

# New records of terrestrial bugs from the Maltese Islands with an updated list of Maltese Heteroptera (Insecta: Hemiptera)

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**ABSTRACT.** Thirty-four species of Heteroptera were found from the Maltese islands during a sampling period of a week in April of 2009. Of these, seven represent new records for this territory and include the seed bugs *Artheneis foveolata*, *Emblethis duplicatus*, *Engistus boops boops* and *Oxycarenum hyalinipennis* and the plant bugs *Megalodactylus macularubra*, *Mimocoris* sp. and *Phytocoris* sp. The integration of the records from the last Catalogue of Maltese Heteroptera, the Catalogue of the Heteroptera of the Palaearctic Region and the present data raised the heteroptera known from the Maltese islands to 223 species accommodated in 161 genera and 26 families.

**KEY WORDS.** Malta, true bugs, new records, updated list.

## INTRODUCTION

Probably the earliest mention of Maltese Heteroptera was due to DALLAS (1852), who recorded four species from Malta, as clearly indicated in Schembri's catalogue of Maltese Heteroptera (1993) which includes most citations relevant to Maltese Heteroptera. The number of Heteroptera species for Malta increased slowly, and more than a hundred years later, TAMANINI (1966) recorded 67 species belonging to 16 families. DE LUCCA (1969) added some further species and RIEGER (1986) provided information on 35 additional new records for Malta. SCHEMBRI (1993) also described the major Maltese habitat types and provided additional new records, listing a total of 209 taxa (refer to discussion) accommodated in 23 families. He included also a biogeographical analysis for the group. Two years later, CARAPEZZA (1995) reviewed the heteroptera of the Sicilian Channel Islands, incorporating a list of species for all islands, including the Maltese ones. In total he recorded 197 species (seven of them doubtful) from the Maltese Islands, corrected the often outdated nomenclature of SCHEMBRI (1993) and made various comments on previously reported species for Malta.

No specific works about Maltese heteroptera have been published since then. However, several species have been synonymized or have changed taxonomic status. An example of this is the revision of the genus *Sciocoris* by PÉRICART (2002), where a couple of species recorded by SCHEMBRI (1993), such as *S. helferi* and *S. ribauti*, are considered as one species whereas, *S. fissus* was synonymized with *S. pallens*. In addition, new records of Heteroptera from the Maltese Islands have been published in the five volumes of the Catalogue of the Heteroptera of the Palaearctic Region (AUKEMA & RIEGER, 1995, 1996, 1999, 2001, 2006), which data is incorporated in the web site "www.faunaeur.org" and can be consulted by country. None of these changes in the knowledge of

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the group were considered in Schembri's work (2003) entitled "Current state of knowledge of the Maltese non-marine fauna".

The present work provides the results of recently collected material, with new records for the Maltese fauna, and updates the list of Heteroptera taking all the above mentioned works in consideration.

## MATERIALS AND METHODS

All the heteropterans recorded in the present study were collected by the first author (unless otherwise indicated) in April of 2009. Bugs were mainly collected by beating vegetation onto a small tray or by direct sampling. When a true bug was located, the host plant or the microhabitat were photographed for subsequent identification by a specialist. The coordinates of the sampling point were taken later using the Google Earth program. The habitats where the bugs were captured were classified following the Maltese habitat types described by SCHEMBRI (1993). Of these thirteen habitats, true bugs were collected from mediterranean maquis, karstland, garigue communities, steppic grassland, disturbed ground (gardens, roadsides and building sites), saline marshland and gentle sloping rocky coasts. Specimens have been deposited in the collections of the authors.

For the new list of Heteroptera of the Maltese islands (Appendix 1), the data for Malta from the web site "www.faunaeur.org" was downloaded. Species quoted in the above mentioned references (since Schembri's catalogue of 1993) that were not included in the initial list were added and new records from the present study were incorporated. Synonymies were eliminated and where applicable comment were provided with some species included in Appendix 1. All changes with respect to Schembri's catalogue (1993) were indicated. A list of Heteroptera families (Table 1) was extracted from Appendix 1 and for each family the number of species, doubtful records, genera and newly recorded genera were calculated. The number of species, doubtful species and records of new genera or the records of SCHEMBRI (1993) and the Palaearctic Catalogue (AUKEMA & RIEGER, 1995, 1996, 1999, 2001, 2006) were also calculated. In both lists for each species/family, a box with three imaginary spaces, one for each island (Malta, Gozo and Comino) was included. A cross mark was included for those spaces when a record was found in the following references: TAMANINI (1966), DE LUCCA (1969), RIEGER (1986), SCHEMBRI (1993) and CARAPEZZA (1995). An empty box indicates that the species/family is recorded from the Maltese Islands without any further data (e.g. AUKEMA & RIEGER, 1995, 1996, 1999, 2001, 2006).

## RESULTS

A total of 34 different taxa (31 identified to species level) in 10 families were found, seven of which represent new records from the Maltese islands (six from Malta and one from Comino). The new records are marked with an asterisk (\*). For each record the locality, date, number and sex of the individuals, the host plant and/or microhabitat, the Maltese habitat and the coordinates are indicated. The following taxonomical list is structured in alphabetical order for both family and species therein.

## ALYDIDAE

*Micrelytra fossularum* (Rossi, 1790)

**Material examined. MALTA:** Żurrieq, Wied Babu, 6.iv.2009, 1 ♀ on *Bromus madretensis* and other grass, maquis (35°49'35.54" N 14°27'46.65" E).

## ANTHOCORIDAE

*Orius (Orius) niger* (Wolff, 1811)

**Material examined. MALTA:** Ghadira, 7.iv.2009, 1 ♂, on *Reseda alba*, disturbed ground (roadsides) (35°58'06.60" N 14°20'53.62" E).

## COREIDAE

*Coriomeris hirticornis* (Fabricius, 1794)

**Material examined. MALTA:** Żurrieq, Wied Babu, 6.iv.2009, 1 ♂, on *Galactites tomentosa*, maquis (35°49'35.54" N 14°27'46.65" E).

## CYDNIDAE

*Crocistethus waltlianus* (Fieber, 1837)

**Material examined. MALTA:** Żurrieq, Wied Babu, 6.iv.2009, 1 ♀, on *Bromus madritensis*, maquis (35°49'35.54" N 14°27'46.65" E).

*Cydnus aterrimus* (Forster, 1771)

**Material examined. MALTA:** Valletta, Hastings Gardens, 5.iv.2009, 1 ♂ & 5 ♀♀ on leaf litter accumulated under the plants on the city wall, disturbed ground (garden) (35°53'50.21" N 14°30'28.93" E); Marsaxlokk, 10.iv.2009, 1 ♂, on disturbed ground (roadsides) (35°50'12.11" N 14°33'53.93" E), leg. A. García.

*Geotomus punctulatus* (A. Costa, 1847)

**Material examined. MALTA:** Żurrieq, Wied Babu, 6.iv.2009, 1 ♀, on ground, garigue, (35°49'35.54" N 14°27'46.65" E).

*Macroscytus brunneus* (Fabricius, 1803)

**Material examined. GOZO:** Xlendi, 9.iv.2009, 1 ♂ & 2 ♀♀, under plant remains, steppic grassland on roadside (36°01'31.07" N 14°13'08.85" E).

## LYGAEIDAE

*Aphanus rolandri* (Linnaeus, 1758)

**Material examined. MALTA:** Valletta, Hastings Gardens, 5.iv.2009, 1 ♀, on *Fumaria parviflorum*, along city wall, disturbed ground (garden) (35°53'50.21" N 14°30'28.93" E).

*Apteroles (Apteroles) kuenckeli kuenckeli* Mulsant & Rey, 1866

**Material examined. MALTA:** St Julian's Bay, 4.iv.2009, 1 ♀, gentle sloping rocky coasts (35°55'24.18" N 14°29'36.53" E). **GOZO:** Xlendi, 9.iv.2009, 1 ♂, around ground, steppic grassland on roadside (36°01'31.07" N 14°13'08.85" E).

*Artheneis foveolata* Spinola, 1837\*

**Material examined. MALTA:** Marsaxlokk, salt marsh reserve, 10.iv.2009, 1 ♂, on *Tamarix* sp., saline marshland (35°50'21.81" N 14°32'56.23" E).

*Caenocoris nerii* (Germar, 1847)

**Material examined. MALTA:** Żurrieq, Wied Babù, 6.iv.2009, 1 ♂, on *Lonicera implexa*, maquis (35°49'35.54" N 14°27'46.65" E), 1 ♂, same data but on *Periploca angustifolia*, garigue communities (35°49'22.96" N 14°27'29.09" E), 7 ♂♂ & 1 ♀, same data but on *Nerium oleander*, disturbed ground (garden) (35°49'48.78" N 14°27'56.21" E).

*Emblethis duplicatus* Seidenstucker, 1963\*

**Material examined. MALTA:** Żurrieq, Wied Babu, 6.iv.2009, 1 ♂, swarming on ground, garigue (35°49'35.54" N 14°27'46.65" E).

*Engistus boops boops* (Dufour, 1857)\*

**Material examined. MALTA:** Marsaxlokk, salt marsh reserve, 10.iv.2009, 1 ♀, on *Tamarix* sp., 4 ♂♂ & 3 ♀♀, same data but on *Arthrocnenum* sp., saline marshland (35°50'21.81" N 14°32'56.23" E).

*Henestaris laticeps* (Curtis, 1836)

**Material examined. MALTA:** St Julian's Bay, 4.iv.2009, 4 ♂♂ & 1 ♀, gentle sloping rocky coasts (35°55'24.18" N 14°29'36.53" E).

*Horvathiolus gibbicollis* (A. Costa, 1882)

**Material examined. GOZO:** Xlendi, 9.iv.2009, 5 ♂♂ & 8 ♀♀, under plant remains, steppic grassland on roadside (36°01'31.07" N 14°13'08.85" E).

*Lygaeosoma sardeum sardeum* Spinola, 1837

**Material examined. MALTA:** St Julian's Bay, 4.iv.2009, 1 ♀, gentle sloping rocky coasts (35°55'24.18" N 14°29'36.53" E).

*Metopoplax ditomoides* (A. Costa, 1847)

**Material examined.** MALTA: Marsaxlokk, salt marsh reserve, 10.iv.2009, 1 ♂, in flight, saline marshland (35°50'21.81" N 14°32'56.23" E).

*Oxycarenus (Oxycarenus) hyalinipennis* (A. Costa, 1843)\*

**Material examined.** MALTA: Għadira, 7.iv.2009, 5 ♂♂ & 2 ♀♀, on *Lavatera cretica*, disturbed ground (roadsides) (35°58'06.60" N 14°20'53.62" E).

*Oxycarenus (Oxycarenus) lavaterae* (Fabricius, 1787)

**Material examined.** MALTA: Għadira, 7.iv.2009, 16 ♂♂ & 16 ♀♀ [five pairs in cop.], on *Lavatera cretica*, disturbed ground (roadsides) (35°58'06.60" N 14°20'53.62" E).

## MIRIDAE

*Calocoris nemoralis* (Fabricius, 1787)

**Material examined.** MALTA: Żurrieq, Wied Babù, 6.iv.2009, 1 ♂, on *Borago officinalis*, maquis (35°49'35.54" N 14°27'46.65" E); Għadira, 7.iv.2009, 1 ♀, on *Glebionis coronaria*, disturbed ground (roadsides) (35°58'06.60" N 14°20'53.62" E).

*Closterotomus norwegicus* (Gmelin, 1790)

**Material examined.** MALTA: Żurrieq, Wied Babu, 6.iv.2009, 1 ♂, on *Lotus cytisoides*, 1 ♀, same data but on *Olea europaea*, 1 ♂ & 1 ♀, same data but on *Rosmarinus officinalis*, maquis (35°49'35.54" N 14°27'46.65" E), 1 ♀, same data but on *Asphodelus aestivus*, garigue communities (35°49'22.96" N 14°27'29.09" E); Għadira, 7.iv.2009, 8 ♂♂ & 4 ♀♀ & 4 nymphs (V instar), on *Parietaria judaica*, disturbed ground (roadsides) (35°58'06.60" N 14°20'53.62" E); Marsaxlokk, 10.iv.2009, 1 ♂ & 1 ♀, on *Hordeum leporinum*, steppic grassland on roadside (35°50'12.11" N 14°33'53.93" E); Floriana, 10.iv.2009, 1 ♂, on a wall, disturbed ground (building sites) (35°53'37.00" N 14°30'23.87" E).

*Horistus (Primihoristus) orientalis* (Gmelin, 1790)

**Material examined.** MALTA: Żurrieq, Wied Babu, 6.iv.2009, 1 ♀, on *Asphodelus aestivus*, garigue communities (35°49'22.96" N 14°27'29.09" E), 1 ♂ & 2 ♀♀, same data but on *Lotus edulis*, 2 ♀♀, same data but swarming around the ground, maquis (35°49'35.54" N 14°27'46.65" E).

*Macrolophus melanotoma* (A. Costa, 1853)

**Material examined.** MALTA: Għadira, 7.iv.2009, 1 ♂, on *Parietaria judaica*, disturbed ground (roadsides) (35°58'06.60" N 14°20'53.62" E).

*Megalodactylus macularubra* (Mulsant & Rey, 1852)\*

**Material examined.** MALTA: Marsaxlokk, salt marsh reserve, 10.iv.2009, 12 ♂♂ & 10 ♀♀ & 2 nymphs (V instar), on *Tamarix* sp., saline marshland (35°50'21.81" N 14°32'56.23" E).

*Mimocoris* sp.\*

**Material examined. MALTA:** Ghadira, 7.iv.2009, 5 nymphs, on *Thymbra capitata*, karstland (35°58'06.60" N 14°20'53.62" E).

*Pachytomella* sp.

**Material examined. MALTA:** Marsaxlokk, salt marsh reserve, 10.iv.2009, 1 nymph (V instar), under a stone with ants, saline marshland (35°50'21.81" N 14°32'56.23" E).

*Phytocoris* sp.\*

**Material examined. COMINO:** 8.iv.2009, 1 ♂ & 2 ♀♀, on *Teucrium fruticans*, karstland (36°00'48.81" N 14°19'35.59" E).

*Tuponia (Chlorotuponia) hippophaes* (Fieber, 1861)

**Material examined. MALTA:** Marsaxlokk, salt marsh reserve, 10.iv.2009, 2 ♂♂ & 16 ♀♀, on *Tamarix* sp., saline marshland (35°50'21.81" N 14°32'56.23" E).

## NABIDAE

*Nabis (Tropiconabis) capsiformis* Germar, 1839

**Material examined. MALTA:** Marsaxlokk, 10.iv.2009, 1 ♂, on *Stipa capensis*, steppic grassland on roadside (35°50'31.44" N 14°33'16.41" E). **COMINO:** 8.iv.2009, 1 ♂, on *Teucrium fruticans*, karstland (36°00'48.81" N 14°19'35.59" E).

## PENTATOMIDAE

*Acrosternum millierei* (Mulsant & Rey, 1866)

**Material examined. MALTA:** Żurrieq, Wied Babu, 6.iv.2009; 1 ♀, on *Cheirolophus crassifolius*, garigue communities (35°49'22.96" N 14°27'29.09" E).

*Brachynema cinctum* (Fabricius, 1775)

**Material examined. MALTA:** Marsaxlokk, salt marsh reserve, 10.iv.2009, 1 ♀, on *Suaeda maritima*, saline marshland (35°50'21.81" N 14°32'56.23" E).

*Holcostethus albipes* (Fabricius, 1781)

**Material examined. MALTA:** Żurrieq, Wied Babu, 6.iv.2009, 1 ♂, on *Prasium majus*, maquis (35°49'35.54" N 14°27'46.65" E); Marsaxlokk, 10.iv.2009, 1 ♀, on *Sinapis alba*, disturbed ground (roadsides) (35°50'12.11" N 14°33'53.93" E).

## RHOPALIDAE

*Liorhyssus hyalinus* (Fabricius, 1794)

**Material examined. GOZO:** Xlendi, 9.iv.2009, 1 ♂, on *Sonchus oleraceus*, steppic grassland on roadside (36°01'31.07" N 14°13'08.85" E).

## SALDIDAE

*Saldula pallipes* (Fabricius, 1794)

**Material examined. MALTA:** Marsaxlokk, salt marsh reserve, 10.iv.2009, 8 ♂♂ & 5 ♀♀ & 26 nymphs, swarming around the ground, saline marshland (35°50'21.81" N 14°32'56.23" E).

*Saldula* sp.

**Material examined. MALTA:** St Julian's Bay, 4.iv.2009, 1 nymph, on ground, gentle sloping rocky coasts (35°55'24.18" N 14°29'36.53" E).

## New heteroptera list for the Maltese islands

The combination of Schembri's Catalogue (1993) of Maltese Heteroptera, Maltese data from the Catalogue of the Heteroptera of the Palaearctic Region and the new data provided in the present study, show a significant increase in the knowledge of this group: a total of 26 families, 161 genera and 223 species are recorded to-date from the Maltese islands (Table 1; Appendix 1).

For 23 families, information is provided by island. All of them (23) occur in Malta, 16 in Gozo and 15 in Comino (Table 1). Twelve families were common to the three islands and the families Lygaeidae, Miridae and Pentatomidae accounted for the highest number of species in the Maltese islands. The total of 223 species comprises 216 species, 4 doubtful species and 3 species accommodated in three genera previously unrecorded from Malta (Table 1). Detailed information is available for 209 species, of which 199 occur in Malta, 62 in Gozo and 34 in Comino (Appendix 1). As regards to the species that were recorded only from a single island, these amounted to 129 from Malta, 2 from Gozo and 5 from Comino. Finally, 16 species occur on all three islands. These are: *Anisops sardeus*, *Notonecta maculata*, *Haploprocta sulcicornis*, *Cydnus aterrimus*, *Apterola kuenckeli*, *Lygaeosoma sardeum*, *Spilostethus pandurus*, *Xanthochilus saturnius*, *Acrosternum millieri*, *Codophila varia*, *Scantius aegyptius*, *Reduvius personatus*, *Maccevetus lineola*, *Odontoscelis signata*, *Dicranocephalus agilis* and *D. setulosus*.

## DISCUSSION

With respect to the seven new records of Heteroptera found in the present study, it is outstanding that three (*Artheneis foveolata*, *Engistus boops boops* and *Megalodactylus macularubra*) were captured beating *Tamarix* sp. in the salt marsh reserve from Marsaxlokk. Despite the fact that individuals of *Oxycarenus hyalinipennis* were found mixed with *O. lavaterae* on *Lavatera cretica*, no hybrid individuals between them were found, although PÉRICART (1998) reported that such hybridization is possible in mixed populations of the mentioned species. The new record of the genus *Mimocoris* could not be identified to species level as no adults were available. It is worth mentioning that *M. rugicollis* has been recorded from nearby islands (CARAPEZZA, 1995) and it is possible that our

**Table 1.** Families of heteroptera present in the Maltese fauna. Records (X) for each island (Malta [Ma], Gozo [Go] and Comino [Co]). [Sps.] = Species; (?) = Doubtful species; [Ad.gen.] = Additional genus, when a specimen is identified only to genus level and it is a new record; [no. gen.] = number of genera in the Maltese fauna for each family; [SCHEMBRI (1993)] and [PaCa] = data recorded respectively in the catalogue of SCHEMBRI (1993) and in the Palaearctic Catalogue after being corrected for synonymies and other changes.

New list							Sch. 93		PaCa	
no.	Family	Ma	Go	Co	Sps.	Ad.gen.	no. gen.	Sps.	Ad.gen.	Sps.
<b>AQUATIC HETEROPTERA</b>										
1	CORIXIDAE	X		X	3		2	3		3
2	GERRIDAE	X			1		1	1		1
3	MESOVELIIDAE	X	X		1		1	1		1
4	NEPIDAE				2		2	-		2
5	NOTONECTIDAE	X	X	X	3		2	2		3
6	PLEIDAE				1		1	-		1
7	VELIIDAE	X	X		2		2	2		2
<b>TERRESTRIAL HETEROPTERA</b>										
8	ALYDIDAE	X		X	2		2	2		2
9	ANTHOCORIDAE	X			12 + 2?		9	9		12 + 2?
10	BERYTIDAE	X		X	2		1	2		2
11	CIMICIDAE	X			1		1	1		1
12	COREIDAE	X	X	X	10		8	10		10
13	CYDNIDAE	X	X	X	11		8	10		11
14	LEPTOPODIDAE	X			1		1	1		-
15	LYGAEIDAE	X	X	X	55 + 1?		42	46 + 1?	1	50 + 1?
16	MIRIDAE	X	X	X	34 + 1?	3	27	32	1	33 + 1?
17	NABIDAE	X	X	X	6		2	6		6
18	PENTATOMIDAE	X	X	X	25		19	24		23
19	PIESMATIDAE				1		1	-		1
20	PYRRHOCORIDAE	X	X	X	1		1	1		1
21	REDUVIIDAE	X	X	X	11		9	11 + 1?		11 + 1?
22	RHOPALIDAE	X	X	X	10		7	10		9
23	SALDIDAE	X	X		1		1	1		-
24	SCUTELLERIDAE	X	X	X	8		5	8		7
25	STENOCEPHALIDAE	X	X	X	4		1	4		4
26	TINGIDAE	X	X		8		5	6	1	8
	Total	23	16	15	216 + 4?	3	161	193 + 2?	3	204 + 5?
	Total number of species				220			195		209
	Minimum number of Maltese species				223			198		209



material belongs to this species. The individuals of the genus *Phytocoris* are still under study, but they do not seem to belong to any of the species recorded by CARAPEZZA (1995) from neighbouring territories.

At family and species level, an underestimation in the number of taxa recorded from Gozo in comparison with Malta is evident. Gozo has a considerable size and a high number of habitats, and most likely it supports the same families and only a fewer species than Malta. These differences are probably due to higher sampling efforts in Malta rather than in Gozo, due to the better accessibility of the main island. Comino is the smallest, the most homogeneous and the least accessible of the islands so it is reasonable to expect the smallest number of families and species. Nonetheless, these numbers should rise with higher sampling efforts. The number of species considered by SCHEMBRI (1993) was reduced from 209 to 198 after synonymies [e.g. comments to Appendix 1: 45, 60, 70, 77 and 93], corrections [e.g. comments: 48, 69 and 80] and deletions [see below] were carried out. The majority of these changes were also incorporated in the excellent work of CARAPEZZA (1995). CARAPEZZA (1995) deleted from the Maltese fauna several species such as *Schoenocoris flavomarginatus*, *Nabis rugosus* and *N. ferus* due to identification errors. These deletions are supported in the Palaearctic Catalogue and in our list. Other deletions, however, such as *Nysius thymi* and *N. ericae*, are not confirmed in the Palaearctic Catalogue and are therefore retained in our list (see comment 34). In the case of *Reduvius villosus* [see comment 85], this species is not included in the current list until new material is available for study and assigned to this species. *Odontotarsus caudatus*, a species recorded by TAMANINI (1966), was absent in the catalogue of SCHEMBRI (1993), but included again in the Palaearctic Catalogue [comment 76]. In relation to the taxa at genus level in SCHEMBRI (1993): *Ligyrocoris* sp. is attributed to *Remaudiereana annulipes* by CARAPEZZA (1995) [comment 38]; *Agramma* sp. is assigned in our list to *Agramma nigrum*, a species present in the Palaearctic Catalogue [comment 94]; *Plagiognathus* sp. remains at genus level.

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**Appendix I.** List of heteroptera from the Maltese Islands (Malta [Ma], Gozo [Go] and Comino [Co]). Old records (X) extracted from TAMANINI (1966), DE LUCCA (1969), RIEGER (1986), SCHEMBRI (1993) and CARAPEZZA (1995), and the new ones (O). [Sch. 93] = Species recorded in the catalogue of SCHEMBRI (1993). [PaCa] = Species recorded in the Palaearctic Catalogue (AUKEMA & RIEGER, 1995, 1996, 1999, 2001, 2006). (?) = Doubtful species.

no.	Family / species / subspecies	Ma	Go	Co	Sch. 93	PaCa
<b>AQUATIC HETEROPTERA</b>						
CORIXIDAE						
1	<i>Corixa affinis</i> Leach, 1817	X			X <sup>[1]</sup>	X
2	<i>Sigara (Vermicorixa) lateralis</i> (Leach, 1817)	X		X	X <sup>[2]</sup>	X
3	<i>Sigara (Pseudovermicorixa) nigrolineata nigrolineata</i> (Fieber, 1848)	X			X	X
GERRIDAE						
4	<i>Gerris (Gerris) thoracicus</i> Schummel, 1832	X			X	X
MESOVELIIDAE						
5	<i>Mesovelia vittigera</i> Horvath, 1895	X	X		X	X
NEPIDAE						
6	<i>Nepa cinerea</i> Linnaeus, 1758					X
7	<i>Ranatra (Ranatra) linearis</i> (Linnaeus, 1758)					X
NOTONECTIDAE						
8	<i>Anisops sardeus sardeus</i> Herrich-Schaeffer, 1849	X	X	X	X <sup>[3]</sup>	X
9	<i>Notonecta (Notonecta) glauca glauca</i> Linnaeus, 1758					X
10	<i>Notonecta (Notonecta) maculata</i> Fabricius, 1794	X	X	X	X <sup>[4]</sup>	X
PLEIDAE						
11	<i>Plea minutissima minutissima</i> Leach, 1817					X
VELIIDAE						
12	<i>Microvelia (Microvelia) pygmaea</i> (Dufour, 1833)	X	X		X	X
13	<i>Velia (Plesiovelia) muelleri</i> Tamanini, 1947	X	X		X <sup>[5]</sup>	X
<b>TERRESTRIAL HETEROPTERA</b>						
ALYDIDAE						
14	<i>Camptopus lateralis</i> (Germar, 1817)	X		X	X	X

<sup>1</sup> Recorded as *Corixa affinis affinis* (Leach, 1818)

<sup>2</sup> Recorded as *Sigara lateralis* (Leach, 1818)

<sup>3</sup> Recorded as [= *Anisops sardea* Herrich-Schäffer, 1849]

<sup>4</sup> Recorded as the subspecies *Notonecta maculata maculata* Fabricius, 1794

<sup>5</sup> Recorded as *Velia mulleri* Tamanini, 1947

no.	Family / species / subspecies	Ma	Go	Co	Sch. 93	PaCa
15	<i>Micrelytra fossularum</i> (Rossi, 1790)	X			X	X
	ANTHOCORIDAE					
16	<i>Anthocoris nemoralis</i> (Fabricius, 1794)	X			X	X
17 ?	<i>Anthocoris nemorum</i> (Linnaeus, 1761)					?
18	<i>Brachysteles parvicornis</i> (A. Costa, 1847)	X				X
19	<i>Cardiastethus nazareus</i> Reuter, 1884	X			X	X
20	<i>Dufouriellus ater</i> (Dufour, 1833)	X			X	X
21	<i>Dysepicritus rufescens</i> (A. Costa, 1847)	X				X
22	<i>Lyctocoris (Lyctocoris) campestris</i> (Fabricius, 1794)	X			X	X
23	<i>Montandoniola moraguesi</i> (Puton, 1896)	X			X	X
24	<i>Orius (Orius) laevigatus laevigatus</i> (Fieber, 1860)	X				X
25	<i>Orius (Orius) niger</i> (Wolff, 1811)	X			X <sup>[6]</sup>	X
26	<i>Orius (Orius) pallidicornis</i> (Reuter, 1884)	X			X	X
27 ?	<i>Xylocoris (Xylocoris) cursitans</i> (Fallen, 1807)					?
28	<i>Xylocoris (Proxylocoris) galactinus</i> (Fieber, 1836)	X			X	X
29	<i>Xylocoris (Xylocoris) obliquus</i> A. Costa, 1853	X			X <sup>[7]</sup>	X
	BERYTIDAE					
30	<i>Berytinus (Lizinus) montivagus</i> (Meyer-Dur, 1841)	X		X	X <sup>[8]</sup>	X
31	<i>Berytinus (Lizinus) setipennis</i> (Saunders, 1876)	X			X	X
	CIMICIDAE					
32	<i>Cimex lectularius</i> Linnaeus, 1758	X			X	X
	COREIDAE					
33	<i>Anoplocerus luteus</i> (Fieber, 1861)	X			X	X
34	<i>Arenocoris fallenii</i> (Schilling, 1829)	X			X <sup>[9]</sup>	X
35	<i>Arenocoris intermedius</i> (Jakovlev, 1883)	X			X	X
36	<i>Arenocoris waltlii</i> (Herrich-Schaeffer, 1834)	X	X		X <sup>[10]</sup>	X
37	<i>Centrocoris variegatus</i> Kolenati, 1845	X			X <sup>[11]</sup>	X

<sup>6</sup> Recorded as *Orius niger niger* (Wolff, 1804)

<sup>7</sup> Recorded as *Xylocoris obliquus* Costa, 1852

<sup>8</sup> Recorded as the subspecies *Berytinus montivagus rotundatus* (Flor, 1862)

<sup>9</sup> Recorded as *Arenocoris falleni* (Schilling, 1829)

<sup>10</sup> Recorded as *Arenocoris waltli* (Herrich-Schäffer, 1834)

<sup>11</sup> Recorded as *Centocoris variegatus* (Kolenati, 1845)

no.	Family / species / subspecies	Ma	Go	Co	Sch. 93	PaCa
38	<i>Coriomeris hirticornis</i> (Fabricius, 1794)	X		X	X	X
39	<i>Haploprocta sulcicornis</i> (Fabricius, 1794)	X	X	X	X <sup>[12]</sup>	X
40	<i>Loxocnemis dentator</i> (Fabricius, 1794)	X			X	X
41	<i>Prionotylus brevicornis</i> (Mulsant & Rey, 1852)		X		X <sup>[13]</sup>	X
42	<i>Strobilotoma typhaecornis</i> (Fabricius, 1803)	X			X	X
	CYDNIDAE					
43	<i>Aethus pilosus</i> (Herrich-Schaeffer, 1834)			X	X	X
44	<i>Byrsinus albipennis</i> (A. Costa, 1853)	X			X <sup>[14]</sup>	X
45	<i>Byrsinus flavicornis</i> (Fabricius, 1794)	X			X <sup>[15]</sup>	X
46	<i>Byrsinus fuscipes</i> (Mulsant & Rey, 1866)					X
47	<i>Byrsinus pilosulus</i> (Klug, 1845)	X			X <sup>[16]</sup>	X
48	<i>Canthophorus melanopterus melanopterus</i> (Herrich-Schaeffer, 1835)	X			X <sup>[17]</sup>	X
49	<i>Crocistethus waltlianus</i> (Fieber, 1837)	X	X		X <sup>[18]</sup>	X
50	<i>Cydnus aterrimus</i> (Forster, 1771)	X	X	X	X	X
51	<i>Geotomus punctulatus</i> (A. Costa, 1847)	X			X <sup>[19]</sup>	X
52	<i>Macroscytus brunneus</i> (Fabricius, 1803)	X	X		X	X
53	<i>Sehirus morio</i> (Linnaeus, 1761)	X			X	X
	LEPTOPODIDAE					
54	<i>Patapius spinosus</i> (Rossi, 1790)	X			X	
	LYGAEIDAE					
55	<i>Acompus laticeps</i> Ribaut, 1929	X			X <sup>[20]</sup>	X
56	<i>Aellopus atratus</i> (Goeze, 1778)	X			X	X
57	<i>Aphanus rolandri</i> (Linnaeus, 1758)	X	X		X	X
58	<i>Apterola (Apterola) kuenckeli kuenckeli</i> Mulsant & Rey, 1866	X	X	X	X <sup>[21]</sup>	X

<sup>12</sup> Recorded as the subspecies *Haploprocta sulcicornis sulcicornis* (Fabricius, 1794)

<sup>13</sup> Recorded as *Priotylus brivicornis* (Mulsant & Rey, 1852)

<sup>14</sup> Recorded as *Byrsinus albipennis* (Costa, 1852)

<sup>15</sup> Recorded as [= *Aethus flavicornis flavicornis* (Fabricius, 1794)]

<sup>16</sup> Recorded as [= *Aethus pilosulus* (Klug, 1845)]

<sup>17</sup> Recorded as [= *Sehirus melanopterus melanopterus* (Herrich-Schäffer, 1835)]

<sup>18</sup> Recorded as *Crocistethus waltlianus* (Fieber, 1836)

<sup>19</sup> Recorded as *Geotomus punctulatus* (Costa, 1837)

<sup>20</sup> Recorded as *Acomptus australis* Horvath, 1931. [= *Acompus australis* Horvath, 1929]

<sup>21</sup> Recorded as *Apterola kuenckeli* Mulsant & Rey, 1866 [= *Apterola pedestris* Stal.]

no.	Family / species / subspecies	Ma	Go	Co	Sch. 93	PaCa
59	<i>Artheneis foveolata</i> Spinola 1837	O				
60	<i>Beosus maritimus</i> (Scopoli, 1763)	X	X		X	X
61	<i>Caenocoris nerii</i> (Germar, 1847)	X			X	X
62	<i>Camptocera glaberrima</i> (Walker, 1872)	X			X	X
63	<i>Cosmopleurus fulvipes</i> (Dallas, 1852)					X
64	<i>Cymodema tabida tabida</i> Spinola, 1837	X			X <sup>[22]</sup>	X
65	<i>Dieuches armatipes</i> (Walker, 1872)	X			X	X
66	<i>Emblethis angustus</i> Montandon, 1890	X	X		X <sup>[23]</sup>	X
67	<i>Emblethis denticollis</i> Horvath, 1878	X	X		X	X
68	<i>Emblethis duplicatus</i> Seidenstucker, 1963	O				
69	<i>Emblethis griseus</i> (Wolff, 1802)	X			X	X
70	<i>Emblethis verbasci</i> (Fabricius, 1803)	X	X		X	X
71	<i>Engistus boops boops</i> (Dufour, 1857)	O				
72	<i>Eremocoris fenestratus</i> (Herrich-Schaeffer, 1839)	X			X	X
73	<i>Geocoris (Geocoris) acuticeps</i> Signoret, 1881					X
74	<i>Geocoris (Geocoris) megacephalus</i> (Rossi, 1790)	X			X <sup>[24]</sup>	X
75	<i>Henestaris laticeps laticeps</i> (Curtis, 1836)	X			X <sup>[25]</sup>	X
76	<i>Heterogaster urticae</i> (Fabricius, 1775)	X	X		X	X
77	<i>Horvathiolus gibbicollis</i> (A. Costa, 1882)	X	X		X	X
78	<i>Horvathiolus superbus</i> (Pollich, 1781)	X	X		X <sup>[26]</sup>	X
79	<i>Hyalochilus ovatulus</i> (A. Costa, 1853)	X	X		X <sup>[27]</sup>	X
80 ?	<i>Kleidocerys resedae resedae</i> (Panzer, 1797)					?
81	<i>Lamprodema maura</i> (Fabricius, 1803)	X			X <sup>[28]</sup>	X
82	<i>Liolobus walkeri</i> (Saunders, 1876)	X		X	X <sup>[29]</sup>	X
83	<i>Lygaeosoma sardeum sardeum</i> Spinola, 1836	X	X	X	X <sup>[30]</sup>	X
84	<i>Lygaeus creticus</i> Lucas, 1854	X			X	X

<sup>22</sup> Recorded as [= *Cymodema tabidum* Spinola, 1837]

<sup>23</sup> Recorded as [= *Emblethis angustatus* Montandon, 1890]

<sup>24</sup> Recorded as *Geocoris magacephalus* (Rossi, 1790)

<sup>25</sup> Recorded as [= *Henestaris curtulus* Horvath, 1911]

<sup>26</sup> Recorded as *Horvathiolus superbus* (Pollich, 1779)

<sup>27</sup> Recorded as *Hyalochilus ovatulus* (Costa, 1852)

<sup>28</sup> Recorded as [= *Lamprodema maurum* (Fabricius, 1803)]

<sup>29</sup> Recorded as [= *Rhyparochromus (Liolobus) walkeri* (Saunders, 1876)]

<sup>30</sup> Recorded as [= *Lygaeosoma sardea* Spinola, 1837]

no.	Family / species / subspecies		Ma	Go	Co	Sch. 93	PaCa
85	<i>Macropternella convexa</i> (Fieber, 1837)		X	X		? <sup>[31]</sup>	X
86	<i>Megalonotus puncticollis</i> (Lucas, 1849)						X
87	<i>Metopoplax ditomoides</i> (A. Costa, 1847)		X			X <sup>[32]</sup>	X
88	<i>Microtomideus leucodermus</i> (Fieber, 1861)		X			X <sup>[33]</sup>	X
89	<i>Neurocladus brachiidens</i> (Dufour, 1851)		X			X	X
90	<i>Nysius cymoides</i> (Spinola, 1837)		X	X		X	X
91	<i>Nysius ericae ericae</i> (Schilling, 1829)	<sup>[34]</sup>	X			X	X
92	<i>Nysius graminicola graminicola</i> (Kolenati, 1845)		X		X	X <sup>[35]</sup>	X
93	<i>Nysius senecionis senecionis</i> (Schilling, 1829)		X			X <sup>[36]</sup>	X
94	<i>Nysius thymi thymi</i> (Wolff, 1804)	<sup>[34]</sup>	X			X	X
95	<i>Orsillus reyi</i> Puton, 1871		X			X	X
96	<i>Oxycarenus (Oxycarenus) hyalinipennis</i> (A. Costa, 1843)			O			
97	<i>Oxycarenus (Oxycarenus) lavaterae</i> (Fabricius, 1787)		X	X		X	X
98	<i>Paromius gracilis</i> (Rambur, 1839)		X			X	X
99	<i>Peritrechus angusticollis</i> (Sahlberg, 1848)		X			X	X
100	<i>Peritrechus meridionalis</i> Puton, 1877		X			X	X
101	<i>Proderus suberythropus</i> (A. Costa, 1842)		X			X <sup>[37]</sup>	X
102	<i>Remaudiereana annulipes</i> (Baerensprung, 1859)	<sup>[38]</sup>	X			X <sup>[38]</sup>	
103	<i>Scolopostethus decoratus</i> (Hahn, 1833)		X			X <sup>[39]</sup>	X
104	<i>Scolopostethus pictus</i> (Schilling, 1829)		X			X	X
105	<i>Spilostethus pandurus</i> (Scopoli, 1763)		X	X	X	X	X
106	<i>Taphropeltus contractus</i> (Herrich-Schaeffer, 1835)		X			X <sup>[40]</sup>	X

<sup>31</sup> Recorded as *Macropterna foveicollis* (Curtis, 1881) [= *Macropternella foveicollis* Costa, 1981]

<sup>32</sup> Recorded as *Metopoplax ditomoides* (Curtis, 1843)

<sup>33</sup> Recorded as [= *Rhyparochromus (Microtomideus) leucodermus* (Fieber, 1861)]

<sup>34</sup> CARAPEZZA (1995) comments: "Vengono esclusi dalla fauna di Malta i *Nysius thymi* (Wolff) e *ericae* (Schill.) in quanto la loro citazione è certamente dovuta ad errori di determinazione". However these species are included in the Palaearctic Catalogue, so we maintain them.

<sup>35</sup> Recorded as *Nysius graminicola* (Kolenati, 1858)

<sup>36</sup> Recorded as [= *Tropinysius senecionis* (Schilling, 1829)]

<sup>37</sup> Recorded as *Proderus suberythropus* (A. Costa, 1841)

<sup>38</sup> CARAPEZZA (1995) attributed to this species the *Ligyrocoris* sp. record by SCHEMBRI [Note: in CARAPEZZA (1995) the notes 18 and 19 in Table 2 seem to be exchanged]. In any case both records represent one additional species for the Maltese fauna).

<sup>39</sup> Recorded as [= *Scolopostethus brevis* Saunders, 1876]

<sup>40</sup> Recorded as *Taphropeltus contractus* (Herrich-Schäffer, 1835)

no.	Family / species / subspecies	Ma	Go	Co	Sch. 93	PaCa
107	<i>Taphropeltus nervosus</i> (Fieber, 1861)	X	X		X	X
108	<i>Thaumastopus marginicollis</i> (Lucas, 1849)	X			X <sup>[41]</sup>	X
109	<i>Tropistethus holosericus</i> (Scholtz, 1846)	X			X <sup>[42]</sup>	X
110	<i>Xanthochilus saturnius</i> (Rossi, 1790)	X	X	X	X <sup>[43]</sup>	X
	MIRIDAE					
111	<i>Calocoris nemoralis</i> (Fabricius, 1787)	X	X		X	X
112	<i>Campyloneura virgula</i> (Herrich-Schaeffer, 1835)	X			X <sup>[44]</sup>	X
113	<i>Capsodes gothicus gothicus</i> (Linnaeus, 1758)	X			X	X
114	<i>Closterotomus norwegicus</i> (Gmelin, 1790)	X			X <sup>[45]</sup>	X
115	<i>Closterotomus trivialis</i> (A. Costa, 1853)	X	X		X <sup>[46]</sup>	X
116	<i>Conostethus venustus venustus</i> (Fieber, 1858)	X	X		X <sup>[47]</sup>	X
117	<i>Deraeocoris (Camptobrochis) serenus</i> (Douglas & Scott, 1868)	[48] X			X <sup>[48]</sup>	X
118	<i>Deraeocoris (Deraeocoris) flavilinea</i> (A. Costa, 1862)	X			X <sup>[49]</sup>	X
119	<i>Deraeocoris (Deraeocoris) punctum</i> (Rambur, 1839)	X			X <sup>[50]</sup>	X
120	<i>Dicyphus (Brachyceroea) albonasutus</i> Wagner, 1951	X			X	X
121	<i>Dicyphus (Brachyceroea) annulatus</i> (Wolff, 1804)	X			X <sup>[51]</sup>	X
122	<i>Dicyphus (Dicyphus) errans</i> (Wolff, 1804)	X			X	X
123	<i>Dicyphus (Dicyphus) hyalinipennis</i> (Burmeister, 1835)	X			X	X
124	<i>Dimorphocoris (Dimorphocoris) mutatus</i> Seidenstucker, 1964	X			X	X
125	<i>Horistus (Primihoristus) orientalis</i> (Gmelin, 1790)	X			X <sup>[52]</sup>	X
126	<i>Liocoris tripustulatus</i> (Fabricius, 1781)	X	X		X	X

<sup>41</sup> Recorded as the subspecies *Thaumastopus marginicollis pallescens* (Jakovlev, 1874)

<sup>42</sup> Recorded as *Tropistethus holosericeus* (Scholtz, 1846)

<sup>43</sup> Recorded as [= *Rhyparochromus (Xanthochilus) saturnius* (Rossi, 1790)]

<sup>44</sup> Recorded as *Campyloneura virgula* (Herrich-Schäffer, 1836)

<sup>45</sup> Recorded as the subspecies *Closterotomus norwegicus norwegicus* (Gmelin, 1788) and *C. n. vittiger* Reuter, 1896

<sup>46</sup> Recorded as [= *Calocoris trivialis* (Costa, 1852)]

<sup>47</sup> Recorded as *Conostethus venustus* (Fieber, 1859)

<sup>48</sup> Recorded as *Deraeocoris punctulatus* (Fallen, 1807). CARAPEZZA (1995) noted: "Vanno riferite a questa specie (*D. serenus*) tutte le citazioni per le regioni meridionali di *D. punctulatus* (Fall.)"

<sup>49</sup> Recorded as *Deraeocoris flavilinea* (Costa, 1860)

<sup>50</sup> Recorded as *Deraeocoris punctum* (Rambur, 1842)

<sup>51</sup> Recorded as [= *Dicyphus ononidis* Wagner, 1951]

<sup>52</sup> Recorded as [= *Capsodes lineolatus* (Brullé, 1832)]



no.	Family / species / subspecies	Ma	Go	Co	Sch. 93	PaCa
127	<i>Lygus pratensis</i> (Linnaeus, 1758)	X			X <sup>[53]</sup>	X
128	<i>Macrolophus melanotoma</i> (A. Costa, 1853)	X	X		X <sup>[54]</sup>	X
129	<i>Macrolophus pygmaeus</i> (Rambur, 1839)	X			X	X
130	<i>Macrotylus (Alloeonycha) atricapillus</i> (Scott, 1872)	X			X	X
131	<i>Macrotylus (Alloeonycha) nigricornis</i> Fieber, 1864	X	X		X	X
132	<i>Megalodactylus macularubra</i> (Mulsant & Rey, 1852)	O				
133	<i>Mimocoris</i> sp.	O				
134	<i>Nesidiocoris tenuis</i> (Reuter, 1895)	X			X <sup>[55]</sup>	X
135	<i>Orthocephalus proserpinae</i> (Mulsant & Rey, 1852)	X	X		X	X
136	<i>Pachytomella passerinii</i> (A. Costa, 1842)	X	X		X <sup>[56]</sup>	X
137	<i>Phytocoris</i> sp.			O		
138	<i>Pilophorus cinnamopterus</i> (Kirschbaum, 1856)	X			X <sup>[57]</sup>	X
139	<i>Plagiognathus</i> sp.			X	X	
140	<i>Polymerus (Poeciloscytus) cognatus</i> (Fieber, 1858)	X	X		X	X
141	<i>Psallus (Psallus) varians cornutus</i> Wagner, 1943	X			X	X
142	<i>Taylorilygus apicalis</i> (Fieber, 1861)	X	X		X <sup>[58]</sup>	X
143 ?	<i>Trigonotylus caelestialium</i> (Kirkaldy, 1902)	X			X <sup>[59]</sup>	?
144	<i>Trigonotylus pulchellus</i> (Hahn, 1834)	X			X	X
145	<i>Trigonotylus tenuis</i> Reuter, 1893	X			X <sup>[60]</sup>	X
146	<i>Tuponia (Chlorotuponia) brevirostris</i> Reuter, 1883					X
147	<i>Tuponia (Chlorotuponia) hippophaes</i> (Fieber, 1861)		X	X	X <sup>[61]</sup>	X
148	<i>Tytthus parviceps</i> (Reuter, 1890)	X				X
	NABIDAE					
149	<i>Himacerus (Anaptus) major</i> (A. Costa, 1842)	X			X <sup>[62]</sup>	X
150	<i>Nabis (Tropiconabis) capsiformis</i> Germar, 1838	X		X	X <sup>[63]</sup>	X

<sup>53</sup> Recorded as [= *Exolygus pratensis* (Linnaeus, 1758)]

<sup>54</sup> Recorded as [= *Macrolophus caliginosus* Wagner, 1950]

<sup>55</sup> Recorded as [= *Cyrtopeltis tenuis* Reuter, 1895]

<sup>56</sup> Recorded as *Pachytomella passerinii* (Costa, 1841)

<sup>57</sup> Recorded as *Pilophorus cinnamopterus* (Kirschbaum, 1855)

<sup>58</sup> Recorded as [= *Taylorilygus pallidulus* (Blanchard, 1852)]

<sup>59</sup> Recorded as *Trigonotylus caelestialium* (Kirkaldy, 1902)

<sup>60</sup> Recorded as [= *Trigonotylus pallidicornis* Reuter, 1900] and [= *Trigonotylus ruficornis* (Geoffroy, 1785)]

<sup>61</sup> Recorded as the subspecies *Tuponia (Chlorotuponia) hippophaes hippophaes* (Fieber, 1861)

<sup>62</sup> Recorded as *Himacerus major* (Costa, 1840)

<sup>63</sup> Recorded as *Nabis capsiformis* Germar, 1837

no.	Family / species / subspecies	Ma	Go	Co	Sch. 93	PaCa
151	<i>Nabis (Nabis) pseudoferus ibericus</i> Remane, 1962	X			X	X
152	<i>Nabis (Nabis) reuterianus</i> Puton, 1880	X			X <sup>[64]</sup>	X
153	<i>Nabis (Halonabis) sareptanus</i> Dohrn, 1862	X			X <sup>[65]</sup>	X
154	<i>Nabis (Aspilaspis) viridulus</i> Spinola, 1837		X		X <sup>[66]</sup>	X
	PENTATOMIDAE					
155	<i>Acrosternum millieri</i> (Mulsant & Rey 1866)	X	X	X	X	
156	<i>Aelia acuminata acuminata</i> (Linnaeus, 1758)	X			X <sup>[67]</sup>	X
157	<i>Ancyrosoma leucogrammes</i> (Gmelin, 1790)	X		X	X <sup>[68]</sup>	X
158	<i>Bagrada (Bagrada) hilaris</i> (Burmeister, 1835)	X			X	X
159	<i>Brachynema cinctum</i> (Fabricius, 1775)	X			X	X
160	<i>Carpocoris (Carpocoris) fuscipinus</i> (Boheman, 1851)	X	X		X <sup>[69]</sup>	X <sup>[70]</sup>
161	<i>Chroantha ornatula</i> (Herrich-Schaeffer, 1842)	X			X <sup>[71]</sup>	X
162	<i>Codophila varia varia</i> (Fabricius, 1787)	X	X	X	X	X
163	<i>Dolycoris baccarum</i> (Linnaeus, 1758)	X			X	X
164	<i>Eurydema (Eurydema) ornata</i> (Linnaeus, 1758)	X			X <sup>[72]</sup>	X
165	<i>Eurydema (Rubrodorsalium) ventralis</i> Kolenati, 1846	X			X <sup>[73]</sup>	X
166	<i>Eysarcoris ventralis</i> (Westwood, 1837)	X	X		X <sup>[74]</sup>	X
167	<i>Graphosoma lineatum</i> (Linnaeus, 1758)	X			X <sup>[75]</sup>	X
168	<i>Holcostethus albipes</i> (Fabricius, 1781)	X			X	X
169	<i>Nezara viridula</i> (Linnaeus, 1758)	X		X	X	
170	<i>Odontotarsus caudatus</i> (Burmeister, 1835)	<sup>[76]</sup> X				X

<sup>64</sup> Recorded as *Nabis reuterianus* Puton, 1879

<sup>65</sup> Recorded as [= *Halonabis sareptanus* (Dohrn, 1862)]

<sup>66</sup> Recorded as [= *Nabis viridis* Brullé, 1835]

<sup>67</sup> Recorded as *Aelia acuminata* (Linnaeus, 1758)

<sup>68</sup> Recorded as *Ancyrosoma leucogrammes* (Gmelin, 1790)

<sup>69</sup> Included here: a) *Carpocoris purpureipennis* (De Geer, 1773) records of SCHEMBRI (1993), which indicated that this record probably refers to the very similar and often confused *C. mediterraneus*. CARAPEZZA (1995) confirmed its exclusion from the Maltese fauna; b) *C. mediterraneus atlanticus* Tamanini, 1958; and c) *C. m. mediterraneus* Tamanini, 1958, see note [70].

<sup>70</sup> Recorded as [= *Carpocoris mediterraneus atlanticus* Tamanini, 1958] and [= *C. m. mediterraneus* Tamanini, 1958], afterwards synonymized by RIBES *et al.* (2007).

<sup>71</sup> Recorded as *Croantha ornatula* (Herrich-Schaeffer, 1842)

<sup>72</sup> Recorded as [= *Eurydema ornatum* (Linnaeus, 1758)]

<sup>73</sup> Recorded as [= *Eurydema ventrale* Kolenati, 1846]

<sup>74</sup> Recorded as [= *Eysarcoris inconspicuus* (Herrich-Schaeffer, 1844)]

<sup>75</sup> Recorded as *Graposoma lineatum italicum* (Müller, 1766)

<sup>76</sup> Recorded by TAMANINI (1966), missing in SCHEMBRI (1993) and present again in the Palaeartic Catalogue.

no.	Family / species / subspecies	Ma	Go	Co	Sch. 93	PaCa
171	<i>Rhaphigaster nebulosa</i> (Poda, 1761)	X			X	X
172	<i>Sciocoris (Neosciocoris) conspurcatus conspurcatus</i> Klug, 1845	X			X	X
173	<i>Sciocoris (Sciocoris) helferi</i> Fieber, 1851	X			X <sup>[77]</sup>	X
174	<i>Sciocoris (Neosciocoris) maculatus</i> Fieber, 1851	X			X <sup>[78]</sup>	X
175	<i>Sciocoris (Neosciocoris) pallens</i> Klug, 1845	X			X <sup>[79]</sup>	X
176	<i>Sciocoris (Neosciocoris) sideritidis</i> Wollaston, 1858	X	X		X	X
177	<i>Scotinophara sicula</i> (A. Costa, 1841)	X			X	X
178	<i>Ventocoris (Ventocoris) rusticus</i> (Fabricius, 1781)	X			X	X
179	<i>Ventocoris (Ventocoris) trigonus</i> (Krynicky, 1871)	X			X	X
	PIESMATIDAE					
180	<i>Piesma (Piesma) maculatum</i> (Laporte de Castelneau, 1833)					X
	PYRRHOCORIDAE					
181	<i>Scantius aegyptius aegyptius</i> (Linnaeus, 1758)	X	X	X	X	X
	REDUVIIDAE					
182	<i>Coranus (Coranus) griseus</i> (Rossi, 1790)	<sup>[80]</sup> X	X		X <sup>[80]</sup>	X
183	<i>Ectomocoris (Ectomocoris) ululans</i> (Rossi, 1790)	X			X	X
184	<i>Empicoris culiciformis</i> (De Geer, 1773)	X			X <sup>[81]</sup>	X
185	<i>Oncocephalus pilicornis</i> Reuter, 1882	X			X <sup>[82]</sup>	X
186	<i>Oncocephalus squalidus</i> (Rossi, 1790)	X			X	X
187	<i>Pasira basiptera</i> Stal, 1859	X			X	X
188	<i>Peirates strepitans</i> Rambur, 1839	X			X <sup>[83]</sup>	X
189	<i>Ploiaria domestica</i> Scopoli, 1786	X	X		X <sup>[84]</sup>	X
190	<i>Reduvius pallipes</i> Klug, 1830	X		X	X	X
191	<i>Reduvius personatus</i> (Linnaeus, 1758)	X	X	X	X	X

<sup>77</sup> Recorded as *Sciocoris helferi* Fieber, 1852 and [= *S. ribauti* Wagner, 1953]

<sup>78</sup> Recorded as *Sciocoris maculatus* Fieber, 1852

<sup>79</sup> Recorded as [= *Sciocoris fissus* Mulsant & Rey, 1866]

<sup>80</sup> Included under *Coranus aegyptius* (Fabricius, 1775) by TAMANINI (1966) and SCHEMBRI (1993). More information in PUTSHKOV & MOULET (2009).

<sup>81</sup> Recorded as the subspecies *Empicoris culiciformis culiciformis* (Degeer, 1773)

<sup>82</sup> Recorded as *Oncocephalus pilicornis* (Herrich-Schäffer, 1835)

<sup>83</sup> Recorded as *Pirates strepitans* Rambur, 1842

<sup>84</sup> Recorded as *Ploiaria domestica* Scopoli, 1786

no.	Family / species / subspecies		Ma	Go	Co	Sch. 93	PaCa
	<i>Reduvius villosus</i> Fabricius, 1794	<sup>[85]</sup>	?			?[ <sup>85]</sup>	?
192	<i>Rhynocoris (Rhynocoris) erythropus</i> (Linnaeus, 1767)		X	X		X <sup>[86]</sup>	X
	RHOPALIDAE						
193	<i>Agraphopus lethierryi</i> Stal, 1872		X			X <sup>[87]</sup>	X
194	<i>Brachycarenum tigrinus</i> (Schilling, 1829)		X		X	X <sup>[88]</sup>	X
195	<i>Corizus hyoscyami hyoscyami</i> (Linnaeus, 1758)		X			X	X
196	<i>Liorhyssus hyalinus</i> (Fabricius, 1794)		X	X		X <sup>[89]</sup>	X
197	<i>Maccevethus corsicus corsicus</i> Signoret, 1862		X	X		X	X
198	<i>Maccevethus errans caucasicus</i> (Kolenati, 1845)		X	X	X	X <sup>[90]</sup>	
199	<i>Rhopalus (Rhopalus) lepidus</i> Fieber, 1861			X		X	X
200	<i>Stictopleurus abutilon</i> (Rossi, 1790)		X			X	X
201	<i>Stictopleurus crassicornis</i> (Linnaeus, 1758)		X		X	X	X
202	<i>Stictopleurus pictus</i> (Fieber, 1861)				X	X	X
	SALDIDAE						
203	<i>Saldula pallipes</i> (Fabricius, 1794)		X	X		X	
	SCUTELLERIDAE						
204	<i>Eurygaster austriaca austriaca</i> (Schrank, 1776)		X			X <sup>[91]</sup>	X
205	<i>Odontoscelis (Odontoscelis) fuliginosa</i> (Linnaeus, 1761)				X	X <sup>[92]</sup>	X
206	<i>Odontoscelis (Odontoscelis) lineola</i> Rambur, 1839		X	X		X	X
207	<i>Odontoscelis (Odontoscelis) signata</i> Fieber, 1861		X	X	X	X	X
208	<i>Odontotarsus caudatus</i> (Burmeister, 1835)		X			X	X
209	<i>Odontotarsus purpureolineatus</i> (Rossi, 1790)		X			X	X

<sup>85</sup> SCHEMBRI (1993) comments about this species: "This is only a tentative determination as Maltese populations of *R. personatus/villosus* show some overlapping diagnostic characteristics. The more distinct females were not taken. W.R. Dolling (in personal communication) considers the Maltese material to be true *personatus* with some *villosus*-like features." CARAPEZZA (1995) deleted this species from the Maltese Fauna, the Palaearctic Catalogue considered this species as doubtful and in the new work of PUTSHKOV & MOULET (2009) *R. villosus* is not included in the Maltese fauna. In consequence we do not consider this species in the list until new material is researched and assigned to this species.

<sup>86</sup> Recorded as *Rhynocoris erythropus* (Linnaeus, 1767)

<sup>87</sup> Recorded as *Agraphopus lethierryi* Stal, 1873

<sup>88</sup> Recorded as [= *Rhopalus tigrinus* Schilling, 1829]

<sup>89</sup> Recorded as *Liorhyssus hyalinus* (Fabricius, 1794)

<sup>90</sup> Recorded as [= *Maccevethus lineola* (Fabricius, 1787)]

<sup>91</sup> Recorded as *Eurygaster austriaca* (Schrank, 1776)

<sup>92</sup> Recorded as [= *Odontoscelis fuliginosus* (Linnaeus, 1761)]

no.	Family / species / subspecies	Ma	Go	Co	Sch. 93	PaCa
210	<i>Psacasta exanthematica</i> (Scopoli, 1763)	X			X	
211	<i>Solenosthedium bilunatum</i> (Lefebvre, 1827)	X			X	X
	STENOCEPHALIDAE					
212	<i>Dicranocephalus agilis</i> (Scopoli, 1763)	X	X	X	X <sup>[93]</sup>	X
213	<i>Dicranocephalus albipes</i> (Fabricius, 1781)	X			X	X
214	<i>Dicranocephalus marginicollis</i> (Puton, 1881)	X			X	X
215	<i>Dicranocephalus setulosus</i> (Ferrari, 1874)	X	X	X	X	X
	TINGIDAE					
216	<i>Agramma (Agramma) nigrum</i> Fieber, 1844	<sup>[94]</sup> X			X <sup>[94]</sup>	X
217	<i>Dictyla echi</i> (Schrank, 1782)	X			X	X
218	<i>Dictyla nassata</i> (Puton, 1874)	X			X	X
219	<i>Kalama lugubris</i> (Fieber, 1861)		X		X	X
220	<i>Kalama tricornis</i> (Schrank, 1801)					X
221	<i>Monosteira unicastata</i> (Mulsant & Rey, 1852)	X	X		X	X
222	<i>Tingis (Tingis) cardui</i> (Linnaeus, 1758)	X	X		X <sup>[95]</sup>	X
223	<i>Tingis (Tropidocheila) ragusana</i> (Fieber, 1861)	X			X	X

<sup>93</sup> Recorded as the subspecies *Dicranocephalus agilis agilis* (Scopoli, 1763) and *D. a. moralesi* Wagner, 1951

<sup>94</sup> This species was recorded from Malta in the Palaearctic Catalogue, so we assigned to this species the *Agramma* sp. record of SCHEMBRI (1993).

<sup>95</sup> Recorded as the subspecies *Tingis cardui cardui* (Linnaeus, 1758)