



## New records of Chalcidoidea (Hymenoptera) from the Maltese Islands with an updated checklist

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### Abstract

Thirty-three species of Chalcidoidea (Hymenoptera) are newly recorded from the Maltese Islands, of which, 19 include host data. An updated checklist for the 181 chalcidoid species recorded from Malta is also included, which belong to 17 families as follows: Agaonidae (3), Aphelinidae (21, 1 as new record), Azotidae (1), Chalcididae (8 species, 5 as new records), Encyrtidae (24, 1 as new record), Eulophidae (51, 16 are new records), Eupelmidae (9, 2 as new records), Eurytomidae (6, 1 as new record), Leucospidae (4), Megastigmidae (1), Mymaridae (2), Ormyridae (1), Perilampidae (1 new record), Pteromalidae (39, 5 as new records), Signiphoridae (2), Tetracampidae (1) and Torymidae (7, 1 as new record).

**Key words:** Malta, Agaonidae, Aphelinidae, Azotidae, Chalcididae, Encyrtidae, Eulophidae, Eupelmidae, Eurytomidae, Leucospidae, Megastigmidae, Mymaridae, Ormyridae, Perilampidae, Pteromalidae, Signiphoridae, Tetracampidae, Torymidae

### Introduction

The preliminary checklist of Chalcidoidea of the Maltese Islands published by Askew & Mifsud (2016) provided information on 147 species and included all previously published data on this group for the mentioned territory. Since then, two new species have been described from Malta, *Baryscapus ecbalii* Cassar, Askew & Mifsud (2018) (Eulophidae), which was previously reported as *Basyscapus* n. sp. by Askew & Mifsud (2016), and *Rhaphitelus mathildae* Askew & Mifsud (2018) (Pteromalidae). In this latter publication, the identity of *Rhaphitelus maculatus* Walker, 1834, which was previously reported from Malta by Mifsud *et al.* (2012), was also confirmed.

Additional material of Chalcidoidea was recently available for study and the list which follows provides additional data on both some previously reported species and on 33 new records (marked by an asterisk (\*) for convenience). Host data is included for most of the new records in Eulophidae (mainly micro-Lepidoptera), but also for some other species. Some previous records (Askew & Mifsud, 2018) were re-examined and it was found that *Anisopteromalus* sp. was previously misidentified as *Cyrtoptyx latipes* (Rondani, 1874), *Hockeria* sp. near *susterae* Bouček, 1951 and *Dibrachys microgastri* (Bouché, 1834) were previously reported only at generic level; and *Neanastatus africanus* Ferrière, 1938 was previously misidentified as *N. turneri* Ferrière, 1938.

Family classification follows Askew & Mifsud (2016) except Megastigminae which is treated as a family following Janšta *et al.* (2018). Appendix I provides an updated checklist for the 181 species of Chalcidoidea currently reported from the Maltese archipelago. In both the annotated species list and Appendix I, families and species therein are arranged alphabetically. Unless otherwise stated all material is dry-mounted and housed in the private collection of one of the authors (DM). Additional material is housed in the private collection of Richard Askew (RAC) and in the Natural History Museum in London, UK (BMNH).

## Annotated species list

### Aphelinidae Thomson, 1876

#### *Encarsia* sp. near *protransvena* Viggiani, 1985\*

**Material examined.** MALTA, 15.x.2016/24.x.2017, Msida, numerous ♂♂ & ♀♀, emerged from ? *Dialeurodes* sp., on *Ficus benjamina*, leg. D. Mifsud (BMNH).

#### *Marietta leopardina* Motschulsky, 1863

**Material examined.** MALTA, 24.x.2017, Msida, numerous ♂♂ & ♀♀, emerged from unidentified scale insect on *Ficus benjamina*, leg. D. Mifsud (BMNH).

### Chalcididae Latreille, 1817

#### *Brachymeria minuta* (Linnaeus, 1767)\*

**Material examined.** MALTA, St. Thomas Bay, Tal-Munxar, 30.iv.2016, 1 ex., beating capper bush, leg. D. Mifsud.

#### *Brachymeria podagrica* (Fabricius, 1787)\*

**Material examined.** MALTA, Salina, 11.vii.2002, 1♀, leg. D. Mifsud.

#### *Chirocera pectinicornis* (Latreille, 1809)\*

**Material examined.** MALTA, Buskett, 5.vi.2003, 1♀, leg. D. Mifsud (RAC); Marsa, 12.vi.2004, 1♂, from *Quercus ilex* branches, leg. D. Mifsud; Marsa, 28.vii.2004, 1♀, reared from *Quercus ilex* branches, leg. D. Mifsud.

#### *Dirhinus hesperidum* (Rossi, 1790)\*

**Material examined.** MALTA, Buskett, 20.vii.2002, 1 ex., leg. D. Mifsud; Zejtun, 20.iv.2014, 1 ex., leg. D. Mifsud.

#### *Hockeria* sp. near *susterai* Bouček, 1951

**Material examined.** MALTA, Verdala Palace, 16.ix.–30.x.2014, 2♂♂, in Malaise trap, leg. D. Mifsud; 1♂, same data but 1.viii.–15.ix.2014 (all in RAC).

**Notes.** This species was previously identified to generic level (Askew & Mifsud, 2016).

#### *Hockeria unicolor* Walker, 1834\*

**Material examined.** MALTA, Zebbug, 27.vii.2016, 1♀, emerged from pupa of Pyralidae feeding on the top part of corn among stigmas, leg. M. Zerafa; Zebbieh, 19.v.2015, 1♂, emerged from pupa of *Coleophora semicinerea* (Coleophoridae) feeding on Fabaceae, leg. M. Zerafa; Dingli, 6.vii.2015, 1 ex., leg. D. Mifsud.

### Encyrtidae Walker, 1837

#### *Cerapterocerus mirabilis* Westwood, 1833

**Material examined.** MALTA, Bahrija, 21.v.1998, 1♀, leg. D. Mifsud.

#### *Encyrtus infelix* (Embleton, 1902)\*

**Material examined.** MALTA, Naxxar, 2.xii.2014, 1 ex., leg. M. Zerafa.

### Eulophidae Westwood, 1829

#### *Aprostocetus epicharmus* (Walker, 1839)

**Material examined.** MALTA, Siggiewi, 28–30.x.2013, 4♀♀, emerged from flower galls on *Diplotaxis*, leg. D. Mifsud; Mgarr, 26–28.x.2013, 5♂♂, emerged from flower galls on *Diplotaxis*, leg. D. Mifsud; Hal Far, 4.x.2016,

2♂♂, emerged from pod galls of *Diplotaxis*, leg. D. Mifsud; Mosta Valley, 20.–21.ix.2016, 1♂ & 2♀♀, emerged from flower galls of *Diplotaxis tenuifolia*, leg. D. Mifsud.

**Notes.** This species was previously reported as *A. sp.* near *epicharmus* (Askew & Mifsud, 2016).

***Chrysocharis assis* (Walker, 1839)\***

**Material examined.** MALTA, Naxxar Gap, 3.xi.–28.xii.2009, 1♂ & 5♀♀, emerged from larvae of *Ectoedemia euphorbiella* (Nepticulidae), mining leaves of *Euphorbia dendroides*, leg. M. Zerafa; Naxxar Gap, 2.i.2010, 1♂, emerged from larva of *Ectoedemia euphorbiella*, mining leaves of *Euphorbia dendroides*, collected in iii.2009, leg. M. Zerafa; Naxxar Gap, 19.iii.2012, 1♀, emerged from larva of Nepticulidae feeding on *Crataegus monogyna*, leg. M. Zerafa.

***Chrysocharis gemma* (Walker, 1839)\***

**Material examined.** MALTA, Naxxar Gap, 7.ii.2009, 1♀, emerged from larva/pupa of *Acalypttris minimella* (Nepticulidae), mining leaves of *Pistacia lentiscus*, leg. M. Zerafa; Mosta valley, 24.ii.2007, 1♂, emerged from larva/pupa of *Stigmella aurella* (Nepticulidae), mining leaves of *Rubus ulmifolius*, leg. M. Zerafa.

***Chrysocharis nitetis* (Walker, 1839)\***

**Material examined.** MALTA, Mosta valley, 10.–18.ix.2014, 1♂ & 6♀♀, emerged from larva of *Coptotriche marginea* (Tischeriidae) feeding on *Rubus ulmifolius*, leg. M. Zerafa; Mosta valley, 7.i.2010, 1♀, emerged from larva of *Coptotriche marginea*, feeding on *Rubus ulmifolius*, leg. M. Zerafa.

**Notes.** Material from Malta differs from typical material described from UK in that female metafemur (hind femur) are entirely pale without any infuscation/darkening.

***Chrysocharis pentheus* (Walker, 1839)\***

**Material examined.** MALTA, Mosta valley, 12.iv.2007, 1♀, emerged from larvae/pupae of *Stigmella aurella* (Nepticulidae), mining leaves of *Rubus ulmifolius*, leg. M. Zerafa; Mistra, 16.vi.2006, 1♀, emerged from larvae/pupae of *Stigmella aurella*, mining leaves of *Rubus ulmifolius*, leg. M. Zerafa; Mosta valley, 17.ii.2007, 1♂, emerged from larvae/pupae of *Stigmella aurella*, mining leaves of *Rubus ulmifolius*, leg. M. Zerafa.

***Cirrospilus vittatus* Walker, 1838\***

**Material examined.** MALTA, Naxxar Gap, 24.viii.2011, 1♀, reared from mines of unidentified Nepticulidae feeding in leaves of *Crataegus monogyna*, leg. M. Zerafa. GOZO, Xlendi, 4.i.2012, 2♀♀, reared from leaf mines of *Trifurcula eurema* (Nepticulidae) on *Lotus cytisoides*, collected on 8.xii.2011, leg. M. Zerafa; Nadur, 8–15.ii.2012, 1♂ & 4♀♀, reared from Nepticulidae mining *Cistus monspeliensis*, leg. M. Zerafa.

***Closterocerus sp.*\***

**Material examined.** MALTA, Verdala Palace, 30.vii.–30.ix.2015, 1♀, Malaise trap, leg. D. Mifsud (RAC).

***Elasmus nowickii* Ferrière, 1947\***

**Material examined.** MALTA, Mosta valley, 20.iv.2007, 1♂, emerged from larvae/pupae of Tineidae, leg. M. Zerafa; Pembroke, 17–29.vi.2012, 3♂♂ & 9♀♀, on *Coleophora semicinerea* (Coleophoridae) feeding on *Anthyllis vulneraria*, leg. M. Zerafa.

***Elasmus rufiventris* Ferrière, 1947**

**Material examined.** MALTA, Mosta valley, 12.iv.2007, 1♂ & 1♀, emerged from larvae/pupae of small Tineidae, leg. M. Zerafa.

***Elasmus steffani* Viggiani, 1967\***

**Material examined.** MALTA, Birguma, 3.xii.2006, 1♀, from *Hypotia corticalis* (Pyrilidae), feeding in seed head of *Daucus carota*, leg. M. Zerafa; Ghar Lapsi, 2.xii.2014, 1♂ & 1♀, emerged from dry seed head of *Daucus carota*, leg. M. Zerafa.

***Hemiptarsenus fulvicollis* Westwood, 1833\***

**Material examined.** MALTA, Ħad Dingli, 9.–13.iv.2009, 2♂♂ & 6♀♀, reared from mines of *Trifurcula eurema* (Nepticulidae) in leaves of *Lotus cytisoides*, leg. M. Zerafa; Pembroke, 26.ii.–2.iii.2016, 1♂ & 2♀♀, reared from Elachistidae feeding on grasses (Poaceae), leg. M. Zerafa. GOZO, Xlendi, 4.–12.i.2012, 2♂♂ & 3♀♀, reared from mines of *Trifurcula eurema* in leaves of *Lotus cytisoides*, collected on 8.xii.2011, leg. M. Zerafa.

***Minotetrastichus frontalis* (Nees, 1834)\***

**Material examined.** MALTA, Mosta Valley, 3.viii.2015, 1♂ & 4♀♀, emerged from stems of *Calamintha nepeta* mined by Nepticulidae, leg. M. Zerafa; Mosta Valley, 29.vii.2015, 2♂♂ & 3♀♀, emerged from stems of *Calamintha nepeta* mined by larvae of Nepticulidae, leg. M. Zerafa; Mosta, L-isperanza Valley, 15–18.ix.2014, 2♂♂ & 3♀♀, emerged from larvae of *Coptotriche marginata* (Tischeriidae), feeding on *Rubus ulmifolius*, leg. M. Zerafa.

***Necremnus artynes* (Walker, 1839)\***

**Material examined.** MALTA, Mtaħleb, 18.v.2009, 1♂, reared from larvae/pupae of *Dialectica scalariella* (Gracillariidae), feeding on *Echium italicum*, leg. M. Zerafa.

***Neochrysocharis formosa* (Westwood, 1833)\***

**Material examined.** MALTA, Verdala Palace, 1.viii.–15.ix.2014, 2♀♀, Malaise trap, leg. D. Mifsud; 3♀♀, same data but 16.ix.–30.x.2014 (RAC).

***Neochrysocharis trifolii* Erdős, 1961\***

**Material examined.** MALTA, Verdala Palace, 1.viii.–15.ix.2014, 7♀♀, Malaise trap, leg. D. Mifsud (RAC).

***Pediobius metallicus* (Nees, 1834)\***

**Material examined.** MALTA, Naxxar Gap, 28–29.x.2009, 1♂, emerged from larva/pupa of *Ectoedemia euphorbiella* (Nepticulidae) collected in March, 2009, mining leaves of *Euphorbia* sp., leg. M. Zerafa; Naxxar Gap, 28–29.x.2009, 1♂ & 2♀♀, emerged from pupae of Elachistidae collected in February 2009, leg. M. Zerafa; Naxxar Gap, 24.ix.2009, 1♀, emerged from larvae/pupae of Elachistidae collected in April 2009, feeding on Poaceae, leg. M. Zerafa; Pembroke, 4–6.xi.2009, 1♂ & 4♀♀, emerged from larvae/pupae of Elachistidae, feeding on Poaceae, leg. M. Zerafa; Bormla, 31.iii.2006, 1♀, emerged from pupa of Elachistidae, leg. M. Zerafa.

***Pnigalio mediterraneus* Ferrière & Delucchi, 1957\***

**Material examined.** MALTA, Ħal Lija, 9.–13.v.2009, 5♂♂ & 3♀♀, reared from leaf mines of *Phyllonorycter messaniella* (Gracillariidae) on *Quercus robur*, leg. M. Zerafa.

***Sympiesis sericeicornis* (Nees, 1834)\***

**Material examined.** MALTA, Naxxar Gap, 5.iv.2009, 1♀, reared from a mine containing a pupa of *Phyllonorycter trifasciella* (Gracillariidae) on *Lonicera implexa*, leg. M. Zerafa; Buskett, 28.iv.2009, 1♂, reared from mine containing a pupa of *Phyllonorycter trifasciella* on a leaf of *Lonicera implexa*, leg. M. Zerafa.

**Notes.** Males of this species are generally without branched antennae but the above cited male specimen has 3 short flagellar branches.

**Eupelmidae Walker, 1833**

***Calosota aestivalis* Curtis, 1836**

**Material examined.** MALTA, Zejtun, 10.v.2002, 1 ex., leg. D. Mifsud.

***Eupelmus (Eupelmus) confusus* Al-khatib, 2015\***

**Material examined.** MALTA, Ħal Far, 4.x.2016, 1♀, emerged from pod galls of *Diplotaxis*, leg. D. Mifsud; Msida, 15.x.2016, 1♂ & 1♀, emerged from pod galls of *Diplotaxis*, leg. D. Mifsud.

***Eupelmus (Eupelmus) microzonus* Förster, 1860**

**Material examined.** MALTA, Dingli, 6.vii.2015, 1♀, leg. D. Mifsud.

***Eupelmus (Macroneura) vesicularis* (Retzius, 1783)\***

**Material examined.** MALTA, Mosta, L-isperanza valley, 15–16.ix.2014, 1 ex., emerged from fennel seeds, leg. M. Zerafa.

***Neanastatus africanus* Ferrière, 1938**

**Material examined.** MALTA, Hal Far, 4.x.2016, 1♂ & 2♀♀, emerged from pod galls of *Diplotaxis*, leg. D. Mifsud; Hal Far, 28.ix.2016, 2♂♂ & 4♀♀, emerged from pod galls of *Diplotaxis*, leg. D. Mifsud.

**Notes.** Prior to the above studied material, this species was reported from Malta on the basis of one female (Askew & Mifsud, 2016) which was incorrectly identified as *N. turneri*.

**Eurytomidae Walker, 1832**

***Systole* sp. near *foeniculi* Otten, 1941\***

**Material examined.** MALTA, Mosta Valley, 13.ix.2016, 1♂, emerged from larva in fennel seeds, leg. M. Zerafa.

**Notes.** Species in the genus *Systole* are generally phytophagous, the larvae often feeding in Apiaceae seeds. This species is a likely host for some of the Tetrastichinae reared from seeds of *Foeniculum* during the present study which include unidentified species in the genera *Aprostocetus* and *Baryscapus*.

**Perilampidae Förster, 1856**

***Perilampus minutalis* Steffan, 1952\***

**Material examined.** MALTA, Buskett, 20./26.vi.2012, 6♂♂, leg. D. Mifsud.

**Pteromalidae Dalman, 1820**

***Anisopteromalus* sp.**

**Material examined.** MALTA, Zejtun, 12–17.ix.2013, 9♂♂ & 4♀♀, emerged from a cocoon mass of *Apanteles galleriae*, leg. D. Mifsud.

**Notes.** This species was incorrectly identified by Askew & Mifsud (2016) as *Cyrtotypx latipes*.

***Dibrachys microgastri* (Bouché, 1834)**

**Material examined.** MALTA, Verdala Palace, 16.ix.–30.x.2014, 3♀♀, in Malaise trap, leg. D. Mifsud (RAC).

**Notes.** This species was previously reported as *Dibrachys* sp. (Askew & Mifsud, 2016).

***Philotrypesis emeryi* Grandi, 1926\***

**Material examined.** MALTA, Zebbug, 17–23.ix.2016, 8♀♀, from syconia of *Ficus microcarpae*, leg. M. Zerafa.

***Pteromalus* sp. near *intermedius* (Walker, 1834)\***

**Material examined.** MALTA, Verdala Palace, 1.viii.–15.ix.2014, 2♀♀, Malaise trap, leg. D. Mifsud (RAC).

***Pteromalus* sp. near *elevatus* (Walker, 1834)\***

**Material examined.** MALTA, Verdala Palace, 1.viii.–15.ix.2014, 1♀, Malaise trap, leg. D. Mifsud (RAC).

***Pteromalus myopitae* (Graham, 1969)**

**Material examined.** MALTA, Mellieħa, 24.xii.2013, 5♂♂ & 2♀♀, emerged from flower galls of *Dittrichia viscosa*, leg. M. Zammit; Selmun, 20.ii.2014, 4♀♀, emerged from flower galls of *Dittrichia viscosa*, leg. M. Zammit.



***Pteromalus semotus* (Walker, 1834)\***

**Material examined.** MALTA, Verdala Palace, 1.viii.–15.ix.2014, 1 ♀, Malaise trap, leg. D. Mifsud (RAC).

***Stenoselma nigrum* Delucchi, 1956**

**Material examined.** MALTA, St Thomas Bay, Tal-Munxar, 30.iv.2016, 2 ♂♂ & 1 ♀, leg. D. Mifsud.

***Walkerella microcarpae* Bouček, 1993\***

**Material examined.** MALTA, Zebbug, 15–23.ix.2016, 8 ♀♀, emerged from syconia of *Ficus microcarpae*, leg. M. Zerafa.

**Torymidae Walker, 1833**

***Monodontomerus obscurus* Westwood, 1833**

**Material examined.** MALTA, Mosta, 1.x.2016, 1 ♀, leg. D. Mifsud.

***Pseudotorymus medicaginis* (Mayr, 1874)\***

**Material examined.** MALTA, Mosta valley, 6.x.2016, 5 exs., from ovary galls on *Foeniculum vulgare*, leg. M. Zerafa.

**Conclusion**

Almost half of the species newly added to the list are Eulophidae obtained by rearing from plant material, such as leaf mines, that contains the immature stages of their lepidopteran hosts. This is indicative of the extent to which rearing from potential hosts or host substrates, such as plant galls, leaf mines, plant stems, dead wood, fruits, seeds and flower heads can reveal additional species as well as providing valuable biological information.

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APPENDIX I. Checklist of the 181 species of Chalcidoidea recorded from the Maltese Islands (\* denotes new records)

**Agaonidae Walker, 1846**

- Eupristina verticillata* Waterston, 1921
- Pleistodontes* sp.
- Blastophaga psenes* (Linnaeus, 1758)

**Aphelinidae Thomson, 1876**

- Aphelinus chaonia* Walker, 1839
- Aphelinus humilis* Mercet, 1927
- Aphelinus mali* (Haldeman, 1851)
- Aphytis diaspidis* (Howard, 1881)
- Aphytis hispanicus* (Mercet, 1912)
- Aphytis lepidosaphes* Compere, 1955
- Aphytis melinus* DeBach, 1959
- Cales noacki* Howard, 1907
- Coccophagus lycimnia* (Walker, 1839)
- Coccophagus scutellaris* (Dalman, 1826)
- Coccophagus* sp. near *rusti* Compere, 1828
- Encarsia brimblecombei* (Girault, 1933)
- Encarsia citrina* (Craw, 1891)
- Encarsia formosa* Gahan, 1924
- Encarsia inaron* (Walker, 1839)
- Encarsia lutea* (Masi, 1909)
- Encarsia* sp. near *protransvena* Viggiani, 1985\*
- Encarsia tricolor* Förster, 1878
- Eretmocerus californicus* Howard, 1895
- Eretmocerus mundus* Mercet, 1931
- Marietta leopardina* Motschulsky, 1863

**Azotidae Nikol'skaya & Yasnosh, 1966**

- Ablerus perspiciosus* Girault, 1916

**Chalcididae Latreille, 1817**

- Brachymeria minuta* (Linnaeus, 1767)\*
- Brachymeria podagrica* (Fabricius, 1787)\*
- Chirocera pectinicornis* (Latreille, 1809)\*
- Dirhinus hesperidum* (Rossi, 1790)\*
- Hockeria bifasciata* Walker, 1834
- Hockeria* sp. near *susterai* Bouček, 1951
- Hockeria unicolor* Walker, 1834\*
- Proconura nigripes* Fonscolombe, 1832

**Encyrtidae Walker, 1837**

- Anagyrus matritensis* (Mercet, 1921)
- Anagyrus pseudococci* (Girault, 1915)
- Anicetus italicus* (Masi, 1917)
- Cerapterocerus mirabilis* Westwood, 1833
- Cheiloneurus claviger* Thomson, 1876
- Cheiloneurus elegans* (Dalman, 1820)
- Comperiella bifasciata* Howard, 1906
- Copidosoma* sp.
- Encyrtus aurantii* (Geoffroy, 1785)
- Encyrtus infelix* (Embleton, 1902)\*
- Gyranusoidea advena* Beardsley, 1969
- Homalotyloidea dahlbomii* (Westwood, 1837)
- Leptomastidea abnormis* (Girault, 1915)
- Metaphycus asterolecanii* (Mercet, 1923)
- Metaphycus flavus* (Howard, 1881)
- Metaphycus hirtipennis* (Mercet, 1921)
- Metaphycus* sp. near *stanleyi* Compere, 1940

*Microterys masii* Silvestri, 1919  
*Microterys nietneri* (Motschulsky, 1859)  
*Ooencyrtus* (?) *fulvipes* Hoffer, 1963  
*Ooencyrtus telenomicida* (Vassiliev, 1904)  
*Prochiloneurus bolivari* Mercet, 1919  
*Syrphophagus aphidivorus* (Mayr, 1876)  
*Tineophoctonus armatus* (Ashmead, 1888)

#### **Eulophidae Westwood, 1829**

*Aprostocetus dauci* Graham, 1987  
*Aprostocetus epicharmus* (Walker, 1839)  
*Aprostocetus* sp. near *toddaliae* (Risbec, 1958)  
*Astichus bachmaieri* Doğanlar, 1992  
*Baryscapus ecballi* Cassar, Askew & Mifsud, 2018  
*Baryscapus impeditus* (Nees, 1834)  
*Baryscapus* sp. (*evonymellae* group)  
*Chrysocharis assis* (Walker, 1839)\*  
*Chrysocharis gemma* (Walker, 1839)\*  
*Chrysocharis nitetis* (Walker, 1839)\*  
*Chrysocharis pentheus* (Walker, 1839)\*  
*Chrysocharis pubicornis* (Zetterstedt, 1838)  
*Cirrospilus pictus* (Nees, 1834)  
*Cirrospilus vittatus* Walker, 1838\*  
*Closterocerus* sp.\*  
*Diglyphus isaea* (Walker, 1838)  
*Diglyphus minoicus* (Walker, 1838)  
*Diglyphus poppoea* Walker, 1848  
*Elachertus bisurmanus* Erdős, 1966  
*Elasmus nowickii* Ferrière, 1947\*  
*Elasmus platydrae* Ferrière, 1935  
*Elasmus rufiventris* Ferrière, 1947  
*Elasmus steffani* Viggiani, 1967\*  
*Euderomphale* sp.  
*Hemiptarsenus fulvicollis* Westwood, 1833\*  
*Hemiptarsenus* sp. near *wailesellae* Nowicki, 1929  
*Leptocybe invasa* Fisher & La Salle, 2004  
*Melittobia acasta* (Walker, 1839)  
*Minotetrastichus frontalis* (Nees, 1834)\*  
*Minotetrastichus* sp. near *frontalis* (Nees, 1834)  
*Miotropis unipuncta* (Nees, 1834)  
*Necremnus artynes* (Walker, 1839)\*  
*Neochrysocharis formosa* (Westwood, 1833)\*  
*Neochrysocharis trifolii* Erdős, 1961\*  
*Neochrysocharis violaceus* Askew, 1999  
*Neotrichoporoides viridimaculatus* (Fullaway, 1955)  
*Oomyzus sempronius* (Erdős, 1954)  
*Ophelimus maskelli* (Ashmead, 1900)  
*Pediobius epigonus* (Walker, 1839)  
*Pediobius metallicus* (Nees, 1834)\*  
*Pnigalio agraulis* (Walker, 1839)  
*Pnigalio mediterraneus* Ferrière & Delucchi, 1957\*  
*Pronotalia carlinarum* (Szelényi & Erdős, 1951)  
*Puklina* sp.  
*Stepanovia eurytomae* (Nees, 1834)  
*Sympiesis sericeicornis* (Nees, 1834)\*  
*Tamarixia actis* (Walker, 1839)  
*Tamarixia pronomus* (Walker, 1839)  
*Tamarixia* sp.  
*Tamarixia tremblayi* (Domenichini, 1965)  
*Zagrammosoma variegatum* (Masi, 1907)



**Eupelmidae Walker, 1833**

- Calosota aestivalis* Curtis, 1836  
*Eupelmus (Episolindelia) hartigi* Förster, 1841  
*Eupelmus (Eupelmus) confusus* Al-khatib, 2015\*  
*Eupelmus (Eupelmus) lanceolatus* Gibson & Fusu, 2016  
*Eupelmus (Eupelmus) microzonus* Förster, 1860  
*Eupelmus (Eupelmus) (?) urozonus* Dalman, 1820  
*Eupelmus (Macroneura) muellneri* Ruschka, 1921  
*Eupelmus (Macroneura) vesicularis* (Retzius, 1783)\*  
*Neanastatus africanus* Ferrière, 1938

**Eurytomidae Walker, 1832**

- Eurytoma* sp. near *dentata* Mayr, 1878  
*Eurytoma (?) inulae* Domenichini, 2002  
*Eurytoma* sp. near *laserpitii* Mayr, 1882  
*Sycophila iracemae* Nieves-Aldrey, 1983  
*Systole* sp. near *foeniculi* Otten, 1941\*  
*Tetramesa stipae* (De Stefani, 1901)

**Leucospidae Walker, 1834**

- Leucospis brevicauda* Fabricius, 1804  
*Leucospis dorsigera* Fabricius, 1775  
*Leucospis gigas* Fabricius, 1793  
*Leucospis intermedia* Illiger, 1807

**Megastigmidae Thomson, 1876**

- Megastigmus wachtl*i Seitner, 1916

**Mymaridae Haliday, 1833**

- Arescon aspidioticola* (Ashmead, 1879)  
*Dicopus citri* Mercet, 1912

**Ormyridae Förster, 1856**

- Ormyrus orientalis* Walker, 1871

**Perilampidae Förster, 1856**

- Perilampus minutalis* Steffan, 1952\*

**Pteromalidae Dalman, 1820**

- Anisopteromalus* sp.  
*Callitula bicolor* Spinola, 1811  
*Catolaccus crassiceps* (Masi, 1911)  
*Cerocephala rufa* (Walker, 1833)  
*Cleonymus laticornis* Walker, 1837  
*Dibrachys microgastris* (Bouché, 1834)  
*Dinarmoides spiloaterus* Masi, 1924  
*Dinarmus acutus* (Thomson, 1878)  
*Gastrancistrus* sp. (*vagans* group)  
*Halticoptera* sp. near *circulus* (Walker, 1833)  
*Homoporus (?) subniger* (Walker, 1835)  
*Josephiella microcarpa*e Beardsley & Rasplus, 2001  
*Meraporus graminicola* Walker, 1834  
*Mesopolobus melitensis* Askew, 2014  
*Miscogaster hortensis* Walker, 1833  
*Norbamus scabriculus* (Nees, 1834)  
*Notanisis (Amarisca) oulmesiensis* (Delucchi, 1962)  
*Notanisis versicolor* Walker, 1837  
*Odontofroggata galili* Wiebes, 1980  
*Pachycrepoideus vindemmiae* (Rondani, 1875)  
*Pachyneuron muscarum* (Linnaeus, 1758)  
*Philotrypesis caricae* (Linnaeus, 1762)

*Philotrypesis emeryi* Grandi, 1926\*  
*Pseudocatolaccus nitescens* (Walker, 1834)  
*Pteromalus* sp. near *bedeguaris* (Thomson, 1878)  
*Pteromalus* sp. near *brachygaster* (Graham, 1969)  
*Pteromalus* sp. near *elevatus* (Walker, 1834)\*  
*Pteromalus* sp. near *intermedius* (Walker, 1834)\*  
*Pteromalus myopitae* (Graham, 1969)  
*Pteromalus puparum* (Linnaeus, 1758)  
*Pteromalus semotus* (Walker, 1834)\*  
*Rhaphitelus maculatus* Walker, 1834  
*Rhaphitelus mathildae* Askew, 2018  
*Scutellista caerulea* (Fonscolombe, 1832)  
*Stenomalina* sp.  
*Stenoselma nigrum* Delucchi, 1956  
*Systasis encyrtoides* Walker, 1834  
*Trychnosoma punctipleura* (Thomson, 1878)  
*Walkerella microcarpae* Bouček, 1993\*

#### **Signiphoridae Howard, 1894**

*Chartocerus kurdjumovi* (Nikol'skaya, 1950)  
*Signiphora flavopalliata* Ashmead, 1880

#### **Tetracampidae Förster, 1856**

*Foersterella reptans* (Nees, 1834)

#### **Torymidae Walker, 1833**

*Idiomacromerus* sp.  
*Monodontomerus obscurus* Westwood, 1833  
*Podagrion splendens* Spinola, 1811  
*Pseudotorymus medicaginis* (Mayr, 1874)\*  
*Pseudotorymus napi* (Ameiling & Kircher, 1860)  
*Torymoides kiesenwetteri* (Mayr, 1874)  
*Torymus curtisi* Graham & Gijswijt, 1998