

# New records of ichneumon wasps (Hymenoptera, Ichneumonidae) from Malta with an updated checklist

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**ABSTRACT.** Ten new records of ichneumon wasps are reported for the first time from Malta. A checklist of all 56 species of Ichneumonidae so far recorded from Malta is also included.

**KEY WORDS.** Mediterranean, ichneumonids.

## INTRODUCTION

MIFSUD (2012) provided a revised check-list of the Maltese ichneumonid fauna, listing a total of 29 species. Since then several new records of ichneumon wasps from the Maltese Islands were published (CASSAR, 2013; VAS *et al.*, 2015; VAS, 2016; MIFSUD *et al.*, 2019). Recently, Dr Gavin Broad of the Natural History Museum in London examined unidentified material collected from the Maltese Islands and 10 new records to the Maltese fauna were found and are recorded here under. Material is deposited in the private collection of the senior author. An updated check list of all 56 species of Ichneumonidae so far recorded from the Maltese Islands is provided (Appendix 1) in the present work.

## ANNOTATED SPECIES LIST

### *Cryptus subspinosus* (Smits van Burgst, 1913) (Cryptinae)

**Material examined:** Malta, Dingli, 17.iii.2018, 1 ♀, leg. T. Cassar.

**Notes:** *Cryptus subspinosus* has a largely circum-Mediterranean distribution though records exist from western Asia (Iran). *Cryptus* species are predominantly associated with Lepidoptera.

### *Ctenichneumon ? divisorius* (Gravenhorst, 1820) (Ichneumoninae)

**Material examined:** Malta, Manikata, 14.ii.2016, 1 ♂, leg. T. Cassar

**Notes:** *Ctenichneumon divisorius* has a Palearctic distribution. It is a larval endoparasitoid of several Noctuidae (THOMPSON, 1957).

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***Linycus exhortator* (Fabricius, 1787)**  
(Ichneumoninae)

**Material examined:** Malta, Dingli, 17.iii.2018, 1 ♀, leg. T. Cassar.

**Notes:** *Linycus exhortator* has a widespread Holarctic distribution. It is an endoparasitoid of various Geometridae larvae.

***Metopius ? laticinctellus* (Hortsmann & Yu, 1999)**  
(Metopiinae)

**Material examined:** Malta, Mtahleb, 23.ii.2014, 1 ♀, leg. T. Cassar.

**Notes:** The genus *Metopius* accommodates over 130 species globally, with around 70 of these occurring in the Palaearctic. They are larval endoparasitoids of several Lepidoptera such as Sphingidae, Geometridae, Lasiocampidae, Noctuidae, Erebidae and Papilionidae (TOLKANITZ, 2015).

***Netelia lineolata* (Costa, 1883)**  
(Tryphoninae)

**Material examined:** Malta, Żebbuġ, 21.iii.2014, 1 ♂, leg. T. Cassar.

**Notes:** *Netelia lineolata* has a western Palaearctic distribution but can be found eastwards as far as Iran. It was recorded as an ectoparasitoid of *Anacamptis timidella* (Wocke, 1887) (Lepidoptera, Gelechiidae) (AUBERT *et al.*, 1984).

***Campoplex* sp.**  
(Campopleginae)

**Material examined:** Maltese Islands. Comino, Il-Hażina, 13.viii.2002, 1 ♀, leg. D. Mifsud.

**Notes:** The genus *Campoplex* currently accommodates over 200 described species which have a worldwide distribution. Species are associated mainly with various micro-lepidopterans, such as a number of Gelechioidean families and Tortricidae.

***Heterischnus* sp.**  
(Ichneumoninae)

**Material examined:** Malta, Marfa, 22.viii.2014, 1 ♂, leg. T. Cassar.

**Notes:** This genus is widely distributed in the Palaearctic, Nearctic and Afrotropical regions. *Heterischnus* accommodates 28 described species which are largely endoparasitoids of various Pterophoridae.

***Phygadeuon* sp.**  
(Cryptinae)

**Material examined:** Malta, Mellieha, 24.xii.2017, 1 ♀, leg. T. Cassar.

**Notes:** *Phygadeuon* is a species-rich genus (over 200 described species) with a worldwide distribution. Species are usually endoparasitoids of Diptera.

***Trathala* sp.**  
(Cremastinae)

**Material examined:** Malta, Marfa, 20.vii.2014, 1 ♂, leg. T. Cassar.

**Notes:** The genus *Trathala* is represented by about 100 described species worldwide, three of which have a Palearctic distribution (CHOI *et al.*, 2014). Species are predominantly larval endoparasitoids of micro-lepidopterans.

***Zoophthorus* sp.**  
(Cryptinae)

**Material examined:** Malta, Żebbuġ, 9.iv.2015, 1 ♀, leg. T. Cassar.

**Notes:** The genus *Zoophthorus* accommodates 27 described species which have a Holarctic and Neotropical distribution. They are endoparasitoids associated largely with micro-lepidopterans (such as various Gelechiidae, Gracillariidae and Coleophoridae).

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## REFERENCES

- AUBERT, J. F., HALPERIN, J., & GERLING, D. (1984) Les ichneumonides d'Israel. *Entomophaga*, 29 (2): 211–235.
- CASSAR, T. (2013) *Diplazon laetatorius* (Fabricius, 1781) - new record of an Ichneumonidae from Malta (Hymenoptera). *Bulletin of the Entomological Society of Malta*, 6: 148.
- CHOI, J., KOLAROV, J., KANG, G. & LEE, J. (2014) Review of the Palearctic *Trathala* Species (Hymenoptera: Ichneumonidae: Cremastinae). *Animal Systematics, Evolution & Diversity*, 30 (4): 327–333.
- MIFSUD, D. (2012) *Syrphophilus bizonarius* (Gravenhorst, 1829) (Hymenoptera) - new to Malta, with a revised check-list of the Ichneumonidae of the Maltese Islands. *Bulletin of the Entomological Society of Malta*, 5: 179–183.
- MIFSUD, D., FARRUGIA, L. & SHAW, M.R. (2019) Braconid and ichneumonid (Hymenoptera) parasitoid wasps of Lepidoptera from the Maltese Islands. *Zootaxa*, 4567 (1): 47–60.
- THOMPSON, W.R. (1957) A catalogue of the parasites and predators of insect pests - section 2 host parasite catalogue - part 4 hosts of the hymenoptera (Ichneumonidae). Commonwealth Agricultural Bureaux: Commonwealth Institute of Biological Control. Ottawa, Ontario, Canada.

- TOLKANITZ, V.I. (2015) Ichneumon flies of the genus *Metopius* Panzer (Hymenoptera, Ichneumonidae, Metopiinae) of the Palaearctic fauna. *Entomological Review*, 95(5): 647–665.
- VAS, Z. (2016) A new species of *Temelucha* Förster from Malta with an updated and revised identification key to the Western Palaearctic *Temelucha* species (Hymenoptera, Ichneumonidae, Cremastinae). *Journal of Hymenoptera Research*, 48: 67–84.
- VAS, Z., MIFSUD, D. & BROAD, G.R. (2015) New records of ichneumon wasps (Hymenoptera, Ichneumonidae) from Malta. *Bulletin of the Entomological Society of Malta*, 7: 139–142.

**Appendix I.** Updated checklist of the Ichneumonidae of the Maltese Islands with species listed alphabetically within their respective subfamilies.

**Anomaloninae Förster, 1869**

*Anomalon cruentatum* (Geoffroy, 1785)

*Trichomma enecator* (Rossi, 1790)

**Banchinae Wesmael, 1845**

*Glypta* sp.

*Syzeuctus tigris* (Seyrig, 1926)

**Campopleginae Förster, 1869**

*Campoplex* sp.

*Casinaria tenuiventris* (Gravenhorst, 1829)

*Diadegma armillatum* (Gravenhorst, 1829)

*Diadegma exareolator* (Aubert, 1964)

*Diadegma semiclausum* (Hellén, 1949)

*Hyposoter ebeninus* (Gravenhorst, 1829)

*Meloboris* sp.

*Venturia canescens* (Gravenhorst, 1829)

**Cre mastinae Förster, 1869**

*Temelucha meridionellator* (Aubert, 1981)

*Temelucha rea* (Vas, 2016)

*Trathala* sp.

**Cryptinae Kirby, 1837**

*Allophatnus aetnensis* (Rudow, 1883)

*Cryptus subspinosus* (Smits van Burgst, 1913)

*Mesostenus grammicus* (Gravenhorst, 1829)

**Phygadeuontinae Förster, 1869**

*Chirotica meridionalis* (Horstmann, 1983)

*Chirotica productor* (Aubert, 1982)

*Dichrogaster longicaudata* (Thomson, 1884)

*Gelis carbonarius* (de Stefani, 1884)

*Gelis cyanurus* (Förster, 1850)

*Gelis exareolatus* (Förster, 1850)

*Gelis seyrigi* (Ceballos, 1925)

*Thaumatogelis innoxius* (Schwarz, 2001)

*Orthizema* sp.

*Phygadeuon* sp.

*Zoopthorus* sp.

**Diplazontinae Viereck, 1918**

*Diplazon laetatorius* (Fabricius, 1781)

*Syrphophilus bizonarius* (Gravenhorst, 1829)

**Ichneumoninae Latreille, 1802**

- Ctenichneumon ? divisorius* (Gravenhorst, 1820)  
*Ctenichneumon messorius* (Gravenhorst, 1820)  
*Ctenochares bicolorus* (Linnaeus, 1767)  
*Eutanyacra picta* (Schrank, 1776)  
*Heterischnus* sp.  
*Linyctus exhortator* (Fabricius, 1787)  
*Protichneumon fusorius* (Linnaeus, 1761)  
*Virgichneumon digrammus* (Gravenhorst, 1820)

**Metopiinae Förster, 1869**

- Exochus castaniventris* (Brauns, 1896)  
*Exochus mitratus* (Gravenhorst, 1829)  
*Exochus prosopius* Gravenhorst, 1829  
*Exochus semilividus* (Vollenhoven, 1875)  
*Metopius (Peltocarus) dentatus* (Fabricius, 1779)  
*Metopius (Peltocarus) ? laticinctellus* (Hortsman & Yu, 1999)

**Ophioninae Shuckard, 1840**

- Ophion obscuratus* (Fabricius, 1798)

**Orthocentrinae Förster, 1869**

- Megastylus orbitator* (Schjødte, 1838)

**Pimplinae Wesmäl, 1845**

- Exeristes roborator* (Fabricius, 1793)  
*Itoplectis maculator* (Fabricius, 1775)  
*Pimpla rufipes* (Miller, 1759)  
*Pimpla spuria* (Gravenhorst, 1829)  
*Tromatobia lineatoria* (Villers, 1789)

**Tryphoninae Shuckard, 1840**

- Netelia (Netelia) fuscicarpus* (Kokujev, 1899)  
*Netelia (Paropheltes) inedita* (Kokujev, 1899)  
*Netelia (Paropheltes) lineolata* (Costa, 1883)

**Xoridinae Shuckard, 1840**

- Xorides praecatorius* (Fabricius, 1793)