

ADDITIONS TO THE ANT FAUNA (HYMENOPTERA: FORMICIDAE) OF THE MALTESE ISLANDS

David Mifsud, Albena Lapeva-Gjonova

Background

The Maltese Islands are situated in the Central Mediterranean basin having a total land area of c. 316 km². A **diverse ant fauna** is present in this archipelago which is increasingly threatened by habitat degradation and invasion of alien species. The myrmecofauna of the archipelago has received considerable attention by researchers since 1893, bringing **the total number to 59 species**, 11 of them non-native. Confirmation of some already reported species, e.g. *Messor structor* (Latreille), *Tapinoma nigerrimum* (Nylander), *Tetramorium caespitum* (Linnaeus), is required in the light of recent taxonomic changes.

Wied Babu



Ghajn Tuffieha



Ramla Bay



Research Objective

- critical study of literature and published records
- revision of unpublished collection data (1995-1997)
- collection of new ant material (2015-2019) (fig. 1)

Methods

- direct sampling
- sifting
- MSS-traps, Malaise traps

Aphaenogaster cf. *crocea lenis*



Strumigenys tenuipilis

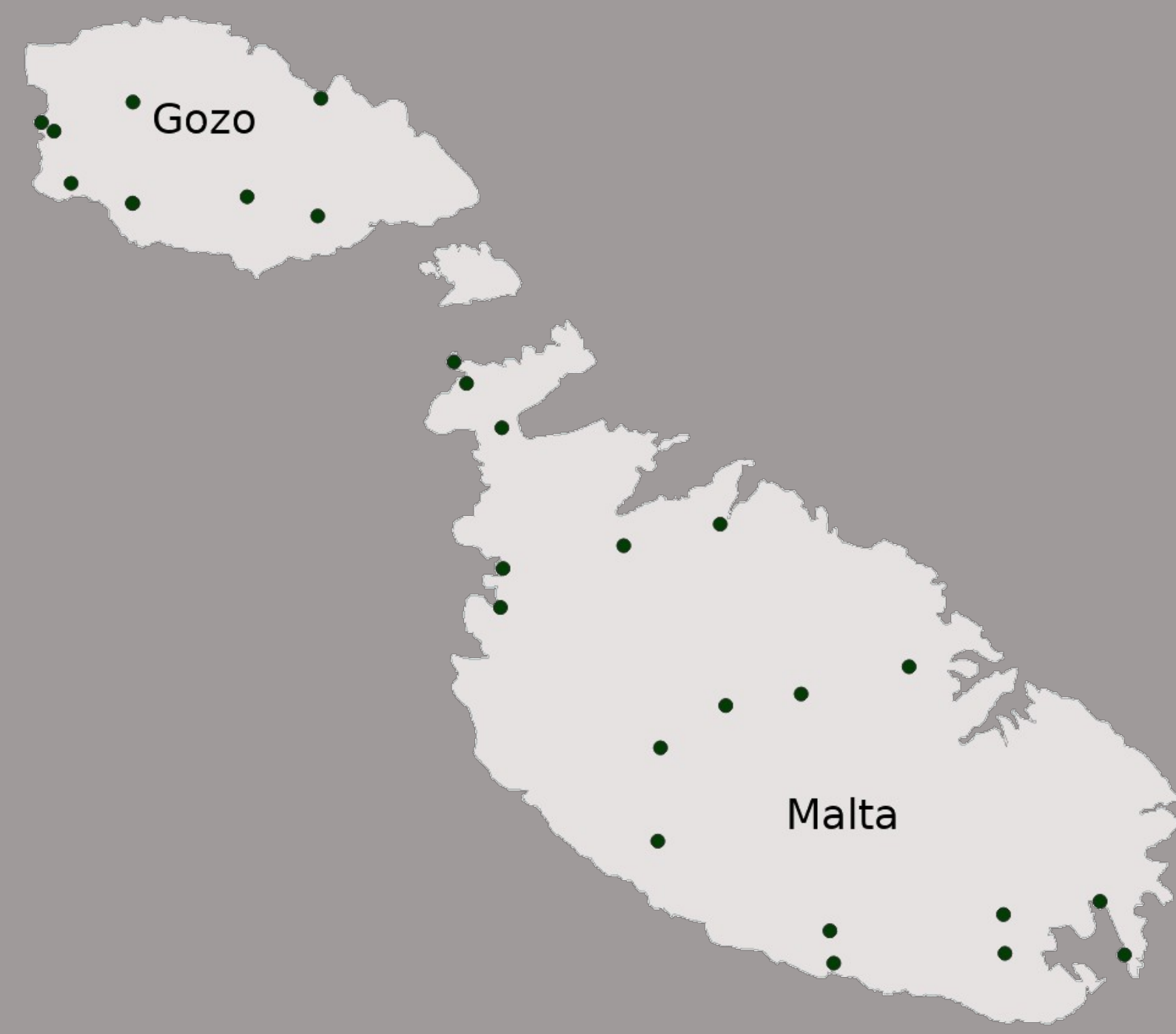
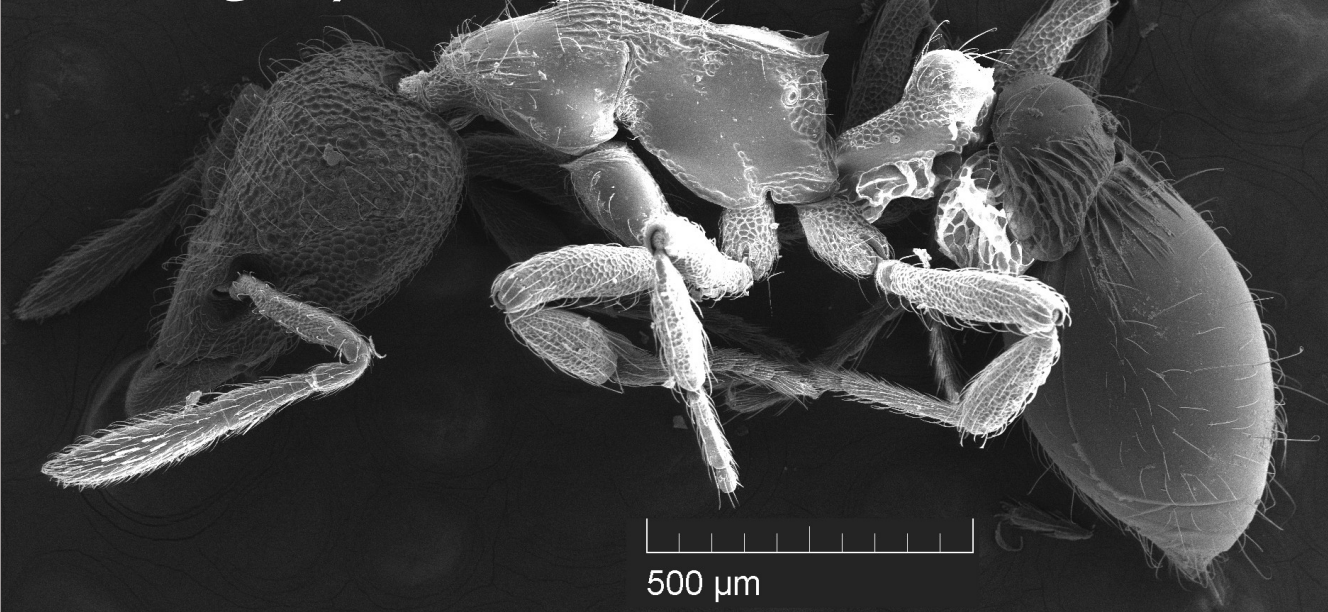


Fig. 1. Map with recent collecting localities (2015-2019)

Results

We provide an updated list of **70 ant species from the Maltese Islands**. Two species are recorded for the first time in Malta – *Anergates atratulus*, an extremely rare socially parasitic ant, and *Hypoponera abeillei*, a hypogaecic ant. Additionally, we report first verified records of *Hypoponera ragusai*, *Leptanilla revelierii*, *Solenopsis fairchildi*, *Strumigenys tenuipilis* and *Tetramorium davidi*. Seven morphospecies with unspecified taxonomic status were also collected – 4 of *Aphaenogaster* (*subterranea*-group), 1 of *Lepisiota* (*frauenfeldi*-group), 1 of *Leptanilla*, and 1 of *Temnothorax* (near *aveli*) and require further studies.

Acknowledgements

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Ants of Malta

Leptanillinae

Leptanilla revelierii Emery, 1870 – first verified record for Malta

Leptanilla sp. (males only) – near *Leptanilla* SIC-2 from Sicily

Amblyoponinae

Stigmatomma denticulatum Roger, 1859

Ponerinae

Hypoponera abeillei (Andre, 1881) – new record for Malta

Hypoponera eduardi Forel, 1894

Hypoponera punctatissima (Roger, 1859)

Hypoponera ragusai (Emery, 1894) – first verified record for Malta

Parvaponera darwini (Forel, 1893) – exotic

Proceratiinae

Proceratium melinum (Roger, 1860)

Proceratium melitense De Andrade, 2003

Dolichoderinae

Linepithema humile (Mayr, 1868) – exotic

Tapinoma melanocephalum (Fabricius, 1793) – exotic

Tapinoma nigerrimum s.l.

Tapinoma simrothi Krausse, 1909

Formicinae

Camponotus barbaricus Emery, 1905

Camponotus lateralis (Olivier, 1792)

Colobopsis truncata (Spinola, 1808)

Lasius emarginatus (Olivier, 1791)

Lasius lasioides (Emery, 1869)

Lepisiota frauenfeldi velox (Baroni Urbani, 1968)

Lepisiota sp. (*frauenfeldi* group)

Nylanderia jaegerskioeldi (Mayr, 1904) – exotic

Paratrechina longicornis (Latreille, 1802) – exotic

Plagiolepis pygmaea (Latreille, 1798)

Myrmicinae

Anergates atratulus (Schenck, 1852) – new record for Malta

Aphaenogaster balcanica (Emery, 1898)

Aphaenogaster campana Emery, 1878

Aphaenogaster inermis Bolton, 1995

Aphaenogaster fiorii Emery, 1915

Aphaenogaster cf. *crocea lenis*

Aphaenogaster melitensis Emery, 1924

Aphaenogaster splendida (Roger, 1859)

Aphaenogaster sp. 1 (*subterranea*-group)

Aphaenogaster sp. 2 (*subterranea*-group)

Aphaenogaster sp. 3 (*subterranea*-group)

Cardiocondyla emeryi Forel, 1881 – exotic

Cardiocondyla mauritanica Forel, 1890

Crematogaster scutellaris (Olivier, 1791)

Messor bouvieri Bondroit, 1918

Messor capitatus (Latreille, 1798)

Messor sp. (*structor* group)

Messor wasmanni Krausse, 1910

Monomorium subopacum (Smith, 1858)

Myrmecina graminicola (Latreille, 1802)

Oxyopomyrmex saulcyi Emery, 1889

Pheidole indica Mayr, 1879 – exotic

Pheidole pallidula (Nylander, 1848)

Solenopsis fairchildi Wheeler, 1926 – first verified record for Malta

Solenopsis orbula Emery, 1875

Solenopsis santschii Forel, 1905

Stenammina petiolatum Emery, 1897

Strongylognathus insularis Baroni Urbani, 1968

Strumigenys baudueri (Emery, 1875)

Strumigenys lewisi Cameron, 1886 – exotic

Strumigenys membranifera Emery, 1869 – exotic

Strumigenys tenuipilis Emery, 1915 – first verified record for Malta

Temnothorax angustulus (Nylander, 1856)

Temnothorax aveli Bondroit, 1918

Temnothorax exilis Emery, 1869

Temnothorax mediterraneus Ward et al., 2014

Temnothorax recedens (Nylander, 1856)

Temnothorax splendiceps (Baroni Urbani, 1968)

Temnothorax unifasciatus (Latreille, 1798)

Temnothorax sp. (near *aveli*)

Tetramorium bicarinatum (Nylander, 1846) – exotic

Tetramorium caespitum (Linnaeus, 1758)

Tetramorium davidi Forel, 1913 – first verified record for Malta

Tetramorium diomedea Emery, 1908

Tetramorium lanuginosum Mayr, 1870 – exotic

Tetramorium semilaeve André, 1883