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The historical Chalcidoidea collection in the Museum of Zoology of the University of Athens, with two new records of Eucharitidae (Hymenoptera: Chalcidoidea) for the Greek fauna

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ABSTRACT

The historical collection of Chalcidoidea (Hymenoptera) deposited in the Museum of Zoology of the University of Athens is reviewed. Despite the small number and poor condition of specimens, two new records for the Greek fauna have been established: *Eucharis (Psilogastrellus) punctata* Förster, 1859 and *Stilbula cyniformis* (Rossi, 1792) (Eucharitidae). The collection constitutes an important part of the cultural heritage and holds some of the oldest—more than one century ago—Chalcidoidea specimens collected in Greece.

KEYWORDS: Biodiversity, Chalcidoidea, Eucharitidae, natural history collections, new records, the Balkans, Greece.

ΠΕΡΙΛΗΨΗ

Η ιστορική συλλογή των Chalcidoidea (Hymenoptera) που βρίσκεται κατατεθεμένη στο Μουσείο Ζωολογίας του Πανεπιστημίου Αθηνών επανεξετάζεται. Παρά το μικρό αριθμό και την κακή κατάσταση των δειγμάτων της, παρουσιάζονται δύο νέες καταγραφές για την Ελληνική πανίδα. Συγκεκριμένα, τα είδη *Eucharis (Psilogastrellus) punctata* Förster, 1859 και *Stilbula cyniformis* (Rossi, 1792) (Eucharitidae). Η συλλογή αποτελεί σημαντικό μέρος της πολιτιστικής κληρονομιάς μας και διατηρεί μερικά από τα παλαιότερα—πριν από περισσότερο από έναν αιώνα—δείγματα Chalcidoidea που συλλέχθηκαν στην Ελλάδα.

ΛΕΞΕΙΣ ΚΛΕΙΔΙΑ: Βιοποικιλότητα, Chalcidoidea, Eucharitidae, μουσειακές συλλογές φυσικής ιστορίας, νέες καταγραφές, Βαλκάνια, Ελλάδα.

INTRODUCTION

The Museum of Zoology of the University of Athens (ZMUA), founded in 1858, is considered one of the oldest Natural History Museums of Greece. Its entomological collection is largely represented by historically important specimens, collected as early as the second half of the 19th century. After the death of Dr Theodor Heinrich Hermann von Heldreich (1902) and Dr Theobald Johannes Krüper (1917), the first and last Museum curators respectively, the geopolitical and economic instability in Europe, particularly in Greece, led to both the absence of subsequent curation and the frequent movement of collections. As a result, the quality of these historical specimens gradually degraded with the majority of them getting covered in dust, rust and a resinous substance. In addition, frequent dermestid beetle raids have

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inflicted extensive damage evidenced by holes on specimens, missing body parts, as well as numerous dermestid remains and exuviae found in cabinets and drawers. Recently, volunteers, students and academic personnel have been enriching, curating, reorganizing and cataloguing specimens, collections and exhibitions.

Although the historical Chalcidoidea collection of the ZMUA contains a small number of specimens in a rather bad condition, it still constitutes an important part of the cultural heritage harbouring some of the oldest Chalcidoidea specimens collected in the country. Given the presented material, it constitutes a small yet important contribution to the knowledge of the chalcid wasp fauna of Greece, presenting the first records of two species new to the fauna of Greece.

MATERIALS AND METHODS

During the reorganisation and curation of the entomological collection, chalcid wasps which were originally scattered in numerous entomological drawers, have been pooled into a single unit tray. A total of just 19 specimens have been located and catalogued, and their label data have been deciphered and are cited verbatim in the below list. Wherever possible, selected specimens have been unpinned, cleaned and re-mounted. Lastly, specimens have been identified up to the lowest possible taxonomic rank, given each specimen's condition.

Specimens were identified using identification keys, species descriptions, diagnoses and remarks of Baur and Amiet (2000), Bouček (1952*a*, *b*, 1956, 1959, 1974), Bürgis (1988), Gadallah *et al.* (2013), Heraty (2002), Masi (1934*a*) and Ruschka (1924). The poor condition of selected specimens restricted their identification beyond the family or genus level.

RESULTS

In total, six species belonging to three chalcid wasp families are presented. Most specimens have been identified up to the genus or species level; however, two Pteromalidae specimens cannot be identified beyond the family level as only their mesosoma has remained.

Family Chalcididae Latreille, 1817

Concerning the Chalcididae family, only specimens of the genus *Brachymeria* Westwood, 1829 were found in the collection. According to Bouček (1951*b*) and Noyes (2021), six species of the genus occur in Greece, namely: *B. femorata* (Panzer, 1801), *B. inermis* (Fonscolombe, 1840), *B. obtusata* (Foerster, 1859), *B. rugulosa* (Förster, 1859), *B. tibialis* (Walker, 1834) and *B. vitripennis* (Foerster, 1859).

Brachymeria rugulosa (Förster, 1859)

Parnassos, 1873, coll. Dr. Krüper, 1♀ (ZMUA HYM00000218).
Parnassos, 1895, coll. Dr. Krüper, 1♀ (ZMUA HYM00000219).

Brachymeria sp.

Parnassos, 1873, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000220).

Family Eucharitidae Latreille, 1809

Regarding the Eucharitidae, only *Stilbula vitripennis* Masi, 1934 was known to occur in the country (Masi 1934*b*; Bouček 1952). *Stilbula cyniformis* and *Eucharis (Psilogastrellus) punctata* are recorded for the first time for Greece, with this being the first record of genus *Eucharis* for the country. Thus, the total number of the Greek Eucharitidae is raised to three species.

Eucharis (Psilogastrellus) punctata Förster, 1859

(Fig. 1)

Parnassos, 1879, coll. Dr. Krüper, 1♀ (ZMUA HYM00000204).

Eucharis sp.

Peloponissos, 1876, coll. Emke & Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000205).

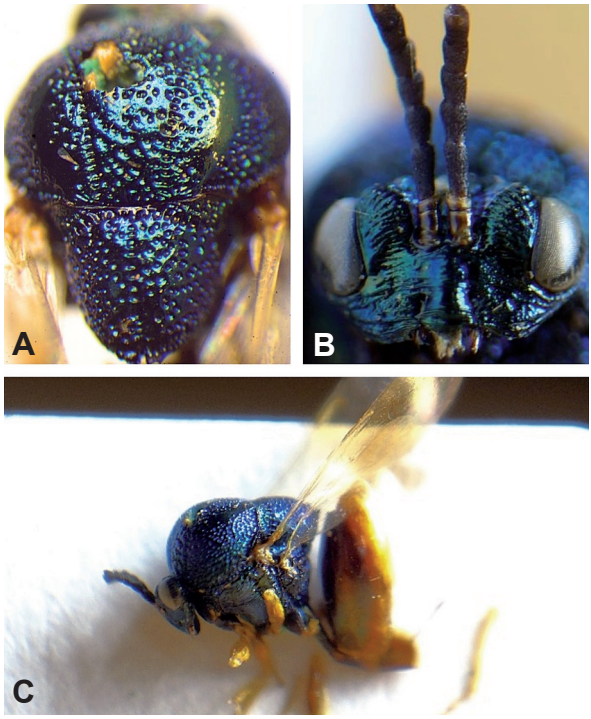

Fig. 1: *Eucharis (Psilogastrellus) punctata* Förster, 1859: (A) mesosoma, dorsal; (B) head, frontal; (C) general habitus, lateral.

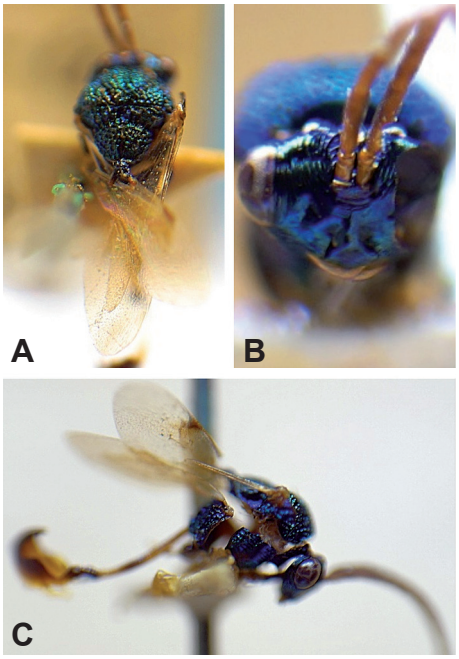

Fig. 2: *Stilbula cyniformis* (Rossi, 1792): (A) mesosoma, dorsal; (B) head, frontal; (C) general habitus, lateral.

Stilbula cyniformis (Rossi, 1792)

(Fig. 2)

Graecia, 1859-61, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000207), labelled as *Eucharis cyniformis* (Rossi, 1792).

Parnassos, 1879, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000206).

Family Leucospidae Fabricius, 1775

The Leucospidae are represented in Greece by five species of the genus *Leucospis* Fabricius, 1775: *L. bifasciata* Klug, 1814, *L. biguetina* Jurine, 1807, *L. dorsigera* Fabricius, 1775, *L. gigas* Fabricius, 1793 and *L. intermedia* Illiger, 1807 (Bouček 1974; Baur & Amiet 2000; Wiśniowski 2019). Three specimens have been identified up to the species level while the remaining specimens have been left as *Leucospis* spp., due to missing key morphological features that prevented further identification.

Leucospis dorsigera Fabricius, 1775

Parnassos, 1879, coll. Dr. Krüper, 1♀ (ZMUA HYM00000215).

Parnassos, 1879, coll. Dr. Krüper, 1♂ (ZMUA HYM00000211).

Leucospis gigas Fabricius, 1793

Parnassos, 1879, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000217).
Taygetos, 1882, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000208).

Leucospis intermedia Illiger, 1807

Poros, 1906, coll. Dr. Krüper, 1♀ (ZMUA HYM00000213).
Parnassos, 1895, coll. Dr. Krüper, 1♀ (ZMUA HYM00000214).

Leucospis spp.

Asia Minor, 1883, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000212).
Peloponnisos, 1876, coll. Emke & Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000209).
Taygetos, 1882, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000210).
Taygetos, 1882, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000216).

Family Pteromalidae Dalman, 1820

Two unidentified specimens are present in the collection.

Naxos, 1880, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000221).
Parnassos, 1873, coll. Dr. Krüper, 1 ex. (sex unidentifiable) (ZMUA HYM00000222).

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