUM

Host Plants – COY (*Corylus*)

Trophic category – MON

Notes. A relatively common species all over peninsular Italy. It was cited from Sicily by Romano (1849) and this citation was subsequently reported by Vitale (1893, 1900). However, Ragusa (1907a) casted doubt on the presence of this species in Sicily. It is noteworthy that Vitale never collect this species even if he collected weevils mainly in Messina province areas where the Sicilian hazelnut cultivation is concentrated (Silvestri 2015). Reported from Sicily by all recent Italian checklists. We did not examine specimens of this species from the island.

Curculio (Curculio) pellitus (Bohemian, 1843)

Chorotype – WME

Host Plants – FAG (*Quercus*)

Trophic category – MON

New records – **Catania**: Monte Etna, northern side, Linguaglossa, 900 m, 16.V.2003, Baviera C. (BCPC); ibid., Rifugio Brunek, 1300 m, 16.V.2002, Baviera C. (BCPC). **Palermo**: Madonie, road Castelbuono-Geraci, Contrada Pintorna, 30.V.1996, Angelini F. (MSNF).

Notes. A species distributed throughout Italy except for Sardinia. Reported from Sicily (Messina: Raccuja, Bucceri) by Vitale (1900, 1901, 1908a) and subsequently from Palermo (Ficuzza) by Ragusa (1907a). Its presence in Sicily was confirmed only recently by specimens collected on Mount Etna (north slope, 1900 m) (Baviera and Sparacio 2002) and at Palermo (Ficuzza) by Stejskal (2004).

Curculio (Curculio) propinquus (Desbrochers des Loges, 1868)

Chorotype – SEU

Host Plants – FAG (*Castanea*, *Quercus*), COY *Corylus*

Trophic category – MON

New records – **Messina**: Monti Peloritani, Forte San Jachiddu, 375 m, 28.IX.2010, Baviera C. (BCPC); Rometta Superiore, Gimello, Santuario San Leone, 480 m, 18.V.2007, at light, Baviera C. and Infusino M. (BCPC).

Notes. Rare species in central and southern regions of Italy, not reported from Sicily by Abbazzi and Maggini (2009). In southern Slovakia this species lives exclusively on *Quercus cerris* (Michael Košťál pers. comm.). Actually, it was quoted from Sicily as a synonym of

C. elephas by Vitale (1893, 1900). The above reported data are the first detailed ones for Sicily.

Curculio (Curculio) reichei (Desbrochers des Loges, 1868)

Chorotype – EME

Host Plants – FAG (*Castanea, Quercus*)

Trophic category – OLI

Notes. In Italy this species is known with confidence only from Piedmont and doubtfully from Sicily (Abbazzi and Maggini 2009). However, it is noteworthy that Sicily is one of the type localities of this species, together with Turkey and Crimea and was quoted by De Bertolini (1872) and Vitale (1901) from *Castanea* Contrada Bucceri. Moreover, it was reported from Sicily also by Reitter (1895) as pointed out by Ragusa (1907a).

Curculio (Curculio) venosus venosus (Gravenhorst, 1807)

Chorotype – EUM

Host Plants – FAG (*Quercus*)

Trophic category – MON

New records – **Messina**: Monti Nebrodi, San Fratello, 1200 m, on *Quercus ilex*, 08.VIII.2001, Baviera C. (BCPC); **Catania**: Monte Etna, northern side, Linguaglossa, 900 m, 16.V.2003, Baviera C. (BCPC); ibid., Rifugio Brunek, 1300 m, 16.V.2002, Baviera C. (BCPC); **Palermo**: Madonie, Piano Zucchi, 1100 m, 19.VII.2006, Baviera C. (BCPC); ibid., 21.VI.2001, Baviera C. (BCPC).

Notes. Widespread species throughout Italy. It was reported from Messina (Bucceri) and Palermo (Ficuzza) by Vitale (1893, 1900, 1908a), and from this latter locality also by Ragusa (1907a). Confirmed from Sicily only recently (Messina, San Fratello) by Baviera and Sparacio (2002).

Derelomini Lacordaire, 1865

Derelomus chamaeropis (Fabricius, 1798)

Chorotype – WME

Host Plants – PMC (*Chamaerops*)

Trophic category – MON

New records – **Siracusa**: Capo Passero, 10.VI.1997, Angelini F. (DLPC); 12.V.1996, Angelini F. (MSNF).

Notes. This is a sporadic species in central and southern Italy. Reported from Agrigento by Ragusa (1906b) and recently from Lipari island by Lo Cascio *et al.* (2006).

**Derelomus piriformis* (Hoffmann, 1938)

Chorotype – MED

Host Plants – PMC (*Chamaerops*)

Trophic category – MON

Notes. Another sporadic species in Italy with a distribution similar to that of *D. chamaeropis*. It is also quoted from Sicily in all recent checklists of the Italian Curculionoidea (Abbazzi and Osella 1992; Abbazzi *et al.* 1995; Abbazzi and Maggini 2009; Abbazzi and Zinetti 2013), but we did not find published detailed data.

Dereolomus subcostatus Boheman, 1844

Chorotype – WME

Host Plants – PMC (*Chamaerops*)

Trophic category – MON

New records – **Trapani:** Castellammare del Golfo, RNO Zingaro, 23-24.IV.2003, Baviera C. (BCPC).

Notes. Its distribution in Italy is similar to the two above-mentioned species, being reported generally from “Sicily” by Hoffmann (1954) and subsequently in all recent checklists of the Italian Curculionoidea. However, we did not know previously published detailed data for Sicily.

Ellescini C. G. Thomson, 1849

**Dorytomus dejani* Faust, 1882

Chorotype – SIE

Host Plants – SAL (*Salix*)

Trophic category – MON

Notes. Doubtfully recorded by Vitale (1893, 1900) for an erroneous identification according to Ragusa (1906b). However, its presence in Sicily is not unlikely, since it is recorded from southern Italy, Calabria included.

**Dorytomus hirtipennis* (Bedel, 1884)

Chorotype – SIE

Host Plants – SAL (*Salix*)

Trophic category – MON

Notes. Widely distributed in Italy, this species is also recorded from Sicily only by Vitale (1932) without more detailed information.

Dorytomus ictor (Herbst, 1795)

Chorotype – ASE

Host Plants – SAL (*Populus*)

Trophic category – MON

New records – **Messina:** San Pier Niceto, torrente Niceto, 300 m, 25.VIII.2010, Baviera C. (BCPC); Graniti, Postoleone, 340 m, 11.III.2015, Baviera C. (BCPC); **Catania:** Calatabiano, San Marco, Foce Fiume Alcantara, 29.VI.2010, Baviera C. (BCPC); *ibid.*, 19.V.2010, Baviera C. (BCPC); *ibid.*, 19.IV.2010, Baviera C. (BCPC); Monte Etna, southern side, S. Maria, 950 m, sifting *Olea*, 26.V.2009,

Baviera C. (BCPC); **Siracusa**: Palazzolo Acreide 5 km S, 520 m, sweeping under *Salix* sp., 28.V.2019, Košt’ál M. (KMPC).

Notes. Common species recorded from Alcamo (Trapani) by Ragusa (1906b) (sub *D. validirostris* Gyllenhal, 1835). Several specimens in the Vitale collection are from Messina (Ucria, Naso and Niceto) (Caldara *et al.* 2010).

Dorytomus longimanus (Forster, 1771)

Chorotype – PAL

Host Plants – SAL (*Populus*)

Trophic category – MON

New records – **Messina**: San Pier Niceto, Torrente Niceto, 177 m, 18.IV.2013, Baviera C. (BCPC); Catania: Calatabiano, San Marco, Foce Fiume Alcantara, 29.VI.2010, Baviera C. (BCPC); *ibid.*, 19.V.2010, Baviera C. (BCPC); *ibid.*, 19.IV.2010, Baviera C. (BCPC); *ibid.*, 1.III.2013, Baviera C. (BCPC); Palermo: Madonie, Mandarini, 16.XI.1976, Romano M. (BCPC).

Notes. Another species widespread all over Italy, recorded by Vitale (1893, 1900, 1901) and Ragusa (1906b) as common in Messina (Rodia, S. Stefano), Palermo (Ficarazzi, Ficuzza, Castelbuono) and Trapani (Alcamo, Santa Ninfa, Castelvetrano). Vitale (1903a) reported this species from Messina on *Populus nigra* L..

Dorytomus melanophthalmus (Paykull, 1792)

Chorotype – EUM

Host Plants – SAL (*Salix*)

Trophic category – MON

New records – **Messina**: Mojo Alcantara, Fiume Alcantara, 11.VI.2004, Baviera C. (BCPC); *ibid.*, 12.V.2009, Baviera C. (BCPC).

Notes. Ragusa (1906b) reported this common species as collected at Ficuzza. In the Vitale collection there are preserved specimens from Messina (Niceto) (Caldara *et al.* 2010).

Dorytomus rubrirostris (Gravenhorst, 1807)

Chorotype – SIE

Host Plants – SAL (*Salix*, *Populus*)

Trophic category – OLI

New records – **Catania**: Calatabiano, S. Marco, Foce Fiume Alcantara, 29.VI.2010, Baviera C. (BCPC).

Notes. This species, widely distributed in Europe and northern Asia, is reported in the recent Italian checklists sub *D. edoughensis* Desbrochers des Loges, 1875. It was known as common in northern Italy and rare in central and southern Italy. Our datum is the first for Sicily.

Dorytomus schoenherri Faust, 1882

Chorotype – ASE

Host Plants – SAL (*Salix*)

Trophic category – MON

Notes. Species reported from Sicily by Vitale (1900). Caldara *et al.* (2010) found two specimens collected at Palazzo Adriano (Palermo) in the Vitale collection.

Dorytomus taeniatus (Fabricius, 1781)

Chorotype – EUR

Host Plants – SAL (*Populus*, *Salix*)

Trophic category – OLI

New records – **Messina:** Monti Peloritani, Monte Antennammare, 1133 m, 19.VI.2004, Baviera C. (BCPC); Antillo, 500 m, 29.V.2010, Baviera C. (BCPC); Monti Nebrodi, Caronia, 1200 m, on *Salix*, 29.V.2015, Baviera C. (BCPC); Mojo Alcantara, Fiume Alcantara, 11.VI.2004, Baviera C. (BCPC);

Catania: Calatabiano, San Marco, Foce Fiume Alcantara, 29.VI.2010, Baviera C. (BCPC); Castiglione di Sicilia, Cuba Bizantina, Fiume Alcantara, 19.V.2010, Baviera C. (BCPC); *ibid.*, 28.V.2010, Baviera C. (BCPC).

Notes. A common and widespread species throughout peninsular Italy as well as in Sicily. Vitale (1903a, 1906) recorded this species as rare from Messina (Calvaruso, Scacco) on *Salix alba* L., and Ragusa (1906b) considered it as common at Ficuzza (Palermo). Caldara *et al.* (2010) found specimens collected at Palermo (Sicani, Palazzo Adriano) in the Vitale collection.

Ellescus infirmus (Herbst, 1795)

Chorotype – CEU

Host Plants – SAL (*Salix*)

Trophic category – MON

Notes. This species, recorded from all Italy, was reported from Messina (Castanea) (Vitale 1900, 1901; Ragusa 1907b; Vitale 1908a). One specimen from “Messina” is preserved in the Vitale collection (Caldara *et al.* 2010).

Itini* Reitter, 1913Ita crassirostris* Tournier, 1878

Chorotype – WME

Host Plants – CHE

Trophic category – MON

Notes. This species is known from Sicily only from the lectotype collected at Boccadifalco (Palermo) and two specimens collected at Ficuzza by Vitale (Caldara *et al.* 2010; Meregalli and Borovec 2011).

***Mecinini* Gistel, 1848**

Cleopomiarus meridionalis (H. Brisout de Barneville, 1862)

Chorotype – WME

Host Plants – CAM (*Campanula*)

Trophic category – MON

Notes. Species known from several regions along the whole of Italy, reported from Palermo and Messina by Vitale (1893, 1900, 1901) and from Ficuzza by Ragusa (1908).

Cleopomiarus micros (Germar, 1821)

Chorotype – EUR

Host Plants – CAM (*Jasione*)

Trophic category – MON

Notes. Uncommon species in Italy, reported for the first time from Sicily by De Bertolini (1872). Ragusa (1908) quoted two specimens collected at Caltagirone (Madonna Via) and Palermo in his collection.

Cleopomiarus plantarum (Germar, 1823)

Chorotype – EUM

Host Plants – CAM (*Campanula, Phyteuma*)

Trophic category – OLI

Notes. Species widespread throughout Italy, cited from Messina by Vitale (1893, 1900, 1901) and from Ficuzza by Ragusa (1908). Several specimens collected in Messina (Montalbano), Catania (Caltagirone) and Palermo (Palazzo Adriano) were recently examined in the Vitale collection (Caldara *et al.* 2010).

Gymnetron aper Desbrochers des Loges, 1892

Chorotype – SEU

Host Plants – SCR (*Veronica*)

Trophic category – MON

Notes. Species widespread all over Italy although uncommon. Recently reported from Catania (Etna Nord, Linguaglossa, Rifugio Brunek, 1500 m, 20.VI.2006, Baviera C.; BCPC) and Messina (Monti Nebrodi, Floresta, Testa dell'Acqua, 26.VI.2007, Baviera C., BCPC) by Caldara (2008).

Gymnetron niloticum Kirsch, 1881

Chorotype – PAL

Host Plants – SCR (*Veronica*)

Trophic category – MON

New records – **Messina**: Francavilla di Sicilia, Fiume Alcantara, Le Gurne, 19.IV.2010, Baviera C. (BCPC); **Agrigento**: Monti Sicani, Monte Carcaci, 850 m, sifting *Quercus*, Baviera C. and Bellò C. (BCPC); **Ragusa**: Lago di Santa Rosalia, 08.V.2019, Diotti L. (DLPC).

Notes. Caldara (2008) quoted this species from southern Italy and Sicily (various localities in the provinces of Agrigento, Catania, Messina, Palermo, Ragusa and Siracusa). Probably reported by Ragusa (1908) sub *G. melinum* Reitter, 1872, which is however a species distributed in the Iberian Peninsula and North Africa (Caldara 2008). In the Vitale collection (Caldara *et al.* 2010) there are specimens from Messina surroundings (Castanea, Massa S. Lucia, Calamarà) identified with various wrong names among which *G. beccabungae* (Linnaeus, 1860), a species not present in Italy and erroneously quoted for Sicily by Vitale (1921).

Gymnetron rostellum (Herbst, 1795)

Chorotype – EUM

Host Plants – SCR (*Veronica*)

Trophic category – MON

New records – **Siracusa**: Sortino valle Anapo, 01.XI.2010, sifting, Baviera C. and Bellò C. (RCPC); **Palermo**: Madonie, Piano Battaglietta, 1600 m, 27.VI.2007, Bellò C. (BCPC); *ibid.*, 16.V.2008, Baviera C. and Rando A. (BCPC); Portella Colla, 1450 m, 03.VI.2000, Baviera C. (BCPC); Piano Battaglia, 27.V.2010, Diotti L. (DLPC).

Notes. A quite common species all over Italy, already reported from Palermo surroundings by Ragusa (1908) and from Madonie (Piano Battaglia, 1600 m) by Caldara (2008).

Gymnetron stimulosum (Germar, 1821)

Chorotype – SEU

Host Plants – SCR (*Veronica*)

Trophic category – MON

New records – **Palermo**: Madonie, Piano Battaglietta, 1600 m, 27.VI.2007, Bellò C. (BCPC); *ibid.*, 16.V.2008, Baviera C. and Rando A. (BCPC).

Notes. Rare species, although reported from several regions of the peninsular Italy (Caldara, 2008). New to Sicily.

Gymnetron villosulum Gyllenhal, 1838

Chorotype – CEU

Host Plants – SCR (*Veronica*)

Trophic category – MON

Notes. Common species all over Italy, reported from Siracusa (Vitale 1904a) and Messina (Scala) Vitale (1906). One specimen from the latter locality is preserved in the Vitale collection (Caldara *et al.* 2010); it was erroneously reported by Vitale (1921) as *G. erinaceus* (Bedel, 1885), a species not present in Italy.

Mecinus barbarus Gyllenhal, 1838

Chorotype – MED

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Agrigento:** Bivona, 10.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Messina:** Monti Peloritani, Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); Montalbano Elicona, 11.V.2012, Baviera C. (DLPC); Torre Faro, Contrada Granatari, 20.IV.1992, Baviera C. (BCPC); *ibid.*, 2.V.1993, Baviera C. (BCPC); *ibid.*, 12.V.2001, Baviera C. (BCPC); **Catania:** Monte Etna, northern side, Linguaglossa, Piano Provenzana, 1800 m, 24.VI.2004, Baviera C. (BCPC); *ibid.*, 28.VI.2012, Baviera C. (CRPC); *ibid.*, 04.V.2012, Diotti L. (DLPC); Monte Etna, eastern side, S. Alfio, Bosco Cerrita, 1500 m, 01.VII.2004, Baviera C. (BCPC); Nicolosi, Monti Monpilieri, 670 m, 20.IV.2014, Krátký J. (KJPC); Monte Etna, Passopisciaro via Guardiola, 30.IV.2016, on *Linaria multicaulis aetnensis*, Baviera C. (BCPC); *ibid.*, Casalini R. (CSPC); **Siracusa:** Canicattini Bagni, Ris. Nat. Cava Grande del Cassibile, 423 m, 19.IV.2014, Krátký J. (KJPC); *ibid.*, 07.V.2019, Diotti L. (DLPC); **Enna:** Piazza Armerina, Parco Ronza, 700 m, 26.V.2016, on *Linaria multicaulis humilis*, Baviera C. (BCPC).

Notes. A widespread species in Italy, although uncommon. Vitale (1893, 1900, 1901) considered this species common in Messina (sub *M. longiusculus* Boheman, 1845). Under this name Ragusa (1908) reported it from Palermo (Mondello, Balestrate) and Enna (Piazza Armerina). Caldara and Fogato (2013) recorded the species from Messina (Peloritani), Catania (Etna) and Palermo.

Mecinus circulatus (Marsham, 1802)

Chorotype – EUM

Host Plants – PLA (*Plantago*)

Trophic category – MON

New records – **Messina:** Torre Faro, Contrada Granatari, 10.IV.1993, Baviera C. (BCPC); Monti Nebrodi, Biviere di Cesaro, 1200 m, 11.IV.2002, Baviera C. (BCPC); **Caltanissetta:** Gela, Biviere, 29-30.V.2006, Baviera C. (BCPC); **Ragusa:** Acate, Museo del Carrubo, sifting *Olea*, 21.XII.2013, Baviera C. and Bellò C. (BCPC); Palermo: Madonie, Piano Zucchi, 1200 m, 17.IV.2010, Baviera C. (BCPC); Monti Sicani, Baucina, 500 m, 22.XII.2013, Baviera C. and Bellò C. (BCPC); **Trapani:** Calatafimi, 23.V.2010, Diotti L. (DLPC).

Notes. Species distributed all over Italy and recorded from Sicily by Vitale (1904a, 1906) from Messina (Castanea, San Ranieri), and by Ragusa (1908) from Palermo (Madonie, Castelbuono). In the Vitale collection there are specimens from Messina (Naso: Caldara *et al.* (2010)).

**Mecinus collaris* Germar, 1821

Chorotype – CAE

Host Plants – PLA (*Plantago*)

Trophic category – MON

Notes. Widespread in Italy although uncommon. Reported from Sicily for the first time by Abbazzi and Maggini (2009), but no detailed data are known.

Mecinus comosus Boheman, 1845

Chorotype – CAE

Host Plants – PLA (*Plantago*)

Trophic category – MON

New records – **Trapani:** Monte Acci, 15.III.2015, 376 m, Paladini A. (PAPC).

Notes. Species known from Italy only from Calabria, Sicily and Sardinia. Reported from Sicily by De Bertolini (1872) sub its synonym *M. setosus* Kiesenwetter, 1864, also known from Licata (Agrigento), the type locality of its synonym *M. hesteticus* Vitale, 1906. Reported from Sicily by Abbazzi and Maggini (2009) too also sub its synonyms *M. hesteticus* and *M. setosus*. Specimens from Messina, Naso and Monreale were found in the Vitale collection (Caldara *et al.* 2010). Recorded also from Francavilla di Sicilia (Messina) and Bosco Ficuzza (Palermo) by Caldara and Fogato (2013).

Mecinus haemorrhoidalis (H. Brisout de Barneville, 1862)

Chorotype – MED

Host Plants – PLA (*Plantago*)

Trophic category – MON

New records – **Messina:** Monti Nebrodi, Floresta 6 km SE, 1200 m, 30.V.2019, Koštál M. (KMPC);**Palermo:** Madonie, Isnello, 12.V. 2017, Diotti L. (DLPC).

Notes. A species reported from Sicily by De Bertolini (1872) and confirmed only very recently from San Placido (Messina) by Caldara *et al.* (2010), and Geraci (Palermo) by Caldara and Fogato (2013) and by Mifsud and Colonnelli (2010) (under its synonym *M. fairmairei* Tournier, 1873).

Mecinus humeralis Tournier, 1873

Chorotype – WME

Host Plants – PLA (*Plantago*)

Trophic category – MON

Notes. This species was described from male specimens collected in Sicily without more detailed data. No other specimens of this species, distributed in Spain and North Africa, were quoted from Italy (Caldara and Fogato 2013).

Mecinus ictericus (Gyllenhal, 1838)

Chorotype – SEU

Host Plants – PLA (*Plantago*)

Trophic category – MON

Notes. Species firstly reported from Sicily upon specimens collected by Failla Tedaldi (Vitale 1900), then reported from Palermo by Ragusa (1922). Recently recorded from Taormina (Messina) by Caldara and Fogato (2013).

Mecinus kaemmereri Wagner, 1927

Chorotype – APPS

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Messina:** Monti Nebrodi, Sella Tre Arie, 1400 m, 04.VI.2007, Baviera C. (BCPC); **Catania:** Monte Etna, northern side, Linguaglossa, 1000 m, 22.IV.2000, Baviera C. (BCPC); ibid., Pineta di Ragabo, 1500 m, 09.VIII.2016, Baviera C. (BCPC); ibid., Piano Provenzana, 1800 m, 09.VIII.2016, Baviera C. (BCPC); ibid., 28.VI.2012, Baviera C. (BCPC); Monte Nero, over Piano Provenzana, 2200 m, 09.VIII.2016, Baviera C. (BCPC); Monte Etna, eastern side, Milo, 1200 m, 09.VIII.2016, Baviera C. (BCPC); ibid., 750 m, 09.VIII.2016, Baviera C. (BCPC); ibid., 08.VI.2012, on *Linaria purpurea*, Baviera C. (CRPC); Monte Etna, southern side, Rifugio Sapienza, 1900 m, 09.VIII.2016, Baviera C. (BCPC); Adrano, 1000 m, 09.VIII.2016, Baviera C. (BCPC); Nicolosi, Monti Monpilieri, 670 m, 20.IV.2014, Krátký J. (KJPC); **Palermo:** Madonie, Piano Battaglietta, 1700 m, 23.VI.2007, Baviera C. (BCPC); Pizzo Carbonara 1750 m, 17.VII.2016, Baviera C. (BCPC); ibid., 1650 m, 17.VII.2016, Baviera C. (BCPC); Piano Battaglia, under Rifugio Marini, 1550 m, 17.VII.2016, Baviera C. (BCPC).

Notes. Species feeding on *Linaria purpurea* (L.) Mill., endemic of Calabria and Sicily, vicariant of the closely related *M. janthinus* (Germar, 1817) which lives on *L. vulgaris* L. Reported from Catania (Etna) and Messina (Peloritani) by Caldara and Fogato (2013).

Mecinus labilis (Herbst, 1795)

Chorotype – EUR

Host Plants – PLA (*Plantago*)

Trophic category – MON

New records – **Trapani:** Custunaci, Monte Cofano, 12.III.2016, Colacurcio L. (DLPC); **Palermo:** Madonie, Isnello, 12.V. 2017, Diotti L. (DLPC).

Notes. A quite common species all over Italy. Vitale (1893, 1900, 1901) and Ragusa (1908) recorded this species from Messina and Caltagirone, respectively. In the Vitale collection there is a specimen from Messina (Calamarà: Caldara *et al.* (2010)). Caldara and Fogato (2013) examined one specimen from Buscemi (Siracusa).

Mecinus latiusculus (Jacquelin du Val, 1855)

Chorotype – SEU

Host Plants – PLA (*Plantago*)

Trophic category – MON

Notes. Reported from Sicily upon specimens in the Baudi collection, by Vitale (1900). Caldara *et al.* (2010) found a specimen of this species from "Sicily" in the Vitale collection. Caldara and Fogato (2013) did not examine other specimens from Italy south of Abruzzo.

Mecinus pascuorum (Gyllenhal, 1813)

Chorotype – PAL

Host Plants – PLA (*Plantago*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); Monti Nebrodi, Floresta, 1088 m, sifting *Quercus ilex*, 21.VII.2010, Baviera C. (BCPC); Monti Nebrodi, Portella Femmina Morta, 31. V. 2007, Diotti L. (DLPC); **Catania**: Mojo Alcantara, Fiume Alcantara, 11.VI.2004, Baviera C. (BCPC); Caltagirone, highway 124, sifting *Olea*, 450 m, 15.IV.2010, Baviera C. (BCPC); **Siracusa**: Buscemi, 600 m, sifting *Olea*, 14.IV.2010, Baviera C. (BCPC); **Agrigento**: Monti Sicani, Monte Cammarata, 1000 m, 27.V.2007, Baviera C. and Bellò C. (BCPC); **Palermo**: Giacalone, 29.XI.2015, Baviera C. and Bellò C. (BCPC); Madonie, Polizzi Generosa, 1400 m, sifting *Fagus*, 26.X.2006, Baviera C. (BCPC); Piano Zucchi, 1100 m., sifting *Quercus ilex*, 18.V.2013, Baviera C. and Rando A. (BCPC).

Notes. Recorded as common in Messina by Vitale (1893, 1900, 1901), it is probably present in all Sicily (Ragusa 1908) as well as in the whole Europe.

Mecinus pirazzolii (Stierlin, 1867)

Chorotype – CEU

Host Plants – PLA (*Plantago*)

Trophic category – MON

Notes. Species recorded from Sicily by Ragusa (1908) and Vitale (1932). This datum, not reported in subsequent checklists, was recently confirmed by Caldara *et al.* (2010) upon a specimen (labeled "Sicilia") found in the Vitale collection.

Mecinus pyraster (Herbst, 1795)

Chorotype – TEM

Host Plants – PLA (*Plantago*)

Trophic category – MON

New records – **Messina**: Torre Faro, Contrada Granatari, 11.IV.1993, Baviera C. (BCPC); Monti Nebrodi, Floresta, Sorgente San Giacomo, 1100 m, sifting *Querus ilex*, 29.VI.2010, Baviera C. (BCPC); Portella Maulazzo, 1400 m, 23.VI.2001, Baviera C. (BCPC); **Catania**: Castiglione di Sicilia, Cuba Bizantina, Fiume Alcantara, 19.V.2010, Baviera C. (BCPC); **Ragusa**: Vittoria 4 km N, 242 m, 13.IV.2015, Krátký J. (KJPC); **Enna**: Ponte Cinque Archi, 07.IV.2013, Paladini A. (PAPC); Agira,

530 m., sifting, Baviera C. and Bellò C. (BCPC); **Palermo**: Fiume Pollina, Contrada Altopiano, 300 m, 05.II.1975, Baviera C. (BCPC); **Trapani**: Marinella, Riserva Foce del Fiume Belice, 17.IV.2014, Krátký J. (KJPC); RNO Zingaro, 04.IV.2013, 400 m, Paladini A. (PAPC).

Notes. Common species all over Italy, reported from Messina by Vitale (1893, 1900, 1901) and from Palermo (Mondello: Ragusa (1908)). Also known from Egadi islands (Levanzo: Osella (1973)).

Mecinus raphaelis Baviera and Caldara, 2014

Chorotype – APPS

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Catania**: Monte Etna, northern side, Linguaglossa, over Piano Provenzana, Monte Nero, 2200 m, 09.VIII.2016, Baviera C. (BCPC).

Notes. Specimens identified as *M. heydenii* Wencker, 1866 by Caldara *et al.* (2010) from Messina and reported by Vitale (1908b) from Messina, San Michele, are to be ascribed to this recently described species (Toševski *et al.* 2014).

Mecinus simus (Mulsant and Rey, 1858)

Chorotype – MED

Host Plants – PLA (*Plantago*)

Trophic category – MON

New records – **Catania**: Mazzarrone, sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Caltanissetta: Gela, Torre di Manfria, 02.III.2013, sifting, Baviera C. and Bellò C. (BCPC); **Siracusa**: Canicattini Bagni, Ris.Nat. Cava Grande del Cassibile, 423 m, 19.IV.2014, Krátký J. (KJPC); Pachino, Punta delle Formiche, sifting *Olea*, 09.XII.2014, Baviera C. and Bellò C. (BCPC); **Agrigento**: Palma di Montechiaro, sifting *Olea*, 17.XI.2018, Baviera C. and Bellò C. (BCPC); **Trapani**: Castellamare del Golfo, Monte Inici, 18.III.2015, Colacurcio L., (DLPC); Paladini A., (PAPC); 29.XI.2015, Baviera C. and Bellò C. (BCPC).

Notes. Species uncommon in central and southern Italy. In Sicily recorded from Messina (Gesso, Ritiro) by Vitale (1906), and subsequently also from Palermo (Ragusa 1908; Osella and Riti 1995), Lampedusa and Linosa (Abbazzi and Osella 1992; Borovec and Osella 1993; Osella and Riti 1995; Osella and Di Marco 1996; Goggi 2004; Diotti *et al.* 2017). Also known from the provinces of Agrigento, Siracusa (Melilli) and Trapani (Visicari) by Caldara and Fogato (2013).

Mecinus variabilis (Rosenhauer, 1856)

Chorotype – SEU

Host Plants – PLA (*Plantago*)

Trophic category – MON

New records – **Siracusa**: Canicattini Bagni, Cava Grande Cassibile, 07.V.2019, Diotti L. (DLPC); **Ragusa**: Acate, Museo Carrubo, 21.XII.2013, Baviera C. and Bellò C. (CBPC); Foce Fiume Irmino,

08.V.2019, Diotti L. (DLPC); Lago di Santa Rosalia, 08.V.2019, Diotti L. DLPC); **Caltanissetta**: Gela, Torre di Manfria, 02.III.2013, sifting, Baviera C. and Bellò C. (BCPC); Mazzarino 2, 480 m, sifting *Olea*, 03.III.2013, Baviera C. and Bellò C. (BCPC); **Palermo**: Fiume Pollina, Contrada Altopiano, 300 m, 05.II.1975, Baviera C. (BCPC); Monti Madonie, Piano Zucchi, 14.VII.2016, Baviera C. (DLPC); Monti Sicani, Piana degli Albanesi, 18.III.2017, Baviera C. (BCPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 23-24.IV.2003, Baviera C. (BCPC); Castellammare, highway 187, 25.III.2017, Colacurcio L. (FLPC); Monte Sparagio, 15.III.2010, Degiovanni A. (DLPC).

Notes. Species quite common in southern Italy, recorded from Messina (Scala) by Vitale (1906) and from Palermo (Ragusa 1908), recently reported also from Ficuzza by Stejskal (2004) and from the provinces of Palermo and Trapani (Caldara and Fogato 2013). Known also from Pantelleria (Osella and Riti 1995).

Rhinusa algirica (H. Brisout de Barneville, 1867)

Chorotype – MED

Host Plants – SCR (*Scrophularia*)

Trophic category – MON

Notes. This is a circum-Mediterranean species reported only recently from Italy for the first time according to a single specimen collected in “Messina” by Vitale (Caldara *et al.* 2010).

Rhinusa antirrhini (Paykull, 1800)

Chorotype – EUM

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Messina**: Monti Nebrodi, Alcara Li Fusi, 27.IV.2016, Casalini R. (CSPC); Torre Faro, Contrada Granatari, 40 m, 08.IV.1996, Baviera C. (BCPC); Monti Peloritani, Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); ibid., Torrente Lampiello, 580 m, 22.VI.2017, on *Linaria purpurea*, Baviera C. (CRPC); Montalbano Elicona, 800 m, 14.V.2016, Baviera C. (BCPC); **Catania**: Monte Etna, northern side, Linguaglossa, Rifugio Brunek, 1500m, 20.VI.2006, on *Linaria purpurea*, Baviera C. (BCPC); ibid., bivio Solicchiata, 1000 m, 10.V.2017, on *Linaria multicaulis aetnensis*, Baviera C. (CRPC); Monte Etna, eastern side, Bronte, Tartaraci, 1000 m, 10.V.2017, on *Linaria multicaulis aetnensis*, Baviera C. (CRPC); ibid., Maletto, 1000 m, 10.V.2017, on *Linaria purpurea* var. *alba*, Baviera C. (CRPC); ibid., Randazzo, Tartaraci, 1000 m, 10.V.2017, on *Linaria purpurea*, Baviera C. (CRPC); ibid., Passopisciaro via Guardiola, 30.IV.2016, on *Linaria multicaulis aetnensis*, Baviera C. (BCPC); ibid., Milo, 08.VI.2012, on *Linaria purpurea*, Baviera C. (CRPC); **Siracusa**: Monti Iblei, Sortino, Santa Sofia, 26.IV.2016, Casalini R. (CSPC).

Notes. By preliminary molecular studies it seems probable that the specimens from Sicily identified as *R. antirrhini* and found on *Linaria purpurea* belong to a new species. The true *R. antirrhini* lives only on *L. vulgaris* L. (Ivo Toševski, pers. comm.), a plant very rare in Sicily since known upon a preserved old specimen from Aidone (Enna province), and only recently found at the northern side of Monte Sambuaglietti (Messina province) by Raimondo and Bazan (2007). Vitale (1893, 1901) reported this species sub *Gymnetron teter* (Fabricius) var. *antirrhini* in Mandanici (Messina).

Rhinusa asellus (Gravenhorst, 1807)

Chorotype – EUM

Host Plants – SCR (*Verbascum*)

Trophic category – MON

Notes. A common species all over Italy, reported from Sicily upon Failla Tedaldi data Vitale (1893, 1900), and from Castelbuono (Palermo) by Ragusa (1908). Specimens from Nebrodi (Ucria) and Peloritani (Antillo) are preserved in the Vitale collection (Caldara *et al.* 2010). Vitale (1903b) observed this species on *Verbascum* spp.

Rhinusa bipustulata (Rossi, 1794)

Chorotype – CEU

Host Plants – SCR (*Scrophularia*)

Trophic category – MON

New records – **Messina:** Francavilla di Sicilia, Fiume Alcantara, Le Gurne, 19.IV.2010, Baviera C. (BCPC); Isole Eolie, Salina, 10-12.V.2007, Baviera C. (BCPC); Vulcano, 9-10.V.2007, Baviera C. (BCPC); **Palermo:** Bellolampo, 27.IV.1972, Romano M. (BCPC); Madonie, Portella Colla, 1450 m, 03.VI.2000, Baviera C. (BCPC); Polizzi Generosa, 1000 m, 31.V.2007, Baviera C. (BCPC); Piano Zucchi, 1100 m, 03.VI.2000, Baviera C. (BCPC); Madonie, Piano Battaglietta, 1700 m, 23.VI.2007, Baviera C. (BCPC); 08.VIII.2015, Baviera C. (BCPC).

Notes. A very common and widespread species in Sicily as well as all over Italy, recorded from Palermo and Messina (Tremonti, Castanea) by Vitale (1893, 1900, 1901, 1906), and from Palermo (Favorita, Monte Pellegrino) and Messina (Gravitelli), according to specimens of the Vitale collection (Caldara *et al.* 2010). Recently recorded from Palermo (Ficuzza) (Stejskal 2004) and from Lipari (Lo Cascio *et al.* 2006). Vitale (1903b) collected this species on *Scrophularia peregrina* L.

Rhinusa brondelii (H. Brisout de Barneville, 1863)

Chorotype – MED

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Catania:** Monte Etna, northern side, Linguaglossa, over Piano Provenzana, Monte Nero, 2200 m, 09.VIII.2016, ex gall on *Linaria purpurea*, Baviera C. (BCPC); *ibid.*, 28.VI.2011, Baviera C. (BCPC); *ibid.*, 1800 m, 28.VI.2011, ex gall on *Linaria purpurea*, Baviera C. (BCPC).

Notes. This species was previously erroneously known as *R. hispida* Brullé, 1832, actually a synonym of *R. tetra* as established by Caldara (2008) and reported in the checklists under this name. Caldara (2008) for the first time and subsequently Toševski *et al.* (2015) reported this species from Sicily (Catania, Mount Etna) inside galls on *Linaria purpurea*.

Rhinusa collina (Gyllenhal, 1813)

Chorotype – EUR

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Catania**: Etna Mount, Passopisciaro via Guardiola, 30.IV.2016, on *Linaria multicaulis aetnensis*, Baviera C. (BCPC); Monte Etna, over Piano Provenzana, 2200 m, on *Linaria purpurea*, 22.VI.2012, Baviera C. (BCPC, CRPC).

Notes. A quite rare species although known from many regions of the peninsular Italy. It is an inquiline species which lives inside the root galls induced by *R. linariae* (Ivo Toševski, pers. comm.).

Rhinusa comosa Rosenschoeld, 1838

Chorotype – WME

Host Plants – SCR (*Verbascum*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Forte San Jachiddu, 375 m, 28.IV.2010, Baviera C. (BCPC); Musolino, 800 m, 06.VII.2002, Baviera C. (BCPC); Pizzo Chiarino, 845 m, 27.IV.2010, Baviera C. (BCPC); 29.V.2011, Baviera C. (BCPC); Monte Scuderi, 1200 m, 22.V.2004, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 23.VI.2006, Baviera C. (BCPC); Monti Nebrodi, Sella Tre Arie, 1400 m, 26.V.2009, Baviera C. (BCPC); **Catania**: Monte Etna, northern side, Linguaglossa, Rifugio Brunek, 1300 m, 16.V.2002, Baviera C. (BCPC); Randazzo, road to Linguaglossa, 31.V.2007, Diotti L. (DLPC).

Notes. This species was recently quoted from many localities and provinces of Sicily: Catania (northern Etna, Bosco di Malabotta; Francavilla; Randazzo, 1000 m); Messina (Cavaliere; Peloritani, Casalvecchio; Peloritani, Castroreale Bafia; Peloritani, Colle San Rizzo; Peloritani, Torrente Niceto; Peloritani, Pizzo Chiarino, 750m; Peloritani, Mandanici; Peloritani, Punta Mandarazzi, 1000 m); Siracusa (Cassaro, Anapo); Palermo (Monti Iblei, Vizzini; Monti Nebrodi, Portella Femmina Morta) by Caldara (2014). Collected by Baviera on *Verbascum thapsus* L. and *V. macrurum* Ten.

Rhinusa depressa (Rottenberg, 1871)

Chorotype – WME

Host Plants – PLA (*Misopates*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Forte San Jachiddu, 375 m, 28.IV.2010, Baviera C. (BCPC); Montalbano Elicona, 800 m, 14.V.2016, Baviera C. (BCPC); Eolie, Filicudi, Focarile A. (CPCM); Eolie, Salina, Lingua, 17.V.1984, Durso (GOCA); **Catania**: Etna, northern side, Linguaglossa, Pasopisciaro, Via Guardiola, 30.IV.2016, Baviera C. (BCPC); **Palermo**: Monte Pellegrino, 02.V.1977, Abbazzi F. (DLPC); 11.V.1977, Carapezza A. (PACF).

Notes. Vitale (1893, 1900, 1901) (sub *Gymnetron (Rhinusa) vestitum*) considered this species as common everywhere around Messina, whereas Ragusa (1922) quoted it from Palermo sub its synonym *Gymnetron lusitanicum* Leonhard, 1912. Caldara *et al.* (2010) examined some specimens collected in the province of Messina (Paradiso, Tremonti) by Vitale. In the previous catalogues the species was often confused with *R. vestita*, which is a species limited in Italy to northern and central regions. Very probably it is so also for the

recently reported datum for *G. vestitum* (Germar, 1821) from Palermo (Ficuzza) by Stejskal (2004). Vitale (1903c) reported *R. vestita* on *Misopates orontium* Raf., which is actually the host plant of *R. depressa*.

Rhinusa griseohirta (Desbrochers des Loges, 1869)

Chorotype – WME

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Siracusa**: Canicattini Bagni, Ris. Nat. Cava Grande del Cassibile, 423 m, 19.IV.2014, Krátký J. (KJPC).

Notes. This taxon was reported sub *Gymnetron (Rhinusa) lanigerum* H. Brisout de Barneville, 1863, a species not present in Italy (see below), upon specimens of the Baudi collection (Vitale 1900). Later, it was cited sub its synonym *Gymnetron griseohirtellum* Desbrochers des Loges, 1870 from Messina (San Pier Niceto, Condrò and Passo Badia) by Vitale (1904a,b, 1906) and from Caltagirone (Madonna Via) by Ragusa (1908). Recently its presence in Sicily (Chiaramonte and Siracusa), and also in Sardinia, was confirmed by Caldara (2013).

Rhinusa herbarum (H. Brisout de Barneville, 1862)

Chorotype – SEU

Host Plants – PLA (*Kickxia*)

Trophic category – MON

New records – **Messina**: Monti Nebrodi, Capizzi, Tassita, 1450 m, 04.VII.2016, Baviera C. (BCPC); **Siracusa**: Buscemi, 14.VI.2010, Baviera C. and Bellò C. (BCPC); Pachino, Granelli, 09.XII.2014, Baviera C. and Bellò C. (BCPC); **Enna**: Agira, sifting *Olea*, 18.III.2016, Baviera C. and Bellò C. (BCPC); **Agrigento**: Bivona, 10.XII.2014, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Favara, 365 m, 11.XII.2014, Baviera C. and Bellò C. (BCPC); **Palermo**: Monti Sicani, Palazzo Adriano, 800 m, 19.III.2008, Baviera C. and Bellò C. (BCPC); Corleone, 18.III.2016, Baviera C. and Bellò C. (BCPC); road Campogrande-Roccamena, 09.III.2014, Bellò C. (BCPC); Madonie, Polizzi Generosa, 27.IX. 2016, Baviera C. (BCPC).

Notes. Specimens collected by Vitale in Messina (Colla, Calamarà, Castanea) and Palermo are still preserved in his collection (Caldara *et al.* 2010). Ragusa (1908) reported the species also from Caltagirone (Enna).

Rhinusa incana (Kirsh, 1881)

Chorotype – MED

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Messina**: Panoramica dello Stretto, loc. Grotte, 15.V.2017, on *Linaria multicaulis messanensis*, Baviera C. (CBPC); Ganzirri, beach, 10.IV.2017, on *Linaria multicaulis messanensis*, Baviera C. (CBPC); Monti Peloritani, Monte Scuderi, 1200 m, 22.V.2004, Baviera C. (BCPC);

Monti Peloritani, Mandanici, VI.1959 (OGPC); Monti Peloritani, Malabotta, 30.V.1982, Osella G. (OGPC); Montalbano Elicona, 800 m, 14.V.2016, Baviera C. (BCPC); Francavilla di Sicilia, 07.V.1995, Borovec R. (RBCN); Eolie, Salina Malfa, 14.V.1984, D'Urso V. (OGPC); **Catania**: San Cono, 450 m, 06.V.2017, on *Linaria multicaulis humilis*, Baviera C. (BCPC); Randazzo, Rovittello, on *Linaria multicaulis aetnensis*, 26.V.2009, Baviera C. (BCPC); Monte Etna, northern side, Linguaglossa, 1000 m, 28.IV.2000, Baviera C. (BCPC); ibid., 22.IV.2000, Baviera C. (BCPC); ibid., bivio Solicchiata 1000 m 10.V.2017, on *Linaria multicaulis aetnensis*, Baviera C. (CBPC); ibid., 21.VII.1979, Carapezza A. (OGPC); ibid., Piano Provenzana, 1800 m, 03.VIII.1998, Baviera C. (BCPC); ibid., 24.VI.2004, Baviera C. (BCPC); ibid., Monte Nero, 2200 m, 15.VI.2003, Baviera C. (BCPC); ibid., Rifugio Brunek, 1500 m, 20.VI.2006, Baviera C. (BCPC); Monte Etna, eastern side, Monti Sartorius, 1500 m, Baviera C. (BCPC); ibid., Bronte, Tartaraci, 1000 m, 10.V.2017, on *Linaria multicaulis aetnensis*, Baviera C. (RCPC); ibid., Nicolosi, 02.VII.1977, Carapezza A. (OGPC); ibid., Passopisciaro via Guardiola, 30.IV.2016, on *Linaria multicaulis aetnensis*, Baviera C. (BCPC); Catania: 28.V.1961, on *Linaria stricta*, Gulli G. (OGPC); **Enna**: Piazza Armerina, Parco Ronza, 700 m, 26.V.2016, on *Linaria multicaulis humilis*, Baviera C. (BCPC); **Palermo**: Piana degli Albanesi, 07.VI.1992, Bologna M. (OGPC).

Notes. In Italy this species is reported from Apulia and Sicily, where it was cited for the first time from Palermo environs by Ragusa (1922). The synonymy between *R. canescens* Desbrochers des Loges, 1893, a species described from Sicily, and *R. incana* described from Spain, proposed by Caldara (2013), was confirmed also by molecular data (Ivo Toševski, pers. comm.).

Rhinusa linariae (Panzer, 1792)

Chorotype – EUR

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Messina**: Monti Nebrodi, Alcara Li Fusi, 27.IV.2016, Casalini R. (CSPC); Monte Etna, Piano Provenzana, 1800 m, 28.VI.2012, Baviera C. (CRPC); ibid., over Piano Provenzana, 2200 m, on *Linaria purpurea*, 22.VI.2012, Baviera C. (CRPC).

Notes. This species induces galls on the roots of *Linaria* spp. (Hoffmann 1958) (Ivo Toševski, pers. comm.). It is reported as common around Messina by Vitale (1900, 1906). Caldara *et al.* (2010) found a single specimen collected in “Sicily” without more detailed indications in the Vitale collection.

**Rhinusa melas* (Bohemian, 1838)

Chorotype – EUR

Host Plants – PLA (*Chaenarhinum*, *Linaria*)

Trophic category – OLI

Notes. This is a quite rare species, although known from several regions of the peninsular Italy. Reported from Sicily by De Bertolini (1872), and subsequently confirmed by Vitale (1932) with no detailed data. No specimens are in the Vitale collection (Caldara *et al.* 2010).

Rhinusa moroderi (Reitter, 1906)

Chorotype – MED

Host Plants – SCR (*Verbascum*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Monte Antennammare, 1133 m, 17.V.2016, Baviera C. (BCPC); **Catania**: Calatabiano, Foce Fiume Alcantara, 29.VI.2010, Baviera C. (BCPC); Adrano, Fiume Simeto, 28.V.2010, Diotti L. (DLPC); Foce Fiume Pollina, 31.V.1998, Diotti L. (DLPC); Monte Etna, eastern side, Randazzo, Tartaraci, 1000 m, 10.V.2017, Baviera C. (CRPC); ibid., Maletto, 1000 m, 10.V.2017, Baviera C. (CRPC); ibid., Milo, 08.VI.2012, Baviera C. (CRPC); ibid., Piano Provenzana, 1800 m, 28.VI.2012, Baviera C. (CRPC); Monte Etna, southern side, Adrano, Osservatorio, 1400 m, 12.VI.2011, Baviera C. (BCPC); **Ragusa**: Scoglitti 7 km E, Riserva Naturale Pino d'Aleppo, 19.IV.2015, Krátký J. (KJPC); **Palermo**: Piano Battaglia, under Rifugio Marini, 1550 m, 17.VII.2016, Baviera C. (BCPC); **Siracusa**: Lentini, 10.V.2000, I.S.A. (BCPC); Lago di Lentini, 28.V.2007, Diotti L. (DLPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 23-24.IV.2003, Baviera C. (BCPC).

Notes. Caldara (2014) examined specimens from Agrigento (Licata), Enna (Aidone), Messina (Peloritani, Colle San Rizzo), Palermo (mouth of the river Pollina), Ragusa (Marina), Siracusa (Ferla Pantalica, Lentini, Sortino Anapo), Egadi Islands (Favignana, Levanzo), Eolie Islands (Lipari), Pantelleria Isle. Recently reported also from Lampedusa (Diotti *et al.* 2017). Usually the host plant is *Verbascum sinuatum* L. (Caldara 2014).

Rhinusa neta (Germar, 1821)

Chorotype – TUE

Host Plants – PLA (*Linaria*)

Trophic category – MON

New records – **Messina**: Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); ibid., Torrente Lampiello, 580 m, 22.VI.2017, on *Linaria purpurea*, Baviera C. (CRPC); **Catania**: Monte Etna, eastern side, Maletto, 1000 m, 10.V.2017, on *Linaria purpurea* var. *alba*, Baviera C (BCPC); Monte Etna, southern side, Adrano osservatorio, 1750 m, on *Linaria purpurea*, 09.VIII.2016, Baviera C. (BCRC); ibid., Rifugio Sapienza, 1900m, on *Linaria purpurea*, 09.VIII.2016, Baviera C (BCRC); Monte Etna, northern side, Piano Provenzana, 2200 m, on *Linaria purpurea*, Baviera C (BCRC); Monte Etna, eastern side, Milo, 1200 m, on *Linaria purpurea*, 09.VIII.2016, Baviera C. (BCRC); **Palermo**: Madonie, Piano Battaglietta, 1700m s.l.m., 23.VI.2007, Baviera C. (BCPC); Madonie, under Pizzo Carbonara, 1650m s.l.m., on *Linaria purpurea*, 17.VII.2016, Baviera C. (BCRC); Madonie, Pizzo Carbonara, 1750m s.l.m., on *Linaria purpurea*, Baviera C. (BCRC); Madonie, under Piano Battaglia, 1700 m, on *Linaria purpurea*, 17.VII.2016, Baviera C.(BCPC); Madonie, under Rifugio Merlini, 1550 m, on *Linaria purpurea*, 17.VII.2016, Baviera C.(BCPC).

Notes. Reported as new for Sicily by Vitale (1932, 1934). Numerous specimens collected in Messina province and preserved in the Vitale collection were examined by Caldara *et al.* (2010). This species, common in Sicily on *Linaria purpurea*, may be easily confused with *R. incana*, feeding however preferably on *L. multicaulis*.

Rhinusa tetra (Fabricius, 1792)

Chorotype – OLA

Host Plants – SCR (*Scrophularia*, *Verbascum*)

Trophic category – OLI

New records – **Messina**: Monti Peloritani, Pizzo Chiarino, 845 m, Baviera C. (BCPC); Musolino, 06.VII.2002, Baviera C. (BCPC); Camaro Superiore, 24.IV.2000, Baviera C. (BCPC); Monte Antennammare, 1133 m, 26.VI.2001, Baviera C. (BCPC); ibid., 21.V.2000, Baviera C. (BCPC); Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); ibid., Lampiello river, 600 m, 14.IV.2004, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 11.VI.2004, Baviera C. (BCPC); Monti Nebrodi, Floresta, Sorgente San Giacomo, 1100 m, sifting *Quercus ilex*, 29.VI.2010, Baviera C. (BCPC); **Catania**: Castiglione di Sicilia, Cuba Bizantina, Fiume Alcantara, 29.VI.2010, Baviera C. (BCPC); Monte Etna, northern side, Linguaglossa, Rifugio Brunek, 1300 m, 20.VI.2006, Baviera C. (BCPC); Monte Etna, eastern side, Passopisciaro via Guardiola, 30.IV.2016, Baviera C. (BCPC); **Palermo**: Madonie, Polizzi Generosa, 27.V.2010, Diotti L. (DLPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 23-24.IV.2003, Baviera C. (BCPC, DLPC); ibid., 23-25.VI.2003, Baviera C. (BCPC).

Notes. Very common species in the peninsular Italy and Sicily (Vitale 1900; Ragusa 1908). Recorded as common in Mandanici (Messina) by Vitale (1901). Known from Egadi Islands (Favignana, Levanzo) by Osella (1973) and Pantelleria (Magnano and Osella 1973; Osella and Riti 1995). Recently reported from Palermo (Ficuzza) by Stejskal (2004).

Rhinusa verbasci (Rosenhauer, 1838)

Chorotype – EME

Host Plants – SCR (*Verbascum*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Monte Scuderi, 1200 m, 22.V.2004, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, Argimusco, 25.VII.2006, on *Verbascum* sp., Baviera C. (BCPC); Monte Antennammare, 1133 m, 17.V.2016, Baviera C. (BCPC); ibid., 25.V.2016, Baviera C. (BCPC); **Catania**: Monte Etna, northern side, Linguaglossa, 750 m, on *Verbascum* sp., Baviera C. (BCPC); ibid., Rifugio Brunek, 1300 m, 20.VI.2006, Baviera C. (BCPC); **Palermo**: Madonie, Polizzi Generosa, 31.V.2007, Baviera C. (BCPC).

Notes. Reported only recently from Italy for the first time from specimens collected in Messina (Castanea) by Vitale (Caldara *et al.* 2010). Caldara (2013) examined several specimens from Catania province (Etna nord, Rifugio Brunek, 1500m ; Etna Sud, Zafferana, 800m; Etna, Monte S. Leo; Randazzo; Nebrodi, Floresta, Sorgente San Giacomo 1000m) and Messina province (Nebrodi, Longi Frazzanò, Convento Fragalà, 700m; Antillo; Bosco di Malabotta, 1300m; Casalvecchio; Castroreale Bafia; Colle San Rizzo; mouth of the creek Niceto; Portella Castanea) collected on various species of *Verbascum* such as *V. blattaria*, *V. macrurum*, *V. thapsus* by Baviera (Caldara 2014).

Rhamphini Rafinesque, 1815

Orchestes (Orchestes) alni (Linnaeus, 1758)

Chorotype – OLA

Host Plants – ULM (*Ulmus*); BET (*Alnus*)

Trophic category – POL

Notes. A common species in Italy, reported from Palermo (Vitale 1893, 1900; Ragusa 1908). In the Vitale collection there are specimens from Palermo (Ficuzza) (Caldara *et al.* 2010).

Orchestes (Orchestes) fagi (Linnaeus, 1758)

Chorotype – EUR

Host Plants – FAG (*Fagus*, *Carpinus*)

Trophic category – OLI

New records – **Messina:** Monti Nebrodi, Capizzi, Portella dell'Obolo, 1500 m, 25.VI.2007, Baviera C. (BCPC); 04.VII.2016, Baviera C. (BCPC); Monte Soro, 1800 m, sifting *Fagus*, 20.V.2000, Baviera C. (BCPC); *ibid.*, 17.V.2001, Baviera C (BCPC); *ibid.*, 08.VIII.2001, Baviera C. (BCPC); San Fratello, 1300 m, 25.VI.2001, Baviera C. (BCPC); Biviere di Cesaro, 1200 m, 03.VII.1999, Baviera C. (BCPC); Portella Femmina Morta, 31.V.2007, Diotti L. (DLPC); **Palermo:** Monti Sicani, Bisacquino, 550 m, sifting *Quercus*, 18.III.2008, Baviera C. and Bellò C. (BCPC).

Notes. A very common species all over Italy. In the Vitale collection there are specimens from Messina (Gesso, Castronovo, Ucria, Castanea, Salice) (Caldara *et al.* 2010). Ragusa (1908) reported the species as very common on Madonie.

Orchestes (Orchestes) hortorum (Fabricius, 1792)

Chorotype – EUM

Host Plants – FAG (*Quercus*); COY(*Corylus*)

Trophic category – POL

New records – **Messina:** Città, SS.ma Annunziata, 03.V.2000, Baviera C. (BCPC); *ibid.*, 30.VI.2001, Baviera C. (BCPC); Massa San Giorgio, 17.X.1998, Baviera C. (BCPC); Monti Peloritani, Monte Antenammare, 1133 m, 29.V.2010, Baviera C. (BCPC); *ibid.*, 27.VII.1999, Baviera C. (BCPC); Monte Scuderi, 1100 m, 31.V.2005, Baviera C. (BCPC); *ibid.*, 22.V.2004, Baviera C. (BCPC); Monte Ciccia, 500 m, 11.VI.2009, Baviera C. (BCPC); Monti Nebrodi, San Fratello, 1300 m, 25.VI.2001, Baviera C. (BCPC); **Catania:** Monte Etna, northern side, Rifugio Brunek, 1500 m, 16.V.2002, Baviera C. (BCPC).

Notes. Species reported from Sicily (Vitale 1893, 1900) and considered as common in Messina by Vitale (1901) sub *O. avellanae* (Donovan, 1797) and in Ficuzza, Castelbuono and Caronia (Ragusa 1908). This weevil was recently reported sub *O. signifer* (Creutzer, 1799) from Palermo (Ficuzza) by Stejskal (2004). In the Vitale collection there are specimens from Messina (Castanea) (Caldara *et al.* 2010).

Orchestes (Orchestes) irroratus irroratus (Kiesenwetter, 1852)

Chorotype – WME

Host Plants – FAG (*Quercus*)

Trophic category – MON

Notes. Rare species in Italy, reported only from Abruzzo, Sardinia and Sicily, which is the type locality. However, we do not know more detailed data for Sicily.

Orchestes (Orchestes) pilosus (Fabricius, 1781)

Chorotype – EUR

Host Plants – FAG (*Quercus*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Rometta Superiore, Gimello, Santuario San Leone, 480 m, 11.VIII.1993, Baviera C. and Miceli G. (BCPC); 28.VII.1999, Baviera C. (BCPC); Santa Lucia del Mela, 01.V.2000, Baviera C. (BCPC); Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); Monti Nebrodi, Biviere di Cesarò, 1200 m, 03.VII.1999, Baviera C. (BCPC); San Fratello, 22.V.2010, Diotti L. (DLPC); **Catania**: Monte Etna, northern side, Rifugio Brunek, 1500 m, 23.VI.2001, Baviera C. (BCPC); **Palermo**: Monti Sicani, Bosco Ficuzza, 800 m, 20.VI.2001, sifting *Quercus*, Baviera C. (BCPC).

Notes. Probably the commonest and most widespread species of this genus in Sicily. Reported from Messina (Raccaja, Tortorici) by Vitale (1900, 1901) and from Ficuzza, Castelbuono and Palermo (Favorita) by Ragusa (1908). Recently reported from Palermo (Ficuzza) by Stejskal (2004). In the Vitale collection there are specimens from Messina (Fondachelli, Montalbano, Castanea) and Palermo (Ficuzza) (Caldara *et al.* 2010).

Orchestes (Orchestes) quercus (Linnaeus, 1758)

Chorotype – EUM

Host Plants – FAG (*Quercus*)

Trophic category – MON

New records – **Messina**: Città, SS. ma Annunziata, 28.VI.1997, Baviera C. (BCPC); Monti Peloritani, Rometta Superiore, Gimello, Santuario San Leone, 480 m, 11.VIII.1993, Baviera C. and Miceli G. (BCPC); Patti, RNO Laghetti di Marinello, 18.X.2002, Baviera C. (BCPC); Monte Antennammare, 1133 m, 27.VI.1997, Baviera C. (BCPC); *ibid.*, 24.IX.2011, Baviera C. (BCPC); **Palermo**: Monti Sicani, Bosco della Ficuzza, 800 m, 20.VI.2001, sifting *Quercus*, Baviera C. (BCPC).

Notes. Species recorded as common in Messina (Vitale 1893, 1900, 1901), at Ficuzza and Castelbuono (Ragusa 1908). In the Vitale collection there are specimens from Messina (Castanea) (Caldara *et al.* 2010).

Pseudorchestes cinereus (Fåhraeus, 1843)

Chorotype – WME

Host Plants – AST (*Centaurea*, *Inula*)

Trophic category – OLI

New records – **Agrigento**: Cattolica, Lago Gorgo, 16.V.1996, Angelini F. (MSNF).

Notes. Sparse and uncommon species throughout Italy. A specimen from Messina (Ritiro) is preserved in the Vitale collection (Caldara *et al.* 2010).

Pseudorchestes flavidus (H. Brisout de Barneville, 1865)

Chorotype – WME

Host Plants – AST (*Centaurea*)

Trophic category – MON

New records – **Trapani**: Calatafimi, 23.V.2010, Diotti L. (DLPC).

Notes. Rare species known from Italy only in Sicily, reported for the first time by Ragusa (1908) upon specimens collected in Palermo province (Monte Pellegrino and Ficuzza). A specimen from Palermo (Favorita) is preserved in the Vitale collection (Caldara *et al.* 2010).

Pseudorchestes pratensis (Germar, 1821)

Chorotype – EUR

Host Plants – AST (*Centaurea*)

Trophic category – MON

Notes. Reported from the whole Italy. In the Vitale collection there are specimens from Palermo (Ficuzza), Trapani (Modione), and Messina (Castanea) (Caldara *et al.* 2010).

Rhamphus oxyacanthae (Marsham, 1802)

Chorotype – EUR

Host Plants – ROS (*Cydonia*, *Crataegus*, *Mespilus*, *Malus*)

Trophic category – OLI

New records – **Messina**: Monti Peloritani, Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); Monti Nebrodi, Portella Maulazzo, 1400 m, 23.VI.2001, Baviera C. (BCPC); Monte Sambugetti, 19.V.2016, Baviera C. (BCPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 19-21.V.2003, Baviera C. (BCPC).

Notes. Known all over Italy and probably common also in Sicily, where it was reported as *R. kiesenwetteri* Tournier, 1873 by Ragusa (1908). Actually, *R. kiesenwetteri* is an African species erroneously described from Sicily (Peyerimhoff 1931; Magnano *et al.* 2009).

Rhamphus pulicarius (Herbst, 1795)

Chorotype – EUM

Host Plants – BET (*Betula*, *Alnus*)

Trophic category – OLI

New records – **Messina**: Monti Peloritani, Monte Antenammare, 1133 m, 26.VI.2001, Baviera C. (BCPC); Fiumentini Piano Margi, 850 m, 10.VI.2006, Baviera C. (BCPC); Monte Soro, peak, 1800 m, sifting *Fagus*, 20.V.2000, Baviera C. (BCPC); San Fratello, 1300 m, 20.V.2000, Baviera C. (BCPC); **Catania**: Monte Etna, eastern side, S. Alfio, Bosco Cerrita, 1500 m, 01.VII.2004, Baviera C. (BCPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 19-21.V.2003, Baviera C. (BCPC); *ibid.*, 22-24.IV.2003, Baviera C. (BCPC); Isole Egadi, Maretimo, 14-16.V.2006, Baviera C. (BCPC).

Notes. Common species all over Italy. Previously recorded, from Sicily, as very common from Messina (Vitale 1900) and Palermo (Ragusa 1908). Known also from Lampedusa and Linosa (Goggi 2004).

***Smicronychini* Seidlitz, 1891**

Aubeonymus carinicollis (Lucas, 1849)

Chorotype – WME

Host Plants – UNK

Trophic category – UNK

New records – **Messina:** Monti Nebrodi, Monte Soro, 1800 m, 01.VI.2007, Baviera C. (BCPC); ibid., 25.IV.2008, sifting *Fagus*, Bellò C. and Baviera C. (BCPC); ibid., 21.X.2006, Baviera C. (BCPC); ibid., 22.VI.2007, Bellò C. and Baviera C. (BCPC); ibid., 25.IV.2008, Baviera C. and Bellò C. (BCPC); ibid., 23.X.2010, Baviera C. (BCPC); Alcara Li Fusi, Bosco Scavioli, sifting *Quercus*, 01.VI.2007, 1100 m, Baviera C. and Bellò C. (BCPC); Capizzi, 30.III.1970, Romano M. (BCPC); Cesaro, Portella Femmina Morta, 22.III.2015, 1450 m, Degiovanni A. (PAPC); **Catania:** Randazzo, Petrosino, 04.IV.2013, Baviera C. (BCPC); **Siracusa:** Monti Iblei, Buccheri, Monte Lauro, 05.III.1997 (DLPC); **Palermo:** Monti Sicani, Monte Genuardo, 1200 m, 28.V.2007, Baviera C. (BCPC); Madonie, Piano Zucchi, 1200 m, 16.V.2008, Baviera C. and Rando A. (BCPC); ibid., 25.IV.2008, Baviera C. and Rando A. (BCPC); Isnello, Piano Battaglia, 06.IV.2013, 1600 m, Paladini A. (PAPC); Piano Battaglietta, 16.V.2008, Baviera C. and Rando A. (BCPC); Pomieri, 23.IX.2010, Baviera C. (BCPC); Monte Genuardo, 18.III.2015, 930 m, Paladini A. (PAPC); Bosco della Ficuzza, Crocifisso, 05.IV.2013, 976 m, Paladini A. (PAPC).

Notes. This western Mediterranean species is known from central and southern regions of Italy. Ragusa (1906b) considered the species common in Sicily, especially at Ficuzza.

Pachytychius aridicola (Wollaston, 1864)

Chorotype – MED

Host Plants – UNK

Trophic category – UNK

New records – **Agrigento:** 10 km S of Ribera, near Borgo Bonsignore, Riserva Naturale Foce del Fiume Belice and adjacent dunes, 15.IV.2015, on *Lotus*, Krátký J. (KJPC).

Notes. This species was known in Sicily only from Agrigento province (Caldara 1978b). A single specimen labeled “Sicily” is preserved in the Vitale collection (Caldara *et al.* 2010). Nothing was previously known on its host plants. As above reported, Jiří Krátký collected some specimens on *Lotus* sp. This is a plausible datum since also some related species feed on Fabaceae (Caldara 1978b).

Pachytychius avulsus Faust, 1885

Chorotype – WME

Host Plants – POA (*Triticum*)

Trophic category – MON

New records – **Catania:** Dittaino river, bridge highway 417, 08.V.1980, Diotti L. (DLPC).

Notes. This species is known in Italy from Apulia, Basilicata and Sicily. Reported from Palermo and Agrigento by Caldara (1978b).

Pachytychius discithorax Desbrochers, 1873

Chorotype – WME

Host Plants – UNK

Trophic category – UNK

New records – **Palermo:** Madonie, Polizzi Generosa, 1400 m, sifting *Fagus*, 26.X.2006, Baviera C. (BCPC).

Notes. A species reported from Sicily by Abbazzi and Maggini (2009) without more detailed data, according to personal communication by the second author of this note, who studied the above recorded specimen.

Pachytychius fuligineus Desbrochers, 1875

Chorotype – MED

Host Plants – UNK

Trophic category – UNK

Notes. A Mediterranean species known in Italy only from Sicily at Spadafora (Caldara 1978b).

Pachytychius haematocephalus (Gyllenhal, 1836)

Chorotype – EUR

Host Plants – FAB (*Astragalus*, *Lotus*)

Trophic category – OLI

New records – **Messina:** Milazzo Capo, 23.XII.2014, sifting *Olea*, Baviera C. (BCPC).

Notes. This species, quite common all over Italy, was reported from Messina (Calamarà) by Vitale (1905, 1906) and from Agrigento by Ragusa (1906a).

Pachytychius hordei grandicollis (Waltl, 1835)

Chorotype – MED

Host Plants – POA (*Hordeum*)

Trophic category – MON

New records – **Messina:** Mojo Alcantara, Fiume Alcantara, 12.V.2009, Baviera C. (BCPC); Monte Scuderi, 1100 m, 14.IV.2004, Baviera C. (BCPC); Catania: Castiglione di Sicilia, Cuba Bizantina, Fiume Alcantara, 19.V.2010, Baviera C. (BCPC); ibid., 19.IV.2010, Baviera C. (BCPC); ibid., 29.III.2010, Baviera C. (BCPC); ibid., 28.V.2010, Baviera C. (BCPC); Caltagirone, Monti Iblei, 450 m, 15.IV.2010, Baviera C. and Bellò C. (BCPC); Calatabiano, San Marco, Foce Fiume Alcantara, 11.III.2011, Baviera C. (BCPC); Monte Etna, Linguaglossa, 25.IV.2000, Diotti L. (DLPC); Fiume Dittaino, bridge highway 417, 08.V.1980, Diotti L. (DLPC); **Ragusa:** Giarratana, Monti Iblei, 500 m, 04.V.2010, Baviera C. and Bellò C. (BCPC); ibid., Santuario Santa Rosalia, 400 m,

15.IV.2010, Baviera C. and Bellò C. (BCPC); **Siracusa**: Sortino, 255 m, 14.IV.2010, Baviera C. and Bellò C. (BCPC); Chiaramonte, Gulfi, 395 m, 19.III.2016, Baviera C. (BCPC); **Enna**: Agira, 325 m, 16.III.2016, Baviera C. (BCPC); **Caltanissetta**: Monte Capodarso, 15.IV.2010, Baviera C. and Bellò C. (BCPC); Gela, Biviere, 13.IV.1995, Baviera C. (BCPC); idem., 07.IV.1994, Baviera C. (BCPC); Sughereta di Niscemi, 300 m, 02.III.2013, Baviera C. (BCPC); **Agrigento**: Monte Cammarata, 1000 m, 27.V.2007, Baviera C. and Bellò C. (BCPC); 21.IV.2008, Baviera C. and Bellò C. (BCPC); **Palermo**: Terrasini, 09.IV.1972, Baviera C. (BCPC); Monti Sicani, Bisacquino, 550 m, sifting *Quercus*, 18.III.2008, Baviera C. and Bellò C. (BCPC); Alia, 500 m, sifting *Olea* and *Quercus*, 19.III.2008, Baviera C. and Bellò C. (BCPC); Chiusa Sclafani, sifting *Olea*, 11.III.2009, Baviera C. and Bellò C. (BCPC); Corleone, Rocca Busambra sud, 700 m, sifting *Olea*, 16.IV.2010, Baviera C. and Bellò C. (BCPC); Madonie, Petralia Sottana, 29.V.2007, Diotti L. (DLPC); Baita del Faggio, 1400 m, sifting *Ilex*, Baviera C. (BCPC); **Trapani**: Santa Ninfa, 17.III.2008, sifting *Olea*, Baviera C. and Bellò C. (BCPC); ibid., 10.III.2009, Baviera C. and Bellò C. (BCPC); Alcamo, Monte Bonifato, San Nicola, 250 m, 22.IV.2010, Bellò C. (BCPC); ibid., 16.III.2008, Baviera C. and Bellò C. (BCPC); RNO Saline di Trapani e Paceco, Fiume Lenzi Baiata, 29.IV.2004, Baviera C. (BCPC); “Salina Vecchia”, 29.IV.2004, Baviera C. (BCPC); Castellammare del Golfo, RNO Zingaro, 26-29.III.2003, Baviera C. (BCPC).

Notes. Probably the commonest and most widespread species of this genus in Sicily, recorded also sub its synonym *P. squamosus* Gyllenhal, 1835 as common everywhere in Messina (Vitale, 1901), and further from Sinnaro, Agrigento, Lentini, Marsala (Vitale 1905; Ragusa 1906b). Recently recorded (sub *P. hordei squamosus*) from Lampedusa (Osella and Riti 1995), Ficuzza (Stejskal 2004) and Alicudi (Lo Cascio *et al.* 2006)). Vitale (1903a) collected the species in Messina on *Hordeum murinum* L.

Pachytychius latus Jekel, 1861

Chorotype – MED

Host Plants – UNK

Trophic category – UNK

Notes. The only specimens known up to now from Italy were collected at Lago Urio Quattrocchi in the Messina province by Fernando Angelini (Caldara and Angelini 1997).

Pachytychius lucasi lucasi Jekel, 1861

Chorotype – MED

Host Plants – UNK

Trophic category – UNK

Notes. In Italy known from Sardinia and Sicily. In Sicily reported only from Palermo province (Balestrate, Birgi, and Passo di Rigano: Ragusa (1906a) and Caldara (1978b)).

Pachytychius picteti (Tournier, 1860)

Chorotype – WME

Host Plants – UNK

Trophic category – UNK

New records – **Palermo**: Monti Sicani, Lago di Piana Albanesi, 19.III.2015, 630 m, Paladini A. (PAPC); ibid., 18.III.2017, Baviera C. (BCPC).

Notes. A very rare species known in Italy only from Sicily (Vitale 1900) where it is reported only from Palermo (Bocca di Falco and Navurra) and Trapani (Santa Ninfa) provinces (Ragusa 1906a; Caldara 1978b) upon a few specimens collected more than a century ago.

Pachytychius sellatus (Lucas, 1849)

Chorotype – WME

Host Plants – UNK

Trophic category – UNK

New records – **Caltanissetta**: Mazzarino, sifting *Olea*, 03.III.2013, Baviera C. and Bellò C. (BCPC); Sughereta di Niscemi, 22.XII.2013, Baviera C. and Bellò C. (BCPC); **Agrigento**: Lago Arancio 17.V.1996, Angelini F. (DLPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 26-29.III.2003, Baviera C. (BCPC).

Notes. Another rare species known for Italy only from Sicily. Osella (1973) and Caldara (1978b) quoted specimens collected at Agrigento (Valle dei Templi), Ragusa (Pachino) and Favignana.

Pachytychius sparsutus (Olivier, 1807)

Chorotype – EUR

Host Plants – FAB (*Ulex*, *Cytisus*, *Genista*)

Trophic category – OLI

New records – **Catania**: Monte Etna, northern side, Linguaglossa, 1000 m, 23.V.2010, Baviera C. (BCPC); Randazzo, road to Linguaglossa, 31.V.2007, Diotti L. (DLPC).

Notes. Species known since a long time ago from Messina surroundings, where it was reported as very common everywhere by Vitale (1901) and Ragusa (1906a). This species was recently recorded also from Ficuzza (Stejskal 2004). Vitale (1903a) studied in detail the biology of the species on *Cytisus* sp.

Sharpia rubida (Rosenhauer, 1856)

Chorotype – TEM

Host Plants – CON (*Cressa*)

Trophic category – MON

Notes. In Italy known only from Sardinia and Sicily, where it was reported from Egadi Islands (Favignana) by Osella and Di Marco (1996). *Atractylis humilis* L. (Asteraceae) was reported as possible host plant of the species (Hoffmann, 1958), and recently Alonso-Zarazaga *et al.* (2009) referred to have collected adults of this species on *Foeniculum vulgare* Miller (Apiaceae). The biology of *S. rubida* on *Cressa cretica* L. was studied in details

by Gompel *et al.* (2009). This species was recently confirmed as its host plant in Israel (Friedman 2017). Michael Košt’ál (pers. comm.) collected the species as well as other *Sharpia* in Macedonia, Bulgaria, Iran and Uzbekistan on Convolvulaceae, family often recorded as host plant for the genus *Sharpia* (Friedman 2017).

Smicronyx (Chalybodontus) cyaneus (Gyllenhal, 1836)

Chorotype – SEU

Host Plants – ORO (*Orobanche*)

Trophic category – MON

New records – **Messina**: Milazzo, Capo, 29.XII.2014, sifting, Baviera C. (BCPC); Tindari, Capo, 10.XI.2010, sifting *Olea*, Baviera C. (BCPC); Monti Peloritani, Forte San Jachiddu, 375 m, 29.V.2011, Baviera C. (BCPC); ibid., San Pier Niceto, sifting *Acer*, 945 m, 11.X.2009, Baviera C. (BCPC); Curcuraci, 300 m, 28.X.2006, Baviera C. (BCPC); Acqualadroni, sifting *Olea*, 09.V.2009, Baviera C. (BCPC); San Saba, Capo Rasocolmo, pitfall traps, 02-19.IV.2004, Baviera C. (BCPC); ibid., 4-18.III.2004, Baviera C. (BCPC); Acqualorto, 600 m, 11.III.2015, Baviera C. (BCPC); Castroreale, 407 m, 03.XI.2011, Baviera C. (BCPC); Colli San Rizzo, 600 m, 14.IV.1998, sifting, Baviera C. (BCPC); Mandanici, 1030 m, sifting *Quercus*, 03.XI.2011, Baviera C. and Bellò C. (BCPC); Monte Antennammare, 1133 m, 02.XI.2009, Baviera C. (BCPC); Francavilla di Sicilia, Fiume Alcantara, Le Gurne, 19.V.2010, Baviera C. (BCPC); Monti Nebrodi, San Fratello, 600 m, 12.X.2006, Baviera C. (BCPC); San Marco D’Alunzio, 20.III.2015, sifting *Olea*, 220 m, Baviera C. and Bellò C. (BCPC); **Siracusa**: Sortino, Valle dell’Anapo, 250 m, 01.XI.2010, Baviera C. (BCPC); Pantalica, Valle dell’Anapo, 21.III.2015, 560 m, Paladini A. (PAPC); Portopalo di Capo Passero, sifting *Pistacia*, 02.XI.2010, Baviera C. and Bellò C. (BCPC); Pachino, sifting *Olea*, 02.XI.2010, Baviera C. and Bellò C. (BCPC); Ispica Est, 09.XII.2010, sifting *Olea*, Bellò C. (BCPC); **Caltanissetta**: Incrocio per Niscemi, sifting *Olea*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); Gela, Torre di Manfria, 02.III.2013, sifting, Baviera C. and Bellò C. (BCPC); **Agrigento**: Raffadali, 03.III.2013, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Bivona, 10.XII.2014, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Palma di Montechiaro, 120 m, 11.XII.2014, sifting *Olea* and *Smilax*, Baviera C. and Bellò C. (BCPC); **Palermo**: Madonie, Baita del Faggio, 1300 m, 18.V.2013, sifting *Ilex aquifolium*, Baviera C. and Bellò C. (BCPC); Monti Sicani, Alpe Cucco, Bosco Ficuzza, 29.V.2007, sifting *Quercus*, Baviera C.; ibid., 25.IX.2010, Baviera C. (BCPC); Monte Genuardo, 1200 m, 28.V.2007, Baviera C. (BCPC); Bisacquino, sifting *Olea* and *Quercus*, 18.III.2008, Baviera C. (BCPC); San Mauro di Castelverde, Località Ogliastro, 31.V.2007, sifting *Olea*, Baviera C. and Bellò C. (BCPC); Piana degli Albanesi, 03.V.1980, Diotti L. (DLPC); **Trapani**: RNO Saline di Trapani e Paceco, Fiume Lenzi Baiata, 29.IV.2004, Baviera C. (BCPC); Salina Anselmo, 28.IV.2004, Baviera C. (BCPC); Gibellina, Poggioreale, 08.III.2014, Baviera C. and Bellò C. (BCPC); Monte Sparagio, 550 m, sifting *Olea*, 20.IV.2007, Baviera C. (BCPC); Erice, 15.III.2015, Colacurcio L. (PAPC).

Notes. Probably the most common and widespread species of this genus in Sicily as emphasized by our data. Reported from Messina (Tremonti, Spadafora) by Vitale (1901, 1906). In the Vitale collection there are specimens from Messina (Scala) and Trapani (Castelvetrano) (Caldara *et al.* 2010). Reported from the whole isle by Ragusa (1906b).

Smicronyx (Smicronyx) albosquamatus Wollaston, 1854

Chorotype – WME

Host Plants – CON (*Cuscuta*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Monte Antennammare, 1133 m, 26.IV.2000, Baviera C. (BCPC); ibid., 06.X.2008, Baviera C. (BCPC); Monte Scuderi, 1200 m, 16.VII.2006, Baviera C. (BCPC); **Catania**: Monte Etna, northern side, Linguaglossa, 1000 m, 22.IV.2000, Baviera C. (BCPC); **Siracusa**: Augusta, 08.VII.1997, Baviera C. (BCPC); Canicattini Bagni 5 km SW, 430 m, 27.V.2019, Košťál M. (KMPC); **Trapani**: Castellammare, Monte Inici, 18.III.2015, Colacurcio L. (PAPC).

Notes. Species known from central and southern Italy. For Sicily reported from Egadi islands (Marettimo) by Osella (1973), Linosa and Lampedusa (Osella and Riti 1995; Goggi 2004).

Smicronyx (Smicronyx) jungermanniae (Reich, 1797)

Chorotype – CEM

Host Plants – CON (*Cuscuta*)

Trophic category – MON

New records – **Messina**: Torre Faro, Contrada Granatari, 25-30.VI.2008, at light, Baviera C. (BCPC); Monti Nebrodi, Biviere di Cesaro, 1200 m, 11.IV.2002, Baviera C. (BCPC); ibid., 26.V.2004, Baviera C. (BCPC); ibid., 01.VI.2007, Baviera C. (BCPC); Monti Nebrodi, Floresta 6 km SE, 1200 m, 30.V.2019, Košťál M. (KMPC); **Palermo**: Madonie, Portella Colla, 1450 m, 03.VI.2000, Baviera C. (BCPC); Piano Zucchi, 1100 m, 19.VII.2006, Baviera C. (BCPC); **Trapani**: Isole Egadi, Marettimo, 22.X.2006, Baviera C. (BCPC).

Notes. Common and probably widespread in Sicily since it is reported from Messina (Vitale 1901), Palermo (Madonna Via, Ficuzza), Catania (Caltagirone, Lentini) and Pantelleria (Ragusa 1906b); some data sub its synonym *S. cretaceus* Tournier, 1874 (Osella and Riti 1995)). Vitale (1903a) collected the species on stems of *Cuscuta europea* L. in Calamarà (Messina). Known also from Siracusa, Messina (Castanea, Paradiso) and Palermo (Ficuzza and Favorita) upon specimens preserved in the Vitale collection (Caldara *et al.* 2010). Recorded from Ficuzza also by Stejskal (2004).

Smicronyx (Smicronyx) nebulosus Tournier, 1874

Chorotype – EUR

Host Plants – CON (*Cuscuta*)

Trophic category – MON

Notes. Species apparently distributed throughout Italy. In Sicily the species is reported only from Linosa (Goggi 2004), sub its synonym *S. rugicollis* Rey, 1895.

Smicronyx (Smicronyx) pauperculus Wollaston, 1864

Chorotype – WME

Host Plants – CON (*Cuscuta*)

Trophic category – MON

Notes. In Italy reported only from Lampedusa (Abbazzi and Osella 1992; Osella and Riti 1995)) and Linosa islands (Osella and Riti 1995).

Smicronyx (Smicronyx) syriacus Faust, 1887

Chorotype – CEM

Host Plants – CON (*Cuscuta*)

Trophic category – MON

New records – **Messina:** Monti Nebrodi, Floresta, Sorgente San Giacomo, 1100 m, sifting *Quercus ilex*, 29.VI.2010, Baviera C. (BCPC); **Siracusa:** Canicattini Bagni 5 km SW, 430 m, 27.V.2019, Košt’ál M. (KMPC).

Notes. Probably distributed all over Italy (Enzo Colonnelli, pers. comm.), reported by Abbazzi and Maggini (2009) sub *S. scops* Tournier, 1874.

***Styphlini* Jekel, 1861**

Orthochaetes insignis Aubé, 1863

Chorotype – WME

Host Plants – UNK)

Trophic category – UNK

New records – **Messina:** Monti Peloritani, Castanea, Monte Ciccia, 400 m, 03.III.2009, Baviera C. (BCPC); ibid., 06.I.2010, Baviera C. (BCPC); Vivaio Ziriò, 700 m, 29.II.2009, Baviera C. (BCPC); Portella Armacerà, 800 m, sifting *Quercus*, 26.XI.2010, Baviera C. (BCPC); Monte Antennammare, 1133 m, pitfall trap, 10-25.II.2005, Baviera C. (BCPC); ibid., 22.III.2008, Baviera C. (BCPC); ibid., 02.I.2009, Baviera C. (BCPC); ibid., 15.VI.2009, Baviera C. (BCPC); ibid., 02.XI.2009, Baviera C. (BCPC); ibid., 27.IX.2009, Baviera C. (BCPC); ibid., 30.IX.2009, Baviera C. (BCPC); ibid., 06.I.2010, Baviera C. (BCPC); ibid., 04.VI.2010, Baviera C. (BCPC); ibid., 04.XI.2010, Baviera C. (BCPC); ibid., 15.VI.2009, Baviera C. (BCPC); ibid., 06.I.2010, Baviera C. (BCPC); ibid., 24.XI.2011, Baviera C. (BCPC); Monti Nebrodi, Floresta, Sorgente San Giacomo, 1100 m, sifting *Quercus ilex*, 29.VI.2010, Baviera C. (BCPC); **Catania:** Castiglione di Sicilia, Cuba Bizantina, Fiume Alcantara, 04.XI.2010, Baviera C. (BCPC); Maniace, Petrosino, 04.IV.2013, Baviera C. (BCPC); **Palermo:** Madonie, Pomieri, 1400 m, 16.V.2008, Baviera C. (BCPC); Castelbuono, Località La Liccia, 30.V.2007, Baviera C. (BCPC).

Notes. This species, known from central and southern Italy, was recorded from Messina (Calamarà and Scala) by Vitale (1903a, 1904a, 1906) and sub *O. setiger* by Ragusa (1906b). In the Vitale collection there are specimens from Messina (Colla, Calamarà, Castanea) (Caldara *et al.* 2010).

Paroryx nitidus (Chevrolat, 1861)

Chorotype – NAF

Host Plants – UNK)

Trophic category – UNK

Notes. A North African species known in Italy only from Sicily, recorded by Ragusa (1906b) as very common at Ficuzza. In the Vitale collection there are specimens from Ficuzza, and others from “Sicily” without detailed localities (Caldara *et al.* 2010).

Styphlidius italicus Osella, 1981

Chorotype – APPS

Host Plants – UNK)

Trophic category – UNK

New records – **Messina:** Piano Torre, Contrada Zini, sifting *Olea*, 24.V.2009, Baviera C. (BCPC); Monti Peloritani, Monte Antennammare, 1133 m, 22.III.2008, sifting *Quercus*, Baviera C. (BCPC); ibid., 06.X.2008, Baviera C. (BCPC); ibid., 02.I.2009, Baviera C. (BCPC); ibid., 05.V.2009, Baviera C. (BCPC); ibid., 15.VI.2009, Baviera C. (BCPC); ibid., 02.XI.2009, Baviera C. (BCPC); ibid., 04.VI.2010, Baviera C. (BCPC); ibid., 24.XI.2011, Baviera C. (BCPC); Monte Scuderi, 1200 m, 15.IV.2004, Baviera C. (BCPC); 29.V.2005, Baviera C. (BCPC); Portella Armacera, 800 m, sifting *Quercus*, 26.XI.2010, Baviera C. (BCPC); Portella Croce Cumia, 850 m, pitfall traps, 25.II-9.III.2005, Baviera C. (BCPC); ibid., 22.II.2009, Baviera C. (BCPC); Castanea, Monte Ciccio, 500 m, 24.IV.2010, Baviera C. (BCPC); ibid., 22.II.2009, Baviera C. (BCPC); 11.VI.2009, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 1200 m, 12.V.2009, Baviera C. (BCPC); Argimusco, 22.V.2014, Baviera C. (BCPC); Castroreale, Piano Margi, 925 m, 03.XI.2011, Baviera C. (BCPC); ibid., 29.II.2014, Baviera C. (BCPC); Monti Nebrodi, Floresta, Sorgente San Giacomo, 1100 m, sifting *Quercus ilex*, 29.VI.2010, Baviera C. (BCPC).

Notes. A southern Italy endemic species, reported for the first time from Sicily by Vitale (1903c) who collected two specimens not far from the sea in Messina (Sant’Agata and Scala, sub *S. coryreus* Reitter, 1884) (Vitale 1903c, 1906). In the Vitale collection there are specimens from Messina (Cavaliere, Scala) (Caldara *et al.* 2010). This species seems to be more common in eastern Sicily. Osella and Zuppa (1996) reported *S. italicus* from Messina (Monte Ciccio) and Catania (Guardia).

Styphlus (Styphlus) transjonicus Osella and Zuppa, 1994

Chorotype – MED

Host Plants – UNK)

Trophic category – UNK

New records – **Messina:** Monti Peloritani, Monte Antennammare, 1133 m, 06.X.2008, sifting *Quercus*, Baviera C. (BCPC); Basicò, 588 m, 25.XI.2009, Bellò C. (BCPC); **Palermo:** Monti Sicani, Corleone, Rocca Busambra south, 1075 m, sifting *Quercus ilex*, 16.IV.2010, Baviera C. and Bellò C. (BCPC).

Notes. Species described from Apulia (Foggia), also reported for Sicily from Messina (Malabotta, Cesariò), Enna (Nicosia) and Siracusa (Iblei Monte Grosso) provinces (Osella and Zuppa 1996). Most probably the single specimen cited from Palermo surroundings and identified as *S. jonicus* by Ragusa (1906b) should be referred to the species.

Styphlus (Styphlus) vidanoi Osella and Zuppa, 1994

Chorotype – SICI

Host Plants – UNK

Trophic category – UNK

New records – **Messina**: Monti Nebrodi, Alcara Li Fusi, Bosco Scavioli, sifting *Quercus*, 01.VI.2007,

1100 m, Baviera C. and Bellò C. (BCPC); Sella Tre Arie, 1350 m, 04.VI.2009, Baviera C. (BCPC);

Floresta, Sorgente San Giacomo, 1100 m, sifting *Quercus ilex*, 29.VI.2010, Baviera C. (BCPC);**Palermo**: Madonie, Castelbuono, Località La Liccia, 30.V.2007, Baviera C. and Bellò C. (BCPC).

Notes. This species was described from Messina (Nebrodi: Portella Femmina Morta) and reported also from Palermo (Ficuzza) (Osella and Zuppa 1996).

Tychiini C. G. Thomson, 1859**Sibinia (Dichotychius) meridionalis* C.N.F. Brisout de Barneville, 1867

Chorotype – MED

Host Plants – PLU (*Limonium*)

Trophic category – MOD

Notes. Sporadically collected in Italy (Tuscany, Latium, Apulia, Sardinia) (Caldara 1979; Abbazzi and Osella 1992), it is also reported from Sicily (Vitale 1932; Abbazzi and Maggini 2009) although we do not know detailed localities.

Sibinia (Dichotychius) planiuscula Desbrochers des Loges, 1873

Chorotype – MED

Host Plants – PLU (*Limonium*)

Trophic category – MOD

New records – **Siracusa**: Torre Vendicari, 14.V.1984, Diotti L. (DLPC).

Notes. In Italy this Mediterranean species is known only from Sicily. Reported from Capo Passero, Pachino and mouth of the river Simeto, all localities in Siracusa province (Caldara 1979).

**Sibinia (Dichotychius) tychiiformis* Pic, 1902

Chorotype – EME

Host Plants – CAR (*Paronychia*)

Trophic category – MOD

Notes. The presence of this western Mediterranean species in Italy must be confirmed. Type specimens of its synonym, *S. cretaceocincta* Desbrochers des Loges, 1908, are reported to have been collected at Rinella, in the municipality of Leni (Eolie islands) (Ragusa 1908). However, none of these type specimens was found by Caldara (1979).

Sibinia (Sibinia) arenariae Stephens, 1831

Chorotype – TUM

Host Plants – CAR (*Silene*, *Spergularia*, *Spergula*)

Trophic category – OLI

New records – **Catania**: Fiume Dittaino, bridge of highway 417, 08.V.1980, Diotti L. (DLPC);**Agrigento**: Licata, Poliscia Mollarella, 15.IV.2014, Krátký J. (KJPC).

Notes. This is a widespread species in the southern Palaearctic and is known from some regions of central and southern Italy and Sardinia (Caldara 1985). It is recorded from Sicily only by Abbazzi and Maggini (2009) without other indications. Herewith we bring first detailed data.

Sibinia (Sibinia) attalica Gyllenhal, 1836

Chorotype – SEU

Host Plants – CAR (*Silene*)

Trophic category – MON

New records – **Messina**: Torre Faro, Contrada Granatari, 08.IV.1994, Baviera C. (BCPC); ibid., 01.V.1992, Baviera C. (BCPC); ibid., 26.III.1994, Baviera C. (BCPC); ibid., 09.VI.1995, Baviera C. (BCPC); ibid., 04.IV.1999, Baviera C. (BCPC); ibid., 18-23.V.2000, Baviera C. (BCPC); ibid., 23-28.IV.2000, Baviera C. (BCPC); ibid., 12.V.2001, Baviera C. (BCPC); Monti Peloritani, Castanea, Monte Ciccio, 400 m, 24.IV.2010, Baviera C. (BCPC); Musolino, 04.VI.2000, Baviera C. (BCPC); Monte Antennammare, 1133 m, 27.VI.1997, Baviera C. (BCPC); ibid., 04.VI.2000, Baviera C. (BCPC); ibid., 20.VI.2005, Baviera C. (BCPC); ibid., 27.IX.2009, Baviera C. (BCPC); ibid., 26.XI.2010, Baviera C. (BCPC); Portella Chiarino, 600 m, 06.VI.2004, Baviera C. (BCPC); Pizzo Chiarino, 845 m, 27.VI.2010, Baviera C. (BCPC); ibid., 29.V.2011, Baviera C. (BCPC); Forte San Jachiddu, 375 m, 28.IV.2010, Baviera C. (BCPC); Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); ibid., 31.V.2005, Baviera C. (BCPC); **Catania**: Monte Etna, eastern side, S. Alfio, Bosco Cerrita, 1500 m, 01.VII.2004, Baviera C. (BCPC); Monte Etna, northern side, Linguaglossa, 24.VI.2000, Baviera C. (BCPC); ibid., Piano Provenzana, 1800 m, 24.VI.2004, Baviera C. (BCPC); **Ragusa**: Acate, Museo Carrubo, 21.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (CBPC); **Siracusa**: Monti Iblei, Monte Lauro, 986 m, 24.V.2010, Baviera C. (BCPC); **Palermo**: Monti Sicanì, Portella della Ginestra, 800 m, sifting, 08.III.2009, Baviera C. and Bellò C. (BCPC); Bosco Ficuzza, 740 m, Baviera C. and Bellò C. (BCPC); Madonie, Polizzi Generosa, 1400 m, 24.IX.2010, Baviera C. (BCPC).

Notes. This common and widespread species was reported in Sicily from Palermo and Messina (Vitale 1893, 1900, 1901), then recorded as common in Sicily by Ragusa (1908). Caldara (1985) examined specimens from Messina, Catania, Ragusa (Pachino), Palermo (Ficuzza, Castelbuono), Trapani (Mazara del Vallo) provinces, and from Egadi islands (Lipari). Recently collected at Ficuzza by Stejskal (2004). Also indicated from Vulcano and Alicudi by Lo Cascio *et al.* (2006).

Sibinia (Sibinia) femoralis Germar, 1823

Chorotype – CEM

Host Plants – CAR (*Silene*)

Trophic category – MON

New records – **Messina**: Torre Faro, Contrada Granatari, 02.V.1993, Baviera C. (BCPC); ibid., 28.IV.2010, Baviera C. (BCPC); Lago Faro, 31.V.2011, Baviera C. (BCPC); Mortelle, Canale degli Inglesi, 28.IV.2010, Baviera C. (BCPC); San Saba, Capo Rasocolmo, 29.V.2011, Baviera C. (BCPC); Casabianca, Lido Spiaggia d’Oro, 02-21.VII.2004, pitfall traps, Baviera C. (BCPC); ibid., 16-30.VIII.2004, Baviera C. (BCPC); ibid., 28.IV.2010, Baviera C. (BCPC); ibid., 29.V.2011, Baviera C. (BCPC); Monti Peloritani, Forte San Jachiddu, 375 m, 28.IV.2010, Baviera C. (BCPC); Campo Italia, 200 m, sifting, 29.I.2006, Baviera C. (BCPC); Monte Scuderi, 1100 m, Baviera C. (BCPC); Monte Antenammare, 1133 m, 05.VII.1999, Baviera C. (BCPC); ibid., 09.IV.2002, Baviera C. (BCPC); Trupiano, 370 m, sifting *Olea*, 11.III.2014, Baviera C. (BCPC); Monti Nebrodi, Monte Soro, 1800 m, 21.X.2006, Baviera C. (BCPC); ibid., 01.VI.2007, Baviera C. (BCPC); ibid., 25.IV.2008, sifting *Fagus*, Bellò C. and Baviera C. (BCPC); **Catania**: Mazzarrone, sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Monte Etna, northern side, Linguaglossa, Piano Provenzana, 1800 m, 20.VI.2006, Baviera C. (BCPC); ibid., Rifugio Brunek, 1500 m, 20.VI.2006, Baviera C. (BCPC); **Ragusa**: Acate, Museo Carrubo, 21.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (CBPC); **Caltanissetta**: Niscemi, sifting, 22.XII.2013, Baviera C. and Bellò C. (BCPC); Niscemi 9 km SE, 180 m, 29.V.2019, Košťál M. (KMPC); **Palermo**: Madonie, Piano Battaglietta, 1800 m, 16.V.2008, sifting, Bellò C. and Baviera C. (BCPC); Piano Battaglia, 27.V.2010, Diotti L. (DLPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 26-29.III.2003, Baviera C. (BCPC); ibid., 23-24.IV.2003, Baviera C. (BCPC); Selinunte, Foce Modione, 09.IV.1998, Baviera C. (BCPC); Salinagrande, Isolotto, 17.IV.2014, J. Krátký (KJPC).

Notes. Common species in Italy, known from Sicily since a long time (Vitale 1893, 1900; Ragusa 1908). Caldara (1985) examined specimens from Messina (Timpazzi, Colle San Rizzo), Catania (Nicolosi, San Giuseppe alla Rena, Caltagirone), Ragusa (Pachino, Chiaramonte Gulfi) and Palermo (Ficuzza, Piano Zucchi) provinces.

Sibinia (Sibinia) pellucens Germar, 1823

Chorotype – EUM

Host Plants – CAR (*Silene*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Monte Antenammare, 1133 m, 21.V.2004, Baviera C. (BCPC); ibid., 19.VI.2004, Baviera C. (BCPC); ibid., 06.I.2010, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 11.VI.2004, Baviera C. (BCPC); ibid., 23.V.2006, Baviera C. (BCPC); Monte Scuderi, 600 m, 14.IV.2004, Baviera C. (BCPC); **Palermo**: Monti Sicani, Ficuzza, Crocefisso, 900 m, 27.XI.2009, Bellò C. (BCPC); Corleone, Rocca Busambra south, sifting *Quercus*, 26.IV.2010, Baviera C. and Bellò C. (BCPC); Monti Madonie, Piano Battaglia, 30.V.2007, Diotti L. (DLPC).

Notes. A common species all over Italy, reported from Messina (Montalbano) by Vitale (1906) and from Palermo (Ficuzza) by Ragusa (1908). From the latter locality it was recently recorded by Caldara (1985) and Stejskal (2004).

**Sibinia (Sibinia) phalerata* Gyllenhal, 1836

Chorotype – EUR

Host Plants – CAR (*Arenaria, Cerastium, Petrorhagia, Dianthus*)

Trophic category – OLI

Notes. This species with a widespread Palaearctic distribution including North Africa is only known in Italy from Sicily. Reported by Vitale (1893, 1900) upon specimens in the Baudi collection with no detailed data, indication repeated by Abbazzi and Maggini (2009). These old data deserve a confirmation.

Sibinia (Sibinia) primita (Herbst, 1795)

Chorotype – EUM

Host Plants – CAR (*Spergularia*)

Trophic category – MON

New records – **Palermo:** Madonie, Piano Battaglia, 27.V.2010, Diotti L. (DLPC).

Notes. Species reported from Messina (Passo Badia) by Vitale (1906). Caldara (1985) examined specimens from Messina (Castelbuono) and Palermo (Ficuzza) provinces, the latter locality also reported by Ragusa (1908). Recently indicated also from Lampedusa (Diotti *et al.* 2017).

Sibinia (Sibinia) sicana Ragusa, 1908

Chorotype – APPS

Host Plants – CAR (*Gypsophila*)

Trophic category – MON

New records – **Siracusa:** Buccheri, 28.V.2010, Baviera C. (BCPC); **Enna:** Aidone, 02.VII.1989, Caldara R. (RCPC).

Notes. This species is endemic to southern Italy (Basilicata and Calabria) and Sicily (type locality: Caltagirone, Madonna Via), where it feeds on *Gypsophila arrostii* Guss., an endemic plant to southern Italy and Sicily (Skuhrovec *et al.* 2015). Bionomics and description of the immatures were recently reported by Skuhrovec *et al.* (2015). This species was considered very rare and known only from the type specimens (Caldara 1985) until a large series of adults were collected on its flowering host plant in summer, a season when usually in Sicily almost all herbaceous plants are dry (Roberto Caldara, pers. obs.).

**Sibinia (Sibinia) subtriangulifera* Desbrochers des Loges, 1888

Chorotype – MED

Host Plants – CAR (*Cerastium, Sagina*)

Trophic category – OLI

Notes. This is a species only known from the Tuscan Archipelago, Sardinia and Corsica. Recorded for “Sicily” only upon a specimen, without more detailed indications, collected by Ghiliani (Caldara 1985). This datum must be confirmed.

Sibinia (Sibinia) variata Gyllenhal, 1836

Chorotype – SEU

Host Plants – CAR (*Spergularia*)

Trophic category – MON

New records – **Agrigento**: Licata, Poliscia Mollarella, 15.IV.2014, Krátký J. (KJPC).

Notes. This species, sporadically collected in Italy in Piedmont, Lombardy, Tuscany and Sardinia, was reported from Palermo and Caltagirone by Ragusa (1908) and recently indicated also from Palermo (Ficuzza) by Stejskal (2004).

Sibinia (Sibinia) viscariae (Linnaeus, 1761)

Chorotype – CEM

Host Plants – CAR (*Lichnis*, *Silene*)

Trophic category – OLI

New records – **Messina**: Capo Milazzo, sifting *Olea*, 1-02.V.2000, Baviera C. (BCPC); Acqualadrone, sifting *Olea*, 30.V.2000, Baviera C. (BCPC); **Catania**: Monte Etna, northern side, Rifugio Brunek, 1300 m, 20.VI.2006, Baviera C. (BCPC); ibid., Passopisciaro via Guardiola, 30.IV.2016, Baviera C. (BCPC); Monte Etna, eastern side, S. Alfio, Bosco Cerrita, 1500 m, 01.VII.2004, Baviera C. (BCPC).

Notes. A common species all over Italy, apparently not rare also in Sicily, from where it was reported for the first time by Ragusa (1908) based on specimens collected at Palermo surroundings and Piazza Armerina (Enna).

Tychius (Apeltarius) amplicollis Aubé, 1850

Chorotype – WME

Host Plants – FAB (*Vicia*)

Trophic category – MON

New records – **Agrigento**: Monti Sicani, Castronovo, 500 m, 27.V.2007, Baviera C. and Bellò C. (BCPC); **Palermo**: Monte Pellegrino, 16.III.2015, 400 m, Paladini A. (PAPC); Monti Sicani, Ficuzza, sifting, 15.III.2008, Baviera C. and Bellò C. (BCPC); Bosco della Ficuzza, 830 m, 02.V.2000, Zolia S. and Polese F. (RCPC); Bosco della Ficuzza, Laghetti Coda di Riccio, 08.III.2017, Baviera C. (BCPC); Monti Sicani, Portella della Ginestra, 04.IV.2011, Baviera C. (BCPC); Palazzo Adriano, 800 m, sifting *Olea*, 17.IV.2009, Baviera C. (BCPC); Lago di Piana degli Albanesi, 610 m, 21.V.1996, Angelini F. (RCPC).

Notes. A rare species reported from Sicily since a long time (Vitale 1893, 1900). Ragusa (1908) collected specimens at Palermo (Favorita), Ficuzza and Piazza Armerina. Caldara (1978a) examined individuals from Palermo (Ficuzza, Paternò) and Agrigento (without more detailed indications). This species was also reported from Ficuzza by Stejskal (2004). Very recently Casalini *et al.* (2018) discovered the host plant of the species, *Vicia sativa* subsp. *macrocarpa* (Moris) Arcang. collecting larvae inside its pods.

Tychius (Apeltarius) multilineatus (Desbrochers des Loges, 1873)

Chorotype – WME

Host Plants – FAB

Trophic category – UNK

Notes. Another rare species known from Sicily since a long ago (Vitale 1893, 1900) sub *T. similis* Tournier, 1874). Ragusa (1908) collected two specimens at Lentini. In his revision of the subgenus Caldara (1978a) did not study specimens from Sicily.

Tychius (Tychius) argentatus Chevrolat, 1859

Chorotype – MED

Host Plants – FAB (*Lotus*)

Trophic category – MON

New records – **Messina:** Monti Nebrodi, Caprileone, 05.III.2012, Baviera C. (BCPC); Monti Peloritani, San Marco d’Alunzio, sifting *Olea*, Baviera C. (BCPC); **Catania:** Adrano, Fiume Simeto, 28.V.2010, Diotti L. (DLPC); Adrano, 21.III.2017, Colacurcio L (FLPC); **Ragusa:** Acate, Museo Carrubio, 21.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (CBPC); Lago di Santa Rosalia, 08.V.2019, Diotti L. DLPC); **Siracusa:** Buscemi, 600 m, sifting *Olea*, 14.IV.2010, Baviera C. and Bellò C. (BCPC); **Enna:** Agira, 325 m, 16.III.2016, Baviera C. (BCPC); Nissoria, 750 m, 17.III.2016, Baviera C. and Bellò C. (BCPC); **Caltanissetta:** Mazzarino, sifting *Olea*, 03.III. 2013, Baviera C. and Bellò C. (BCPC); Monti Erei, Niscemi, sifting *Olea*, 03.III.2012, Baviera C. and Bellò C. (BCPC); **Agrigento:** Bivona, sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); **Palermo:** Camporeale, 260 m, 07.XI.2010, Bellò C. (BCPC); road Campogrande-Roccamena, 09.III.2014, Bellò C. (BCPC); Monti Sicani, Baucina, 500 m, 22.XII.2013, Baviera C. and Bellò C. (BCPC); Monti Sicani, Ficuzza, Alpe Cucco, 950 m, sifting *Quercus*, 25.XI.2010, Baviera C. and Bellò C. (BCPC); Grotta Gratteri, 06.III.2016, Colacurcio L. (FLPC); Partinico, 09.III.2014, Baviera C. and Bellò C. (BCPC); Trabia, Pizzo Cane, Eremo di San Felice, 07.III.2013, Bellò C. (BCPC); **Trapani:** RNO Saline di Trapani e Paceco, Fiume Lenzi Baiata, 24.IV.2004, Baviera C. (BCPC); Calatafimi, 23.V.2010. Diotti L. (DLPC); Partanna, Castel di Pietra, 11.III.2016, Colacurcio L. (FLPC).

Notes. This is a common species in peninsular Italy as well as in Sicily (Ragusa 1908). Reported as common in Messina (Rodia, Tremonti) by Vitale (1893, 1901, 1908a) and at Ficuzza by Stejskal (2004). Vitale (1903b) collected long series of this weevil around Messina on the Poaceae *Elytrigia repens* (L.) Desv. ex Nevski and *Aegylops ovata* L., which are surely refugial plants for *T. argentatus* because it is associated with *Lotus* (Caldara 1990).

Tychius (Tychius) aureolus Kiesenwetter, 1851

Chorotype – PAL

Host Plants – FAB (*Medicago*)

Trophic category – MON

Notes. This widespread Palaearctic species is uncommon in southern Italy and Sicily. Vitale (1893) reported it in his first catalogue based on Baudi’s data, and Ragusa (1908) indicated it from Palermo. In the Vitale collection Caldara *et al.* (2010) found a specimen collected at Palazzo Adriano (Palermo).

Tychius (Tychius) bicolor C.N.F. Brisout de Barneville, 1862

Chorotype – TUM

Host Plants – FAB (*Melilotus*, *Astragalus*)

Trophic category – OLI

New records – **Messina**: Monti Peloritani, Monte Scuderi, 1200 m, 22.V.2004, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, Argimusco, Orante, sifting, 22.XII.2016, Baviera C. (BCPC); Trupiano, 370 m, sifting *Olea*, 11.III.2014, Baviera C. (BCPC); Monti Nebrodi, Portella Femmina Morta, 31.V.2007, Diotti L. (DLPC); Eolie, Salina, 10-12.V.2007, Baviera C. (BCPC); **Siracusa**: Portopalo di Capo Passero, 02.XI.2010, Baviera C. and Bellò C. (BCPC); ibid., Pantani Mochella, sifting *Olea*, 09.XII.2014, Baviera C. and Bellò C. (BCPC); Vendicari, sifting *Olea*, 01.III.2013, Baviera C. and Bellò C. (BCPC); Pachino, Punta delle Formiche, sifting *Olea*, 09.XII.2014, Baviera C. and Bellò C. (BCPC); **Caltanissetta**: Niscemi, Sughereta, 24.XII.2013, Baviera C. (BCPC); Reisa, Trabia miniere, 10.V.2019, Diotti L. (DLPC); **Palermo**: Partinico, 09.III.2014, Baviera C. and Bellò C. (BCPC); **Trapani**: Pantelleria, Lago di Venere, 28.IV.2009, Diotti L. (DLPC).

Notes. In Italy this species is widespread especially in central and southern regions including isles. It was reported for the first time from Sicily by Vitale (1893, 1900) and Ragusa (1908). Known also from Siracusa province (Fonte Ciane, Pachino) and Favignana island (Roberto Caldara pers. obs.).

Tychius (Tychius) breviusculus Desbrochers des Loges, 1873

Chorotype – PAL

Host Plants – FAB (*Melilotus*)

Trophic category – MON

New records – **Catania**: Bosco di Santo Pietro, 10.XII.2014, Bellò C. (BCPC); Mazzarino, 375 m, 19.III.2016, Baviera C. and Bellò C. (BCPC); **Siracusa**: Monti Iblei, Buscemi, 630 m, sifting *Olea* and *Quercus*, 02.III.2012, Bellò C. (BCPC); Pachino, Granelli, 09.XII.2014, Baviera C. and Bellò C. (BCPC); Pachino, Punta delle Formiche, sifting *Olea*, 09.XII.2014, Baviera C. and Bellò C. (BCPC); Vendicari, sifting *Olea*, 01.III.2013, Baviera C. and Bellò C. (BCPC); **Palermo**: Capo Gallo, 10.II.2015, Baviera C. (BCPC); **Enna**: Nissoria, 750 m, sifting *Olea*, 17.III.2016, Baviera C. and Bellò C. (BCPC); Piazza Armerina, sifting *Quercus*, 19.III.2010, Baviera C. Bellò C. (BCPC); **Caltanissetta**: Sughereta di Niscemi, sifting *Quercus suber*, 02.III.2013, Baviera C and Bellò C. (BCPC); Reisa, Trabia miniere, 10.V.2019, Diotti L. (DLPC); **Agrigento**: Naro, sifting *Olea*, 21.III.2013, Baviera C. and Bellò C. (BCPC); Sant'Angelo Muxaro, sifting *Olea*, 10.XII.2012, Baviera C. Bellò C. (BCPC); **Trapani**: Alcamo, Monte Bonifato, San Nicola, 250 m, 26.XI.2009, Bellò C. (BCPC); Pizzo Montelongo, 300 m, sifting *Olea*, 10.III.2009, Baviera C. and Bellò C. (BCPC).

Notes. Another species widespread across the whole Italy including Sicily. Known also from Catania, mouth of the river Simeto (Roberto Caldara, pers. obs.).

Tychius (Tychius) capucinus (Boheman, 1843)

Chorotype – MED

Host Plants – FAB (*Lotus*)

Trophic category – MON

New records – **Messina**: Capo Milazzo, 29.XII.2014, Baviera C. (BCPC); Torre Faro, Canale degli Inglesi, 04.III.2004, Baviera C. (BCPC); Lago Faro, 31.V.2011, Baviera C. (BCPC); Mortelle Lido, 04.III.2004, Baviera C. (BCPC); Casabianca Lido, pitfall traps, 19.X-3.XI.2004, Baviera C. (BCPC).

Notes. This species, which occurs on dune vegetation, is uncommon in Sicily. Reported by Vitale (1900, 1901, 1908a) from Messina (Falcone, Tarantonio, Olivieri) and by Ragusa (1908) from Palermo, Balestrate, Caltagirone and Messina. Known also from Catania (Roberto Caldara, pers. obs.) and Lampedusa (Lo Cascio *et al.* 2006; Diotti *et al.* 2017).

Tychius (Tychius) consputus Kiesenwetter, 1864

Chorotype – MED

Host Plants – FAB

Trophic category – UNK

New records – **Messina:** Monti Peloritani, Monte Scuderi, 1200 m, 16.VII.2006, Baviera C. (BCPC).

Notes. A rare species reported from numerous localities of the whole Sicily (Lentini, Fi-cuzza, Godrano, Piazza Armerina, Caltagirone, Caronie and Madonie) by Ragusa (1908) sub its synonyms *T. siculellus* Ragusa, 1908, and *T. fanalesi* Ragusa, 1908, from Monti Nebrodi (Cesarò, Mistretta) and Nicolosi by Caldara (1990), and from Lipari (Lo Cascio *et al.* 2006). Caldara *et al.* (2010) examined a specimen collected at Contrada Mulinello (Messina) in the Vitale collection.

Tychius (Tychius) cuprifer (Panzer, 1799)

Chorotype – TUE

Host Plants – FAB (*Teline, Trifolium*)

Trophic category – OLI

New records – **Messina:** Monti Peloritani, Monte Scuderi, 1200 m, 22.V.2004, Baviera C. (BCPC); Monti Nebrodi, Portella Maulazzo, 1400 m, 08.VIII.2001, Baviera C. (BCPC); Biviere di Cesarò, 1283 m, 11.IV-19.VI.2002, Baviera C. (BCPC); ibid., 14.V.2004, Baviera C. (BCPC); ibid., 26.V.2004, Baviera C. (BCPC); **Palermo:** Madonie, Piano Battaglia, 1600 m, 24.IX.2010, Baviera C. (BCPC).

Notes. This species, very common in continental Italy, is instead in Sicily quite occasional. Reported from Messina (Calamarà) by Vitale (1900, 1901, 1906) was recently recorded from Palermo (Ficuzza) by Stejskal (2004).

Tychius (Tychius) cupriferoides (Ragusa, 1922)

Chorotype – MED

Host Plants – FAB (*Trifolium*)

Trophic category – MON

New records – **Messina:** Monti Peloritani, Montalbano Elicona, Bosco di Malabotta, 1200 m, 24.IV.2006, Baviera C. (BCPC); ibid., 23.V.2006, Baviera C. (BCPC); Bosco Acquamenta, 1150 m, 11.X.2009, Baviera C. (BCPC); Monti Nebrodi, Portella Maulazzo, 1400 m, 28.V.2011, Baviera C. (BCPC); Floresta, 1100 m, 24.VI.2007, Baviera C. (BCPC); Portella Femmina Morta, 31.V.2007, Diotti L.(DLPC); Biviere di Cesarò, 1283 m, 26.V.2004, Baviera C. (BCPC); ibid., 02.VII.2005, Baviera C. (BCPC); ibid., 01.VI.2007, Baviera C. (BCPC); Monte Soro, 1800 m, 01.VI.2007, Baviera C. (BCPC); Capizzi, Portella dell'Obolo, 1500 m, 31.V.2011, Baviera C. (BCPC); Tortorici, Contrada Batana, 787 m, 20.III.2015, Baviera C. (BCPC); **Catania:** Castiglione di Sicilia, Cuba Bizantina, Fiume Alcantara, 19.V.2010, Baviera C. (BCPC); **Siracusa:** Palazzolo Acreide 5 km S, 520 m,

28.V.2019, Košt’ál M. (KMPC); **Palermo:** Monte Pellegrino, 28.XI.2009, Baviera C. (BCPC); Madonie, Piano Battaglia, 1600 m, 24.IX.2010, Baviera C. (BCPC); ibid., 27.V.2010, Diotti L. (DLPC); Piano Battaglietta, 1700 m, 16.V.2008, Baviera C. (BCPC); Petralia Soprana, 29.V.2007, Tedeschi M. (PAPC); Monti Sicani, Bosco della Ficuzza, Alpe Cucco, 29.V.2007, Baviera C. (BCPC); Bosco della Ficuzza, 26.V.2010, Diotti L. (DLPC); Collesano, 08.VI.1991, Diotti L. (DLPC); **Trapani:** RNO Zingaro, 04.IV.2013, 400 m, Paladini A., (PAPC).

Notes. A species very common and widespread in Sicily, reported from the whole island by Caldara (1990). Morphologically it differs from the close *T. cuprifer* only by the black versus reddish colour of the tibiae.

Tychius (Tychius) curtirostris Desbrochers des Loges, 1873

Chorotype – SEU

Host Plants – FAB (*Trifolium*)

Trophic category – MON

New records – **Messina:** Città, SS.ma Annunziata, 11.III.2000, Baviera C. (BCPC); Acquarone, 09.V.2009, Baviera C. (BCPC); Torre Faro, Contrada Granatari, 27.V-05.VI.2000, Baviera C. (BCPC); ibid., 08.VII.2002, Baviera C. (BCPC); ibid., 22.III.2010, Baviera C. (BCPC); Monti Peloritani, Forte San Jachiddu, 375 m, 28.IV.2010, Baviera C. (BCPC); Portella San Rizzo, 467 m, 03.I.1999, Baviera C. (BCPC); ibid., 27.IV.2010, Baviera C. (BCPC); Salice Urni, 380 m, 31.V.2011, Baviera C. (BCPC); Pizzo Chiarino, 845 m, 27.IV.2010, Baviera C. (BCPC); Monte Scuderi, 1200 m, 22.V.2004, Baviera C. (BCPC); Monte Antennammare, 1133 m, 05.VII.1999, Baviera C. (BCPC); ibid., 26.IV.2000, Baviera C. (BCPC); ibid., 27.IV.2010, Baviera C. (BCPC); Pezzolo, sifting *Olea*, 02.XII.2011, Baviera C. (BCPC); Mandanici, 560 m, 03.XI.2011, Baviera C. (BCPC); Ficarra, sifting *Quercus suber* L., 20.IV.2010, Baviera C. (BCPC); Montalbano Elicona, Bosco di Malabotta, 1200 m, pitfall trap, 02.VII-05.VIII.2005, Baviera C. (BCPC); Graniti, Postoleone, 340 m, 19.XII.2013, Baviera C. (BCPC); Milazzo, Capo, 10.X.2009, Baviera C. (BCPC); ibid., sifting *Olea*, 28.II.2010, Baviera C. (BCPC); ibid., sifting *Olea*, 22.XII.2015, Baviera C. (BCPC); Monti Nebrodi, Monte Soro, 1800 m, sifting *Fagus*, 01.VI.2007, Baviera C. (BCPC); Reitano, 150 m, sifting *Olea*, 25.IV.2008, Baviera C. (BCPC); Capo d’Orlando San Gregorio, 20.III.2014, Baviera C. (BCPC); Eolie, Vulcano, 02.IV.1994, Baviera C. (BCPC); ibid., 01.IX.1994, Baviera C. (BCPC); ibid., 09-10.V.2007, Baviera C. (BCPC); **Catania:** Mazzarrone 2, sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (CBPC); Calatabiano, San Marco, Foce Fiume Alcantara, 29.VI.2010, Baviera C. (BCPC); Castiglione di Sicilia, Cuba Bizantina, Fiume Alcantara, 19.IV.2010, Baviera C. (BCPC); Monte Etna, northern side, Linguaglossa, 22.IV.2000, Baviera C. (BCPC); Monte Etna, eastern side, Milo, Bosco Cerrita, 1500 m, 01.VII.2004, Baviera C. (BCPC); **Ragusa:** Giarratana, Santuario Santa Rosalia, 15.IV.2010, sifting *Olea*, Baviera C. (BCPC); Acate, Museo Carrubo, 21.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (CBPC); **Siracusa:** Monti Iblei, Buccheri, sifting *Olea* and *Quercus*, 28.V.2010, Baviera C. and Bellò C (BCPC); San Corrado di Fuori, 320 m, 28.V.2019, Košt’ál M. (KMPC); **Enna:** Agira, Torre Borgo, 27.XI.2015, Baviera C. (BCPC); **Caltanissetta:** Mazzarrone sud, 03.III.2012, sifting *Olea*, Baviera C. and Bellò C. (BCPC); **Palermo:** Madonie, Isnello, Piano Zucchi, 1100 m, 24.IV.2008, Baviera C. (BCPC); ibid., 17.V.2008, Baviera C. (BCPC); ibid., 17.IV.2010, Baviera C. (BCPC); ibid., 24.IX.2010, Baviera C. (BCPC); Piano Battaglia, 1600 m, 24.IX.2010, Baviera C. (BCPC); Piano Battaglietta, 1700 m, 24.IV.2008, Baviera C. (BCPC); ibid., 16.V.2008, Baviera C. (BCPC); **Trapani:** Castellammare, highway 187, 25.III.2017, Colacurcio L. (LFPC); Egadi, Favignana, Monte S. Caterina, 06.XI.2010, Baviera C. (BCPC).

Notes. A very common species in central and southern Italy as well as in Sicily (Caldara 1990), where it was firstly noticed by Ragusa (1908) and Vitale (1908a) sub its synonym *T. neapolitanus* Tournier, 1874.

Tychius (Tychius) decretus Tournier, 1873

Chorotype – WME

Host Plants – FAB (*Trifolium*)

Trophic category – MON

New records – **Palermo:** Monti Sicani, Ficuzza, Alpe Cucco, 950 m, 04.IV.2011, Bellò C. (BCPC); Laghetti Coda di Riccio, 18.III.2017, Baviera C. and Bellò C. (BCPC); **Trapani:** Castellammare del Golfo, 09.XII.1993, Sabella G. (MSNF).

Notes. A rare species, known from central and southern Italy, previously reported for Sicily only from Enna (Nicosia) and Catania (mouth of the river Simeto) by Caldara (1990).

Tychius (Tychius) depressus Desbrochers des Loges, 1873

Chorotype – WME

Host Plants – FAB (*Medicago*)

Trophic category – MON

New records – **Catania:** Monti Ere, Bosco di Santo Pietro, sifting *Quercus*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); **Ragusa:** Monti Iblei, Chiaramonte Gulfi, S. Margherita, 10.XII.2014, Baviera C (BCPC); **Siracusa:** Sortino Valle Anapo, 01.XI.2010, sifting, Baviera C. and Bellò C. (RCPC); Floridia, Monti Climiti, 19.XII.1913 (CBPC); Pachino, Punta delle Formiche, sifting *Olea*, 09.XII.2014, Baviera C. and Bellò C. (BCPC); **Enna:** Nissoria, sifting *Olea* and *Quercus*, 26.XI.2015, Baviera C. and Bellò C. (CBPC); ibid., 17.III.2016, Baviera C. and Bellò C. (BCPC); Monte Altesina, 738 m, 27.XI.2015, Baviera C. and Bellò C. (BCPC); **Caltanissetta:** Mazzarino, 480 m, sifting *Olea*, 03.III.2013, Baviera C. and Bellò C. (BCPC); Mazzarino, 370 m, sifting *Olea*, 03.III.2013, Baviera C. and Bellò C. (BCPC); Sughereta di Niscemi, sifting *Quercus suber*, 02.III.2016, Baviera C. and Bellò C. (BCPC); Riesi, 02.III.2013, Baviera C. (BCPC); Agrigento: Bivona, sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Ribera, sifting *Olea*, 04.III.2013, Baviera C. and Bellò C. (BCPC); **Palermo:** Monti Sicani, Baucina, 500 m, 22.XII.2013, Baviera C. and Bellò C. (BCPC); Monti Sicani, Giuliana, Contrada Garrana, 440 m, sifting *Olea*, 11.III.2009, Baviera C. and Bellò C. (BCPC); Madonie, Piano Battaglia, 29.V.2007, Diotti L. (DLPC); Piano Battaglietta, 1600 m, 23.VI.2007, Bellò C. (RCPC); ibid., 27.VI.2007, Bellò C. (RCPC); Case La Liccia, 800 m, Baviera C. and Bellò C. (BCPC); road Gangi-Sperlinga, 19.III.2017, Bellò C. (BCPC); **Trapani:** Custonaci, Purgatorio, 273 m, 05.IV.2011, Baviera C. and Bellò C. (BCPC).

Notes. A rare species, known from central and southern Italy. Previously reported for “Sicily” (Vitale 1893, 1900) and subsequently only from Messina (Calamarà: Vitale (1901, 1908a)), from Ficuzza, Piazza Armerina and Caltagirone (Ragusa 1908), and from Agrigento, Palermo (Ficuzza, Monti Iblei and Manfria) by Caldara (1990). In the Vitale collection there are specimens from Agrigento (Porto Empedocle), Palermo (Palazzo Adriano) and Messina (Oliveri) (Caldara *et al.* 2010).

Tychius (Tychius) doderoi (F. Solari, 1950)

Chorotype – SISR

Host Plants – FAB

Trophic category – UNK

New records – **Messina:** Monti Nebrodi, Lago Urio Quattrocchi, 1000m a.s.l, Angelini F. (MSNF).

Notes. A very rare species previously reported only from the type locality (Ficuzza) and from Nicolosi by Caldara (1990). It is also known from Sardinia.

Tychius (Tychius) flavus Becker, 1864

Chorotype – SIE

Host Plants – FAB (*Medicago*)

Trophic category – MON

Notes. A common species especially in northern and central Italy, reported recently from Sicily for the first time by Caldara *et al.* (2010) from a single specimen labeled “Palazzo Adriano” (Palermo) and preserved in the Vitale collection.

Tychius (Tychius) funicularis C.N.F. Brisout de Barneville, 1862

Chorotype – WME

Host Plants – FAB (*Vicia*)

Trophic category – MON

Notes. Species reported from Sicily for the first time by De Bertolini (1872) and then from Palermo by Ragusa (1908). Its presence on the isle was recently confirmed by a single specimen from Messina preserved in the Vitale collection (Caldara *et al.* 2010). Apart from Sicily, in Italy it is known only from Sardinia (Caldara 1990).

Tychius (Tychius) grandicollis Desbrochers des Loges, 1873

Chorotype – WME

Host Plants – FAB (*Trifolium*)

Trophic category – MON

New records – **Messina:** Monti Peloritani, Castroreale, 407 m, sifting *Olea*, 03.XI.2011, Baviera C. (BCPC); **Agrigento:** Monti Sicani, Monte Cammarata, 1000 m, 27.V.2007, Baviera C. and Bellò C. (BCPC); **Palermo:** Monti Sicani, Palazzo Adriano, 750 m, sifting *Olea*, 21.IV.2008, Baviera C. and Rando A. (BCPC); ibid., 900 m, Baviera C. and Rando A. (BCPC); Alia, 675 m, sifting *Olea* and *Quercus*, 15.IV.2010, Baviera C. and Bellò C. (BCPC); Bosco della Ficuzza, 26.V.2010, Diotti L. (DLPC); Bisacquino 3, 04.IV.2011, Baviera C. and Bellò C. (BCPC); Piana degli Albanesi, 26.V.2010, Diotti L. (DLPC); **Trapani:** Alcamo, Monte Bonifato, 300 m, 10.III.2009, Baviera C. and Bellò C. (BCPC).

Notes. A quite common species in central and southern Italy as well as in Sicily (Caldara 1990).

Tychius (Tychius) grenieri C.N.F. Brisout de Barneville, 1861

Chorotype – MED

Host Plants – FAB (*Astragalus*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Monte Scuderi, 1200 m, 22.V.2004, Baviera C. (BCPC).

Agrigento: S. Angelo Muxaro, 23.III.2017, Colacurcio L. (FLPC).

Notes. The species was cited from Sicily by Vitale (1893, 1900). Reported from Messina (Scala) by Vitale (1908a), and from Palermo (Favorita, Monte Cuccio) by Ragusa (1908). Based on specimens preserved in the Vitale collection from Messina (Ucria, Calamarà, Castanea), and from Palermo (Favorita, Ficuzza) provinces, this species appears widespread in Sicily although uncommon (Caldara *et al.* 2010).

Tychius (Tychius) junceus (Reich, 1797)

Chorotype – CAE

Host Plants – FAB (*Trifolium*)

Trophic category – MON

Notes. A quite common species all over Italy, although probably not so in Sicily. It was reported from Messina (Faro, Colla sub *T. femoralis* C.N.F. Brisout de Barneville, 1863) by Vitale (1893, 1900, 1908a), and from Palermo by Ragusa (1908).

Tychius (Tychius) laticollis Perris, 1864

Chorotype – MED

Host Plants – FAB

Trophic category – UNK

New records – **Catania**: Monte Etna, Linguaglossa, Catena, 26.IV.2000, Angelini F. (DLPC); **Ragusa**:

Acate, Museo Carrubo, 21.XII.2013, sifting *Olea*, Baviera C. and Bellò C. (CBPC); **Siracusa**: Sortino Valle Anapo, 01.XI.2010, sifting, Baviera C. and Bellò C. (RCPC); **Enna**: Agira, 325 m, sifting *Olea*, 18.III.2016, Baviera C. and Bellò C. (BCPC).

Notes. In Italy known only from Sicily, from where it was recorded since a long ago (Vitale 1900). Reported from Caltagirone (Madonna Via sub its synonym *T. parallelogrammus* Desbrochers des Loges, 1892) by Ragusa (1908) and from Palermo (Ficuzza: Ragusa (1926)). Reported from Palermo and from some localities of Siracusa province (Castelluccio, Melilli, Pachino, Iblei) by Caldara (1990).

Tychius (Tychius) lineatulus Stephens, 1831

Chorotype – EUM

Host Plants – FAB (*Trifolium*)

Trophic category – MON

Notes. An uncommon species in Italy, although known from almost all regions including Sicily (Palermo: Ragusa (1908)).

Tychius (Tychius) longicollis C.N.F. Brisout de Barneville, 1863

Chorotype – EUM

Host Plants – FAB (*Trifolium, Ononis*)

Trophic category – OLI

New records – **Palermo:** Ficuzza, 01.V.2000, Angelini F. (MSNF).

Notes. This species is known from the whole Italian regions (Caldara 1990). New record for Sicily.

Tychius (Tychius) medicaginis C.N.F. Brisout de Barneville, 1862

Chorotype – CAE

Host Plants – FAB (*Medicago*)

Trophic category – MON

Notes. A common species in northern and central Italy, but rare in the south. Specimens from Messina (Castanea) are preserved in the Vitale collection (Caldara *et al.* 2010).

Tychius (Tychius) meliloti Stephens, 1831

Chorotype – CAM

Host Plants – FAB (*Melilotus*)

Trophic category – MON

New records – **Messina:** Monti Peloritani, Monte Antennammare, 1133 m, 05.V.2004, Baviera C. (BCPC); Monti Nebrodi, Biviere di Cesaro, 1200 m, 03.VII.1999, Baviera C. (BCPC); **Siracusa:** Buscemi 2 km N, 790 m, 14.IV.2015, Krátký J. (KJPC); Pachino, Punta delle Formiche, sifting *Olea*, 09.XII.2014, Baviera C. and Bellò C. (BCPC); Palazzolo Acreide 5 km S, 520 m, 28.V.2019, Koštál M. (KMPC); **Caltanissetta:** Gela, Biviere, 05.IV.1994, Baviera C. (BCPC); Sughereta di Niscemi, 300 m, 02.III.2013, Baviera C. (BCPC); Gela 7 km N, 200 m, 29.V.2019, Koštál M. (KMPC); **Agrigento:** Palma di Montechiaro, sifting *Olea* and *Thymus*, 21.XII.2013, Baviera C. and Bellò C. (BCPC); ibid., 21.XII.2015, Baviera C. and Bellò C. (BCPC); **Palermo:** Monti Sicani, Bosco della Ficuzza, 26.V.2010, Diotti L. (DLPC); **Trapani:** RNO Saline di Trapani e Paceco, Salina “Vecchia”, 25.IV.2004, Baviera C. (BCPC); Castellammare del Golfo, RNO Zingaro, 23-24.IV.2003, Baviera C. (BCPC); Monte Inici-Monte Teleffio, 678m, sifting, 28.XI.2015, Baviera C. and Bellò C. (BCPC).

Notes. A common species in the whole of Italy, reported from Messina (Calamarà) by Vitale (1893, 1900, 1901, 1908a). Many specimens are in the Vitale collection from Messina (Calamarà, Faro Superiore, Gualtieri, Santo Stefano Medio, Rometta, Niceto) (Caldara *et al.* 2010). Reported from Palermo and Caltagirone by Ragusa (1908) and from Egadi islands (Favignana, Marettimo) by Osella (1973).

Tychius (Tychius) naxiae Faust, 1889

Chorotype – EEU

Host Plants – FAB (*Melilotus*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Montalbano Elicona, Bosco di Malabotta, sifting *Quercus*, 23.V.2006, Baviera C. (BCPC); **Ragusa**: Acate, Carrubo Museum, sifting *Olea*, 21.XII.2013, Baviera C. and Bellò C. (CBPC); **Caltanissetta**: Reisa, Trabia miniere, 10.V.2019, Diotti L. (DLPC); **Trapani**: RNO Saline di Trapani e Paceco, Salina “Vecchia”, 25.IV.2004, Baviera C. (BCPC); Castellammare, SS. 187, 25.III.2017, Colacurcio L. (FLPC).

Notes. This uncommon species was reported from several regions of southern Italy (Caldara 1990). A specimen from Calatabiano (Catania) is in the Vitale collection (Caldara *et al.* 2010). Known also from the islands of Lipari, Vulcano and Stromboli (Lo Cascio *et al.* 2006).

Tychius (Tychius) nigricollis Chevrolat, 1859

Chorotype – MED

Host Plants – FAB

Trophic category – UNK

New records – **Trapani**: Foce Fiume Belice, 29.IV.2000, Zoia S. (RCPC); Marausa, Tritoni, 16.IV.2015, Krátký J. (KJPC); Egadi, Favignana, 19.IV.2007, Baviera C. (BCPC).

Notes. In Italy this species is known only from Sicily (Caldara 1990) and reported by Vitale (1893, 1900). Ragusa (1908) quoted the species from Piazza Armerina and Caltagirone (Madonna Via). Some localities are also reported by Caldara (1990): Caltagirone (Catania), Palermo, mouth of the river Modione (Trapani).

Tychius (Tychius) ochraceus Tournier, 1847

Chorotype – CEM

Host Plants – FAB (*Trifolium*)

Trophic category – MON

Notes. Species only very recently reported for the first time in Italy upon a single specimen collected in Palermo province (Sicani, Palazzo Adriano) and preserved in the Vitale collection (Caldara *et al.* 2010).

Tychius (Tychius) picirostris (Fabricius, 1787)

Chorotype – PAL

Host Plants – FAB (*Trifolium*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Montalbano Elicona, Bosco di Malabotta, 29.X.2006, Baviera C. (BCPC); ibid., 04.II.2007, Baviera C. (BCPC); Monti Nebrodi, Monte Soro, 1800 m, 21.X.2006, Baviera C. (BCPC); ibid., 01.VII.2007, Baviera C. (BCPC); ibid., 25.IV.2008, Baviera C. and Rando A. (BCPC); Monte Soro, 1400 m, 08.III.2016, Colacurcio L. (FLPC); San Fratello, 1100 m,

13.X.2005, Baviera C. (BCPC); **Catania**: Monte Etna, eastern side, S. Alfio, Bosco Cerrita, 1500 m, 01.VII.2004, Baviera C. (BCPC); Monte Etna, northern side, Linguaglossa, Piano Provenzana, 1800 m, 10.VIII.1998, Baviera C. (BCPC); **Caltanissetta**: Mazzarino, 370 m, sifting *Olea*, 03.III.2013, Baviera C. and Bellò C. (BCPC); **Agrigento**: Vallone Zangara, 24.X.2006, Baviera C. (BCPC).

Notes. A very common Palaearctic species recorded from Sicily for the first time by Romano (1849) and later from Messina (Castanea) by Vitale (1906, 1908a) and from Monte Pellegrino (Palermo) by Ragusa (1926). In the Vitale collection there are specimens from (“Messina”, Niceto) (Caldara *et al.* 2010).

Tychius (Tychius) polylineatus (Germar, 1823)

Chorotype – EUM

Host Plants – FAB (*Trifolium*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Montalbano Elicona, Bosco di Malabotta, 12.XI.2005, Baviera C. (BCPC); Monte Scuderi, 1200 m, 18.III.2005, Baviera C. (BCPC); Mandanici 1, 19.XII.2013, Baviera C. (BCPC); Monti Nebrodi, Biviere di Cesaro, 1200 m, 26.V.2004, Baviera C. (BCPC); *ibid.*, 27.V.2006, Baviera C. (BCPC); *ibid.*, 1.VI.2007, Baviera C. (BCPC); **Catania**: Monte Etna, northern side, Linguaglossa, Rifugio Brunek, 1300 m, 20.VI.2006, Baviera C. (BCPC); **Siracusa**: Sortino, 01.XI.2010, Baviera C. (BCPC).

Notes. A quite common species all over Italy. In Sicily reported from Messina and Ragusa by Vitale (1893, 1900, 1901, 1908a). Specimens from Siracusa (Avola) and Messina (Fondachelli) are in the Vitale collection (Caldara *et al.* 2010).

Tychius (Tychius) pusillus Germar, 1842

Chorotype – SEU

Host Plants – FAB (*Trifolium*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Salice, 380 m, sifting *Quercus*, 22.III.2008, Baviera C. (BCPC); Monforte San Giorgio, 340 m, 06.II.2011, Baviera C. (BCPC); Monti Nebrodi, Reitano, 150 m, sifting *Olea*, 08.III.2009, Baviera C. and Bellò C. (BCPC); Biviere di Cesaro, 11.VIII.1998, Baviera C. (BCPC); Catania: Castiglione di Sicilia, Cuba Bizantina, Fiume Alcantara, 19.IV.2010, Baviera C. (BCPC); Mazzarrone, sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); **Ragusa**: Acate, Museo del Carrubo, sifting *Olea*, 21.XII.2013, Baviera C. and Bellò C. (BCPC); **Siracusa**: Chiaramonte Gulfi, 395 m, 19.III.2016, Baviera C. (BCPC); **Enna**: Monti Ere, Monte Altesina, 738 m, sifting *Olea*, 27.XI.2015, Baviera C. and Bellò C. (BCPC); **Caltanissetta**: Gela, Torre di Manfria, 02.III.2013, sifting, Baviera C. and Bellò C. (BCPC); **Palermo**: Terrasini, 30.I.2011, Baviera C. and Bellò C. (BCPC); Partinico, 09.III.2014, Baviera C. and Bellò C. (BCPC); San Martino delle Scale, 480 m, 03.IV.2013, Paladini A. (PAPC); Monti Sicani, Portella della Ginestra, 800 m, sifting, 25.IV.2008, Baviera C. and Bellò C. (BCPC); Bosco della Ficuzza, 04.V.2000, Angelini F. (DLPC); Palazzo Adriano, 22.XII.2013 (CBPC); Madonie, Piano Battaglietta, 1600 m, 16.V.2008, Baviera C. and Rando A. (BCPC); Piano Zucchi, 24.IX.2010, sifting *Quercus*, Baviera C. (BCPC); *ibid.*, 27.IX.2016, Baviera C. (BCPC); La Liccia, 27.IX.2016, Baviera C. (BCPC); **Trapani**: Alcamo, Pizzo Montelongo, 300 m, sifting *Olea*, Bellò C. and Baviera C. (BCPC); Egadi, Marettimo, 22.X.2006, Baviera C. (BCPC).

Notes. Common species in the whole Sicily (Roberto Caldara, pers. obs.). Reported from Messina by Vitale (1901, 1908a), from Palermo by Ragusa (1908) and from Messina (San Fratello, Portella Femmina Morta) and from Siracusa (Lentini) by Caldara (1975).

Tychius (Tychius) quinquepunctatus (Linnaeus, 1758)

Chorotype – PAL

Host Plants – FAB (*Lathyrus, Pisum*)

Trophic category – OLI

New records – **Messina**: Monti Peloritani, Pizzo Chiarino, 600 m, 06.VI.2004, Baviera C. (BCPC); **Catania**: Monte Etna, southern side, Adrano, Osservatorio, 1400 m, 12.VI.2011, Baviera C. (BCPC); **Ragusa**: Monti Iblei, Giarratana, Santuario Santa Rosalia, 15.IV.2010, sifting *Olea*, Bellò C. and Baviera C. (BCPC); **Palermo**: Monti Sicani, Bosco della Ficuzza, 29.V.2007, sifting *Quercus*, Baviera C. and Bellò C. (BCPC); 26.V.2010, Diotti L. (DLPC); Madonie, Piano Battaglietta, 1600 m, 24.IV.2008, Baviera C. and Rando A. (BCPC); ibid., 23.IX.2010, Baviera C. and Bellò C. (BCPC); Isnello, Piano Battaglia, 06.IV.2013, 1600 m, Paladini A. (PAPC).

Notes. A common and widespread species in Sicily as well as throughout Italy, recorded from Messina (Calvaruso, Cavaliere) by Vitale (1906, 1908a) and from Ficuzza and Piazza Armerina by Ragusa (1908). Reported from Ficuzza also by Stejskal (2004).

**Tychius (Tychius) rufipennis* C.N.F. Brisout de Barneville, 1862

Chorotype – EUM

Host Plants – FAB (*Melilotus, Trifolium*)

Trophic category – OLI

Notes. This is an uncommon species in Italy, mainly recorded from southern regions. We do not know detailed data for Sicily.

Tychius (Tychius) schneideri (Herbst, 1795)

Chorotype – EUR

Host Plants – FAB (*Anthyllis*)

Trophic category – OLI

New records – **Messina**: Monti Peloritani, Castroreale, Piano Margi, 29.II.2014, Baviera C. (BCPC); Monti Nebrodi, Floresta 6 km SE, 30.V.2019, Košťál M. (KMPC); **Ragusa**: Lago di Santa Rosalia, 08.V.2019, Diotti L. (DLPC); **Siracusa**: Palazzolo Acreide 5 km S, 520 m, 28.V.2019, Košťál M. (KMPC); **Agrigento**: Monti Sicani, Monte Cammarata, 1000 m, 27.V.2007, Baviera C. and Bellò C. (BCPC); **Palermo**: Madonie, Polizzi Generosa, 1400 m, sifting *Fagus*, 26.X.2006, Baviera C. (BCPC); 24.IX.2010, Baviera C. and Bellò C. (BCPC); **Trapani**: Castellammare del Golfo, Monte Inici-Monte Teleffio, 678 m, sifting, 28.XI.2015, Baviera C. and Bellò C. (BCPC).

Notes. This species, widespread in Italy, was recorded from Sicily by De Bertolini (1872), Tournier (1873), Vitale (1893, 1900), Ragusa (1908), and Vitale (1932).

Tychius (Tychius) seriepilosus Tournier, 1874

Chorotype – MED

Host Plants – FAB

Trophic category – UNK

Notes. This uncommon species is widely distributed in North Africa and Middle East (Caldara 1990). In Italy it is known only from Lampedusa (Osella and Riti 1995).

Tychius (Tychius) siculus Boheman, 1843

Chorotype – NAF

Host Plants – FAB

Trophic category – UNK

Notes. This rare species, known from the Iberian Peninsula and North Africa, was described upon specimens collected in Sicily without more detailed indications. Reported from Messina (Rodia and Tremonti) by Vitale (1893, 1908a). Caldara (1990) examined a specimen from Palermo.

Tychius (Tychius) squamulatus Gyllenhal, 1836

Chorotype – EUM

Host Plants – FAB (*Lotus*)

Trophic category – MON

Notes. Recorded from Messina (San Pier Niceto: Passo Badia, Scala, Castanea) by Vitale (1893, 1900, 1901, 1908a) and from Palermo by Ragusa (1908) sub the misidentified name of *T. flavicollis* Stephens, 1831 which is actually a synonym of *T. junceus* (Reich, 1797). A specimen from Messina is preserved in the Vitale collection (Caldara *et al.* 2010).

Tychius (Tychius) stephensi Schoenherr, 1836

Chorotype – WPA

Host Plants – FAB (*Trifolium*)

Trophic category – MON

New records – **Messina:** Monti Peloritani, Massa San Giovanni, 05.IV.1998, Baviera C. (BCPC); Monte Antennammare, 1133 m, 27.VI.1997, Baviera C. (BCPC).

Notes. A very common species all over Italy which seem to be rare in Sicily. Recorded from Palermo, Lentini and Siracusa by Ragusa (1908), and from Messina in Vitale's catalogues (Vitale 1893, 1900) sub its synonym *T. tomentosus* (Herbst, 1795), a primary homonym. Under this name it is considered uncommon in Castanea and Passo Badia (Messina, San Pier Niceto) by Vitale (1908a).

Tychius (Tychius) striatulus Gyllenhal, 1836

Chorotype – EUM

Host Plants – FAB (*Ononis*)

Trophic category – MON

New records – **Siracusa**: Cava d’Ispica, on *Ononis*, 23.IV.2016, Casalini R. (BCPC); Monti Iblei, Sortino, Santa Sofia, 26.IV.2016, Casalini R. (CSPC); **Caltanissetta**: Gela, Biviere, 05.IV.1994, Baviera C. (BCPC); ibid., 29-30.V.2006, Baviera C. (BCPC); Gela, I Macconi, 14.V.1996, Angelini F. (MSNF); Gela, Torre di Manfria, 02.III.2013, sifting, Baviera C. and Bellò C. (BCPC); Monti Erei, Niscemi, sifting *Olea*, 04.III.2012, Bellò C. (BCPC); Niscemi 9 km SE, 180 m, on *Ononis* sp., 29.V.2019, Košťál M. (KMP).

Notes. A quite common species all over Italy was reported by Vitale (1893, 1900) from many localities and sub its synonym *T. decoratus* Rosenhauer, 1856 var. *bellus* Kirsch, 1870 from Messina. Indicated from Messina (Savoca) also by Vitale (1908a).

Tychius (Tychius) thoracicus Boheman, 1843

Chorotype – EEU

Host Plants – FAB (*Vicia*)

Trophic category – MON

New records – **Messina**: Acqualorto, 600 m, sifting, 11.III.2015, Baviera C. (BCPC); Torre Faro, Contrada Granatari, 10.IV.1993, Baviera C. (BCPC); **Catania**: Monti Erei, Bosco di Santo Pietro, sifting *Quercus*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); **Ragusa**: Monti Iblei, Giarratana, 500 m, 04.V.2010, Baviera C. and Bellò C. (BCPC); **Siracusa**: Pachino, sifting *Olea*, 2.XI.2010, Baviera C. and Bellò C. (BCPC); Lentini, on citrus fruits, 08.VI.2000, ISA (BCPC); Monti Iblei, Buscemi, 07.VI.1986, Pierotti H. (RCPC); **Enna**: Piazza Armerina, sifting *Quercus*, 19.III.2010, Baviera C. (BCPC); Caltanissetta: Monti Erei, Niscemi, sifting *Olea*, 03.III.2012, Bellò C. (BCPC); **Agrigento**: S. Angelo Muxaro, 120 m, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Favara, 375 m, sifting *Olea*, 11.XII.2014, Baviera C. and Bellò C. (BCPC); Palma di Montechiaro, sifting *Olea* and *Thymus*, 21.XII.2013, Baviera C. and Bellò C. (BCPC); **Palermo**: San Mauro di Castelverde, Ogliastro, sifting *Olea*, 31.V.2007, Baviera C. and Bellò C. (BCPC); Madonie, Piano Zucchi 1100 m, sifting *Quercus*, 19.VII.2006, Baviera C. and Bellò C. (BCPC); Polizzi Generosa, 27.V.2010, Diotti L. (DLPC); Monti Sicani, Bosco della Ficuzza, sifting *Quercus*, 07.I.2007, Baviera C. and Bellò C. (BCPC); ibid., 26.V.2010, Diotti L. (DLPC); Portella della Ginestra, 800 m, sifting, 08.III.2009, Baviera C. and Bellò C. (BCPC); road Campogrande-Roccamena, 09.III.2014, Bellò C. (BCPC); **Trapani**: Monti Sicani, Santa Ninfa, sifting *Olea*, 27.IX.2009, Baviera C. and Bellò C. (BCPC); Castellammare del Golfo, crossroad for Terme Segestane, sifting *Olea*, 10.III.2009, Baviera C. and Bellò C. (BCPC); Alcamo, Monte Bonifato, 16.III.2008, Bellò C. (BCPC); Castelvetrano, 11.III.1993, Sabella G. (DLPC); Calatafimi, 23.V.2010, Diotti L. (DLPC).

Notes. A quite common species in southern Italy. Known since a long time from Sicily (Vitale 1893, 1900; Ragusa 1908). Reported from Messina (Fiumedinisi, Taormina), Siracusa (Lentini), Palermo (Madonie, Ficuzza), Catania (Nicolosi) and Ragusa (Pachino) by Caldara (1990).

Tychius (Tychius) tibialis Boheman, 1843

Chorotype – TEM

Host Plants – FAB (*Trifolium*)

Trophic category – MON

New records – **Messina**: Monti Peloritani, Montalbano Elicona, Bosco di Malabotta, 23.V.2006, Baviera C. (BCPC); ibid., 04.II.2007, Baviera C. (BCPC); ibid., 03.VII.2014, Baviera C. (BCPC); Monte Scuderi, 1100 m, 22.V.2004, Baviera C. (BCPC); ibid., 16.VII.2006, Baviera C. (BCPC); Monti Nebrodi, Floresta. 6 km SE, 1200 m, 30.V.2019, Košt’ál M. (KMPC); Monti Nebrodi, Biviere di Cesaro, 1200 m, 14.V.2004, Baviera C. (BCPC); ibid., 26.V.2004, Baviera C. (BCPC); ibid., 19.VIII.2006, Baviera C. (BCPC); Floresta, 1088 m, 21.VII.2010, Baviera C. (BCPC); San Fratello, 1300 m, sifting *Quercus ilex*, 27.XI.2005, Baviera C. (BCPC); Portella Femmina Morta, 31.V.2007, Diotti L. (DLPC); Reitano, 150 m, sifting *Olea*, 25.IV.2008, Baviera C. and Bellò C. (BCPC); **Catania**: Mazzarrone, sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); Monte Etna, northern side, Linguaglossa, 900 m, 22.IV.2000, Baviera C. (BCPC); ibid., Rifugio Brunek, 1300 m, 24.VI.2004, Baviera C. (BCPC); ibid., 20.VI.2006, Baviera C. (BCPC); **Ragusa**: Acate, Museo del Carrubo, sifting *Olea*, 21.XII.2013, Baviera C. and Bellò C. (BCPC); **Siracusa**: Monti Iblei, Buccheri, 28.V.2010, Baviera C. (BCPC); Vendicari, sifting *Olea*, 20 m, 01.III.2013, Baviera C. and Bellò C. (BCPC); **Enna**: Nissoria, 17.III.2016, Baviera C. and Bellò C. (BCPC); **Agrigento**: Monti Sicani, Monte Cammarata, 1000 m, 25.X.2006, Baviera C. and Bellò C. (BCPC); Monte Carcaci, 850 m, sifting *Quercus*, Baviera C. and Bellò C. (BCPC); Caltabellotta, 673 m, sifting *Olea* and *Quercus*, 26.XI.2009, Baviera C. and Bellò C. (BCPC); S. Angelo Muxaro, 23.III.2017, Colacurcio L. (FLPC); Bivona, sifting *Olea*, 10.XII.2014, Baviera C. and Bellò C. (BCPC); **Palermo**: Monti Sicani, Ficuzza, Alpe Cucco, 950 m, sifting, 29.V.2007, Baviera C. and Bellò C. (BCPC); ibid., 04.IV.2011, Baviera C. and Bellò C. (BCPC); ibid., 26.V.2010, Diotti L. (DLPC); road Corleone-Bisacquino, 18.III.2017, Baviera C. and Bellò C. (BCPC); Palazzo Adriano, 800 m, sifting *Olea*, 12.III.2009, Baviera C. (BCPC); ibid., 27-29.V.2007, Baviera C. and Bellò C. (BCPC); Madonie, Piano Battaglietta, 1600 m, 24.IV.2008, Baviera C. and Rando A. (BCPC); ibid., 16.V.2008, Baviera C. and Rando A. (BCPC); Polizzi Generosa, 27.V.2010, Diotti L. (DLPC); Petralia Sottane, 29.V.2007, Diotti L. (DLPC); Isnello, Piano Zucchi, 1100 m, 17.VII.2016, Baviera C. (BCPC); Pizzo Carbonara, 1750 m, sifting *Fagus*, 27.IX.2016, Baviera C. (BCPC); Castelbuono, Piano Sempria, Balzo del Gatto, 27.IX.2016, Baviera C. (BCPC); **Trapani**: Castellammare del Golfo, RNO Zingaro, 23-24.IV.2003, Baviera C. (BCPC); Monte Inici, 736 m, sifting, 29.XI.2015, Baviera C. and Bellò C. (BCPC); Egadi, Favignana, Monte S. Caterina, 100 m, 06.XI.2010, Bellò C. (BCPC).

Notes. A common species indicated from the whole isle by Ragusa (1908) and from Messina (Catarratti, Scala, Linata) by Vitale (1893, 1900, 1901, 1908a) also under its synonym *T. comptus* Tournier, 1874. Known in addition from Egadi islands (Favignana) by Osella (1973), and recently reported from Ficuzza by Stejskal (2004).

Tychius (Tychius) trivialis Boheman, 1843

Chorotype – PAL

Host Plants – FAB (*Astragalus*)

Trophic category – MON

Notes. A rare species known from Italy from a few localities of northern (Piedmont), central and southern (Apulia) Italy (Caldara 1990). Reported from Sicily only recently upon a single specimen collected at Palermo (Ficuzza) and preserved in the Vitale collection (Caldara *et al.* 2010).

Species to be excluded from the Sicilian fauna

Acalyptus sericeus Gyllenhal, 1836

Chorotype – SIE

Host Plants – SAL (*Salix*)

Trophic category – MON

Notes. This species is rare in Italy, where is known from the northern regions. Ragusa (1907b) considered this taxon erroneously indicated as occurring in Sicily by Romano (1849) and Vitale (1900). We also think that its presence in Sicily is unlikely. As above mentioned, also detailed data on *A. carpini* in Sicily are missing.

Cionus schoenherri C.N.F. Brisout de Barneville, 1863

Chorotype – WME

Host Plants – SCR (*Scrophularia*)

Trophic category – MON

Notes. Reported from Sicily by Abbazzi and Maggini (2009) apparently for the first time without detailed localities. We did not find the source of this datum, which therefore must be confirmed.

Geranorrhinus pusillus (Motschulsky, 1851)

Chorotype – NAF

Host Plants – TAM (*Tamarix*)

Trophic category – MON

Notes. This species is known from North Africa, Middle East, the Caucasus and central Asia. Even if reported from Sicily by all recent checklists of the Italian Curculionoidea, we found no data on the presence of the species in Sicily.

Cleopomiarus longirostris (Gyllenhal, 1838)

Chorotype – SEU

Host Plants – CAM (*Campanula*)

Trophic category – MON

Notes. This species, which is relatively common in northern and central Italy, is reported with doubt from Sicily by Abbazzi and Maggini (2009). During their revision of the Palaearctic *Cleopomiarus*, Caldara and Legalov (2016) did not find specimens from southern Italy and Sicily.

Gymnetron veronicae (Germar, 1821)

Chorotype – EUR

Host Plants – SCR (*Veronica*)

Trophic category – MON

Notes. The presence of the species in Sicily, noted by Vitale (1940), needs to be confirmed. Caldara (2008) examined specimens from the whole peninsular Italy but not from Sardinia and Sicily. Perhaps the specimens from Sicily identified as *G. veronicae* actually belong to the above mentioned closely related taxon *G. niloticum*.

Mecinus heydenii Wencker, 1866

Chorotype – CEU

Host Plants – PLA (*Linaria*)

Trophic category – MON

Notes. This species, firstly recorded from Sicily by Vitale (1908b), is actually replaced in the isle by *M. raphaelis*, a species recently described from Mount Etna (Toševski *et al.* 2014).

Mecinus janthinus (Germar, 1817)

Chorotype – ASE

Host Plants – PLA (*Linaria*)

Trophic category – MON

Notes. This species lives exclusively on *Linaria vulgaris* Mill., an Eurasian species which seems to be very rare in Sicily (Raimondo and Bazan 2007). Toševski *et al.* (2011) reported that *M. janthinus* is replaced in Sicily by the closely related *M. kaemmereri* feeding on *L. purpurea* (L.) Mill.

Rhinusa lanigera (H. Brisout de Barneville, 1863)

Chorotype – WME

Host Plants – PLA (*Linaria*)

Trophic category – MON

Notes. We agree with Vitale (1904b) in believing that *R. lanigera* does not occur in Sicily. In our opinion this species needs to be excluded from the Italian fauna in contradiction with data reported in the recent checklists of the Italian weevils (Abbazzi and Maggini 2009; Abbazzi and Zinetti 2013). It was probably confused with *R. griseohirta* (Roberto Caldara, pers. obs.).

Rhinusa vestita (Germar, 1821)

Chorotype – WME

Host Plants – PLA (*Antirrhinum*)

Trophic category – MON

Notes. This species does not occur in southern Italy where it is replaced by the closely related *R. depressa* (Roberto Caldara, pers. obs.).

Smicronyx (Smicronyx) scops Tournier, 1874

Chorotype – SEU

Host Plants – CON (*Cuscuta*)

Trophic category – MON

Notes. Currently the species is reported only from southern Russia (Alonso-Zarazaga *et al.* 2017). Therefore, its presence in Sicily is unreliable.

Orchestes (Orchestes) longulus (Schaufuss, 1862)

Chorotype – MED

Host Plants – UNK

Trophic category – UNK

Notes. This species was described from Greece and after its description it was treated by no author except by Porta (1932), who cited it from Sicily upon indication by Ragusa. This datum was reported in all the recent checklists of the Italian Curculionoidea. Actually, type specimen(s) of *O. longulus*, which should be in the Museum für Naturkunde in Berlin, are untraceable (Roberto Caldara pers. obs.), and consequently the taxonomic validity of this taxon and its relationships remain to be verified. The specimens identified as *Rhynchaenus longulus* in the Vitale collection belong to *O. pilosus* (Caldara *et al.* 2010).

Rhamphus kiesenwetteri Tournier, 1873

Chorotype – NAF

Host Plants – FAB (*Acacia*)

Trophic category – MON

Notes. This species was described from Sicily, and subsequently recorded also by Vitale (1900), but erroneously, since according to Peyerimhoff (1931) and Magnano *et al.* (2009) it lives only in northern Africa. No type specimens were found in the collection Tournier (Roberto Caldara, pers. obs.).

Orthochaetes setiger (Beck, 1817)

Chorotype – EUR

Host Plants – UNK

Trophic category – UNK

Notes. According to Osella and Zuppa (1996) this species, even if reported from Sicily by Luigioni (1929) and Porta (1932) and recently by Abbazzi and Maggini (2009), following Ragusa (1906b), must be excluded from the Sicilian fauna.

Sibinia (Dichotychius) reichei Tournier, 1873

Chorotype – MED

Host Plants – UNK

Trophic category – UNK

Notes. This species was described on specimens reported as collected from Calabria and Cyprus, the former examined by Caldara (1979). After its description it was not recollected in Europe. Specimens of this species from Sudan were the ones subsequently studied by Caldara (1989), sub its synonym *S. vitticollis* Marshall, 1942. Even if reported from Sicily by Abbazzi and Maggini (2009), there are no published data for the species, and also its presence in Calabria remains doubtful.

Tychius (Tychius) hueti Tournier, 1874

Chorotype – APP

Host Plants – UNK

Trophic category – UNK

Notes. Species reported from Sicily by Vitale (1900) based on information by Baudi. This species is known only on the lectotype apparently collected in Calabria (Caldara 1990). Its taxonomic validity as distinct from the closely related *T. parallelus*, and its presence in Sicily, must be confirmed by the study of other specimens.

Tychius (Tychius) parallelus (Panzer, 1794)

Chorotype – TEM

Host Plants – FAB (*Chamaecytisus*, *Cytisus*, *Genista*, *Spartium*, *Teline*, *Ulex*)

Trophic category – OLI

Notes. Recorded sub the misidentified name of *T. venustus* (Fabricius, 1781) from "Sicily" based upon Romano data by Vitale (1893, 1900) and sub *T. venustus* var. *genistae* Boheman, 1843 from Messina (Scodellaro) by Vitale (1900, 1901). Actually, the Fabrician species belongs to the genus *Hypera* Germar, 1817, and is currently named *Hypera (Hypera) venusta* (Fabricius, 1781). In the Vitale collection there are no specimens of *T. parallelus* (Caldara et al., 2010) and we were unable to examine material of this species from Sicily.

4. Conclusions and final remarks

In the last three decades four checklists of the Italian weevils were published by Abbazzi and Osella (1992), Abbazzi *et al.* (1995), Colonnelli (2003), and Abbazzi and Maggini (2009), this last updated by Abbazzi and Zinetti (2013). The Curculioninae reported from Sicily in these checklists were respectively 133, 156, 158, and 178 (plus other 4 in the updated list). Moreover, few others were cited as doubtful. The present one is the first reliable checklist of this subfamily in Sicily, with all the quoted specimens identified by the authors according to the most recent literature. A total of 167 Curculioninae are reported from Sicily with certainty, with several unpublished collection localities for many species. It is noteworthy that three of these species are only known from the Pelagie islands: *Smicronyx nebulosus*, *S. pauperculus* and *Tychius seriepilosus*. Five taxa – *Anthonomus conspersus*, *Bradybatus fallax*, *Dorytomus rubrirostris*, *Gymnetron stimulosum* and *Tychius longicollis* – are reported from Sicily for the first time. Detailed data about the following eight species already generically quoted as present in Sicily are given for the first time: *Anthonomus incurvus*, *A. ulmi*, *Bradybatus elongatus*, *Curculio propinquus*, *Derelomus subcostatus*, *Archarius troglodytes*, *Pachytychius discithorax*, and *Sibinia arenariae*. Among the taxa previously quoted for the island, we consider the presence of 15 species as doubtful and worthy of further verification. Moreover, on the basis of their distribution and misidentifications, we think that other 16 taxa were erroneously reported as occurring in Sicily. Members of this weevil subfamily in Sicily constitute about 08.6% of the Italian Curculionidae (Abbazzi and Maggini 2009; Abbazzi and Zinetti 2013) in the current meaning (Oberprieler *et al.* 2014). It is noteworthy that since 2013 new data on the Curculioninae of Sicily almost exclusively concerned the Mecinini, with the proposal of new synonymies (Caldara 2013) and new ecological observations of species collected on the Mount Etna at high altitude. These researches allowed the description of a new species, *Mecinus raphaelis* (Toševski *et al.* 2014, 2015), and probably another taxon close to *Rhinusa antirrhini* will be described soon (Ivo Toševski, pers. comm.). It is confirmed that 11 tribes of Curculioninae known from the peninsular Italy (Alonso-Zarazaga *et al.* 2017) have also representatives in Sicily. The presence of a twelfth tribe, the Acalyptini, is doubtful, whereas the Anoplini are missing. Finally, the genus *Ita* of the southern Palaearctic tribe Itini, is the only known from this isle in Europe. Among Curculioninae, 23 different chorotypes and endemic distribution types are represented in Sicily.

The 35% of the species, representing more than an half of the twenty total chorotypes, shows a widespread distribution in the Palaearctic Region (PAL s.l.), with an high European-Mediterranean (EUM) component. The Mediterranean ones (MED s.l.) are represented by only four chorotypes, with MED and WME components, each with 16% of species (26 species). The European component (EUR s.l. 26%) is also well represented with a high south European component (SEU, 16 species). Among the Sicilian Curculioninae, the species which show endemic distribution types (including neighbouring isles) amount to six upon the whole of 167 species (4%). It is noteworthy that only a single species, *Styphlus vidanoi*, is strictly endemic to Sicily (SICI), whereas *Tychius doderoi* is the only species endemic of Sicily and Sardinia (SISR). This poor number of endemisms in Sicily is not surprising since it is well known that Curculioninae are the best flyers among Curculionidae (see Figs. 1-2).

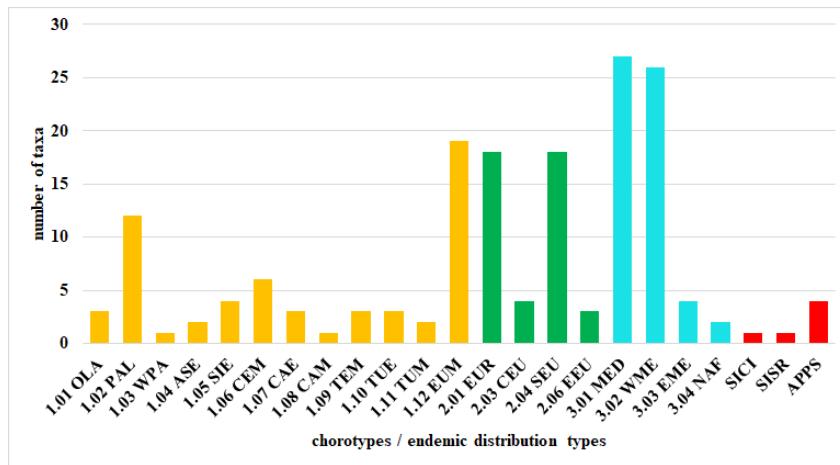


FIGURE 1. Number of Sicilian Curculioninae species/subspecies subdivided into chorotypes or endemic distribution types categories (see Sect. 2 for abbreviations)

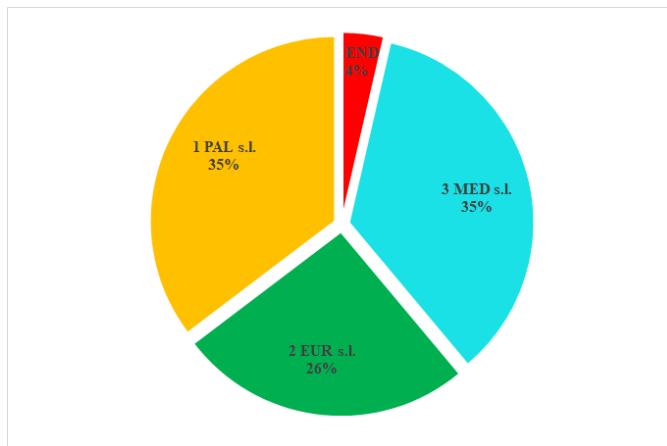


FIGURE 2. Percentage of Sicilian Curculioninae species/subspecies with chorotype and endemic distribution types categories (see Sect. 2 for abbreviations)

Although the Sicilian Curculioninae are associated with 21 different plant species, it is interesting to note that 50.3% of these species live on three plant families only: Fabaceae (25.15%), used as host plants mainly by Tychiini species; Plantaginaceae (14.37%), used by Mecinini species; and Scrophulariaceae (10.78%), used by Cionini and Mecinini (see Fig. 3). After analyzing the trophic categories, it emerges that the monophagous (MON) species represent about the 70% of the total while only 2% of species is polyphagous (POL) with only three species feeding on two botanical families: *Orchestes alni*, *O. hortorum*, and *Curculio propinquus*. The feeding habits of 12% of the species is still unknown (Fig. 4).

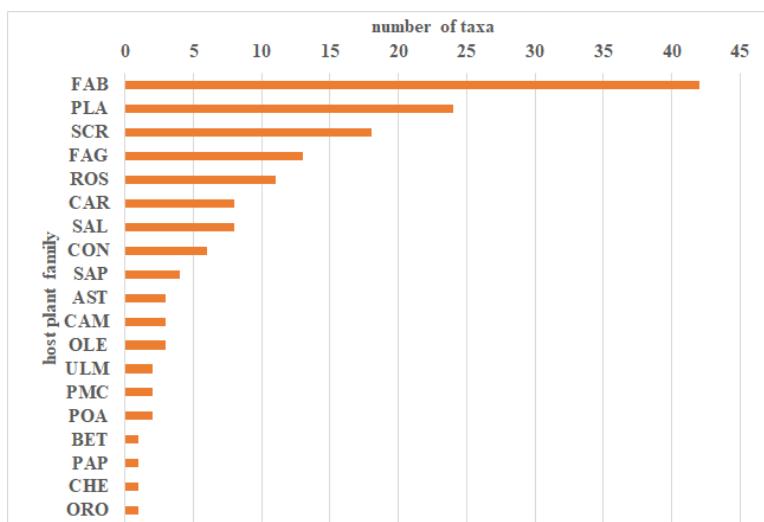


FIGURE 3. Number of Sicilian Curculioninae species/subspecies per host plant family (see Sect. 2 for abbreviations)

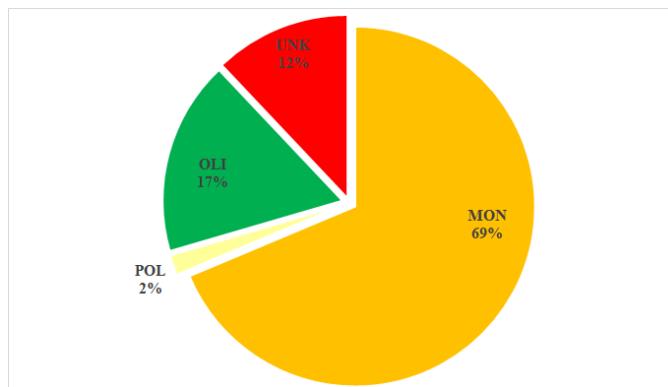


FIGURE 4. Percentages of Sicilian Curculioninae species/subspecies per trophic categories (see Sect. 2 for abbreviations)

Monophagous species feed on plants belonging to 19 of the 21 different plant families on which the Sicilian Curculioninae live (Fig. 5). Moreover, it is interesting to note that Curculioninae species in Sicily are associated with the main two plant families above reported used as host plants primarily by Mediterranean species: Fabaceae by MED and WME species and Plantaginaceae by MED and SEU species (see Fig. 6). The high number of the Curculioninae still doubtful for Sicily suggests that further more careful specialized collections are necessary, especially on the mountains where the most interesting species were found as the recent new data on the Mount Etna (Toševski *et al.* 2014, 2015) have demonstrated.

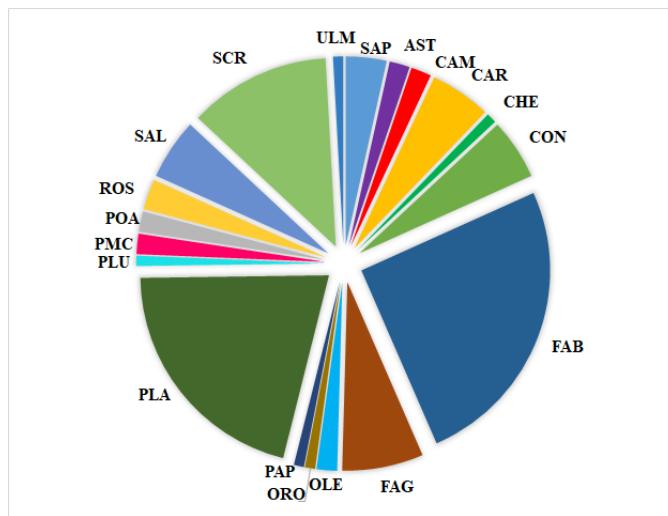


FIGURE 5. Number of Sicilian monophagous (MON) Curculioninae species/subspecies per host plant family (see Sect. 2 for abbreviations)

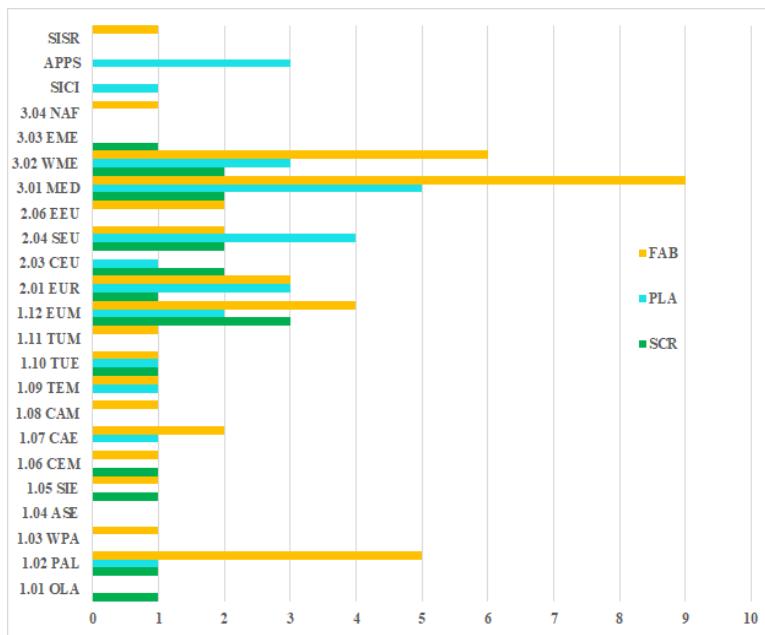


FIGURE 6. Number of Sicilian Curculioninae species per chorotype and most significant host plant families (see Sect. 2 for abbreviations)

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References

- Abbazzi, P., Colonnelli, E., Masutti, L., and Osella, G. (1995). “Coleoptera Polyphaga, XVI (Curculionoidea)”. In: *Checklist delle Specie della Fauna Italiana*. Ed. by A. Minelli, S. Ruffo, and S. La Posta. Bologna: Comitato italiano IUCN e Ministero dell’Ambiente e della Tutela del Territorio e del Mare. URL: <http://www.comitato.faunaitalia.it/docs/F61.docx>. (Fascicolo 61).
- Abbazzi, P. and Maggini, L. (2009). “Elenco sistematico-faunistico dei Curculionoidea italiani, Scolytidae e Platypodidae esclusi (Insecta, Coleoptera)”. *Aldrovandia* **5**, 29–216.
- Abbazzi, P. and Osella, G. (1992). “Elenco sistematico-faunistico degli Anthribidae, Rhinomaceridae, Attelabidae, Apionidae, Brentidae, Curculionidae italiani (Insecta, Coleoptera, Curculionoidea). I Parte”. *Redia* **75**, 267–414.
- Abbazzi, P. and Zinetti, F. (2013). “Elenco sistematico-faunistico dei Curculionoidea italiani, Scolytidae e Platypodidae esclusi (Insecta, Coleoptera). 2. Addenda e corrigenda”. *Memorie della Società Entomologica Italiana* **90**(2), 89–104. DOI: [10.4081/MemorieSEI.2013.89](https://doi.org/10.4081/MemorieSEI.2013.89).
- Alonso-Zarazaga, M. A., Barrios, H., Borovec, R., Bouchard, P., Caldara, R., Colonnelli, E., Gültekin, L., Hlaváč, P., Korotyaev, B., Lyal, C., A. M., Meregalli, M., Pierotti, H., Ren, L., Sánchez-Ruiz, M., Sforzi, A., Silfverberg, H., Skuhrovec, J., Trýzna, M., Velázquez de Castro, A., and Yunakov, N. N. (2017). *Cooperative Catalogue of Palaearctic Coleoptera Curculionoidea*. Ed. by M. A. Alonso-Zarazaga. Vol. 8. Monografías electrónicas S.E.A. Zaragoza, Spain: Sociedad Entomológica Aragonesa. 729 pages. URL: <http://sea-entomologia.org/monoelec.html>.
- Alonso-Zarazaga, M. A. and Lyal, C. H. C. (1999). *A World Catalogue of Families and Genera of Curculionoidea (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae)*. Barcelona, Spain: Entomopraxis S.C.P. 315 pages.
- Alonso-Zarazaga, M. A., Ugarte San Vicente, I., and Coello, P. (2009). “Nuevos datos sobre la distribución de *Sharpia rubida* (Rosenhauer, 1856) (Coleoptera, Curculionidae, Smicronychini)”. *Boletín Sociedad Entomológica Aragonesa* **44**, 573–574.
- APG IV – The Angiosperm Phylogeny Group (2016). “An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG IV”. *Botanical Journal of the Linnean Society* **181**(1), 1–20. DOI: [10.1111/boj.12385](https://doi.org/10.1111/boj.12385). (This paper was compiled by J. W. Byng, M. W. Chase, M. J. M. Christenhusz, M. F. Fay, W. S. Judd, D. J. Mabberley, A. N. Sennikov, D. E. Soltis, P. S. Soltis and P. F. Stevens, with contributions from other scientists).
- Baviera, C. (2004). “La collezione di Coleotteri di Francesco Vitale”. *Il Naturalista Siciliano*. 4th ser. **28**(1), 965–981. URL: http://www.sssn.it/PDF/PDF%20Nat.%20Sic.%202%202004/Baviera_965-982.pdf.
- Baviera, C. (2006). “Coleotteri nuovi o poco noti di Sicilia III (Carabidae, Histeridae, Cerambycidae, Chrysomelidae, Anobiidae, Bothrideridae, Tenebrionidae, Curculionidae, Scolytidae)”. *Il Naturalista Siciliano*. 4th ser. **30**(1), 21–28. URL: http://www.sssn.it/PDF/PDF%20Nat.Sic.%201%202006/Baviera_21-28.pdf.

- Baviera, C. (2007). "First record of *Gonioctena* (Coleoptera Chrysomelidae, Chrysomelinae) in Sicily, with the description of *Gonioctena theae* n. sp." *Italian Journal of Zoology* **74**(4), 389–393. DOI: [10.1080/11250000701650719](https://doi.org/10.1080/11250000701650719).
- Baviera, C. (2008). "Prima segnalazione del genere *Aesalus*, Fabricius, 1801 in Sicilia con descrizione di *Aesalus scarabaeoides siculus* n. ssp. (Coleoptera Lucanidae: Aesalinae)." *Revue Suisse de Zoologie* **115**(3), 585–592. DOI: [10.5962/bhl.part.80447](https://doi.org/10.5962/bhl.part.80447).
- Baviera, C. (2009). "Coleotteri nuovi o poco noti di Sicilia IV (Carabidae, Histeridae, Cholevidae, Elateridae, Cerambycidae et Raymondionymidae)". *Il Naturalista Siciliano*. 4th ser. **33**(1-2), 149–156. URL: <http://www.sssn.it/PDF/PDF%20NS%2033/149-156.pdf>.
- Baviera, C. (2010). "*Alaoocyba ientilei* n. sp. (Coleoptera: Curculionoidea, Raymondionymidae) dell'Isola di MARETTIMO (Isole Egadi, Sicilia)". *Revue Suisse de Zoologie* **117**(1), 11–16. DOI: [10.5962/bhl.part.117584](https://doi.org/10.5962/bhl.part.117584).
- Baviera, C. (2011). "Nuovi dati sulla biodiversità della Sicilia Nord-Orientale: la coleottero fauna endemica". *Biogeographia - The Journal of Integrative Biogeography* **30**(1), 449–465. DOI: <https://doi.org/10.21426/B630110590>.
- Baviera, C. (2015). "A review of the genus *Solariola* Flach, 1908 (Coleoptera: Curculionidae: Entiminae, Peritelini)." *Zootaxa* **3920**(3), 401–430. DOI: [10.11646/zootaxa.3920.3.1](https://doi.org/10.11646/zootaxa.3920.3.1).
- Baviera, C. and Audisio, P. (2014). "The Nitidulidae and Kateretidae (Coleoptera: Cucujoidea) of Sicily: recent records and updated checklist". *Atti della Accademia Peloritana dei Pericolanti. Classe di Scienze Fisiche, Matematiche e Naturali* **92**(2), A1 [32 pages]. DOI: [10.1478/AAPP.922A1](https://doi.org/10.1478/AAPP.922A1).
- Baviera, C., Bellavista, M., Altadonna, G., Turrisi, G. F., Bella, S., Muscarella, C., and Sparacio, I. (2017). "The Cerambycidae (Coleoptera: Chrysomeloidea) of Sicily: Recent records and updated checklist." *Atti della Accademia Peloritana dei Pericolanti. Classe di Scienze Fisiche, Matematiche e Naturali* **95**(1), A2 [79 pages]. DOI: [10.1478/AAPP.951A2](https://doi.org/10.1478/AAPP.951A2).
- Baviera, C. and Bellò, C. (2016). "The Peritelini (Coleoptera: Curculionidae, Entiminae) of the Vitale collection". *Atti della Accademia Peloritana dei Pericolanti. Classe di Scienze Fisiche, Matematiche e Naturali* **94**(1), A1 [10 pages]. DOI: [10.1478/AAPP.941A1](https://doi.org/10.1478/AAPP.941A1).
- Baviera, C. and Biondi, M. (2015). "The Alticinae (Coleoptera: Chrysomelidae, Galerucinae) of Sicily: recent records and updated checklist". *Atti della Accademia Peloritana dei Pericolanti. Classe di Scienze Fisiche, Matematiche e Naturali* **93**(2), A2 [50 pages]. DOI: [10.1478/AAPP.932A2](https://doi.org/10.1478/AAPP.932A2).
- Baviera, C. and Liberti, G. (2010). "Dasytidae of the Egadi Archipelago (Coleoptera, Cleroidea) with description of *Danacea hierena* n. sp." *Zootaxa* **2351**(1), 49–57. DOI: [10.11646/zootaxa.2351.1.5](https://doi.org/10.11646/zootaxa.2351.1.5).
- Baviera, C. and Magnano, L. (2010). "Contribution to the knowledge of the weevil subgenus *Aram-michnus* Gozis, genus *Otiorhynchus* Germar (Coleoptera, Curculionidae) from Sicily and the Sicilian islands." *Zootaxa* **2432**(1), 45–58. DOI: [10.11646/zootaxa.2432.1.2](https://doi.org/10.11646/zootaxa.2432.1.2).
- Baviera, C. and Platia, G. (2018). "The Elateridae (Coleoptera: Elateroidea) excl. Cebrionini and Drilini of Sicily: recent records and updated checklist". *Atti della Accademia Peloritana dei Pericolanti. Classe di Scienze Fisiche, Matematiche e Naturali* **96**(2), A1 [33 pages]. DOI: [10.1478/AAPP.962A1](https://doi.org/10.1478/AAPP.962A1).
- Baviera, C. and Sparacio, I. (2002). "Coleotteri nuovi o poco noti di Sicilia. II". *Il Naturalista Siciliano*. 4th ser. **26**(1-2), 79–94.
- Baviera, C. and Vienna, P. (2019). "The Histeridae (Coleoptera: Histeroidea) of Sicily: new records and updated checklist". *Atti della Accademia Peloritana dei Pericolanti. Classe di Scienze Fisiche, Matematiche e Naturali* **97**(2), A7 [34 pages]. DOI: [10.1478/AAPP.972A7](https://doi.org/10.1478/AAPP.972A7).
- Bellò, C. and Baviera, C. (2011). "On the Sicilian species of *Pseudomeira* Stierlin (Coleoptera: Curculionidae: Entiminae)". *Zootaxa* **3100**(1), 35–68. DOI: [10.11646/zootaxa.3100.1.2](https://doi.org/10.11646/zootaxa.3100.1.2).

- Bellò, C., Osella, G., and Baviera, C. (2017). "A taxonomic monograph of the genus *Dodomeira* Bellò & Baviera, a new genus of Peritelini from Sicily (Coleoptera: Curculionidae: Entiminae)". *Zootaxa* **4334**(1), 1–138. DOI: [10.11646/zootaxa.4334.1.1](https://doi.org/10.11646/zootaxa.4334.1.1).
- Bellò, C., Osella, G., and Baviera, C. (2019). "A taxonomic monograph of the genus *Solariola* Flach, 1908 (Coleoptera: Curculionidae: Entiminae)". *Zootaxa* **4676**(1), 1–261. DOI: [10.11646/zootaxa.4676.1.1](https://doi.org/10.11646/zootaxa.4676.1.1).
- Biondi, M. (1996). "Proposal for an ecological and zoogeographical categorization of the Mediterranean species of the flea beetle genus *Longitarsus* Berthold". In: *Chrysomelidae Biology*. Ed. by P. H. A. Joliet and M. L. Cox. Vol. 3. General Studies. Amsterdam, The Netherlands: SPB Academic Publishing, pp. 13–35.
- Biondi, M., Urbani, F., and D'Alessandro, P. (2013). "Endemism patterns in the Italian leaf beetle fauna (Coleoptera, Chrysomelidae)". *ZooKeys* **332**, 177–205. DOI: [10.3897/zookeys.332.5339](https://doi.org/10.3897/zookeys.332.5339).
- Borovec, R. and Osella, G. (1993). "Due nuove specie di *Trachyphloeus* Germar, 1817 di piccole isole italiane (Coleoptera, Curculionidae)". *Annali del Museo Civico di Storia Naturale di Genova* **89**, 401–413.
- Caldara, R. (1975). "Considerazioni su alcune specie del gruppo del *Tychius pusillus* Germar (VII Contributo alla conoscenza dei Coleoptera Curculionidae)". *Bollettino della Società Entomologica Italiana* **107**, 31–40.
- Caldara, R. (1978a). "I generi *Apeltarius* Desbrochers, *Xenotychius* Reitter e *Pseudolignyodes* Pic (Coleoptera Curculionidae)". *Bollettino della Società Entomologica Italiana* **110**, 23–34.
- Caldara, R. (1978b). "Revisione dei *Pachytychius* paleartici (Coleoptera Curculionidae)". *Memorie della Società Entomologica Italiana* **56**, 131–216.
- Caldara, R. (1979). "Revisione delle specie paleartiche di *Sibinia* vicine a *sodalis* Germar ed *exigua* Faust (Coleoptera Curculionidae)". *Memorie della Società Entomologica Italiana* **57**, 65–100.
- Caldara, R. (1985). "Revisione delle *Sibinia* paleartiche (Coleoptera Curculionidae)". *Memorie della Società Entomologica Italiana* **62/63** (1983/1984), 24–105.
- Caldara, R. (1989). "Revisione delle *Sibinia* della Regione Etiopica (Coleoptera Curculionidae)". *Giornale Italiano di Entomologia* **4**, 243–317.
- Caldara, R. (1990). "Revisione tassonomica delle specie paleartiche del genere *Tychius* Germar (Coleoptera Curculionidae)". *Memorie della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale di Milano* **25**, 51–218.
- Caldara, R. (2008). "On the taxonomy and nomenclature of some Mecinini (Coleoptera: Curculionidae, Curculioninae)". *Fragmenta Entomologica* **40**, 125–138.
- Caldara, R. (2013). "Curculionidae: Curculioninae". In: *Catalogue of Palaearctic Coleoptera. Curculionoidea II*. Ed. by I. Löbl and A. Smetana. Vol. 8. Leiden: Brill, pp. 51–56. DOI: [10.1163/9789004259164_009](https://doi.org/10.1163/9789004259164_009).
- Caldara, R. (2014). "Rhinusa Stephens: a taxonomic revision of the species belonging to the *R. tetra* and *R. bipustulata* groups (Coleoptera Curculionidae)". *Journal of Insect Biodiversity* **2**(19), 1–46. DOI: [10.12976/jib/2014.2.19](https://doi.org/10.12976/jib/2014.2.19).
- Caldara, R. and Angelini, F. (1997). "Su alcuni Curculionoidea nuovi per l'Italia o per varie regioni italiane". *Bollettino della Società Entomologica Italiana* **129**, 241–249.
- Caldara, R., Casalini, R., and Baviera, C. (2012). "Taxonomic and nomenclatural notes on the *Rhinusa tetra* (Fabricius) species complex (Coleoptera: Curculionidae)". *Zootaxa* **3329**(1), 31–40. DOI: [10.11646/zootaxa.3329.1.3](https://doi.org/10.11646/zootaxa.3329.1.3).
- Caldara, R. and Fogato, V. (2013). "Systematics of the weevil genus *Mecinus* Germar, 1821 (Coleoptera: Curculionidae.). I. Taxonomic treatment of the species". *Zootaxa* **3654**(1), 1–105. DOI: [10.11646/zootaxa.3654.1.1](https://doi.org/10.11646/zootaxa.3654.1.1).
- Caldara, R., Franz, N. M., and Oberprieler, R. G. (2014). "3.7.10. Curculioninae Latreille, 1802". In: *Coleoptera, Beetles. Morphology and Systematics (Phytophaga)*. Ed. by R. A. B. Leschen

- and R. Beutel. Vol. 3. *Handbook of Zoology: Arthropoda: Insecta*. Berlin/Boston: De Gruyter, pp. 589–628. DOI: [10.1515/9783110274462.423](https://doi.org/10.1515/9783110274462.423).
- Caldara, R. and Legalov, A. A. (2016). “Systematics of the Holarctic species of the weevil genus *Cleopomiarus* Pierce (Coleoptera Curculionidae)”. *Journal of Insect Biodiversity* **4**(6), 1–47. DOI: [10.12976/jib/2016.4.6](https://doi.org/10.12976/jib/2016.4.6).
- Caldara, R., Pesarini, C., Colonnelli, E., and Baviera, C. (2010). “V Contributo alla revisione della collezione coleotteroologica Francesco Vitale: Coleoptera Curculionoidea (Prima parte)”. *Memorie della Società Entomologica Italiana* **89**, 229–257. DOI: [10.4081/memorieSEI.2010.229](https://doi.org/10.4081/memorieSEI.2010.229).
- Caldara, R., Skuhrovec, J., Gosik, R., and Marvaldi, A. (2018). “On the affinities and systematic position of *Pachytychius* Jekel, a genus currently incertae sedis in Coleoptera, Curculionidae: Evidence from immature stages and the COI gene support its placement in Smicronychini”. *Zoologischer Anzeiger* **277**, 218–230. DOI: [10.1016/j.jcz.2018.08.007](https://doi.org/10.1016/j.jcz.2018.08.007).
- Casalini, R., Colonnelli, E., and Sacco, F. (2018). “*Tychius (Apeltarius) amplicollis* Aubé, 1850 in Central Italy with notes on its host plant and immature stages (Coleoptera, Curculionidae)”. *Gredleriana* **18**, 131–133. URL: https://www.zobodat.at/pdf/Gredleriana_018_0131-0133.pdf.
- Colonnelli, E. (2003). “A revised checklist of Italian Curculionoidea (Coleoptera)”. *Zootaxa* **337**(1), 1–142. DOI: [10.11646/zootaxa.337.1.1](https://doi.org/10.11646/zootaxa.337.1.1).
- De Bertolini, S. (1872). *Catalogo sinonimico e topografico dei coleotteri d'Italia*. Firenze: Tipografia Cenniniana. 263 pages. DOI: [10.5962/bhl.title.8783](https://doi.org/10.5962/bhl.title.8783).
- Dieckmann, L. (1968). “Revision der westpaläarktischen Anthonomini (Coleoptera: Curculionidae)”. *Beiträge zur Entomologie* **18**(3-4), 377–564. DOI: [10.21248/Contrib.entomol.18.3-4.377-564](https://doi.org/10.21248/Contrib.entomol.18.3-4.377-564).
- Diotti, L., Monzini, S., Tedeschi, M., and Caldara, R. (2017). “Nuove segnalazioni di Coleotteri Curculionoidea per l’isola di Lampedusa”. *Giornale Italiano di Entomologia* **14**, 703–708. URL: <http://giornaleitalianodientomologia.blogspot.com/2017/03/n-62-l-diotti-s-monzini-m-tedeschi-r.html>.
- Friedman, A. L. (2017). “The genus *Sharpia* Tournier in Israel (Coleoptera: Curculionidae, Curculioninae)”. *Israel Journal of Entomology* **47**, 159–172. URL: http://www.entomology.org.il/sites/default/files/pdfs/Friedman_2017_IJE_SharpiaIsrael.pdf.
- Goggi, G. (2004). “Indagine faunistica sui Coleotteri delle isole Pelagie (Sicilia)”. *Giornale Italiano di Entomologia* **11**, 127–143.
- Gompel, N., Piry, S., Desnouhes, L., Tan Ham, L., Yavercovski, N., Gauthier, P., Le Clainche, N., and Grillas, P. (2009). “*Cressa cretica* L. (Convolvulaceae), host-plant of the weevil *Sharpia rubida* (Rosenhauer, 1856) (Coleoptera, Curculionidae, Errirrhininae)”. *Biocosme Mésogén* **26**(3), 111–123.
- Hoffmann, A. (1954). “Coléoptères Curculionides (Deuxième Partie)”. In: *Faune de France*. Vol. 59. Paris: Lechevalier, pp. 487–1208. URL: [https://faunedefrance.org/bibliotheque/docs/A.%20Hoffmann%20\(FdeFr%2059\)%20Curcu%20vol%202.pdf](https://faunedefrance.org/bibliotheque/docs/A.%20Hoffmann%20(FdeFr%2059)%20Curcu%20vol%202.pdf).
- Hoffmann, A. (1958). “Coléoptères Curculionides (Troisième Partie)”. In: *Faune de France*. Vol. 62. Paris: Lechevalier, pp. 1209–1839. URL: [https://faunedefrance.org/bibliotheque/docs/A.%20Hoffmann%20\(FdeFr%2062\)%20Curcu%20vol%203.pdf](https://faunedefrance.org/bibliotheque/docs/A.%20Hoffmann%20(FdeFr%2062)%20Curcu%20vol%203.pdf).
- Jelínek, J., Audisio, P., Hájek, J., Baviera, C., Moncoutier, B., Barnouin, T., Brustel, H., Genç, H., and Leschen, R. A. B. (2016). “*Epuraea imperialis* (Reitter, 1877). New invasive species of Nitidulidae (Coleoptera) in Europe, with a checklist of sap beetles introduced to Europe and Mediterranean areas”. *Atti della Accademia Peloritana dei Pericolanti. Classe di Scienze Fisiche, Matematiche e Naturali* **94**(2), A4 [24 pages]. DOI: [10.1478/AAPP.942A4](https://doi.org/10.1478/AAPP.942A4).
- Lo Cascio, P., Cecchi, B., Abbazzi, P., and Arnone, M. (2006). “A contribution to the knowledge of the Coleoptera of the Aeolian Islands (Insecta Coleoptera)”. *Il Naturalista Siciliano*. 4th ser. **30**(2), 315–341. URL: http://www.sssn.it/PDF/PDF%20Nat.%20Sic.%202%202006/Lo%20Cascioetalii_315-341.pdf.

- Luigioni, P. (1929). "I coleotteri d'Italia. Catalogo sinonimico topografico bibliografico". *Memorie della Pontificia Accademia delle Scienze. Nuovi Lincei*. 2nd ser. **13**, 1–1160.
- Magnano, L., Colonnelli, E., and Caldara, R. (2009). "Order Coleoptera, superfamily Curculionoidea. Families Anthribidae, Brentidae, Apionidae, Nanophyidae, Curculionidae and Dryophthoridae". In: *Arthropod Fauna of the UAE*. Ed. by A. van Harten. Vol. 2, pp. 216–266.
- Magnano, L. and Osella, G. (1973). "La curculionidofaunadelle delle isole circum-siciliane: alcune osservazioni zoogeografiche". *Biogeographia – The Journal of Integrative Biogeography* **3**, 621–649. DOI: [10.21426/B63110072](https://doi.org/10.21426/B63110072).
- Magrini, P. and Baviera, C. (2011). "Note sulle *Typhloreicheia* (Holdhaus, 1924) siciliane del gruppo *praecox* con descrizione di una nuova specie (Coleoptera Carabidae: Scaritinae)". *Revue Suisse de Zoologie* **118**(2), 329–343. DOI: [10.5962/bhl.part.117813](https://doi.org/10.5962/bhl.part.117813).
- Meregalli, M. and Borovec, R. (2011). "Radiation in the halophytic coenoses of the Peri-Tethys: taxonomy and biogeography of the genus *Ita* (Coleoptera: Curculionidae)". *Journal of Natural History* **45**, 1331–1401. DOI: [10.1080/00222933.2011.557550](https://doi.org/10.1080/00222933.2011.557550).
- Mifsud, D. and Colonnelli, E. (2010). "The Curculionoidea of the Maltese Islands (Central Mediterranean) (Coleoptera)". *Bulletin of the Entomological Society of Malta* **3**, 55–143.
- O'Brien, C. W. and Wibmer, G. J. (1978). "Genera and species of Curculionidae (Coleoptera)". *Entomological News* **89**(2-3), 89–92.
- Oberprieler, R. G., Anderson, R. S., and Marvaldi, A. E. (2014). "3. Curculionoidea Latreille, 1802". In: *Coleoptera, Beetles, Morphology and Systematics (Phytophaga)*. Ed. by R. A. B. Leschen and R. G. Beutel. Berlin/Boston: De Gruyter, pp. 285–300.
- Oberprieler, R. G., Marvaldi, A. E., and Anderson, R. S. (2007). "Weevils, weevils, weevils everywhere". *Zootaxa* **1668**(1), 491–520. DOI: [10.11646/zootaxa.1668.1.24](https://doi.org/10.11646/zootaxa.1668.1.24).
- Osella, G. (1973). "I Curculionidi delle Isole Egadi (Coleoptera)". *Atti dell'Accademia Gioenia di Scienze Naturali in Catania*. 7th ser. **89**(2-3), 89–92.
- Osella, G. and Di Marco, C. (1996). "Nuovi Curculionoidea della fauna Siciliana (Coleoptera)". *Bollettino del Museo Civico di Storia Naturale di Verona* **20**(1), 345–370.
- Osella, G. and Riti, M. (1995). "Coleoptera Attelabidae, Apionidae, Brachyceridae e Curculionidae". *Il Naturalista Siciliano*. 4th ser. **19** (Suppl.): Arthropoda di Lampedusa, Linosa e Pantelleria (Canale di Sicilia, Mar Mediterraneo). Ed. by B. Massa, 597–665. URL: <http://www.sssn.it/PDF/PDF%20NS%202019suppl/19suppl.pdf#page=299>.
- Osella, G. and Zuppa, A. (1996). "Gli Orthochaetini italiani". *Memorie della Società Entomologica italiana* **72**(1), 277–309.
- Peyerimhoff, P. (1931). "Mission scientifique du Hoggar. Coléoptères". *Mémoires de la Société d'Histoire Naturelle de l'Afrique du Nord* **2**, 1–172.
- Pollini, A. (1998). *Manuale di entomologia applicata*. Ed. by A. Pollini. Bologna: Edagricole.
- Porta, A. (1932). *Fauna Coleopterorum Italica, 5. Rhynchophora - Lamellicornia*. Ed. by A. Porta. Piacenza: Stabilimento Tipografico Piacentino.
- Ragusa, E. (1906a). "Catalogo ragionato dei coleotteri di Sicilia (Cont.)" *Il Naturalista Siciliano* **19**, 22–48.
- Ragusa, E. (1906b). "Catalogo ragionato dei coleotteri di Sicilia (Cont.)" *Il Naturalista Siciliano* **19**, 104–112.
- Ragusa, E. (1907a). "Catalogo ragionato dei coleotteri di Sicilia (Cont.)" *Il Naturalista Siciliano* **19**, 256–280.
- Ragusa, E. (1907b). "Catalogo ragionato dei coleotteri di Sicilia (Cont.)" *Il Naturalista Siciliano* **20**, 63–65.
- Ragusa, E. (1908). "Catalogo ragionato dei coleotteri di Sicilia (Cont.)" *Il Naturalista Siciliano* **20**, 156–186.

- Ragusa, E. (1922). "Coleotteri nuovi o poco conosciuti della Sicilia". *Atti della Reale Accademia di Scienze, Lettere e Belle Arti di Palermo* **12**, 13–28.
- Ragusa, E. (1926). "Coleotteri nuovi o poco conosciuti della Sicilia (lavoro postumo)". *Il Naturalista Siciliano* **24**, 69–83.
- Raimondo, F. M. and Bazan, G. (2007). "First finding of *Linaria vulgaris* (Scrophulariaceae) in Sicily". *Flora Mediterranea* **17**, 287–289. URL: <http://www.herbmedit.org/flora/17-287.pdf>.
- Raimondo, F. M., Domina, G., and Spadaro, V. (2010). "Checklist of the vascular flora of Sicily". *Quaderni di Botanica Ambientale e Applicata* **21**, 189–252. URL: <http://www.quadernibotanicam bientaleappl.it/quaderni/21-189.pdf>.
- Reitter, E. (1895). "Uebersicht der mir bekannten Arten der Coleopteren-Gattung Balaninus Germ, aus Europa und den angrenzenden Ländern". *Wiener Entomologische Zeitung* **14**, 253–255. URL: <https://www.biodiversitylibrary.org/item/44375#page/7/mode/1up>.
- Romano, B. (1849). *Coleotteri della Sicilia raccolti e posseduti da Baldassare Romano*. Palermo: Tipografia di Francesco Lao. 28 pages.
- Silvestri, C. (2015). "Hazelnut (*Corylus avellana* L.) genetic resources and nursery industry improvement by biotechnological approaches". PhD thesis. Università degli Studi della Tuscia di Viterbo. URL: <https://pdfs.semanticscholar.org/d8a8/3324975c3eae2019928d6b1ac0b11a421541.pdf> (visited on 04/16/2020).
- Skuhrovec, J., Gosik, R., Caldara, R., and Košťál, M. (2015). "Immatures of Palaearctic species of the weevil genus *Sibinia* (Coleoptera, Curculionidae): new descriptions and new bionomic data with suggestions of their potential value in a phylogenetic reconstruction of the genus". *Zootaxa* **3955**(2), 151–187. DOI: [10.11646/zootaxa.3955.2.1](https://doi.org/10.11646/zootaxa.3955.2.1).
- Solano, E., Thomaes, A., Cox, K., Carpaneto, G. M., Cortellessa, S., Baviera, C., Bartolozzi, L., Zilioli, M., Casiraghi, M., Audisio, P., and Antonini, G. (2016). "When morphological identification meets genetic data: the case of *Lucanus cervus* and *L. tetraodon* (Coleoptera, Lucanidae)". *Journal of Zoological Systematics and Evolutionary Research* **54**(3), 197–205. DOI: [10.1111/jzs.12124](https://doi.org/10.1111/jzs.12124).
- Stejskal, R. (2004). "Weevils of Ficuzza nature reserve (Palermo province, Sicily): communities in oak forest stands and the first checklist (Coleoptera, Curculionoidea)". *Il Naturalista Siciliano*. 4th ser. **28**(3-4), 1177–1193. URL: http://www.ssn.it/PDF/PDF%20Nat.%20sic.%203-4%202004/Stejskal_1177-1194.pdf.
- Stroscio, S., Baviera, C., Frati, F., Lo Paro, G., and Nardi, F. (2011). "Deep genetic divergence in the darkling beetle *Pimelia rugulosa* Germar, 1824 (Coleoptera, Tenebrionidae) reflects Plio-Pleistocene paleogeographic history of Sicily". *Journal of Zoological Systematics and Evolutionary Research* **49**(3), 196–203. DOI: [10.1111/j.1439-0469.2011.00617.x](https://doi.org/10.1111/j.1439-0469.2011.00617.x).
- Thompson, R. (1992). "Observations on the morphology and classification of weevils with a key to the major groups". *Journal of Natural History* **26**(4), 835–891. DOI: [10.1080/00222939200770511](https://doi.org/10.1080/00222939200770511).
- Toševski, I., Caldara, R., Jović, J., Baviera, C., Hernández-Vera, G., Gassmann, A., and Emerson, B. C. (2014). "Revision of *Mecinus heydenii* species complex (Curculionidae): integrative taxonomy reveals multiple species exhibiting host specialization". *Zoologica Scripta* **43**(1), 34–51. DOI: [10.1111/zsc.12037](https://doi.org/10.1111/zsc.12037).
- Toševski, I., Caldara, R., Jović, J., Hernández-Vera, G., Baviera, C., Gassmann, A., and Emerson, B. C. (2015). "Host associated genetic divergence and taxonomy in the *Rhinusa pilosa* Gyllenhal species complex: an integrative approach". *Systematic Entomology* **40**(1), 268–287. DOI: [10.1111/syen.12109](https://doi.org/10.1111/syen.12109).
- Toševski, I., Caldara, R., Jović, J., Hernández-Vera, G., Baviera, C., Gassmann, A., and Emerson, B. C. (2011). "Morphological, molecular and biological evidence reveal two cryptic species in *Mecinus janthinus* Germar (Coleoptera, Curculionidae), a successful biological control agent of Dalmatian toadflax, *Linaria dalmatica* (Lamiales, Plantaginaceae)". *Systematic Entomology* **36**(4), 741–753. DOI: [10.1111/j.1365-3113.2011.00593.x](https://doi.org/10.1111/j.1365-3113.2011.00593.x).

- Tournier, H. (1873). "Curculionides nouveaux". *Mittheilungen der Schweizerischen entomologischen Gesellschaft* **4**(4), 170–191. URL: <https://www.e-periodica.ch/digbib/view?pid=seg-001:1872:4::191#191>.
- Vigna Taglianti, A., Audisio, P. A., Belfiore, C., Biondi, M., Bologna, M. A., Carpaneto, G. M., De Biase, A., De Felici, S., Piattella, E., Racheli, T., Zapparoli, M., and Zolia, S. (1992). "Riflessioni di gruppo sui corotipi fondamentali della fauna W-paleartica ed in particolare italiana". *Biogeographia – The Journal of Integrative Biogeography* **16**, 159–179. DOI: [10.21426/B616110375](https://doi.org/10.21426/B616110375).
- Vigna Taglianti, A., Audisio, P. A., Biondi, M., Bologna, M. A., Carpaneto, G. M., De Biase, A., Fattorini, S., Piattella, E., Sindaco, R., Venchi, A., and Zapparoli, M. (1999). "A proposal for a chorotype classification of the Near East Fauna, in the framework of the Western Palearctic region". *Biogeographia – The Journal of Integrative Biogeography* **20**, 31–59. DOI: [10.21426/B6110172](https://doi.org/10.21426/B6110172).
- Vitale, F. (1892a). "Catalogo sinonimico e topografico dei Curculionidi di Sicilia". *Il Naturalista Siciliano* **11**, 219–232, 272–279.
- Vitale, F. (1892b). "Catalogo sinonimico e topografico dei Curculionidi di Sicilia". *Il Naturalista Siciliano* **12**, 46–51, 64–68.
- Vitale, F. (1893). "Catalogo sinonimico e topografico dei Curculionidi di Sicilia". *Il Naturalista Siciliano* **12**, 82–90, 155–163.
- Vitale, F. (1900). "Rincofori siciliani. Catalogo generale sinonimico-topografico". *Atti e Rendiconti della Accademia Dafnica di Acireale* **7**, 1–52.
- Vitale, F. (1901). "I rincofori messinesi". *Atti della Reale Accademia Peloritana* **15**, 417–454. URL: <http://cab.unime.it/mus/5565/>. (Anno XV, 1900/1901 – Memorie della Classe I).
- Vitale, F. (1903a). "Gli Errirrhinini siciliani". *Rivista Coleotterologica Italiana* **1**, 110–123, 166–178.
- Vitale, F. (1903b). "Le somiglianze protettive dei Curculionidi". *Rivista Italiana di Scienze Naturali* **23**, 85–90.
- Vitale, F. (1903c). "Osservazioni su alcune specie di rincofori messinesi". *Rivista Italiana di Scienze Naturali* **23**, 1–2.
- Vitale, F. (1904a). "I Rincofori Siciliani. Catalogo Generale. Primo supplemento". *Atti e Rendiconti della Accademia Dafnica di Acireale* **10**, 1–10.
- Vitale, F. (1904b). "Note di corologia e di caccia". *Rivista Coleotterologica Italiana* **3**, 39–46.
- Vitale, F. (1905). "Osservazioni su alcune specie di rincofori messinesi. Nota III". *Rivista Italiana di Scienze Naturali* **25**, 53–69.
- Vitale, F. (1906). "Di alcune nuove forme specifiche di Curculonidi siciliani". *Atti della Reale Accademia Peloritana* **20**(2), 175–209. URL: <http://cab.unime.it/mus/5617/>. (Anno XX, 1905/1906).
- Vitale, F. (1908a). "I Coleotteri messinesi". *Bollettino del Naturalista, Siena* **28**, 51–55.
- Vitale, F. (1908b). "Osservazioni su alcune specie di rincofori messinesi". *Il Naturalista Siciliano* **20**(4–5), 73–82.
- Vitale, F. (1921). "Catalogo dei coleotteri di Sicilia". *Atti della Reale Accademia Peloritana* **29**, 1–43.
- Vitale, F. (1923). "L'Anthonomus ornatus Reic. del mandorlo". *Annali della Regia Stazione Sperimentale di Agrumicoltura e Frutticoltura* **7**.
- Vitale, F. (1932). "Coleotteri nuovi o poco noti di Sicilia". *Bollettino della Società Entomologica Italiana* **64**, 35–40.
- Vitale, F. (1934). "Coleotteri nuovi od ancora non citati di Sicilia". *Bollettino della Società Entomologica Italiana* **66**, 61–64.
- Vitale, F. (1940). "Nuovi acquisti per la fauna entomologica sicula". *Atti della Reale Accademia Peloritana. Classe di Scienze Fisiche, Matematiche e Biologiche* **42**, 170–183. URL: <http://cab.unime.it/mus/2131/>.

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