

## Notes on Chalcidoidea of Turkey, II. Pteromalidae

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### Summary

From the chalcidoid fauna of Turkey, 98 species of Pteromalidae are obtained. From them 73 species are new records for the Turkish fauna. In this work 18 species were reared from their host(s) or from the material related with their host(s). The others were swept from alfalfa fields or from pastures.

### Introduction

In this second part of the work on Chalcidoidea of Turkey, 98 species of Pteromalidae from 6 subfamilies are obtained, viz., 1 Ceinae, 2 Spalanginae, 2 Asaphinae, 24 Miscogasterinae, 65 Pteromalinae and 2 Colotrechinae. Some of these species were recorded by Boucek (1963, 1970, 1977). Tuatay et al. (1972), Kaya (1975), Soydanbay-Tunçyürek (1976, 1978), Düzgüneş et al. (1981), Dođanlar (1982), Kılınçer (1982 a,b) and Erkin (1983). By this study 73 species are found as new records for the Turkish fauna. In addition to this work the species of *Dibrachys* Foerster and of *Pachyneuron* Walker will be studied elsewhere. The most species were swept from alfalfa fields or from pastures in many parts of eastern Anatolia, and 18 species were reared from their host(s) or from the material related with their host(s).

### Material and Methods

The specimens were collected or reared by the author by the method which were explained in the first part of the series (Dođanlar, 1934). The name of the collectors is recorded in brackets after collection date of

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species, if the collector is not the author. The new records are indicated by asterisk in the text. The species are given below the name of subfamilies in a systematic order by following Graham (1969).

## Results and Discussions

### CEINAE

*Cea pulicaris* Walker\*

ERZINCAN, 22.5.1982.

Swept from pastures. Boucek (1970) recorded it as a parasite of *Phytomyza paulilcevi* Hend.ex *Peucedanum oreoselinum* in Germany.

### SPALANGIINAE

*Spalangia fuscipes* Nees

ERZURUM, 4.6.1982.

Swept from flowers of *Ribes* sp. Boucek (1963, 1977) recorded it as a pupal parasite of *Oscinella frit* L.

*Spalangia subpunctata* Foerster\*

ERZURUM, 30.5.1982.

Swept from pastures. Boucek (1963, 1977) recorded the species as a parasite of synanthropic flies of the genera *Syritta*, *Physiphora*, associated with sheep or cattle droppings in pastures.

### ASAPHINAE

*Asaphes suspensus* (Nees)

ADANA, 10.6.1979; ERZURUM, 1.8.1979; 6.6.-2.7.1980; ERZINCAN, 9.5.1982.

Reared from the mummy galls of *Myzus persicae* (Hom., Aphididae) ex *Prunus persica*, and swept from leaves of *Prunus mahaleb* which was infested by *Aphis* sp., and from fields *Medicago sativa*. Boucek (1977) recorded it as a common hyperparasite of aphids via Aphidiinae (Hym., Braconidae).

*Asaphes vulgaris* Walker

ADANA, 10.6.1979.

Reared from the mummy galls of *M. persicae* ex *P. persica*. Boucek (1970, 1977) recorded this species as a common hyperparasite of aphids via Aphidiinae. Düzgüneş et al. (1931) found it as a parasite of some species of Aphididae. Kılınçer (1932a) stated the species as a hyperparasite of *Brevi-*

*coryne brassicae* from Ankara, Turkey, and as a parasite of some species of Aphididae (viz., *Brachycaudus helichrysi*, *Hyalopterus pruni*, *Myzus cerasi* and *M. persicae*) by Erkin (1933).

#### MISCOGASTERINAE

*Sphigigaster aculeata* (Walker)\*

ERZURUM, 25.8. - 15.9.1979 (Özbek).

Swept from fields of *M. sativa*. Graham, (1969) recorded it as a parasite of *Melanagromyza lappae* Lw. and *Agromyza aeneiventris* Fl n. ex *Serecio jacobaea* L.

*Sphigigaster brevicornis* (Walker)\*

ERZURUM, 29.8. - 8.9.1979 (Özbek); ERZİNCAN, 22.6.1980 (Özişik)

Swept from fields of *M. sativa* in Erzurum and of *Beta vulgaris* in Erzincan.

*Sphigigaster pallicornis* (Spinola)\*

ADANA, Kurttepe, 8.8.1982.

Swept from pastures. It has been recorded as a parasite of *Phytomyza* spp. (Graham, 1969; Boucek, 1970).

*Cyriogaster vulgaris* Walker

ERZİNCAN, Kemaliye, 18.6.1982 (Özişik).

Swept from pastures. The species has been recorded as a common parasite of some Diptera, mainly of Agromyzidae (Askew, 1965; Graham, 1969; Boucek, 1970).

*Syntomopus incisus* Thomson\*

ERZURUM, 20.6.1973; 20.7.1979.

Swept from fields of *M. sativa*. Graham (1969) and Boucek (1970; 1977) recorded this species as a parasite of Agromyzid Diptera of the genus *Melanagromyza* in stems of *Arctium*, *Cirsium* and *Carduus*.

*Syntomopus incurvus* Walker\*

ERZURUM, 16.8. - 25.9.1979 (Özbek).

Swept from fields of *M. sativa*. It has been recorded as a parasite of *Melanagromyza* spp. (Graham, 1969; Boucek, 1977).

*Halticoptera brevicornis* Thomson\*

ERZİNCAN, Yuvaköyü, Kemaliye, 18.6.1982 (Özişik).

Swept from pasture. Boucek (1977) recorded it as a parasite of Diptera.

*Halticoptera circulus* (Walker)\*

ERZURUM; 8.9.1979 (Özbek); Palandöken Mountain, 9.7.1980.

Swept from fields of *M. sativa*. Graham (1969) reared this species from *Phytomyza* spp. (Dipt., Agromyzidae).

*Halticoptera crius* (Walker)\*

ERZURUM, 1.8.1979 (Özbek).

Swept from fields of *M. sativa*.

*Halticoptera laevigata* Thomson\*

ADANA, Yumurtalık, 20.8.1982.

Swept from the plants on seashore. Graham (1969) recorded it as a parasite of *Anomoia permunda* (Dipt., Trypetidae) ex *Cotonaster multiflora* and *Crataegus monogyna*.

*Halticoptera patellana* (Dalman)\*

ERZURUM, 2.7.1982.

Swept from leaves of *P. mahalep*. Graham (1969) and Boucek (1977) recorded it as a parasite of several genera of Agromyzidae (e.g. *Phytomyza*, *Liriomyza*, *Agromyza*) and of *Spilographa zoe* (Mg.) (Dipt., Trypetidae).

*Halticopterina triannulata* Erdoes\*

ERZURUM, 29.8.1979 (Özbek)

Swept from fields of *M. sativa*.

*Halticopterina penthocoryne* Dzankomen\*

ERZURUM, 16.8. - 8.9.1979 (Özbek).

Swept from fields of *M. sativa*.

*Ksenoplata quadrata* Boucek\*

ERZURUM, 26.6.1979.

Swept from pastures.

*Thinodytes cyzinus* (Walker)

ERZURUM, 16.7.1979 (Özbek); Palandöken Mountain, 9.7.1980.

Swept from fields of *M. sativa* and from pastures. Boucek (1977) recorded it as a parasite of Agromyzidae.

*Miscogaster elegans* Walker\*

ERZURUM, 8.9.1978 (Özbek)

Swept from fields of *M. sativa*. Graham (1969) recorded it as a parasite of *Agromyza reptans* Fln., *A. anthracina* Mg., *Phytomyza symphyti* Hend. and *Phytobia labiatarum* (Hend.) (Dipt., Agromyzidae).

*Miscogaster hortensis* Walker\*

ERZURUM, 4.7.1978 (Özbek); 26.6.1979; Ispir, 15.5.1982.

Swept from fields of *M. sativa* and from pasture. Graham (1969) reared a female similar *M. hortensis* from *Agromyza genistae* Hendel.

*Miscogaster rufipes* Walker\*

ERZURUM, 12.9.1979 (Özbek); Erzincan. 9.5.1982.

Swept from fields of *M. sativa* and from pasture. Graham (1969) and Boucek (1970; 1977) recorded this species as a parasite of the genera *Agromyza* and *Phomyza* (Dipt., Agromyzidae).

*Skeloceras mirabile* Delucchi\*

ERZURUM, 28.6.1979.

Swept from pasture. A female was reared in England from an unspecified host on *Rumex acetosa* L. (Graham, 1969).

*Systasis encyrtoides* Walker\*

ERZURUM, 8.9.1972; Palandöken Mountain, 9.7.1980.

Swept from pasture. It has been recorded as a parasite of the genera *Dasyneura* and *Contarinia* (Dipt., Cecidomyiidae) (Graham, 1969; Boucek 1977).

*Gastrancistrus glabellus* (Nees)\*

ERZURUM, Palandöken Mountain, 9.7.1980.

Swept from pasture.

*Gastrancistrus hirtulus* Graham\*

ERZURUM, Horasan, 30.5.1980.

Swept from pasture. Graham (1969) swept this species from *Larix decidua* Mill. and from *Betula* in England.

*Gastrancistrus latifrons* (Thomson)\*

ERZURUM, 28.6.1979 (Özbek).

Swept from fields of *M. sativa*.

*Pirene varicornis* Haliday\*

KARS, Kağızman, 20.6.1980.

Swept from the apple orchards. Graham (1969) and Boucek (1977) recorded it as a parasite of *Contarinia tritici* Kirby (Dipt., Cecidomyiidae).

## PTEROMALINAE

*Caenocrepis arenicola* Thomson\*

ERZURUM, Paşalı, Şenkaya, 3.5.1982.

Swept from leaves of *Malus communis* L.

*Caenocrepis bothynoderi* Gromakov

ERZURUM, 13.8.1978.

Swept from pasture. Gromakov (1941) recorded it as an egg-parasite of *Bothynoderes punctiventris* Germ from Anatolia and USSR.

*Cyrtoptyx robustus* (Masi)

BINGOL, Genç, 18.2.1975.

The specimens were reared from the galls of Cynipidae on oak. Graham (1969) and Boucek (1977) recorded it as a parasite in Cynipid galls on oak in Mediterranean countries.

*Dinarmus acutus* Thomson

ERZURUM, 14.6.1978; 20.6 - 25.9.1979 (Özbek); 14.3. - 10.6.1980; ADANA, Kurttepe, 22.8.1982.

The most of the specimens were reared from the seeds of *Convolvulus arvensis* which were infested by a species of Bruchidae (Col.). The species has been recorded as a parasite of several Bruchidae in pods of Leguminosae (Graham, 1969; Boucek, 1977) and of *Ceroplastes rusci* ex *Ficus carica* in Izmir (Soydanbay-Tunçyürek, 1976). Tuatay et al. (1972) found it from Denizli-Turkey.

*Merisus splendidus* Walker\*

ERZURUM, Horasan, 30.5.1980; Akdağ, 25.6.1980; ERZINCAN, Yuva-köyü, Kemalije, 18.6.1982 (Özışık).

Swept from pasture. Graham (1969) and Boucek (1977) recorded it as a parasite of some *Tetramesa* spp. (Eurytomidae) in grass stems.

*Homoporus subniger* Walker\*

ERZURUM, 8.9.1979 (Özbek); Horasan, 30.5.1980.

Swept from fields of *M. sativa* and from leaves of *Salix* spp.

The species has been recorded as a parasite of *Aylax papaveris* Kieff. in stems of *Papaver* (Selenyi, 1956; Boucek, 1977) and of *Phanacis centaureae* Foerster in stems of *Centaurea* spp. (Graham, 1969).

*Homoporus arestor* (Walker)\*

ERZURUM, Horasan, 30.5.1980.

Swept from pasture.

*Homoporus fulviventris* (Walker)\*

ERZURUM, 4.7.1978 (Özbek); 26.6.1979; ADANA, Yumurtalık, 22.8.1982.

The specimens were mainly reared from the Curculionid gall on *Lepidium draba* and swept from pasture. Boucek (1977) recorded it as a parasite of insects in grass stems.

*Psilocera atra* (Walker)\*

ERZINCAN, 9.5.1982.

Swept from pasture.

*Psilocera obscura* Walker\*

ERZINCAN, 23.6.1980 (Özışık).

Swept from pasture.

*Catolaccus ater* (Ratzeburg)

ERZURUM, 23.3. - 3.9.1978.

Reared from cocoons of *Apanteles* spp. ex *Simyra dentinosa* and *Vanessa urticae* (Lepidoptera). This species has been recorded as a hyperparasite of Lepidoptera through cocoons of Braconidae and Ichneumonidae (Graham, 1969; Boucek, 1970; 1977). Tuatay et al. (1972) recorded it from Erzurum-Turkey.

*Psychophagus omnivorus* (Walker)

ERZURUM, 1. - 12.5.1976; 11. - 22.6.1982.

Reared from larvae of *Acronicts aceris* (Lep., Noctuidae) by Doğanlar (1982) and swept from leaves of *Prunus mahaleb*. Graham (1969) and Boucek (1977) recorded it as a primary or secondary parasite in pupae or in cocoons of many Lepidoptera and some Tenthredinoidea or their primary parasites (Braconidae and Ichneumonidae).

*Trijapitzinia leucomae* Dzhankmen

ERZURUM, 1. - 25.8.1981.

Reared from pupae of *L. salicis* (Doğanlar, 1982).

*Spintherus dubius* (Nees)

ERZURUM, 26.6. - 8.9.1979 (Özbek); ERZINCAN, 9.5.1982.

Swept from fields of *M. sativa* and from pastures. The species has been recorded as a parasite of *Apion* spp. (Col., Curculionidae) in flowerheads of *Trifolium* (Graham, 1969; Boucek, 1977).

*Pteromalus (Pteromalus) puparum* (Linnaeus)

ERZURUM, 21.8. - 8.9.1971; ERZINCAN, Çadırtepe, 9.8. 1980 (Aydemir).

Reared from pupae of *Pieris brassicae* and *P. rapae* (Lep., Pieridae). Graham (1969) and Boucek (1970, 1977) recorded it as a common gregarious parasite in pupae of Lepidoptera, mainly of Nymphalidae, Pieridae and Papilionidae. The same hosts were given by Tuatay et al. (1972). Doğanlar (1982) and Kılınçer (1982b).

*Pteromalus (Pteromalus) bifoveolatus* Foerster

ERZURUM, 1.7.1965 (Yüksel); BINGOL, 27.6.1974.

Reared from larvae of *Malacosoma franconica* and *M. neustria* (Lep., Lasiocampidae). The species has been recorded as a parasite of Lepidoptera (e.g. Lasiocampidae, Notodontidae, Saturniidae) (Graham, 1969; Boucek, 1970, 1977).

*Pteromalus (Pteromalus) apum* (Retzius)\*

ERZURUM, 25.8.1979 (Özbek) .

Swept from fields of *M. sativa*. It has been recorded as a parasite of *Megachile* spp. (Hym., Megachilidae) (Graham, 1969; Boucek, 1970, 1977).

*Pteromalus (Habrocytus) platyphilus* Walker

ERZURUM, 22.6.1980.

Reared from galls of *Erisoma* sp. ex *Ulmus* sp., but Graham (1969) and Boucek (1977) reared the species from egg-sac of the spider *Dictyna arundinacea* (L.) (Dictynidae). The specimens, reared in Erzurum, should attack the egg-sac of a spider in those galls.

*Pteromalus (Habrocytus) chrysos* Walker

ERZURUM, Tafta, 7.7.1970; Horasan, 30.5.1980.

Reared from larvae of *M. franconica* and swept from leaves of *Salix* spp. Graham (1969), Boucek (1970, 1977) and Tuatay et al. (1972) recorded the species as a primary or secondary parasite of various Lepidoptera.

*Pteromalus (Habrocytus) semotus* (Walker)

ERZURUM, Tafta, 7.7.1970.

Reared from larvae of *M. franconica*. Graham (1969), Tuatay et al. (1972) and Boucek (1977) recorded it as a primary or secondary parasite of Lepidoptera.

*Pteromalus (Habrocytus) elevatus* (Walker)

ERZURUM, 8. - 20.9.1980.

Reared from trypetid larvae on flowerheads of *Centaurea* spp. The species has been recorded as a parasite of Trypetidae causing galls in flowerheads of some Compositae (*Carduus*, *Cirsium*, *Centaurea*) (Graham, 1969; Boucek, 1977).



*Pteromalus (Habrocytus) intermedius* (Walker)\*

ERZURUM, 25.8.1979 (Özbek).

Swept from fields of *M. sativa*. Graham (1969) reared it from stems of *Ariemisia vulgaris* L. and stated it as a parasite of *Oxya parietina* L.

*Pteromalus (Habrocytus) albipennis* Walker\*

Swept from fields of *M. sativa*. It has been recorded as a parasite of Trypetidae, developing in flowerheads of Compositae (Graham, 1969; Boucek, 1970, 1977).

*Pteromalus (Habrocytus) sequester* Walker

ERZURUM, 1.8. - 8.9.1979 (Özbek); 8.9.1980; ERZINCAN, Çağlayan, 12. - 23.6.1980.

Swept from fields of *M. sativa* and also from Graminae. This species has been recorded as a parasite of *Asphondylia mayeri* Lieb. (Dipt., Cecidomyiidae) and of *Apion fusciosre* (F.) (Col., Curculionidae) (Graham, 1969), as a parasite of various Curculionidae (e.g. *Apion* spp.) associated with seed or seed-pods of Viciaceae (Boucek, 1970), and of Bruchidae in pods of Leguminosae, probably also of some curculionidis (Boucek, 1977). In Turkey, it was recorded as a parasite of *Pachytychius hordei* from Burdur by Tuatay et al. (1972) and of *Microlarinus lypriformis* ex *Tribulus terrestris* from Aydın by Soydanbay-Tunçyürek (1976).

*Pteromalus (Habrocytus) cionobius* (Erdoes)\*

ERZURUM, 1.8. - 2.9.1979 (Özbek).

Swept from fields of *M. sativa*. The species has been recorded as a parasite of *Cionus thapsi* (F.) in fruits of *Verbascum phlomoides* L. (Graham, 1969) and of curculionid galls in fruits and stems of some plants like *Verbascum* and *Linaria* (Boucek, 1977).

*Hobbya stenonota* (Ratzeburg)\*

BINGOL, 20.5. - 16.6.1974.

Reared from cynipid galls on oak. It has been recorded as a parasite in galls of *Biorhiza pallida* Oliv. (Hym., Cynipidae) on oak (Graham, 1969; Boucek, 1977).

*Stenomalina laticeps* (Walker)\*

ERZURUM, 24.7. - 25.9.1979 (Özbek).

Swept from fields of *M. sativa*.

*Stenomalina favorinus* (Walker)\*

ERZURUM, Palandöken Mountain, 9.7.1980.

Swept from pastures.

*Saenomalina continua* (Walker)\*

ERZURUM, 25.9.1979 (Özbek).

Swept from fields of *M. sativa*. The species was reared from *Chlorops pumilionis* (Bjerk) (Dipt., Chloropidae) in grasses (Graham, 1969; Boucek, 1977).

*Chlorocytus diversus* (Walker)\*

ERZURUM, 25.9.1979 (Özbek).

Swept from fields of *M. sativa*. Graham (1969) and Boucek (1977) recorded it as a common parasite of *Phanacis centaureae* Foerster (Hym., Cynipidae) on *Centaurea* spp.

*Chlorocytus ultonicus* Graham\*

ERZURUM, 18.7. - 25.9.1979 (Özbek).

Swept from fields of *M. sativa*.

*Chlorocytus phalaridis* Graham\*

ERZURUM, 12.9.1979 (Özbek).

Swept from fields of *M. sativa*. Graham (1969) stated that the species is a parasite of *Tetramesa longicornis* (Walker) (Hym., Eurytomidae) in internodes of *Phalaris arundinacea* L.

*Psilonotus adamas* Walker\*

ERZURUM, 16.7.1979.

Swept from leaves of *Betula* spp. This species was reared from seeds of *Betula*, which bore gall-like swellings (Graham, 1969) and which were infested by the cecidomyiid fly, *Semudobia betulae*. Winn. in USSR (Nikol'skaya, 1954).

*Psilonotus hortensia* Walker\*

ERZURUM, 16.7.1979.

Swept from leaves of *Betula* spp.

*Psilonotus achæus* Walker\*

ERZURUM, 11.9.1980.

Swept from leaves of *Arctium lappa*. Graham (1969) stated that it is also associated with *Betula*.

*Mesopolobus morys* (Walker)\*

ERZURUM, 8.9.1979 (Özbek); 30.7.1980; Palandöken Mountain, 9.7.1980; ERZINCAN, Yazıören, Tercan, 26.6.1980 (Özışık).

Swept from fields of *M. sativa* and from leaves and flowers of *Salvia*. The species has been recorded as a parasite of *Ceuthorrhyncus assimilis*

Payk. (Col., Curculionidae) in stems of *Brassica* spp. (Graham, 1969; Boucek, 1977).

*Mesopolobus incultus* (Walker)\*

ERZURUM, Palandöken Mountain, 9.7.1980; İspir, 15.5.1982.

Swept from leaves and flowers of *Salvia* spp. It has been recorded as a hyperparasite of *Apion* spp. on *Trifolium repens* L. (Graham, 1969).

*Mesopolobus aequus* (Walker)

ERZURUM, 3.9.1979 (Özbek).

Swept from fields of *M. sativa*. Graham (1965) and Boucek (1970, 1977) recorded it as a predator on eggs and larvae of other insects, e.g. of Delphacidae, in internods of grass stems.

*Mesopolobus nobilis* (Walker)\*

ERZURUM, 6.9.1979 (Özbek).

Swept from fields of *M. sativa*. The species was reared from *Avena elatior* L., *Bromus inermis* Leyss. (von Rooen, 1962), and from *Avena pubescens* (Huds.) and *A. pratensis* (L.) (von Rosen, 1966).

*Mesopolobus teliformis* (Walker)

ERZURUM, 20.6.1972; 18.7.1979 (Özbek).

Swept from grasses and from fields of *M. sativa*. This species was obtained from inflorescences of *Agropyron repens* (L.) in Sweden, and reared from seeds of *A. cristatum* (L.) in USSR (von Rosen, 1960), and found abundantly on *A. junceiforme* A. and D. Löve in Britain (Graham, 1969). Tuatay et al. (1972) recorded it as a parasite of *Pachytychius hordei* in Burdur, Turkey.

*Mesopolobus laticornis* (Walker)\*

ERZURUM, 18.7.1979 (Özbek); 18.8.1979.

Swept from fields of *M. sativa* and from grasses. The species develops in stems of grasses (e.g. *Arrhenatherum elatius*) (Boucek, 1977) and was reared from seeds of various grasses (von Rosen, 1966).

*Mesopolobus graminum* (Hardh)\*

ERZURUM, 28.6. - 16.8.1979.

Swept from grasses. Von Rosen (1960) recorded it as an egg-predator of *Calligypona pellucida* (F.) (Hemp., Delphacidae) in grass clumps, and as a larval parasite of *Eurytoma succica* v. Rosen and of *Tetramesa angustipennis* (Walker) (Hym., Eurytomidae) and their parasites, *Pediobius eubius* (Walker) (Hym., Eulophidae), *Chlorocytus pulchripes* (Walker) (Hym., Pteromalidae), and of *Tetramesa hyalinipennis* (Walker) and

*T. linearis* on *A. repens* in Sweden. In Britain this species has been reared from cells of *Setramesa calamagrostidis* (Hed.) (Graham, 1969).

*Mesopolobus diffinis* (Walker)\*

ERZURUM, 8.9.1978 (Özbek); 9.7. - 17.9.1979 (Özbek); 30.7.1980 (Özbek); Palandöken Mountain, 12.6. - 9.7.1980.

Swept from fields of *M. sativa* and from leaves and flowers of *Salvia* spp. This species was reared from galls of *Misospila tubifex* (Bouche) on *Artemisia campestris* L. (von Rosen, 1961).

*Lampoterma viride* (Thomson)\*

ERZURUM, 26.6.1979.

Reared from the curculionid galls on *Lepidium draba*.

*Pseudocatolaccus nitescens* (Walker)\*

ADANA, Kuttepe, 22.8.1982.

Swept from cotton fields after harvesting. This species has been recorded as a parasite of *Asphondylia* spp. (Dipt., Cecidomyiidae) (Graham, 1969; Boucek, 1977).

*Trichomalus posticus* (Walker)\*

ERZURUM, 14.9.1979 (Özbek); 21.4.1982.

Swept from fields of *M. sativa* and from pastures. Graham (1969) stated that the species is very probably parasitic on chloropid flies.

*Trichomalus nanus* (Walker)\*

ERZURUM, 14.9.1979 (Özbek); 21.4.1982.

Swept from fields of *M. sativa* and from pastures. Graham (1969) stated that the species is very probably parasitic on chloropid flies.

*Trichomalus nanus* (Walker)\*

ERZURUM, 25.6. - 3.9.1979 (Özbek).

Swept from fields of *M. sativa*. Graham (1969) stated that the species is possibly parasitic on chloropid flies.

*Trichomalus elengatus* Delucchi and Graham\*

ERZURUM, 26.6.1979 (Özbek); Palandöken Mountain, 9.7.1980.

Swept from fields of *M. sativa* and from pastures. This species was reared with *Eurytoma* sp. from stems of *Althaea rosea* (L.), probably as a parasite of *Apion radiolus* Marsh. (Graham, 1969).

*Trichomalus apertus* (Walker)\*

ERZURUM, 18.7. - 8.9.1979 (Özbek); 26.6.1979; Palandöken Mountain, 9.7.1980,

Swept from fields of *M. sativa* and *Onobrycis sativa* and from pastures.

*Trichomalus helvipes* (Walker)\*

ERZURUM, 8.9.1979.

Swept from pastures. The species has been recorded as a parasite of *Brachonyx pineti* Payk. in Norway (Graham, 1969).

*Trichomalus fulvipes* (Walker)\*

ERZURUM, 26.6.1979; 1. - 16.8.1979 (Özbek); KARS, Kağızman, 20.6.1980.

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

*Trichomalus inops* (Walker)\*

ERZURUM, 20.6.1978 (Özbek).

Swept from fields of *M. sativa*. The species was obtained from inflorescences of *Trifolium* sp. (Graham, 1969).

*Trichomalus campestris* (Walker)\*

ERZURUM, 26.6. - 24.7.1979 (Özbek); 20.7.1980; Horasan, 30.5.1980.

Swept from fields of *M. sativa* and from foliage of *Salvia* spp. The species has been recorded as a parasite of various *Apion* spp. developing in flowerheads of *Trifolium* (Graham, 1969; Boucek, 1977).

*Eupteromalus littoralis* Graham\*

ERZURUM, 8.9.1979 (Özbek).

Swept from fields of *M. sativa*.

*Nasonia vitripennis* (Walker)

ERZURUM, 6.9.1966 (Yüksel); 25.7.1980; 11.7.1982.

Reared from tachinid pupae ex *Malacosoma castrensis* L. and swept from leaves of *P. mahalep*. The species has been recorded as a parasite of Calliphoridae, Muscidae and some other Diptera (Peck et al., 1964; Graham, 1969; Boucek, 1977).

*Tomicobia promulus* (Walker)\*

ERZURUM, Horasan, 30.5.1980; Akdağ, 25.6.1980.

Swept from pastures. The species has been recorded as a parasite in adult Curculionidae, reared e.g. from *Otiorrhynchus ligustici* L. (Boucek, 1977).

*Arthrolytus discoidzeus* (Nees)\*

ERZURUM, 25.9.1979 (Özbek).

Swept from fields of *M. sativa*.

*Erdoesina alboannulata* Ratzeburg\*

ERZURUM, 8.9.1979 (Özbek).

Swept from fields of *M. sativa*. The species has been recorded as a pupal parasite of *Panolis griseovariegata* (Goeze), and a parasite of *Bupalus piniarius* (L.), *Polia pisi* (L.) (Graham, 1969).

*Platneptis laeta* (Walker)\*

ERZURUM, 25.7.1978; 8.9.1978 (Özbek).

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

*Dibrachys* Foerster.

The species of the genus will be published elsewhere.

*Dibrachoides dynastes* (Foerster)\*

ERZURUM, 26.6.1979; 18.8. - 8.9.1979 (Özbek); Palandöken Mountain, 12.6.1980; Tahtköyü, Şenkaya, 5.7.1982.

Swept from fields of *M. sativa* and from pastures. The species has been recorded as a larval parasite of the alfalfa-weevil, *Phytonomus posticus* (Gyll.) (Col., Curculionidae) (Peck et al., 1964; Graham, 1969).

*Coelopisthia caledonica* Askew\*

ERZURUM, 8.9.1979 (Özbek).

Swept from fields of *M. sativa*.

*Conomorium patulum* (Walker)

ERZURUM, 12.8.1982 (Aloğlu).

Swept from grasses in apple orchards. The species has been recorded as a parasite of various Lepidoptera, e.g. *Hyphantria cunea* Drury (Arctiidae), *Erannis bajoria* (Schiff.) (Selidosemidae), *M. neustria*, *Phyllonorycter platani* (Stgr.) (Gracillariidae) and *Paraleucoptera sinuella* Retzi (Lyonetiidae) (Graham, 1969; Boucek, 1977).

*Pchyneuron* Walker

The species of the genus will be studied elsewhere.

*Pachycrepoides vindemiae* Rondani

ADANA, 20.7 - 27.8.1982.

Reared from pupae of *Drosophila* sp. on grapes binch infested by *Polyctrosis* sp. The species has been recorded as a pupal parasite of numerous

Diptera (Graham, 1969; Boucek, 1977), and of *Cadra cautella* (Lepidoptera) (Soydanbay-Tunçyürek, 1976).

#### COLOTRECHNINAE

*Colotrechnus subcoeruleus* Thomson\*

ERZINCAN, Yuvaköyü, Kemaliye, 18.6.1982 (Özışık).

Swept from pastures.

*Colotrechnus viridis* (Masi)

ERZURUM, Horasan, 20.5.1982; Tortum, 26.5.1982; ADANA, Yumurtalık, 22.8.1982.

Swept from pastures. The species was recorded as a parasite of *Microgaster lypriformis* ex *Tribulus terrestris* in Izmir by Soydanbay-Tunçyürek (1976).

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#### Özet

Türkiye Chalcidoidea'sıyla ilgili notlar, II. Pteromalidae

Türkiye'nin Chalcidoidea faunasından 98 pteromalid türü saptanmış olup bunlardan 73'ü Türkiye için yeni kayıttır. Bu türlerden 18'i konukçularından veya konukçularıyla ilgili materyallerden elde edilmiştir. Diğer türlerden bir kısmı yonca tarlalarından, bir kısmı ise çayır-mer'adan atrapla toplanmışlardır.

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