

NEW RECORDS AND DISTRIBUTIONAL DATA OF SOME COLEOPTERA AND HYMENOPTERA FROM GREECE

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We report on new data obtained from our collections concerning 22 species of Coleoptera and Hymenoptera collected in Greece, providing new distributional records, the first records of two Hymenoptera previously unreported from Greece: i.e. *Chalybion bengalense* (Dahlbom, 1845) and *Tremex fuscicornis* (Fabricius, 1787) as well as some notes on their identification, ecology and native or alien status.

Key words: Greece, distribution, faunistics, Coleoptera, Hymenoptera, alien species, taxonomy

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Rad donosi nove podatke iz naših zbirki o 22 vrste Coleoptera i Hymenoptera prikupljenih u Grčkoj, dajući nove podatke o rasprostranjenosti, prve nalaze za dvije vrste Hymenoptera dosad nezabilježene za Grčku – *Chalybion bengalense* (Dahlbom, 1845) i *Tremex fuscicornis* (Fabricius, 1787), kao i neke bilješke o njihovoj determinaciji, ekologiji i te statusu domaće, odnosno strane vrste.

Ključne riječi: Grčka, rasprostranjenost, faunistika, Coleoptera, Hymenoptera, strane vrste, taksonomija

INTRODUCTION

The insect fauna of Greece is relatively well-known, but it has not been studied as extensively as that of Western European countries. This disparity is underscored for example by the relatively recent bibliographic entries for two prevalent Coleoptera species within the Palearctic: *Aegomorphus clavipes* (Schränk, 1781) in 2011 and *Emus hirtus* (Linnaeus, 1758) in 2021 (PLEWS *et al.*, 2011; GILLET *et al.*, 2019). Regional checklists of insects are often incomplete and lists covering the entire territory of Greece are available only for certain groups. Specifically concerning the Coleoptera of Greece, various works have been dedicated to different families (BATELKA, 2007; ARNDT *et al.*, 2011; ZAHRADNÍK, 2015). However, the only work encompassing the entire Coleoptera fauna was last published by VON OERTZEN (1886). Despite its utility, this work is somewhat outdated, especially given that at the time, the geographical boundaries of Greece extended only to Thessaly.

Regarding the Hymenoptera of Greece, ARENS (2001, 2011, 2012, 2015, 2016, 2017) authored multiple papers considerably increasing the list of known species of various

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Aculeata, particularly within the Peloponnese. The ants of the country have been extensively studied, with numerous publications by BOROWIEC & SALATA (2012, 2013) and SALATA & BOROWIEC (2018). Additionally, various works focusing on specific groups, usually in specific areas of the country, contribute to our knowledge of Greek Hymenoptera (MAVROMOUSTAKIS, 1958, 1959; ATANASSOV, 1965; BLANK, 1993; LELEJ *et al.*, 2003; PAPP, 2007).

This article aims to present new distributional data and records of species previously unreported in the country, contributing to our knowledge of the Coleoptera and Hymenoptera fauna in Greece.

MATERIALS AND METHODS

The specimens examined were collected by Georgios Gastouniotis (GG) during 2013-2023, mainly in the northeast Peloponnese, and by Georgios Kakiopoulos (GK) during 1970-2023 in various parts of Greece. A total of 16 species of Coleoptera in 12 families and 6 species of Hymenoptera in 5 families were examined. The examination of Coleoptera specimens was conducted jointly by both authors, while the examination of Hymenoptera specimens was carried out exclusively by GG.

RESULTS AND DISCUSSION

Coleoptera

Family: Cerambycidae Latreille, 1802

Genus: *Aegomorphus* Haldeman, 1847

***Aegomorphus clavipes* (Schränk, 1781)**

Additional records: This species was recorded for the first time in Greece in 2011 from Pieria (PLEWS *et al.*, 2011). According to our records, this species is widely distributed throughout mainland Greece but has not been previously published.

Material examined: Greece: Corinthia, Nemea, 17/v/2021 (GG); Karditsa, Agiopiigi, vii/1984 (GK); Pella, Agra, vii/1994 (GK); Kavala, Keramoti, vii/2020 (GK)

Genus: *Nathrius* Brèthes, 1916

***Nathrius brevipennis* (Mulsant, 1839)**

Additional records: The species was recorded for the first time from Greece in 1975 in Corfu, followed by records in 1977 from Ioannina, and in 1980 from Metsovo (SANTAS, 1984). Herein, we extend its known distribution to include Crete, Rhodes, and Athens, indicating a more widespread presence throughout Greece.

Material examined: Greece: Knossos, Agia Eirini, 7/vii/2003 (GK); Rhodes, Mesanagros, 26/vi/2005 (GK); Attica, Athens, 8/vi/2022 (GG)

Genus: *Oxymirus* Mulsant, 1863

***Oxymirus cursor* (Linnaeus, 1758)**

Additional records: The species was recorded in Greece only once, in 2001, from Vathirema, Drama at an elevation of 1300 meters (MPAMNARAS & ELIOPOULOS, 2017). The present record is from Epirus. The species is apparently rare, and despite being indicated as invasive in KORAKAKI *et al.* (2021), it is most probably native to Greece. This

assertion is supported by its absence from other lists of alien insects in Europe (COCQUEMPOT & LINDELÖW, 2010; EASIN, 2024).

Material examined: Greece: Ioannina, Milia Metsovou, at 1.800 meters altitude, mixed forest of *Pinus nigra*, *P. leucodermis*, *Abies* sp., *Fagus sylvatica* 16/ix/2000 (GK)

Genus: *Xylotrechus* Chevrolat, 1860

***Xylotrechus chinensis* (Chevrolat, 1852)**

New for the Peloponnese: The species was recorded for the first time in Greece in 2017 from the city of Heraklion, Crete (Leivadara *et al.*, 2018). Subsequently, it was reported for the first time in mainland Greece in 2020, specifically in Athens, and received widespread coverage in the local press (GREEK REPORTER, 2020). At present, the species is rapidly spreading in the Peloponnese, resulting in extensive damage to and mortality of mulberry trees in Nemea, Daphni (Nemeas) and Vasiliko Corinthias.

Material examined: Greece: Attica, Athens, 30/v-7/vi/2022, 15 specimens (GG); Corinthia: Nemea, 26/v/2022 (Stephanos Gastouniotis [SG]), Nemea, 17/vi/2022 (SG), Daphni (Nemeas), vi/2022 (local resident), Vasiliko, vi/2022 (local resident)

Family: Cryptophagidae Kirby, 1826

Genus: *Alfieriella* Wittmer, 1935

***Alfieriella naxiana* (Reitter, 1884)**

Additional records: The distribution of this species includes Greece, Italy and Albania, while it is the only species of the genus reported from Greece (RATTI, 1976; POGGI, 2020; ŠIMA, 2021). Specifically, it has been found in Naxos, Athens and Crete (POGGI, 2020), herein reported in the Peloponnese, Kythnos, and Kea, with particularly large populations observed on the latter two islands. CHEN *et al.* (2020) suggested the need for a phylogenetic study to evaluate the taxonomic identity of Cretan populations. However, upon examination of specimens from Crete, we did not find any significant morphological differences from populations from other locations. Therefore, we believe that the Cretan populations belong to the same species as those found elsewhere.

Material examined: Greece: Corinthia, Agionori (1,5 km south), 650 m., in dry *Quercus coccifera* leaf substrate, 12/iii/2023 (GK); Kythnos island, in dry *Asphodelus* sp. leaf substrate, 30/xi/2014 [7 specimens (GK)]; Kea island, in dry *Asphodelus* sp. leaf substrate, 13/ii/2017 (3 specimens), 3/xii/2022 [2 specimens (GK)]; Crete, Rethymno, Spili (3 km. East), Northern foothills of mount Kedros, 700 m., under stones at the edges of wheat fields, 30/i/2005, [6 specimens (GK)]

Family: Rhipiceridae Latreille, 1834

Genus: *Arrhaphipterus* Schaum, 1862

***Arrhaphipterus olivetorum* (Kraatz, 1859) & *Arrhaphipterus vanderwolffi* Wurst, 1999**

Additional records and identification key: Greece is the only European country in which the family Rhipiceridae has been found, being represented by two species of *Arrhaphipterus* i.e. *A. olivetorum* and *A. vanderwolffi* (Löbl & Smetana, 2007). *Arrhaphipterus olivetorum* was recorded from the Peloponnese and Attica (OERTZEN, 1886; DANIEL, 1903), herein also reported from Kefalonia island (Ionian Archipelago). *Arrhaphipterus vanderwolffi* had previously only been recorded in the Peloponnese, Attica, and



Fig. 1. *Arrhaphipterus vanderwolffi* Wurst, 1999 without colour contrast on the elytral costae.

possibly *Aegina* (WURST, 1999). We report the species' presence in Thessaly, Kythira and Lesvos as new distributional records. Both species are nocturnal and are attracted to light from lamps during the summer months. They are often collected in this manner and are also occasionally found as dead specimens entangled in spiderwebs inside buildings. Commenting on the description of *A. vanderwolffi*, based on the examined material the elytral costae may be of the same colour as the elytra (Fig. 1). Consequently, the strong colour contrast on the elytral costae, which was noted as a diagnostic character in the description, may not be reliable. Furthermore, the elytra of *A. olivetorum* also display colour variation, ranging from completely black to red with a black edge, while the head and thorax consistently remain black. In the original description of *A. olivetorum*, the empodium was not described (KRAATZ, 1859), but this was later described by DANIEL, (1903) and to our knowledge is the best diagnostic character distinguishing the two species with *A. olivetorum* having a simple empodium while that of *A. vanderwolffi* is bifurcated (WURST, 1999). In the following key we mention the individual morphological differences we observed:

- Empodium simple linear.
Pronotum punctures with a distance between them equal to their diameter.
Scutellum wider than its length, strongly hairy *olivetorum*
- Empodium bifurcated.
Pronotum with dense, continuous punctures.
Scutellum width equal to its length, few hairs present *vanderwolffi*

Material examined: *A. olivetorum* (Kraatz, 1859): Greece: Athens (Goudi area), 24/vii/2016 (GK); Achaia, Kalogria forest, elytron remains, 6/iii/2006 (GK)

A. vanderwolffi Wurst, 1999: Greece: Corinthia, Nemea: 17/viii/2022 (GG); 23/viii/2022 (SG); 26/viii/2022 (GG) (Fig. 1); Larisa, Gonnoi, 11/viii/1995 (GK); Kythira, Avlemonas, elytron remains, 14/iv/2018 (GK)

Material examined from photographs: *A. olivetorum* (Kraatz, 1859): Greece: Kefalonia, Argostoli, Makris Gialos beach, 30/viii/2019 (Violi Michele) (<http://www.entomologiitaliani.net/public/forum/phpBB3/viewtopic.php?f=288&t=87358&hilit=arrhaphipterus>); Athens, Lycabettus hill, 18/vi/2010 (Davranoglou Leonidas-Romanos) (https://www.facebook.com/photo/?fbid=10204611348958289&set=pcb.10154033646162573&locale=el_GR)

A. vanderwolffi Wurst, 1999: Greece: Messinia, Petrochori, 18/vii/2014 (Romano Marcello) (<http://www.entomologiitaliani.net/public/forum/phpBB3/viewtopic>).

php?f=67&t=55157&hilit=arrhaphipterus); Lesvos, Skala Eresou, 10/viii/2019 (Zafeiriou Savvas) (https://www.facebook.com/photo/?fbid=3437655722952486&set=gm.492564331558736&id=orvanity=426569821491521&locale=el_GR)

Family: Staphylinidae Latreille, 1802

Genus: *Emus* Leach, 1819

***Emus hirtus* (Linnaeus, 1758)**

Additional records: The species was first reported for Greece in 2019 from Thessaly (GILLET *et al.*, 2019). Based on our observations, the species is widespread throughout mainland Greece but relatively scarce.

Material examined: Greece: Karditsa, Tsaousi, 15/iv/1982 (GK); Laconia, Mani, Monastery of Panayia Yiatrissa, 17/vi/1997 (GK); Attica, mount Parnitha, 19/v/2022 (GG)

Family: Helophoridae Leach, 1815

Genus: *Helophorus* Fabricius, 1775

***Helophorus milleri* Kuwert, 1886**

First record in mainland Greece: The species has a Mediterranean distribution, in Greece it has been recorded only from Crete and Corfu (TOUAYLIA *et al.*, 2009). Robert Angus kindly identified the specimen.

Material examined: Greece, Corinthia, Nemea, 12/v/2022 (GG) (Fig. 2)



Fig. 2. Habitus of *Helophorus milleri* Kuwert, 1886

Family: Hydrophilidae Latreille, 1802

Genus: *Hydrophilus* Geoffroy, 1762

***Hydrophilus piceus* (Linnaeus, 1758)**

Additional records: According to KARAOUZAS *et al.* (2014) the species has been recorded in Greece only from the Axios delta and two localities in the north-western Peloponnese, suggesting a potentially critical population status. However, this article ignores previous literature mentioning the presence of the species in Parnassus, Peloponnese, Crete (OERTZEN, 1886) and Corfu (ANGUS, 2013). Our findings indicate that the species is widespread throughout mainland Greece with populations in all water concentrations. Two particularly large populations were observed, one in Stymphalia and another in the irrigation networks around the Argolic Gulf, where a significant

number of individuals were observed. In *Stymphalia*, both living specimens and elytral remains of thousands of individuals were found on the banks of the lake. The largest specimen examined was a female (found dead in Loutraki by Nectarios Gastouniotis [NG]), measuring 52 mm long and 25 mm wide.

Material examined: Greece: Karditsa, Karditsa, iii/1980 (GK); Karditsa, Karditsa, 18/iii/1988 (GK); Aetoloakarnania, Missolonghi Lagoon (GK); Xanthi, Lake Vistonida (GK); Serres, Lake Kerkini (GK); Ioannina, Lake Pamvotida (GK); Corinthia, Lake Stymphalia (GK); Corinthia, Lake Stymphalia, vii/2016 (GG); Argolis, Miloi, 31/vii/2016 (GG); Corinthia, Loutraki, 13/viii/2016 (NG); Argolis, Miloi, 19/viii/2017 (GG); Argolis, Nea Kios, 21/vii/2018 (GG); Argolis, Timenio, 28/vii/2022 (GG); Corinthia, Nemea, 5/x/2022 (GG)

Family: Hygrobiidae Régimbart, 1879

Genus: *Hygrobia* Latreille, 1804 -

***Hygrobia hermanni* (Fabricius, 1775)**

First record in mainland Greece: The species was previously recorded only once in Corfu at the end of the 19th century by John Sahlberg (SAHLBERG, 1903). Konrad Dettner, who has done extensive research on the species, does not give any locality in Greece but Corfu (DETTNER, 1997).

Material examined: Greece: Larisa, Vlachogianni Elassonas, in an artificial lake 30*30 meters, 8/iv/1996, pair (GK)

Family: Curculionidae Latreille, 1802

Genus: *Larinus* Dejean, 1821

***Larinus (Larinus) cynarae* (Fabricius, 1787)**

First record for the Peloponnese: The species was previously recorded in Greece only in Epirus and Crete (GERMANN *et al.*, 2022).

Material examined: Greece: Corinthia, Nemea, 8/vi/2020 (GG)

Family: Chrysomelidae Latreille, 1802

Genus: *Liliocerus* Reitter, 1912

***Liliocerus lili* (Scopoli, 1763)**

Clarification of the status of the species in Greece: The first record of the species in Greece dates back to 2007 (PAPADOULIS & TSAGKARAKIS, 2012), while it is not mentioned in the list of Palearctic Coleoptera (LÖBL & SMETANA, 2010). Nevertheless, 136 years ago OERTZEN (1886) reported *Criocerus merdigera* (Linnaeus, 1758) as present in Greece, specifically in Attica, the Peloponnese and Parnassos. *Criocerus merdigera* (Linnaeus, 1758) is a junior synonym of *Liliocerus merdigera* (Linnaeus, 1758), while *Criocerus merdigera* (Fabricius, 1775) is a junior synonym of *Liliocerus lili* (Scopoli, 1758) (Winkler, 1924). *Liliocerus merdigera* (Linnaeus, 1758) has not been found in Greece, and we were unable to locate any specimens for examination. The sole known record in a neighbouring country is in Bulgaria (in the Balkans) (LÖBL & SMETANA, 2010). On the contrary, *Liliocerus lili* (Scopoli, 1758) has been recorded in all neighbouring countries (LÖBL & SMETANA, 2010), and we have examined specimens from various locations and dates within Greece. Due to the distinct colour pattern differences between the two species, citizen

science data can be effectively utilised. Thus, numerous photographic observations of *Liliocerus lilii* (Scopoli, 1758) from Greece can be found on iNATURALIST (2023), while none of *Liliocerus merdigera* (Linnaeus, 1758). Therefore, we hypothesize that Eberhard von Oertzen may have noted *Criocerus merdigera* (Linnaeus, 1758) instead of *Criocerus merdigera* (Fabricius, 1775) i.e. *Liliocerus lilii* (Scopoli, 1758) from Greece, leading to confusion around the presence of the two species in the country. The assertion by KORAKAKI *et al.*, (2021) that the species is invasive in Greece, with an introduction date in 2011 [the article citing PAPADOULIS & TSAGKARAKIS (2012) who report the date of first recording in 2007], may need reconsideration.

Material examined: all the specimens collected on *Lilium* sp.: Greece: Karditsa, v/1979 (GK); Ioannina, v/1970 (GK); Karditsa, Kerasia, Monoplati slope, 1500 m., v/1981 (GK); Karditsa, Kerasia, Monoplati slope, 1400 m., 11/vi/1994 (GK); Corinthia, Nemea, 17/v/2020 (GG); Karditsa, near Fylakti, 1000 m., 31/v/2023 (GG)

Family: Elateridae Leach, 1815

Genus: *Plastocerus* Schaum, 1852

***Plastocerus angulosus* (Gerrnar, 1844)**

Notes on the ecology of the species: The biology and ecology of this species remain largely unknown (BRANHAM, 2010). The female of this species was first reported in 2018, based on two undated specimens from Turkey (BOCAK *et al.*, 2018). According to our observations, adults are diurnal and are active during the second half of July and the first half of August. Males have been observed feeding on the flowers of various plants such as *Crataegus*, *Pyrus* and *Onopordum*. They often spend extended periods motionless on the tops of grass or stones. While we have not yet observed females feeding, we have noticed that they are agile in flight, flying at considerable heights. They are frequently preyed upon by swallows, which feed them to their chicks. Due to the intense competition for food among the chicks, these insects often fall to the ground. After falling, they are unable to fly again due to minor injuries; thus providing an ideal source for obtaining female specimens.

Material examined: females: Greece, Corinthia, Nemea: 28/vii/2017 (GG); 18/vii/2021 (GG); 20/vii/2021 (GG) (Fig. 3); 4/viii/2021 (GG); males: Greece, Corinthia, Nemea, mountain of Agia Analipsi, 15/vii/2017 (GG); Messinia, Langada Manis, 450m., 5/viii/1990 (GK); Arcadia, Leonidion Kynourias, 0-600m., 8-9/viii/1992 (GK); Achaia, Kalavrita, 10/VIII/2009 (GK)



Fig. 3. Habitus of female *Plastocerus angulosus* (Gerrnar, 1844)



Fig. 4. Habitus of *Ripiphorus subdipterus* Bosc d'Antic, 1792

Family: Ripiphoridae Gemminger & Harold, 1870

Genus: *Ripiphorus* Bosc, 1792

***Ripiphorus subdipterus* Bosc d'Antic, 1792**

Additional and recent records in mainland Greece: This species has been recorded from Greece in Attica and the Peloponnese (OERTZEN, 1886). However, BATELKA (2007), who extensively examined ripiphorid specimens from major European collections, reported its presence only in Crete, without referencing Oertzen's records.

Material examined: Greece: Attica, Alimos, 28/v/2022 (GG) (Fig. 4); Phthiotis, Lamia, 25/vi/2023 (Athanasios Mpoulas [AM])

Family: Lucanidae Latreille, 1804

Genus: *Sinodendron* Schneider, 1791

***Sinodendron cylindricum* (Linnaeus, 1758)**

Additional records: The species had been recorded from Greece only once, in 2012, on Mt Falakron, Drama at an elevation of 1400 meters (MPAMNARAS & ELIOPOULOS, 2017). Based on our observations, the species is widespread in all beech forests (*Fagus sylvatica*) in the mountains of Central and Northern Greece. Our findings suggest that the species is native to Greece and not invasive, contrary to the assertion made by KORAKAKI *et al.* (2021). This is supported by its absence from other lists of alien insects in Europe (DENUX & ZAGATTI, 2010; EASIN, 2024).

Material examined: Greece: Karditsa, Argitheia, Agios Nikolaos mountain pass, 1.500 metres altitude, vii/1983, pair on *Fagus sylvatica* (GK)

Hymenoptera

Family: Eucharitidae Latreille, 1809

Genus: *Eucharis* Latreille, 1804

***Eucharis (Psilogastrellus) punctata* Forster, 1859**

First confirmed record in the Peloponnese: The species was reported for the first time from Greece in 2021, based on a specimen collected in 1879 from Mt Parnassos (KOUTSOUKOS & DEMETRIOU, 2021). An additional specimen of *Eucharis* sp. labelled Peloponissos, 1876 was unidentifiable to species level due to its poor condition (KOUTSOUKOS & DEME-

TRIOU, 2021). The extended period (142 years) without additional specimens in Hellenic collections and published records in general, for a relatively large species of Chalcidoidea, possibly indicates the rarity of and limited research into Greek Eucharitidae.

Material examined: Greece, Corinthia, Nemea, on *Silybum sp.*, 11/vi/2021 (GG) (Fig. 5)

Family: Sphecidae Latreille, 1802

Genus: *Chalybion* Dahlbom, 1843

***Chalybion bengalense* (Dahlbom, 1845)**

First record for Greece: The species has been recorded in East Africa, Southeast Asia, New Guinea, Australia and for the first time in Europe from Italy in 2008 (MEI *et al.*, 2012). BERLAND (1921) mentions *C. bengalense* in Greece under the name *Sceliphron (Pelopaeus) violaceum* de Saussure, 1892 from Corinthia. This record is most probably a misidentification of *Chalybion flebile* (Lepelletier, 1845) (PULAWSKI, 2023). In PHAM *et al.*, (2019) Greece is also mentioned in the distribution of *C. bengalense* but without citation or examination of material. In turn, PHAM & ANTROPOV (2021) include Greece in the species' distribution citing TANO & KUROKAWA (2015), an article that does not mention Greece.

The species belongs to the nominal *Chalybion* subgenus in the *bengalense* species group in which six species are known from Greece, five Palearctic and one North American: *C. flebile*, *C. klapperichi* (Balthasar, 1957), *C. minos* (de Beaumont, 1965), *C. omissum* (Kohl, 1889), *C. walteri* (Kohl, 1889) and *C. zimmermanni* Dahlbom, 1843; one more *Chalybion* species occurs in Greece, belonging to subgenus *Hemichalybion*: *C. femoratum* (Fabricius, 1781) (HENSEN, 1988; PULAWSKI, 2023). Four species of *Chalybion* i.e. *C. femoratum*, *C. flebile*, *C. minos*, and *C. omissum* are found in the Peloponnese (Arens, 2017).

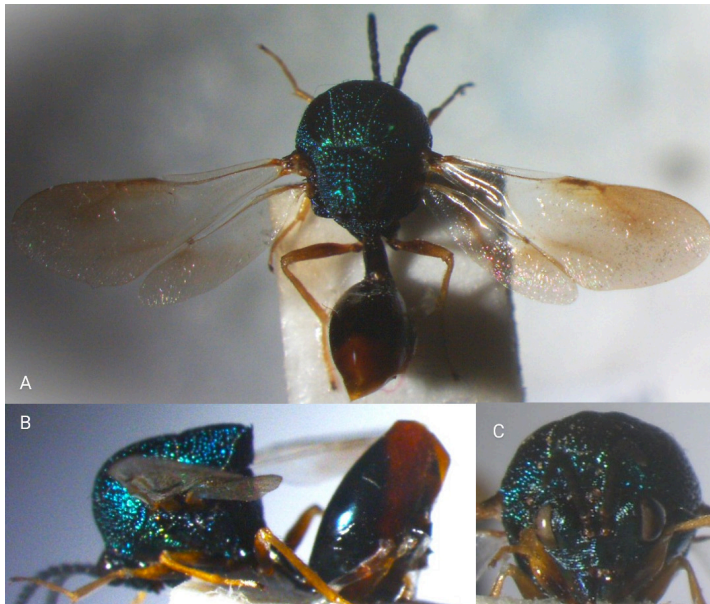


Fig. 5. *Eucharis (Psilogastrillus) punctata* Forster, 1859: (A) Habitus dorsal view; (B) lateral view; (C) head frontal view

A total of 21 specimens of *C. bengalense* were collected between 2018 and 2022, on two *Citrus* trees (lemon and tangerine) infested with honeydew-producing Hemiptera (Pseudococcidae and Aleyrodidae), at sea level. These trees attracted a large number of Hymenoptera, including many Sceliphrinae species, specifically: *Sceliphron spirifex* (Linneus, 1758), *S. madraspatanum* (Fabricius, 1781), *S. curvatum* (Smith, 1870), *C. flebile* and *C. femoratum*. *Chalybion bengalense* seems to have become established in the area. In 2021, when the most intensive collection of specimens was conducted, 19 *Chalybion* specimens from the subgenus *Chalybion* were collected, along with a single *Chalybion femoratum*. Of the 19 samples only three were identified as *C. flebile* while the rest were identified as *C. bengalense*.

Material examined: Greece, Argolis, Timenio, 15/vii/2018, 30/vii/2019, 17/viii/2021 (2 specimens), 16/viii/2021, 19/viii/2021, 25/viii/2021 (2 specimens) (Fig. 6.A, F), 25/vii/2021 (4 specimens), 22/vii/2021 (3 specimens) (Fig. 6 B-E), 23/vii/2021, 23/vii/2022 (3 specimens), 28/vii/2021, 24/vii/2021 (GG)

Family: Scoliidae Latreille, 1802

Genus: *Dasyscolia* Bradley, 1951

***Dasyscolia ciliata araratica* (Radoskovsky, 1890)**

First record in the Peloponnese: This species was reported from Northern Greece (OSTEN, 2002) and later from Central Greece and Rhodes (OSTEN & ARENS, 2004). Its presence in the Peloponnese indicates a widespread distribution throughout Greece.

Material examined: Greece, Corinthia, Nemea, 5/v/2018 (GG)

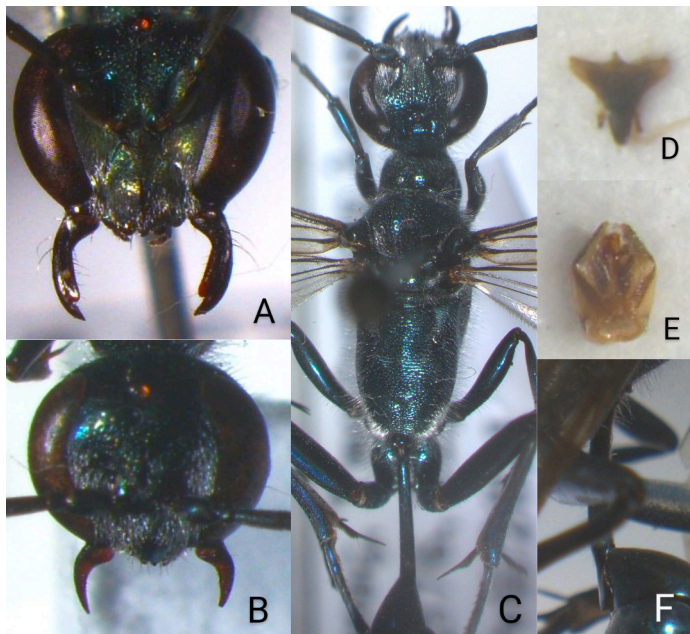


Fig. 6. *Chalybion bengalense* (Dahlbom, 1845): (A) ♀ head frontal view; (B) ♂ head, frontal view; (C) ♂ head, mesosoma and petiolus dorsal view; (D) ♂ eighth sternite; (E) ♂ genitalia; (F) ♀ petiolus lateral view

Genus: *Megascolia* Betrem, 1928***Megascolia (Regiscolia) bidens* (Linneus, 1767)**

First record in the Peloponnese: The species was first reported for mainland Greece from a specimen collected in 2018 from Salamis Island (Argosaronic Gulf) and from a photographic observation from Aspropyrgos (Attica) taken in 2020 (DEMETRIOU *et al.*, 2021). In the same publication it was stated that the species was already reported from Greece in the Dodecanese Islands, citing the works of OSTEN & ARENS (2004). However, this claim was not found in the cited sources with the given distribution being the western Mediterranean: southern Italy, southern France, Spain, Morocco, Algeria and Tunisia (OSTEN, 2002; OSTEN & ARENS, 2004). Instead, the record from the Dodecanese Islands originated from the Fauna Europaea website (DE JONG *et al.*, 2014). Upon communication with Dr Mircea-Dan Mitroiu (Alexandru Ioan Cuza University, Iasi, Romania) we were informed that the record must have been introduced by Dr Till Osten (as a taxonomic specialist of the site) and that the basis of this record is unknown.

Material examined: Greece: Corinthia, Nemea, feeding on *Silybum* sp., 23/iv/2021 (GG); Phthiotis, Kastri, 25/iv/2022 (AM); Phthiotis, Castle of Lamia, 26/iv/2022 (AM)

Family: Siricidae Billberg, 1820**Genus: *Tremex* Jurine, 1807*****Tremex fuscicornis* (Fabricius, 1787)**

First record in Greece: The species has been recorded in a large part of the Palearctic Region and has been introduced into Australia, Argentina and Chile. The countries in which the species has been recorded include Argentina, Armenia, Austria, Bulgaria, Chile, China, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Hungary, Iran, Italy, Japan, North Korea, South Korea, Latvia, Moldova, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Taiwan, and Ukraine (SMITH, 1978; TAEGER *et al.*, 2018; CABL, 2022). Six more species belonging to the family Siricidae have been recorded from Greece, specifically: *Urocerus gigas* (Linnaeus, 1758), *Urocerus augur* (Klug, 1803), *Urocerus fantoma* (Fabricius, 1781), *Sirex juvenecus* (Linnaeus, 1758), *Sirex noctilio* Fabricius, 1793, *Xeris pallicoxae* Goulet, 2015 (GOULET *et al.*, 2015; TAEGER *et al.*, 2018).



Fig. 7. Habitus of *Tremex fuscicornis* (Fabricius, 1787)

Regarding records of *Sirex cyaneus* Fabricius, 1781, RASPLUS *et al.* (2010) included Greece in the European distribution of the species. However, Greece is not mentioned in any of the six cited works (HAYES, 1982; HELLRIGL, 1984; KIRK, 1974; MIDTGAARD, 1986; SCHWARZ, 1994; VIITASAAI & MIDTGAARD, 1989). DEMETRIOU *et al.*, (2021) and KORAKAKI *et al.*, (2021) reported it as an alien and invasive species in Greece, both citing LISTON (1995). However, Liston's work does not mention Greece. According to KORAKAKI *et al.*, (2021), the species was introduced in Greece in 1885, a date probably taken by RASPLUS *et al.*, (2010), who reported the first introduction of the species into Europe, in France on this date. European populations of *S. cyaneus* were identified in 2012 as *Sirex torvus* Harris, 1779, a European species distinct from the North American species (SCHIFF *et al.*, 2012). While *S. torvus* is mentioned in Greece by TAEGER *et al.* (2018), this is likely an incorrect listing, as the distribution of the species is in Central and northeastern Europe and the British Isles [(LISTON, 1995; LACOURT, 2020; GREEN, 2023) as *S. torvus* and (SMITH, 1978; VAN ACHTERBERG *et al.*, 2009) as *S. cyaneus cyaneus*].

Material examined: Greece: Corinthia, Nemea, 27/xii/2014 (GG); 9/vii/2019 (GG); Corinthia, Kaliani, 29/ix/2019 (GG) (Fig. 7); Achaea, Zachloritika, 13/viii/2018 (AM)

Family: Apidae Latreille, 1802

Genus: *Xylocopa* Latreille, 1802

***Xylocopa* (*Koptortosoma*) *pubescens* Spinola, 1838**

Additional records: The species is naturally distributed in the Near East and the Eastern part of North Africa but has now expanded its range to Greece, Cyprus, Turkey, and the western part of North Africa (TERZO & RASMONT, 2014), Southern Spain (ORTIZ & PAULY, 2016), Gran Canaria (RUIZ *et al.*, 2020), and France (LE DIVELEC *et al.*, 2022). It was first photographed in Greece in Athens in 2012. As the only representative of the subgenus *Koptortosoma* in the western Palearctic, it is easily recognizable from other bee species in the region by its intense, distinct black and yellow colours and its habit of flying slowly over gardens (TERZO & RASMONT, 2014).

In the Peloponnese, the first author observed it for the first time in Argos in 2016. Since then, the species has been observed throughout the north-eastern Peloponnese (at low elevations), Crete, and the islands of Euboea, Milos, and Sytos (INATURALIST, 2022). By 2023, the species had rapidly spread throughout the coastal Peloponnese and central Greece, reaching as far north as Volos city, and as far south as the island of Santorini; in 2024, it was observed on the island of Lesbos (INATURALIST, 2024).

Although the species has been known from Greece since 2014, it has received little attention and has not been included in any list of alien or invasive species in Greece (DEMETRIOU *et al.*, 2021; KORAKAKI *et al.*, 2021). While no negative impact of the species has been documented in Greece, according to the first author's observations, it dominates the areas it settles in, making it a potential competitor for local species.

In Cyprus, the species was first known after 1990 (TERZO & RASMONT, 2014). However, herein, a specimen from the collection of Themistocles Shiakides (TS) (stored in the Agricultural University of Athens), collected in 1974 and labelled "*Xylocopa aestuans*", provides an earlier distributional record of the species on the island.

Material examined: Greece: Argolis, Argos, vii/2016 (GG); Argolis, Nafplio, 4/v/2018 (NG); Corinthia, Loutraki, 20/vi/2019 (GG); Corinthia, Corinthos, 24/vi/2022 (GG); Attica, Athens, 15/xi/2019 (GG); Argolis, Timenio, 16/viii/2021 (GG); Cyprus, Nicosia, 2/iv/1974 (TS)

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