

The Phalacridae of the Maltese Islands (Coleoptera)

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ABSTRACT. Ten species of Phalacridae from Malta were found during the present study, of which *Olibrus particeps* and *Tinodemus polygramma* represent new records for this territory. Earlier citations of *Olibrus bimaculatus* and *O. liquidus* were found to be incorrect and should refer to *O. bicolor* and *O. castaneus* respectively. Also the earlier citations of *Phalacrus substriatus* and *P. fimetarius* were found to be based on misidentifications and should refer to *P. corruscus*.

KEY WORDS. New records, Malta, Mediterranean.

INTRODUCTION

The Phalacridae is a moderate-sized family of about 50 genera and more than 600 valid species. The Palaearctic fauna is currently composed of 146 described species (ŠVEC, 2007). They are of a very characteristic shape, usually ovate and convex dorsally, ventrally flattened, glabrous and usually with reduced elytral striations. Many phalacrids are fungal feeders. *Olibrus* species are mainly found on flower heads feeding on pollen and nectar. Some larval species of *Stilbus* and *Acyломus* may also be predaceous. However the life-cycle of most phalacrids is still unknown.

To our knowledge, very few references include original records of Phalacridae from the Maltese Islands and in order to provide detailed information on the Phalacridae of Malta, we decided to publish the present work in the hope that this will present a clearer picture of the current state of knowledge of this family and to provide a better base for further studies.

Seven named phalacrid species were included in a list of Coleoptera of the Maltese Islands (CAMERON & CARUANA GATTO, 1907) and LUIGIONI (1929), in his work on the Italian Coleoptera, repeated these records. ANDRES (1916) published a list of Lepidoptera, Hemiptera and Coleoptera which he collected from these islands during a period of almost two years that he spent in Malta as a prisoner of war and in this list he included two phalacrids of which, one (*Olibrus* sp.), was not identified to species level. ŠVEC (2000) described *Tinodemus mifsudi* from material collected in Malta. ŠVEC (2004; 2007) was also responsible for both the Fauna Europaea database and the catalogue of Palaearctic Coleoptera for species included in this family. In both works he mentioned 12 species of phalacrids as occurring in Malta. This was based on earlier published records and material he examined from Malta, most of which is now included in the present work. No original collecting data was available for new Maltese records of Phalacridae in ŠVEC (2004; 2007) and very little data was included in CAMERON & CARUANA GATTO (1907).

Historical material of Phalacridae collected from Malta became available and we were able to interpret a number of questionable old records. This historical material consists of two collections. Specimens in one of these collections are labelled as "Cameron Coll., B.M. 1936-555" and this material was collected by Malcolm Cameron (MC) either alone or in collaboration with the Maltese

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naturalist Alfredo Caruana Gatto. Generally, material from this collection included individual label numbers which correspond to numbers in Cameron's private notes and refer to the following information (partially or fully): date of collection, name of the species, name of person who identified this species, locality name and ecological data. In the present work, this information is added in square brackets after the mentioned label number. Material in the other collection is labelled as "G.C. Champion Coll., B.M. 1927-409". This material was collected by Commander James John Walker between 1874-76 almost exclusively between the months of October and March and except for the name Malta (very often abbreviated to a characteristic hand written M), there is no other data accompanying this material. Both collections formed the basis of the Coleoptera list of the Maltese Islands published by CAMERON & CARUANA GATTO (1907).

Most of the recent material was collected by David Mifsud (Malta) - DM. In the case of other collectors, full names are provided and we acknowledge their assistance. The depository of specimens not in the authors' collection is to be found at The Natural History Museum in London, UK (BMNH, indicated in parenthesis). The classification and taxonomy follows that of ŠVEC (2007), from which work we also reported the global distribution of species reported here under.

CHECK-LIST OF MALTESE SPECIES

Family PHALACRIDAE Leach, 1815

Olibrus affinis (Sturm, 1807)
Olibrus bicolor (Fabricius, 1792)
Olibrus castaneus Baudi di Selve, 1870
Olibrus particeps Mulsant & Rey, 1861
Olibrus pygmaeus Sturm, 1807
Olibrus reitteri Flach, 1888
Phalacrus corruscus (Panzer, 1797)
Stilbus testaceus (Panzer, 1797)
Tinodemus mifsudi Švec, 2000
Tinodemus polygramma (Flach, 1888)

ANNOTATED SPECIES LIST

Olibrus affinis (Sturm, 1807)

Material examined. MALTA: 18 exs., G.C. Champion coll., B.M. 1927-409 (BMNH); viii/ix.1901, 10 exs., MC., 5185 [= *Olibrus affinis*, 25 July, 1901], M. Cameron Coll., B.M. 1936-555 (BMNH); ix.1901, 2 exs., MC, 5781 [= *Stilbus*, September 1901, Marsaxlokk], M. Cameron Coll., B.M. 1936-555 (BMNH); Wardija, 4.iv.1993, 3 exs., P. Sprick; Zebbiegh, 2.iv.1993, 1 ex., P. Sprick; St. Thomas Bay, Tal-Munxar, 15.iv.2004, 1 ex., DM; Buskett, 24.vi.2003, 7 exs., DM; Buskett, 15.ix.1995/12.ii.2000, 3 exs., in decaying hay and vegetation, DM; Girgenti, 25.vii.1997, 2 exs., DM; Wied Babu, 15.ix.1995, 2 exs., DM; Siggiewi, Wied Qirda, 28.i.1996, 1 ex., DM; Bahrija, 20.iv.2002, 3 exs., DM; Zejtun, 4.v.2002, 1 ex., DM; Birzebbugia, 2.iv.1956, 1 ex., G.V.P. Sewell (BMNH); Ballut ta' l-Mgiebah, limits of Selmun, 23.ii.2000, 3 exs., DM; Wied id-Dis, 13.vi.2002, 1 ex., DM. **GOZO:** Ramla, 30.iii.2002, 1 ex., DM; Dwejra, 25.iv.2003, 12 exs., DM.

Notes. The occurrence of *O. affinis* in Malta was recorded as "common" by CAMERON & CARUANA GATTO (1907) and it was also reported from Malta by ŠVEC (2004; 2007). It is widely distributed

in Europe, North Africa and throughout the Mediterranean basin, extending eastwards up to Far Eastern Russia.

Olibrus bicolor (Fabricius, 1792)

Material examined. MALTA: x.1901, 6 exs., MC., 6094 [= *Olibrus bimaculatus*, Wied tal-Gnejna], M. Cameron Coll., B.M. 1936-555 (BMNH); Bahrija Valley, 27.vi.1993, 1 ex., on *Polygonum salisifolium*, DM.

Notes. Our examination of the above cited historical material available to CAMERON & CARUANA GATTO (1907) for their catalogue on Maltese Coleoptera, proved to belong to *O. bicolor* and not to *O. bimaculatus* Küster, 1848 as indicated on the label and by which name the species was later cited (CAMERON & CARUANA GATTO, 1907). Based on this, *O. bimaculatus* is being excluded from the phalacrid fauna of Malta. The record of *O. bimaculatus* in ŠVEC (2004; 2007) was entirely based on that of CAMERON & CARUANA GATTO (1907). *Olibrus bicolor* is widely distributed in Europe and Asia and is also known from Morocco and Tunisia. It is also recorded from the Nearctic Region.

Olibrus castaneus Baudi di Selve, 1870

Material examined. MALTA: viii.1901, 3 exs., MC., 5482 [= *Olibrus liquidus*, 17 August 1901, Marsaskala], M. Cameron Coll., B.M. 1936-555 (BMNH); Buskett, 20.vii.2002, 1 ex., DM; Marsa, 12.v.2002, 1 ex., on flowers of *Cynara cardunculus*, DM. **GOZO:** Xlendi, Wied tal-Kantra, 18-28.viii.2001, 1 ex., V. Navratil. **COMINO:** Il-Hazina, 13.viii.2002, 5 exs., on vegetation around artificial freshwater pool, DM; Santa Maria Bay, 13.viii.2002, 2 exs., DM.

Notes. Our examination of the above cited historical material available to CAMERON & CARUANA GATTO (1907) for their catalogue on Maltese Coleoptera, proved to belong to *O. castaneus* and not to *O. liquidus* Erichson, 1845 as indicated on the label and by which name it was later cited (CAMERON & CARUANA GATTO, 1907). Based on this, *O. liquidus* is being excluded from the phalacrid fauna of Malta. The record of *O. liquidus* in ŠVEC (2004; 2007) was entirely based on that of CAMERON & CARUANA GATTO (1907). *Olibrus castaneus* is a typical Mediterranean species recorded from Bosnia Herzegovina, Croatia, France, Corfu, Cyprus, Italy, Spain, Morocco, Algeria, Lebanon, Syria, Turkey and Uzbekistan.

Olibrus particeps Mulsant & Rey, 1861

Material examined. MALTA: 2 exs., G.C. Champion coll., B.M. 1927-409 (BMNH).

Notes. *Olibrus particeps* is a new record for Malta. The species occurs in central-southern Europe and throughout the Mediterranean basin with records from Spain, France, Greece, Italy, Portugal, Estonia, Macedonia, Cyprus, Israel, Lebanon, Switzerland, Algeria, Egypt, Morocco, Tunisia, extending in the east to Japan and Siberia.

Olibrus pygmaeus Sturm, 1807

Material examined. MALTA: 1 ex., G.C. Champion coll., B.M. 1927-409 (BMNH); viii.1901, 10 exs., MC., 5184 [= *Olibrus pygmaeus*, July 1901, Brixhiera], M. Cameron Coll., B.M. 1936-555 (BMNH); ix.1901, 1 ex., MC., 5797 [= Girgenti], M. Cameron Coll., B.M. 1936-555 (BMNH).

Notes. The occurrence of *O. pygmaeus* in Malta was reported as “not common” by CAMERON & CARUANA GATTO (1907). ŠVEC (2004; 2007) reported the presence of this species in Malta. It is a widely distributed species in Europe and throughout the Mediterranean basin.

Olibrus reitteri Flach, 1888

Material examined. MALTA: Hagar Qim, 5.xi.1989, 1 ex., DM.

Notes. *Olibrus reitteri* is a typical Mediterranean species previously reported from Malta by ŠVEC (2004; 2007).

Phalacrus corruscus (Panzer, 1797)

Material examined. MALTA: 17 exs., G.C. Champion coll., B.M. 1927-409 (BMNH); viii.1901, 5 exs., MC., 5526 [= 21 July 1901, Marsaskala], M. Cameron Coll., B.M. 1936-555 (BMNH); viii.1901, 1 ex., MC., 5186 [= *Phalacrus fimetarius*, July 1901, id. Gatto], M. Cameron Coll., B.M. 1936-555 (BMNH); viii.1901, 1 ex., MC., 5508 [= *Phalacrus*, July 1901, Girgenti], M. Cameron Coll., B.M. 1936-555 (BMNH); viii.1901, 1 ex., MC., 5530 [= *Phalacrus*, 20 August 1901, St. Paul’s Bay], M. Cameron Coll., B.M. 1936-555 (BMNH); Mistra, 4.ii.1996, 1 ex., DM; Mtahleb, 7.iv.1996, 1 ex., DM; Ballut ta’ l-Mgiebah, limits of Selmun, 23.ii.2000, 1 ex., DM; Bahrija Valley, 11.v.1990/20.iv.2002, 2 exs., DM; Wardija, 4.iv.1993, 1 ex., P. Sprick; Birzebbugia, 8.iii.1956, 6 exs., G.V.P. Sewell (BMNH); Mellieha Bay, 3.iii.2002, 6 exs., DM.

Notes. We are confident that the above series of historical material labelled 5526 was the one used in Cameron and Caruana Gatto’s paper where *Phalacrus substriatus* Gyllenhal, 1813 was recorded. We arrived at this conclusion based on the fact that both the date and the locality provided for this series coincide with such data as reported in CAMERON & CARUANA GATTO (1907) and also because there is no other entry for Phalacridae being collected from Marsaskala in Cameron’s private notes. Examination of all historical material proved to belong to *P. corruscus* and not to *P. fimetarius* (Fabricius, 1775) which species was listed by both CAMERON & CARUANA GATTO (1907) and ANDRES (1916). Furthermore, due to the fact that no recently collected material of *Phalacrus* from the Maltese Islands was attributed to either *P. substriatus* or *P. fimetarius*, these two species are being excluded from the local phalacrid fauna. *Phalacrus corruscus* is widely distributed in Europe, the Mediterranean basin extending eastwards into Asia up to Far Eastern Russia.

Stilbus testaceus (Panzer, 1797)

Material examined. MALTA: 15 exs., G.C. Champion coll., B.M. 1927-409 (BMNH); x.1901, 2 exs., MC., 5840 [= *Stilbus testaceus*, Wied el Klija], M. Cameron Coll., B.M. 1936-555 (BMNH); viii./ix.1901, 9 exs., MC., 5386 [= *Stilbus testaceus*], M. Cameron Coll., B.M. 1936-555 (BMNH); Fiddien, 27.vi.1989, 3 exs., DM; Birzebbugia, Wied Has-Sabtan, 3.ii.1996, 1 ex., DM; Wied tal-Bahrija, 27.vi.1993, 1 ex., DM; Marsaxlokk, Balluta saltmarsh, 15.viii.2003, 15 exs., DM; Qrendi, 19.vii.2003, 1 ex., DM; Wied tal-Isqof, 16.vii.2002, 2 exs., DM; Buskett, 24.vi.2003, 4 exs., DM; Salina, 11.vii.2002, 1 ex., DM.

Notes. CAMERON & CARUANA GATTO (1907) recorded the occurrence of *S. testaceus* as “very common” and it was also cited from Malta by ŠVEC (2004; 2007). The species is recorded from most of Europe, the Mediterranean basin, Asia and the Afrotropical Region.

Tinodemus mifsudi Švec, 2000

(Fig. 1)

Material examined. MALTA: Type material collected from Bahrija on 16/24.vii.1997, DM.

Notes. This species was so far collected only from Malta and seems to be endemic to this island (ŠVEC, 2000).

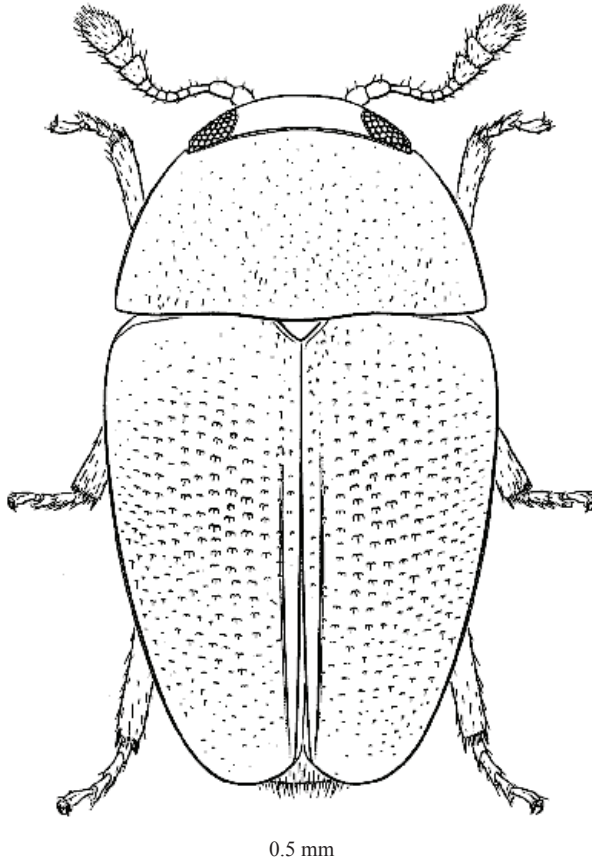


Figure 1: *Tinodemus mifsudi*

Tinodemus polygramma (Flach, 1888)

Material examined. MALTA: x.1901, 1 ex., MC., 6133 [= Gbir], M. Cameron Coll., B.M. 1936-555 (BMNH); ix.19021, 2 exs., MC., 5798 [= Girgenti], M. Cameron Coll., B.M. 1936-555 (BMNH); Bahrija, 20.iv.2002, 1 ex., DM.

Notes. *Tinodemus polygramma* is a new record for Malta. The species appears to have a rather restricted distribution within the Mediterranean and is currently recorded only from Corsica, Greece, Italy, Gibraltar, Egypt, Algeria, Israel, Turkey and Syria.

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