

To John,
with my compliments
Miklat Doğanlar

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Notes on Chalcidoidea of Turkey. I. Chalcididae, Eurytomidae, Torymidae, Ormyridae, Perilampidae, Eucharitidae

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Summary

As a result of the work, 33 species of the chalcidoid fauna of Turkey were obtained. The species are 7 Chalcididae, 7 Eurytomidae, 11 Torymidae, 4 Ormyridae, 2 Perilampidae and 2 Eucharitidae. Seventeen of them are new records for the Turkish fauna. Sixteen species were reared from their hosts or from the material related with the host(s).

Introduction

The chalcidoid fauna of Turkey was not studied specifically till this time. Only a few of them were recorded from some parts of Turkey and reared from some hosts by some authors (Boucek, 1952; 1970; 1977; Çakıllar, 1959; İren, 1960; Öncüer et al., 1978; Tuatay et al., 1972; Soydanbay - Tunçyürek, 1976; Doğanlar, 1982). In the last decade many species of Chalcidoidea were collected and reared in some parts of Anatolia, mainly from Erzurum region by the author and some other researchers. In this work altogether 222 species of Chalcidoidea from 12 families were obtained, viz., 7 Chalcididae, 7 Eurytomidae, 11 Torymidae, 4 Ormyridae, 2 Perilampidae, 2 Eucharitidae, 110 Pteromalidae, 6 Encyrtidae, 2 Aphelinidae, 2 Tetracampidae, 64 Eulophidae and 5 Elmidae. The results will be given in three parts.

In this first part of the work, 33 species from 6 families were treated. Sixteen species were reared from their hosts or from the material related with their host(s). Seventeen species are recorded for the first time for the Turkish fauna.

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Material and Methods

The hosts or the materials from which the parasites were reared were collected from fields with their host plant and brought to laboratory. They were caged in the laboratory in order to obtain their adults and parasites. On the other hand some of the parasites were swept from fields of alfalfa or from pastures from some parts of Anatolia.

The Lepidoptera were identified by Dr. J.D. Bradly (British Museum (Natural History), London). The most of the parasitic species were identified by the author during his stays in the British Museum (Natural History), London and in the Hungarian Natural History Museum, Budapest. Some of the identifications were also checked by Dr. Z. Boucek (Commonwealth Institute of Entomology) and by Dr. J. Noyes (British Museum (Natural History), London).

In the text the new records are marked with asteriks. The specimens were collected or reared by the author, otherwise the name of collectors are written in brackets after collection date. The families and the species are given in a systematic order by following Boucek (1970).

Results and discussions

Chalcididae

Belaspidia obscura Masi

Erzurum, Horasan, 30.5.1980; Tortum, 15.8.1982.

Reared from larval sacks of *Apteroma helix* Sieb. ex *Malus communis* L. Boucek (1952) recorded it as a parasite of *Apterona crenulella* f. *helix* Sieb.

Brachymeria inermis (Fonscolombe)

Erzincan, 5.8.1980 (Özışık); Adana, 22.8.1982.

Reared from the larvae of *Cassida* sp. (Col., Chrysomellidae) ex *Onopordon* sp. Boucek (1977) recorded also same host for the species.

Brachymeria intermedia (Nees)

Bingöl, 26.6.-10.7.1974.

Reared from the larvae of *Cassida* sp. (Col., Chrysomelidae) ex dae) ex *Quercus* spp. Boucek (1952; 1970) recorded it as an endoparasite of lepidopterous larvae.

Brachymeria minuta (L.)

Erzincan, 23.6.1980 (Özişik).

Swept from pasture. It has been recorded as a parasite in puparia of various Sarcophagidae and Tachinidae (Boucek, 1977).

Brachymeria moerens? (Ruschka)

Erzurum, 28.7.1982.

Reared from pupae of *Archips rosanus* L. (Lep., Tortricidae) ex *Rosa* sp.

Brachymeria walkeri (Dalla Torre)

Adana, 22.8.1982.

Reared from pupae of *Drosophila* sp. (Dipt., Drosophilidae) on the bunch of grapes, damaged by the larvae of *Polychrosis*. The species has been recorded as a parasite of Diptera, mainly puparia of Sarcophagidae (Boucek, 1977).

Hockeria mengenillarum (Silv.)

Mersin, Kargılıköyü, Yenice, 15.8.1982; Adana, Kurttepe, 22.8.1982.

Swept from pasture. *Mengenilla quaesita* (Strepsiptera) was given as a host for this species by Boucek (1952).

Eurytomidae

Eudecatoma bigutta (Swederus) *

Bingöl, 16.6.1974; Genç, 18.2.1975 (reared in laboratory).

Reared from Cynipid galls on oak. Boucek (1970) recorded the same host from Europa and western Siberia.

Eudecatoma variegata Walker*

Bingöl, Hamamlar, 13.2.1975 (reared in laboratory).

Reared from Cynipid galls on oak.

Eurytoma curculionum Mayr*

Erzurum, 13.8.1982; Tortum, 22.9.1982.

Reared from the Curculionid galls in *Linaria dalmatica*. The species has also been recorded as a parasite in galls of Curculionidae in stems of various plants (Boucek, 1977).

Eurytoma curta Walker*

Erzurum, 17.1.1982 (reared in laboratory).

Reared from galls **Urophora** sp. (Dipt., Trypetidae) in flowerheads of **Cirsium** and **Carduus** spp. Nikol'skaya (1952) also recorded same host from USSR.

Eurytoma robusta Mayr*

Erzurum, 5.2.1982 (reared in laboratory).

Reared from galls of Trypetidae in flowerheads of **Centaurea** spp. Nikol'skaya (1952) recorded same host from USSR.

Eurytoma rosae Nees

Erzurum, Serçeme, 23.6.1976; Oltu, 3.7.1976.

Reared from galls of **Diplolepis rosae** L. on **Rosa** spp. Boucek (1977) recorded this species from same host.

Eurytoma tristis Mayr*

Erzurum, 15.8.1978.

Swept from fields of **Medicago sativa** L.

Torymidae

Didactyliocerus dispar Masi

Erzincan, Çağlayan, 23.6.1980 (Özışık); Adana, Yumurtalık, 19.8.1982.

Swept from grasses on seashore and in apple-orchards.

Dimeromicrus kiesenwetteri (Mayr)

Erzurum, 25.8.-25.9.1979 (Özbek).

Swept from fields of **M. sativa** and **Charthamus** sp. Boucek (1977) recorded it as a parasite of Trypetidae in stems and flowerheads of Compositae.

Glyphomerus stigma (Fabricius)

Erzurum, Serçeme, 28.6.1974.

Reared from galls of **Diplolepis rosae** Le. ex **Rosa** sp. The species has been recorded from the same host by Boucek (1977).

Liodontomerus pannonicus Ruschka*

Erzurum, 8.9.1980.

Reared from larvae of Trypetidae in flowerheads of **Carduus** spp. It has been also recorded from the same host from USSR by Nikol'skaya (1952).

Lioterphus pallidicornis* Boh.

Erzurum, 2.6.1982.

Swept from grasses.

Megastigmus dorsalis* (Fabricius)

Diyarbakır, Eğil, 15.10.1974.

Reared from Cynipid galls on oak. Boucek (1977) also recorded from the same host.

Megastigmus rosae* Boucek

Erzurum, Serçeme, 21.-28.6.1976

Reared from Cynipid galls on **Rosa** spp.

***Monodontomerus aereus* Walker**

Erzurum, Oltu, 13.7.1971, ex **Malacosoma franconica**; Oltu, 2.6.1974, ex **Euproctis chryssorrhoea** L.; Merkez, 28.8.1981, ex **Leucoma salicis** L.; Tahtköyü, Şenkaya, 23.-31.8.1982, ex **Yponomeuta malinella** L.; Bitlis, 16.5.1974, ex **Malacosoma neustria** L.; Bingöl, 10.7.1974, ex **M. neustria**. The species has been recorded as a parasite in pupae of many Lepidoptera and in cocoons of some diprionid sawflies (Boucek, 1970).

Paraholaspis cothurnata* Masi

Erzurum, 25.9.1979.

Swept from fields of **Charthamus** sp.

Pseudotorymus militaris* Boh.

Erzurum, 18.8.1979 (Özbek)

Swept from fields of **M. sativa**.

Pseudotorymus pannonicus* Mayr

Erzurum, 18.8.1979.

Swept from fields of **M. sativa**.

Ormyridae

***Ormyrus diffinis* (Fonscolombe)**

Erzurum, 2.4.1976; Akdağ, 25.6.1980.

Swept from flowers of **Salvia** spp. In seeds of **Salvia** spp., probably developing as a parasite of a phytophagous Eurytomid; also reared from galls of Cynipid **Xestophanes potentillae** Ratz. on **Potentilla** spp. (Boucek, 1977).

Ormyrus graciosus (Förster) *

Erzurum, 18.7.1979.

Swept from fields of *Onobrycis sativa* and *M. sativa*. Boucek (1977) recorded it as a parasite in galls of *Aylax* spp. (Hym., Cynipidae) on *Centaurea* and other plants.

Ormyrus nitidulus (Fabricius) *

Hakkari, Şemdinli, 10.1.-17.2.1975 (reared in laboratory); Muş, Kızılağaç, 5.1.-13.2.1975 (reared in lab.); Bingöl, Genç, 15.2.1975; Hamamlar, 13.2.1975 (reared in lab.).

Reared from Cynipid galls on oak. The species has been recorded as a parasite in many Cynipid galls on oak (Boucek, 1977).

Ormyrus orientalis Walker

Erzurum, 18.7.1979 (Özbek).

Swept from fields of *M. sativa*. Boucek (1977) recorded the species as a parasite in galls of Trypetidae on Compositae.

Perilampidae

Chrysolampus thenae (Walker) *

Erzurum, 20.6.-1.8.1979; Tortum, 26.5.1982

Swept from fields of *M. sativa* and *O. sativa*. The species has been recorded as a parasite of *Meligethes* spp. (Col., Nitidulidae) (Graham, 1969; Boucek, 1977).

Chrysomalla roseri Foerster *

Erzurum, 25.7.-8.9.1979.

Swept from fields of *M. sativa*. The species has been recorded as a parasite of *Tychius flavus* (Col., Curculionidae) (Peck et al., 1964; Graham, 1969).

Eucharitidae

Eucharis adscendens (Fabricius)

Erzurum, 18.7.1978; 26.6.1981 (Özışık).

Swept from fields of *M. sativa*. Peck et al. (1964) and Boucek (1977) recorded it as a parasite of the genera *Formica*, *Messor* (Hym., Formicidae.)

Psilogastrellus sp.nr.punctatus (Foerster)*

Gaziantep, Araban, 3.8.1977.

Swept from pasture.

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Ö z e t

Türkiye Chalcidoidea'sıyla ilgili notlar, I. Chalcididae, Eurytomidae, Torymidae, Ormyridae, Perilampidae, Eucharitidae

Bu çalışmanın sonucu olarak Türkiye chalcidoid'lerinden 33 tür saptanmıştır. Bunlardan 7 tür Chalcididae, 7 tür Eurytomidae, 11 tür Torymidae, 4 tür Ormyridae ve 2'ser tür de Perilampidae ile Eucharitidae familyalarındandır. Bu türlerden 17'si Türkiye faunası için yeni kayıt olup 16'sı konukçularından veya konukçularıyla ilgili materyallerden elde edilmiştir.

References

- Boucek, Z., 1952. The first revision of the European species of the family Chalcididae (Hymenoptera). *Acta ent. Mus. natn. Pragae*, 27, Suppl. 1, 108 pp.
- , 1970. Contribution to the knowledge of Italian Chalcidoidea, based mainly on a study at the Institute of Entomology in Turin, with descriptions of some new European species (Hymenoptera). *Mem. Soc. ent. ital.*, 59 : 35-102.
- , 1977. A Faunistic review of the Yugoslavian Chalcidoidea (Parasitic Hymenoptera). *Acta Entomol. Jugoslavica*, Suppl. 13, 145 pp.
- Çakıllar, M., 1959. Marmara Bölgesinde zeytin güvesinin biyolojisi üzerinde araştırmalar. Ziraat Vekaleti, Zirai Mücadele ve Zirai Karantina Umum Müdürlüğü neşriyatı. İstanbul Matbaası, İstanbul, 100 pp.
- Doğanlar, M., 1982. Hymenopter parasites of some lepidopterous pests in eastern Anatolia. *Türk Bit. Kor. Derg.*, 6 : 197-205.
- Graham, M.W.R. de V., 1969. The Pteromalidae of north-western Europe (Hymenoptera, Chalcidoidea). *Bull. Br. Mus. nat. Hist. Ent.*, Suppl. 16, pp: 86-92.

- İren, Z., 1960. Ankara Bölgesinde ağ kurtları (*Yponomeuta*) türleri, arız olduğu bitkiler, bu türlerin kısa biyolojisi ve mücadelesi üzerinde araştırmalar. Ziraat Vekaleti İlimi rapor ve Araştırma serisi: C-4, Gürsoy Basımevi, Ankara, 141 pp.
- Nikol'skaya, M.N., 1963. The Chalcid fauna of the USSR (Chalcidoidea). (English translation by Birron, A. and Cole, Z.S.). Israel Program for Scientific Translations, Jerusalem, 574 pp.
- Öncüer, C., E. Yalçın ve E. Erkin, 1978. Ege Bölgesi meyve ağaçlarında zarar yapan *Euproctis chrysorrhoea* L. (Lepidoptera: Lymantriidae) larvalarının doğal düşmanları ve bunların etkilik durumları. **Türk. Bit. Kor. Derg.**, 2 : 31-36.
- Peck, O., Z. Boucek and A. Hoffer, 1964. Keys to the Chalcidoidea of Czechoslovakia (Insecta: Hymenoptera). **Mem. ent. Soc. Canada**, No: 34, 170 pp.
- Soydanbay-Tunçyürek, M., 1976. Türkiye'de bitki zararlısı bazı böceklerin doğal düşman listesi, Kısım I. **Bitki Koruma Bülteni**, 16 : 32-46.
- Tuatay, N., A. Kalkandelen ve N. (Çağatay) Aysev, 1972. Nebat Koruma Müzesi böcek kataloğu (1961-1971). Yenigün Matbaası, Ankara, 119 pp.