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A contribution to the Braconid Fauna of Israel (Hymenoptera: Braconidae), 3

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ABSTRACT

Two hundred forty-five species of Braconidae are recorded from Israel, the majority of which are new to the Israeli fauna. The following eight species: *Dinotrema paucilia*, *Idiasta argamani, Bracon (Bracon) heberola*, *Bracon (Glabrobracon) propebella*, *Chelonus argamani*, *Microchelonus atrotibia, Microchelonus halperini*, and *Opius (Phaedrotoma) ocuvergens* are described as new to science. Collecting data are provided for all species. With 115 original figures.

KEYWORDS: Braconidae, Israel, new species, Qabir Argaman

INTRODUCTION

Two hundred forty-five braconid species are reported from Israel belonging to 18 subfamilies and 72 genera. The species are divided among 18 subfamilies as follows (in brackets number of species/number of genera): Agathidinae (12/5), Alysiinae: Alysiini (18/9), Alysiinae: Dacnusini (11/1), Brachistinae (14/3), Braconinae (47/9), Cardiochilinae (1/1), Cheloninae (33/5), Doryctinae (12/7), Euphorinae (6/3), Helconinae (2/ 1), Homolobinae (2/1), Hormiinae (3/3), Macrocentrinae (1/1), Meteorinae (5/1), Microgastrinae (50/12), Miracinae (1/1), Opiinae (15/6), Orgilinae (4/2), and Rogadinae (8/1). In the chapter Faunistic List, the species that are new to the Israeli fauna are marked with an asterisk (*). Collecting data are detailed for all species, taxonomic and distributional remarks are given wherever necessary. Eight species are described as new to science: *Dinotrema paucilica* sp. n., *Idiasta argamani* sp. n., *Bracon (Bracon) heberola* sp. n., *Bracon (Glabrobracon) propebella* sp. n., *Chelonus argamani* sp. n., *Microchelonus atrotibia* sp. n., *Microchelonus halperini* sp. n., and *Opius (Phaedrotoma) ocuvergens* sp. n. One new synonym was established: *Rhadinobracon zarudnyi* Telenga, 1936, is senior synonym of *Pseudovipio nigrocephalus* Hedwig, 1957. The following new varieties were created: *Bracon (Glabrobracon) ater var. gilvus* and *Bracon (Glabrobracon) ater var. rutilus*.

The overwhelming majority of the braconid material treated in this paper was collected by the late Dr. Qabir Argaman (1940–2003), the well-known aculeate wasp specialist, my good friend with Hungarian origin (his original name in Hungarian or-

thography NAGY Károly). To honor his contribution to the study of the braconid fauna of Israel (as well as the insect fauna of Israel in general), two new species are dedicated to his memory.

MATERIALS AND METHODS

Most of the specimens, including all the holotypes, are deposited in the National Collection of Insects, Tel Aviv University, Tel Aviv, Israel (TAUI). Some specimens are deposited in the Hungarian Natural History Museum, Budapest, Hungary (MNM), and in the museums and collections the acronyms of which are listed below.

CNC — Canadian National Collection of Insects, Ottawa, Canada
MNM — Hungarian Natural History Museum, Budapest, Hungary
HNHM — The Natural History Museum, London, GB
NMPC — Natural History Museum, The National Museum, Prague, Czech Republic
PPIII — Department of Plant Protection and Inspection Institute, Bet Dagan, Israel
RNH — Nationaal Natuurhistorische Museum, Leiden, Netherlands
TAUI — National Collection of Insects, Tel Aviv University, Tel Aviv, Israel
ZMHU — Museum für Naturkunde der Humboldt Universität zu Berlin, Berlin, Germany
ZSBS — Zoologische Staatsammlung, München, Germany

In the descriptions, Terminology follows Papp (1989) and the following abbreviations are applied (after Van Achterberg 1993: 4–5):

Forewing: *cu–a* = transverse cubito-anal vein, *m–cu* = transverse medio-cubital or recurrent vein, *r* = first section of the radial vein, *1–M* = basal vein, *1–R1* = first section of the metacarpal vein, *1–SR–M* = first section of the cubital vein, *2–SR* = third section of the cubital vein, *3–SR* = second section of the radial vein, *SR1* = third section of the radial vein.

Hind wing: *cu–a* = transverse cubito-anal (or anal) vein.

Eye: OOL = shortest distance between hind ocellus and compound eye, POL = shortest distance between hind two ocelli.

FAUNISTIC LIST

In the majority of the species the distribution data were adopted from Yu et al., (2005), and this reference is not cited further under each species. In a few cases, the distributional data were adopted from other sources, and in these cases the relevant references are given.

Agathidinae

**Agathis anglica* Marshall, 1885 — 1♀ (in Budapest): Karmel, 17.v.1965. Erdős. – Widely distributed in the Palaearctic region. Nearest to Israel known in Syria and Turkey.

**Agathis malvacearum* Latreille, 1805 — 1♂: Nazeret [Nazareth], 30.ix.1982. – Western Palaearctic region frequent to common species. Nearest to Israel known in Turkey and Caucasus Mts.

**Agathis montana* Shestakov, 1932 — 1♀,1♂: Ma'ale Gilboa', 23.x.1984. – Western Palaearctic region fequent to common. Nearest to Israel known in Turkey and Caucasus Mts.

**Agathis rufipalpis* Nees, 1812 — 1♂ (MNM): Karmel, 14.v.1965. Erdős.

Agathis umbellatarum Nees, 1814 — 1♀: Biriyya, 1.iv.1981. 1♂: 'En Gedi [Ein Gedi], 2.viii.1981. 1♂: Gan Or, 30.i.1985. 1♀: Mifshata, C 1987. 1♀: Ramle, 2.v.1993. 1♂: Silwān, vii.1989. 6♀, 1♂: Tel Aviv, 5.v.1960. Bytinski-Salz. 1♀: W. Sha'ar haGolan, 1.vi.1970. Bytinski-Salz. – Widely distributed in the Mediterranean Subregion. Nearest to Israel reported from Cyprus and Turkey (Nixon, 1986: 197). First reported from Israel ("Haifa") by Szépligeti (1901: 152).

**Baeognatha turanica* Kokujev, 1903 — 1♂: Hawwat 'Eden [H'Eden], 23.i.1986. 1♀: Nahariyya, 2.viii.1983. – Distributed in Kazakhstan, Uzbekistan, and Turkmenia.

**Bassus nugax* (Reinhard, 1867) — 1♀: Boqeq, iii.1990. – Reported from twelve countries in Europe. Nearest to Israel from Azerbaijan and Turkey.

**Bassus rugulosus* (Nees, 1834) — 1♀: El Balata, iv.1981. – Widely distributed in Europe. Nearest to Israel from Azerbaijan and Greece.

**Bassus tergalis* (Alexeev, 1971) — 1♀: Daliyya, 15.v.1985. 1♀: 'En Gedi, 24.x.1985. 1♀: 'En Harod, 11.vi.1981. 1♀: Kefar haNagid [K. Nagid], 22.vi.1985. 1♀: Mabbu'im, 7.ii.1985. – Described from, and up to now, known in Turkmenia. The Israeli locality is its second distributional contribution.

Coccygidium transcaspicum (Kokujev, 1902) — 1♀: 'Enot Zuqim, 22.v.2009. Freidberg. 3♀: Hawwat 'Eden, taken with light trap, vi.1986. Or and Argaman. – Distributed in the former Soviet Central Asia" (Turkmenia, Uzbekistan), Iran (Tobias 1986a: 291), Afghanistan, Israel, and Japan (Yu et al., 2005).

**Disophrys caesa* (Klug, 1835) — 1♀: Berekhya, 18.viii.1981. 1♀: Giv'at, Olga, 22.vi.1981. 1♀: Mikhmoret, 25.iv.1981. 1♂: Urim, 15.v. Bytinski-Salz. 1♂: Upper Nahal Zin [Wadi Nafkh], 8.iv.1965. Kugler. – Distributed in the steppe and forest-steppe zone of the Palaearctic region. In Israel fairly frequent.

**Disophrys dissors* Kokujev, 1903 — 1♂: Upper Nahal Zin [Wadi Nafkh], 8 .iv.1964. Kugler. – distribution: Hungary, Ukraine, Moldova, Azerbaijan (described from here), and Turkey.

Alysiinae: Alysiini

Alysia (Alysia) manducator (Panzer, 1799) — 1♀ (det. Fischer 1995): Bat Yam [Bat Jam], 12.ii.1942. Bytinski-Salz. – In the western Palaearctic region frequent to common.

Alysia (Anarcha) rufidens Nees, 1834 —1♂ (det. Fischer 1995): Ma'ale Gilboa', 25.x.1984. – In Europe widely distributed albeit rather sporadically. Nearest to Israel known in Bulgaria.

**Aphaereta difficilis* Nixon, 1939 — 1♀: Mikhmoret, Miramar Hotel garden, viii.1980.

1♀: Yotvata, v.1989. – Widely distributed in the western Palaearctic region. Nearest to Israel reported from Tunisia and Bulgaria.

**Aphaereta falcigera* Graham, 1960 — 1♀: Ofaqim, viii.1985. – Known rather sporadically in Europe. Nearest to Israel in Hungary and Austria.

**Aspilota breviantennata* Tobias, 1962 — 1♀: 'En Gedi, 25 .v.1981. – Described from European Russia (Leningrad district), known in Romania (Transylvania), Hungary and Slovakia. In Hungary a frequent *Aspilota* species.

**Aspilota latitemporata* Fischer, 1976 — 1♀: Pedaya, ix.1985. – Distribution: Described from Austria, known in Hungary, Slovakia, Romania (Transylvania), and Spain.

**Dinotrema paucilica* n. sp. — See the chapter description of the New Species.

**Idiasta argamani* n. sp. — See the chapter description of the New Species.

**Idiasta dichrocera* Königsmann, 1960 — 1♀: Gibbeton, vii.1985. 1♀: Nahal Kelekh, v.1983. 1♀: Yesodot, vii.1982. 1♀: Horbat Zedata, near Poriyya [Zedata], vii.1986. – Widely though sporadically distributed in the Palaearctic region. Nearest to Israel, known in Bulgaria.

**Idiasta picticornis* (Ruthe, 1854) — 1♀: Horbat Dardar, near Zur Natan [Dardar], 26.viii.198?. 1♀: Gimzo, viii.1990. – Yu et al. (2005) reported its disjunct distribution in Germany, Hungary, Czech Republic, Slovakia, and China.

**Orthostigma pseudolaticeps* Königsmann, 1969 — 1♀: Tel Nagila, x.1986. – Described from Germany (Königsmann, 1969: 23), listed in Hungary (Papp, 2005: 144).

**Phaenocarpa brevipalpis* (Thomson, 1895) — 1♀: Mikhmoret, Miramar Hotel garden, viii.1980. – Apparently a disjunct distribution figure in Europe: Hungary and Sweden; in Asia: Mongolia and Russia (Altai Mts., Kamchatka).

**Pseudopezomachus masii* Nixon, 1940 — 1♀: Bet Herut, 14.viii.1980. 1♂: Nahal 'Arugot, 25.v.1981. 1♀: Nazeret [Nazareth], 30.ix.1982. 1♀: Nuseirat, 13.iv.1981. 1♀: Nahal Perat [Vadi Qelt], 10.iii.1981. 1♂: Yeroham, 4.viii.1981. 1♀: Zefat, 1.iv.1981. EGYPT: 1♀: El 'Arish, 13.iv.1981. – Described from Lybia ("Sidi Mezri"), reported from Greece (Nixon, 1940, Papp, 2007: 100). In the Hungarian Natural History Museum there are further specimens from two countries: 4♀, 8♂: Romania, Dobruja, Agigea, taken in April (7♂), July (2♀), August (2♀, 1♂), and September (1♀, 1♂). Argaman; 1♀: Turkey, Istanbul, V. Zombori.

Synaldis argamani Fischer, 1993 — 1♀ (holotype): Sha'ar ha'Amaqim, 25.vii.1981.

Synaldis distracta (Nees, 1834) — 1♂: Ga'aton, 16.iv.1981.

Synaldis glabripleura Fischer, 1993 — 1♂ (holotype): Nazeret [Nazareth], 30.ix.1982.

Synaldis israelica Fischer, 1993 — 1♀ (holotype): Zur Natan, 26.viii.1981.

**Synaldis maxima* Fischer, 1962 — 1♀: Shabtin, N. Modi'in 'Illit, iii.1993. 1♀: Nahal Qezev, Central 'Arava [W. Oezev], viii.1982. 1♀: Nahal Teref, E. Makhtesh Ramon [W. Teref], iv.1984. – In Europe widely distributed. Nearest to Israel known in Bulgaria and Italy.

Alysiinae: Dacnusini

**Chorebus (Stiphrocera) anitus* (Nixon, 1943) — 1♀: Hawwat 'Eden, 23.i.1986. – In Europe known in six countries. Nearest to Israel in Serbia, Hungary, and Ukraine.

**Chorebus (Phaenolexis) caelebs* (Nixon, 1944) — 1♀: Hawwat 'Eden, 25.x.1984. – Hitherto known only in the United Kingdom.

**Chorebus (Stiphrocera) cubocephalus* (Telenga, 1934) — 1♂: Hamadya, iv.1987. – Widely distributed in the Palaearctic region. Nearest to Israel known in Turkey, Armenia, and Azerbaijan.

**Chorebus (Stiphrocera) freya* (Nixon, 1943) — 1♀: Ofaqim, 16.v.1982. – Described from Sweden, reported from Poland.

**Chorebus (Phaenolexis) leptogaster* (Haliday, 1839) —1♀: Nizzana, vi.1987. 1♂: Yavne, x.1989. 1♂: Yotvata, viii.1980. 1♀: Ze'elim, v.1993. 1♀: Zububa, NW Jenin, x.1982. – In the western Palaeartic region frequent. Nearest to Israel known in Turkey, Armenia, Azerbaijan, and Afghanistan (Tobias et al., 1998: 181).

**Chorebus (Stiphrocera) merellus* (Nixon, 1937) — 1♂: Reshef, viii.1989.

**Chorebus (Stiphrocera) myles* (Nixon, 1943) — 1♂: Hulata [Hullaha], 3.v.1983. 1♀: Ofaqim, 16.v.1982. 1♂: Shelomi, 18.iii.1982. 1♂: Yodefat, ix.1980. – Described from Germany, reported from Serbia, Ukraine, and Azerbaijan.

**Chorebus (Stiphrocera) pseudomisellus* Griffiths, 1968 — 2♀: Kefar Darom, 18.viii.1981.

**Chorebus (Etriptes) subasper* Griffiths, 1968 — 1♀: Latrun, 26.v.1984. – Described from Poland, reported from Asiatic Russia (Sakhalin).

**Chorebus (Stiphrocera) thecla* (Nixon, 1943) — 1♂: Yavne, ix.1983.

**Chorebus (Stiphrocera) tumidus* (Tobias, 1966) — 1♂: Qiryat Gat, Mivhor, v.1987. 1♀: Yotvata, 23.xi.1983. – Described from Turkmenistan, reported from Serbia (Žikić et al., 2000).

Brachistinae

**Eubazus (Brachistes) claviventris* (Ruthe, 1867) — 1♀: Rosh haNiqra [Ros Hanika], 13.v.1965. Erdős. – Distributed in the western Palearctic region. Nearest to Israel known in European Russia (Sochi), Hungary, and Bulgaria.

**Eubazus (Brachistes) gallicus* (Reinhard, 1867) — 1♀: Daliyya, 15.v.1985. – A western Palearctic and less frequent species. Nearest to Israel known in Greece.

**Eubazus (Brachistes) minutus* (Ratzeburg, 1848) — 1♀: Rosh haNiqra [Ros Hanika], 13.v.1965. Erdős. – A sporadic to frequent species in Europe. Nearest to Israel known in Hungary, Ukraine, and Azerbaijan.

**Eubazus (Brachistes) rufithorax* (Abdinbekova, 1969) — 1♂: Shekhem, 8.v.1986. – Up to now, known only in Azerbaijan. The Israeli locality is its second distributional datum.

**Schizoprymnus hilaris* (Herrich-Schaeffer, 1838) — 1♀: Alonim, taken from *Cercis siliquastrum*, 6.vii.1975. Halperin. 1♀: Mt. Carmel, taken from *Pinus halepensis*, 10.ix.1959. Halperin. – Distributed in the western Palaearctic region. Nearest to Israel known in Moldova and Serbia.

**Schizoprymnus obscurus* (Nees, 1816) — 1♀: Bet Alfa, 3.vi.1981. 2♀: Mt. Carmel, 21.v.1986. 1♀: Park Canada, 26.v.1984. 1♀: Nahal Perat [Wadi Qelt], 10.iii.1981. – In Europe a fairly frequent to common species. Nearest to Israel known in Greece and Iran.

**Schizoprymnus tantalus* Papp, 1981 (?=*S. moldavicus* Tobias, 1986) — 1♀: 'Afula, 20.v.1981. – Known sporadically to less frequently in Hungary, Serbia, Greece, Moldova, and Turkey.

Triaspis aciculatus (Ratzeburg, 1848) — 1♀: Yeriho [Jericho], 8.iv.1981. 1♀: Jordan Valley, Hawwat, 'Eden, 19–27.vi.1990. 1♀: Kefar Vitkin, 17.vi.1981. 2♀, 1♂: Netanya, 1.iii.1984, 2♀, 1♂: ex *Gastrallus corsicus* Schilsky (Col. Anobiidae) host's food-plant: *Delonix regia* (1♀, 1♂) and *Pistacia atlantica* (1♀). Halperin. 1♀: Sede' Eliyyahu, 6.ix.1983. 1♂: Yavne, 1.v.1983. – A fairly frequent western Palaearctic species. First reported from Israel by Halperin (1986). Nearest to Israel known in Greece.

**Triaspis collaris* (Thomson, 1874) — 1♂: Bet Dagan, iv.1993. 1♀: Yavne, ii.1984. – The species was described from Sweden, reported from France and Germany (Belokobylskij et al., 2003: 369, Yu et al., 2005).

**Triaspis facialis* (Ratzeburg, 1852) — 1♀, 3♂: Kabri, reared from dry twig of *Calycotome villosa*, 15.vii.1985. Halperin. – Its specific identity is more difficult to recognize. A fairly rare species, known in Germany, Hungary, Italy, and Bulgaria.

Triaspis floricola (Wesmael, 1835) — 1♀: 'Ami'ad, 31.viii.1981. Halperin. 1♂: Antipatris, 11.ii.1984. 1♀: Bet Herut, 14.viii.1980. 3♀: Kabri, reared from dry twig of *Calycotome villosa*, 15.vii.1985. Halperin. 2♂: Mikhmoret, Miramar Hotel garden, viii.1980. 1♀: Ro'i, 21.iii.1984. 5♂: Shefayim, 21.ii.1984. 1♂: Shuyukh, NE Hevron, iii.1984. 1♀: Tomer, iv.1984. – Frequent to common in southern half of Europe. Nearest to Israel known in Greece. First reported from Israel by Halperin (1986).

Triaspis obscurellus (Nees, 1816) — 1♀: Afeq, vii.1980. 1♂: 'Afula, 20.v.1981. 1♀: Antipatris, 11.xi.1984. 1♂: Bet Herut, 14.viii.1980. 1♀: Holon, 15.viii.1983. 1♀: Hoshaya, iv.1989. 1♀: Kabri, 25.iii.1982. 1♂: Kefar Darom, 18.viii.1981. 2♀: Kefar Maymon, 23.viii.1983.1♀, 1♂: Mikhmoret, Miramar Hotel garden, viii.1980. 1♂: Mikhmoret, 6–8.vii.1981. 1♀: Qedesh [Qaddis], viii.1980. Rosh Tur, vii.1983. 1♀: Sede Boqer, 4.viii.1981. 1♀, 2♂: Shefayim, 21.ii.1984. 1♀: Nahal Sal'it [W. Salit], v.1983. 1♂, 2♂: Ze'elim, 13.vii.1983. 1♀: Zur Natan, 26.viii.1981. – In Europe a frequent to common species. In Israel also frequent.

**Triaspis pallipes* (Nees, 1816) (=*Sigalphus similis* Szépligeti, 1901) — 1♀: Megiddo, 15.v.1965. Erdős. 1♂: Nahal 'Ammud [Wadi Ammud], 16.v.1965. Erdős. 1♀: Ashqelon [Askelon], 23.v.1965. Erdős. – In Europe a less frequent species. Nearest to Israel known in Bulgaria, Armenia, and Azerbaijan.

Triaspis thoracicus (Curtis, 1860) — 1♀: Dunes, Hadera, 26.viii.1980. 1♀: Jordan Valley, Hawwat 'Eden, 19–27.vi.1990. 1♀: Sede Boqer, 4.viii.1984. 1♂: Yoqne'am, Menashe Hills, near Haifa, taken from *Pinus halepensis*, 26.vi.1960, Halperin.

Braconinae

Argamania aereus Papp, 1989 — 1♂ (in Berlin): Israel, Yeriho [Palaestina, Jericho], 7.i.1931. Bodenheimer. – Distributed in Israel, Tunisia, Algeria. Supposedly widely distributed in the Mediterranean subregion.

**Bracon (Glabrobracon) abbreviator* Nees, 1834 — 1♂ (in MNM): 'En Hemed [?Jerusalem, Aqua Bella], 21.v.1965. Erdős.

Bracon (Glabrobracon) abbreviator var. *abscissor* (Nees, 1834) — 1♀: Kinneret, iv.1985, Argaman.

**Bracon (Bracon) andriescui* Papp, 1993 — 1♂: Yeriho [Jericho], 8.iv.1981. – Described from Romania, reported from Korea. Very near to *B. (B.) fulvipes* Nees, 1834; Tobias and Belokobylskij (2000: 135) considers it as probably identical with this species.

Bracon (Palpibracon) atrator Nees, 1834 — Typical specimens are black, at most palps more or less brown and sternites anteriorly brownish to yellow(ish). Legs black to (dark) brown, hind tibia basally light brown to yellow(ish). Specimens of this species in the Mediterranean subregion comprise light color deviations that were already observed by Nees (1834: 82). The yellow, reddish yellow, brownish yellow, testaceous color deviations are restrict to the oral parts (palps, oral opening, mandible, cheek) as well as mesoscutum, mesopleuron and tergites.

Cyprus: 3♀: Kiliani, 1♀: Kalopanyiotis, 3♀: Ayia Mavi, Iliani, Pera Pedi. Israel: 1♂: Arava Valley, 3.v.1983. 1♂: Ilanot, 24.iv.1981. 1♀: Judean Hills, 3.v.1983. 1♀: Meshar, xi.l986. 1♂: Nazeret [Nazareth], 30.ix.1982. 1♀: Nizzana, 29.v.1984. 1♀: Nahal haRo`a [N. Haroa], 4.viii.1981. 1♀: Tel Aviv, 24.v.1989. Halperin.

**Bracon (Glabrobracon) chrysostigma* Greese, 1928 — 1♀: 'En Hazeva, 13.iii.1985. 7♀, 3♂: Ma'agan Mikha`el [Maagan Michael], taken from *Verbascum* sp., 2.i.1960. ? 2♀, 1♂: Nahal Poleg [Wadi Falik], taken from *Verbascum* sp., 1♀: 6.iii.1962, 1♀, 1♂: 24.iii.1962. Kugler. – A rather rare species. Described from Ukraine: Kiev; reported its few localities from France, Hungary, Romania, Moldova, Ukraine, and Greece.

**Bracon (Glabrobracon) delibator* Haliday, 1833 (=*B. anthracinus* Nees, 1834) — 1♂: Kalanit, 17.i.1985. 1♀: Peza'`el [Pesa'el], 8.i.1985.

Bracon (Glabrobracon) dichromus Wesmael, 1838 — 1♀: Jordan Valley, Hawwat 'Eden, 19–27.vi.1990. 1♂: Meron, iv.1986. 1♀: Yavne, Holot, 30.ix.1984.

Bracon (Lucobracon) erraticus Wesmael, 1838 — 1♂ (ZSBS): Har Hermon [Mt. Hermon], 2050 m, 31.v.1991. Warncke.

Bracon (Lucobracon) fortipes Wesmael, 1838 — 1♂: Ashqelon, 21.iii.1989. Halperin. 1♂: Hawwat 'Eden, 4.vi.1986. 1♂: Lod, 6.x.1985. 1♀: Me`ir Sheféya [Sheffayia], 21.ii.1984, taxonomic remark: ovipositor sheath short, clearly shorter than metasoma (usually as long as or somewhat longer). – In the Palaearctic region distributed rather sporadically. Nearest to Israel known in Cyprus and Turkey.

**Bracon (Glabrobracon) fumatus* Szépligeti, 1901 — 1♂: 'Ein el-Auja [E. Auja], ii.1981. Argaman. – Distributed and fairly frequent in the southern half of Europe.

**Bracon (Bracon) gusaricus* Telenga, 1933 — 1♀: Yavne, 27.vi.1987. – Described from Uzbekistan; reported from Switzerland, Bulgaria, European Russia (Daghestan), Azerbaijan, Georgia, Turkmenistan, in Afghanistan known from several specimens in two localities (Tobias et al., 1998: 177).

**Bracon (Bracon) heberola* n. sp. — See the chapter Description of the New Species.

**Bracon (Glabrobracon) helleni* Telenga, 1936 — 1♀: Hawwat 'Eden [H. Eden], iii.1990. 1♀: Hevron [Hebron], ii.1982. 1♂: Jalbūn, v.1985. 1♀: Pedaya, vi.1989. – Distribution: Switzerland, Turkey, Cyprus, Kazakhstan, and Israel.

Bracon (Bracon) intercessor var. *laetus* (Wesmael, 1838) (= var. *concolor* Fahringer, 1927; =var. *subtilis* Szépligeti, 1901) — 1♀: Bet El, iv.1983, 1♀: Boqeq, vi.1993. 1♂: Erez, viii.1980. 1♀: Etanim, vii.1985. 1♀: Hofit, ix.1980. 1♀: Har Karkom, vii.1981. 1♀: Ilanot, i.1986. 1♀: Kelekh, iii.1985. 1♂: Neta'im, viii.1984. 1♂: Nófekh, ix.1987. 1♂: Qedumim, iv.1990. 1♀: Poriyya, iii.1993. 1♀: Shefer, xi.1984. 1♀: Horbat Sirgona, ix.1980. 1♀: Tel Salwim vi.1993. – Frequent to sporadic in the Palaearctic region. Nearest to Israel known in Cyprus.

**Bracon (Glabrobracon) karakumicus* Tobias, 1967 — 1♀: Judean Desert, 3.v.1983. – Until now known only in Turkmenia (Repetek, Tobias, 1967: 385). Supposedly a semidesert-desert species.

**Bracon (Bracon) kozak* Telenga, 1936 — 1♂: Qedumim, vii.1989. – Known in European Russia (Stavropol district), Turkmenia, and Uzbekistan. It seems to be a steppe- and deserticol species.

**Bracon (Bracon) leptus* Marshall, 1897 — 1♀ (RNH): Yerushalayim [Jerusalem], 18.iii.1976. Teunissen. 1♂: Mikhmoret, Miramar Hotel garden, viii.1990. – Widely distributed in the Palaearctic region. Nearest to Israel known in Cyprus.

**Bracon (Glabrobracon) lividus* Telenga, 1936 — 1♀ (ZSBS): Bet Lehem, Berekhat Shelomo [Bethlehem, Salamons Teiche], 5.vii.1928. Müller. – Distribution: Armenia (the type locality is there), European Russia (Krasnodar), Germany, Hungary, Greece, and Turkey.

Bracon (Bracon) luteator Spinola, 1808 — 1♀ (NHM): Dafna [Daphne Oaks], 16.vi. 1952. Mavromoustakis. 1♀: Hadera, ix.1981. 1♀: Judean Desert, 3.v.1983. 1♀: Yavne, 11.iv.1984. 1♂: Tomer, 31.viii.1982. – Reported from Israel (Papp, 1989: 49).

Bracon (Bracon) luteator var. *nigripedator* (Nees, 1834) — 1♂: Mt. Carmel, 21.v.1986. Argaman. 1♂: Peza``el, 7.iii.1982. Argaman. 1♂: Nizzana, 2.v.1984. Argaman.

**Bracon (Glabrobracon) marshalli* Szépligeti, 1901 — 1♂: Nahariyya, 8.iii.1981. – A species recently reinstated after being considered a junior synonym of *B. obscurator* (Nees sensu Marshall, 1885, Papp, 2008: 1763). Distributed in many countries of Europe and in Mongolia. Nearest to Israel known in Cyprus (Papp, 2008: 1763).

Bracon (Glabrobracon) obscurator Nees, 1812 — 1♀: Hawwat 'Eden [H. Eden], ix.1984. 1♀, 2♂ (CNC): Tel Aviv, Holon, 27.iii.1968. Bleszynski.

Bracon (Ophthalmobracon) ophthalmicus Telenga, 1933 — 1♀: Yafo [Jaffo], viii.1984. 1♀: Horbat Magdil, vii.1982. – Distribution: Israel, Armenia, Azerbaijan, Kyrgyzstan, Tajikistan, Turkmenia, Uzbekistan, and Mongolia.

Bracon (Bracon) pectoralis Wesmael, 1838 — 1♀: Bet Zur, v.1985. 1♀: Elqosh, 10.v.1981. 1♀: HaZorea', ix.1981. 1♂: Hofit, 13.xi.1980. 1♀: Misgav, viii.1983. 1♀: Qaryūt, iv.1984. 1♀: Pedaya, ix.1980. 1♀ (CNC) : Ramla, 25 km E. from Tel Aviv, 14.iii.1968. Bleszynski. 1♀: Samar, 9.i.1990. Halperin. 1♀: Sho`eva, iii.1990. 1♂: Tel 'Adashim, 26.viii.1982. – Distribution: Armenia, Azerbaijan, Israel, Kirgyzstan, Tajikistan, Turkmenia, Uzbekistan, and Mongolia. Frequent to common in the Palaearctic region.

**Bracon (Pigeria) piger* Wesmael, 1838 — 1♀: Gilo, vi.1985. 1♂: Mikhmoret, Miramar Hotel garden, viii.1980. 1♀: Tel 'Eter, vii.1985. – Widely distributed in the Palaearctic region. Nearest to Israel in Turkey and Lebanon.

Bracon (Glabrobracon) praecox Wesmael, 1838 — 1♂: Khan Yunis, 13 .iv.1981. 1♀: Mikhmoret, Miramar Hotel garden, viii.1980. – Widely distributed in the Palaearctic region, in Europe frequent to common. Nearest to Israel known in Cyprus and Iran.

**Bracon (Glabrobracon) propebella* n. sp. — See the chapter description of the New Species.

**Bracon (Glabrobracon) pulcher* Bengtsson, 1924 — 1♀: Sha'ar haGay, host's foodplant: *Prasium major*, 25.iii.1990. Halperin. – Known in Sweden, Denmark, Austria, Poland, and Hungary.

**Bracon (Foveobracon) quadrimaculatus* Telenga, 1936 var. *amaculatus* (Beyarslan, 1988) — 1♀: Sitriyya, iii.1985. – The species was described from Turkmenia (Telenga, 1936: 169, 266, 372), reported from Azerbaijan (Tobias, 1986: 119), and Greece (Papp, 2007: 103). Beyarslan (1988: 71) described this species under the name *B. amaculatus* (from Turkey), which I consider but the variety of the nominate form: the variety lacking the four dark maculae on tergites 2–3 contrary to the nominate form.

**Bracon (Bracon) schmidti* Kokujev, 1912 — 1♂: 'Azza [Gaza], 13.xi.1981. – Its localities listed in Azerbaijan, Uzbekistan, Iran, and Cyprus. A rare species.

Bracon (Glabrobracon) tschitscherini Kokujev, 1904 — 1♀: Bet Guvrin, 21.vii.1984. 1♂: Jordan Valley, Hawwat 'Eden, 19–27.vi.1990. – It seems a frequent to sporadic species of the steppe/forest-steppe zone of the Palaearctic region. Reported from Israel (Papp, 1989: 49).

Bracon (Cyanopterobracon) urinator (Fabricius, 1798) — 1♀ (ZMHU): Bet Lehem, Berekhat Shelomo [Bethlehem, Solomons Teiche], 5.vii.1928. Müller. 3♂ (ZSBS): Dafna, 27.v.1991. Warncke. 1♀, 1♂ (NHM): Dafna, *Quercus boissieri* [Daphne Oaks], 16.vi.1952. Mavromoustakis. 1♂: Elot [Eliot], 14.vi.1981. 1♀, 1♂: Gan Or, 13.xi.1985. 1♂ (MNM): Haifa, coll. Reitter. 1♀ (NMPC): Yerushalayim [Jerusalem], 28.v.1942. Houska. 2♂ (ZMHU): Qiryat Anavim [Kirjath Anawin], 10.v.1930. Amsel. 1♂: Kefar Eliyyahu [K. Eliyahu], 18.iv.1982. 1♂: Nir David, 27.vi.1984. 1♀ (NHM): Ramat Gan, 18.vi.1952. Mavromoustakis. 1♂: Tirat Zevi, 8.vii. 1982. 1♀ (NHM): Nahal Bezet [Wadi Karkara], 15.vi.1952. Mavromoustakis. 1♀: Zefat, 1.iv.1981. – In the steppe/forest-steppe zone of the Palaearctic region frequent to common; in Israel also common, reported by Papp (1970: 73, 1989: 50).

Bracon (Bracon) variegator Spinola, 1808 — 1♂: Yeriho [Jericho], 8.iv.1981. 1♀: Negba, 4.ix.1981. – A common species in the Palaearctic region.

**Glabriolum kirgisorum* Shestakov, 1932 — 1♀: Nahal Tirza [Wadi Faria], 14 .vii.1970. Bytinski-Salz. – Body 6 mm long. Second tergite rugulose. Pair of oblique furrows of third tergite anteriorly near to each other. – Known from Kirghizia and European Russia.

**Glyptomorpha turcomanica* (Kokujev, 1904) — 1♀: Nahal Tirza [Wadi Faria], 14.vii.1970. Bytinski-Salz. – Hitherto known from Central Asia (Kazakhstan, Turkmenia) and Cyprus.

**Habrobracon (Habrobracon) crassicornis* Thomson, 1894 — 1♀: Mikhmoret, Miramar Hotel garden, viii.1980. – Widely distributed in the western Palaearctic region. Its taxonomic status was recently studied (Papp, 2008b: 168).

Habrobracon (Habrobracon) hebetor (Say, 1836) — 1♀: Boqeq, iii.1990. 1♀: Daverat, x.1980. 1♂: Hawwat 'Eden, taken with light trap, v.1996. Or and Argaman. 1♀: Korazim, iv.1983. 1♀: Shuva, v.1983. 1♀: Silwad, iv.1981. 1♀: Zomet Huqoq, v.1982. – A cosmopolitan and common species.

**Habrobracon (Habrobracon) semenovi* Kokujev, 1914 — 1♀: Kefar Eliyyahu [K. Eliyahu], 18 .iv.1982. Argaman. 2♂: Hawwat 'Eden, taken with light trap, V 1996. Or and Argaman. – Distribution: Switzerland, Turkmenia (described from here), Uzbekistan, Azerbaijan, Cyprus, and Mongolia.

Habrobracon (Habrobracon) telengai Mulyarskaya, 1955 — 1♀: Kefar haNagid [K. Nagid], 22.vi.1985. 1♀: Ma'ale Gilboa', 25.x.1984. 1♀: Tirat Zevi, 8.vii.1982. – Distributed in the western Palaearctic region, reported from Israel (Papp, 1989: 51).

**Iphiaulax impostor* var. *rufosignatus* Kokujev, 1898 — 1♀: Hefzi Bah, 18.vi.1986. 7♀: Kabri, 14.vi.198?. 1♂: Kh. Jubāra [Kh. Jabara], 13.ix.1981. 1♀: Megido, 4.ix.1960. Halperin. – A light-colored form. Distributed in the Old World: Palaearctic, Oriental, and Ethiopian Regions.

Iphiaulax tauricus Shestakov, 1927 — 1♀: Tirat Zevi, 25.x.1984. – Distributed in Italy (Sicily), Turkey, Ukraine (Crimea), Armenia, Georgia, and Kazakhstan. Reported from Israel (Papp, 1989: 51)

Pseudovipio castrator (Fabricius, 1798) — 1♂: Yitav, 8.iv.1981. – Frequent to common in the western Palaearctic region. Reported from Israel (Papp, 1989: 51).

Pseudovipio umbraculator (Nees, 1834) — 1♀: Be`erotayim, 31.x.1985. 1♀ (in Budapest): Rehovot, 19 .v.1965. Erdős. – A common species in the Palaearctic region.

**Rhadinobracon zarudnyi* (Telenga, 1936) (=*Pseudovipio nigrocephalus* Hedwig, 1957, syn. n.) — 1♂: Daliyya, 15.v.1985. Argaman. – The synonymy is based on the comparison and interpretation of the original descriptions by Telenga (1936) and Hedwig (1957) as well as examination of the single male specimen from Israel. Hitherto known only from Iran.

**Vipio longicauda* (Boheman, 1853) — 1♀: Qiryat 'Anavim [Kirjat Anawim], 12.v.1968. Bytinski-Salz. – A common species in the Palaearctic region.

Vipio mlokossewiczi Kokujev, 1898 — 2♂: Mikhmoret, Miramar Hotel garden, viii.1980. – Distribution: Afghanistan, Azerbaijan, Cyprus, Georgia, Iran, Romania, Tajikistan, Turkmenia, and Uzbekistan. Reported from Israel (Papp, 1970: 72, 1989: 52). A steppe/forest-steppe species.

Vipio tentator (Rossi, 1790) — 1♂ (in ZMHU): Miqwe Israel [Mikweh], 23.iii.1931. Bodenheimer. – A frequent to common species in the Palaearctic region.

Cardiochilinae

**Cardiochiles saltator* (Fabricius, 1781) — 1♀: 'Ein el-Auja [Auja], 8.iv.1981. 1♂: Elqosh, 18.v.1981. 1♀: Giv'at Olga, 22.vi.1981. 1♂: Ilanot, iv.1984. 1♀: Yeriho [Jericho], 8.iv.1981. 1♀: Yerushalayim [Jerusalem], 5.x.1942. Bytinski-Salz. 1♂: Peza``el, 31.viii.1981. 1♂: Tomer, 31.viii. 1982. – A frequent species in the steppe/forest-steppe zone of the Palaearctic region.

Cheloninae

Ascogaster annularis (Nees, 1816) — 1♂: Bet Guvrin, 5.v.1984. – Common in the western Palaearctic region.

Ascogaster quadridentata Wesmael, 1835 — 2♀: Arava Valley, 3.v.1983. 1♂: Bet She`an, 3.iii.1983. 1♀: Kefar 'Azza, ex gall of *Eriophyes tiliae* 31.x.1972, host's foodplant: *Tamarix aphylla*. Limon. 1♀: Har Gilboa' [M. Gilbo]a, 18.vi.1986. 1♀: Negba, 4.ix.1981. 1♀, 3♂: Upper Galilee, ex *Cydia pomonella* Linné (Lep. Tortricidae), vii.1985. Steinberg. 3♀, 1♂: Zerifin, 10.viii.1984. – A common species in the Palaearctic region.

**Chelonus argamani* n. sp. — See the chapter description of the New Species.

**Chelonus asiaticus* Telenga, 1941 — 1♂: Yavne, 23.vii.1981. – Widely distributed in the Palaearctic region, in Europe less frequent. Nearest to Israel known in Turkey and Azerbaijan.

**Chelonus capsa* Tobias, 1972 — 1♂: Nizzana, 29.v.1984. – Distributed in the European part of Russia (Saratov district), Hungary, and Mongolia.

**Chelonus kryzhanovskii* Tobias, 1966 — 1♂ (MNM): Megiddo, 15.v.1965. Erdős. – Described from Turkmenistan, known in Spain and Hungary.

**Chelonus obscuratus* Herrich-Schaeffer, 1838 — 1♀: Hofit, 21.x.1980. Remark: carapace in dorsal view somewhat globose, i.e., somewhat less elongate. – Common in Europe.

**Chelonus oculator* (Fabricius, 1775) — 1♀: Biriyya, 21.v.1986. 2♂: Dan, 17.viii.1945. Bytinski-Salz. 1♂: Elqosh, 18.v.1981. 1♂: Nizzana, 29.v.1984. 1♀: Yeroham, 4.viii.1981. 1♂: Zur Natan, 26.viii.1981. – Common in Europe (Germany, Austria, Hungary, and Greece).

**Chelonus productus* Herrich-Schaeffer, 1838 (=*Ch. submuticus* auct. nec Wesmael, 1835) — 1♀: Beit Jimāl, 3 km S. Bet Shemesh [Bet Jamel], 23.iii.1968. Bytinski-Salz. – Distribution: Europe (Germany, Austria, Hungary, Greece), Turkey, Cyprus, and Mongolia.

**Chelonus szepligetii* Dalla Torre, 1898 — 1♀: Elqosh, 18.v.1981. 1♂: Yavne, 23.vii.1981. – So far known in Hungary (described from here under the name *Ch. rufiscapus* Szépligeti, 1896 nec Provancher, 1886), Croatia, Serbia, Turkey, and Azerbaijan.

**Chelonus telengai* (Abdinbekova, 1965) — 1♀: Yeriho [Jericho], 22.iv.1931. Bodenheimer. 1♀: Sede Boqer, 20.vi.1970. Bytinski-Salz. – Described from Azerbaijan, known in Armenia and Iran.

**Microchelonus atrotibia* n. sp. — See the chapter description of the New Species.

**Microchelonus balkanicus* Tobias, 2003 — 1♀: Zur Natan, 26.viii.1981. – Described from Croatia ("Carlopago" = Karlobag, Korčula Island) on the basis of one female (holotype) and one male (paratype) specimen (Tobias 2003: 455–457). Israel is its second listed record.

**Microchelonus brevis* Tobias, 1976 — 1♀: Mikhmoret, Marimar Hotel garden, viii.1980. – Described from European Russia (Krasnodar), reported from Hungary.

**Microchelonus caucasicus* (Abdinbekova, 1967) — 1♂: Tomer, 31.viii.1982. – Distribution: Europe (Azerbaijan: type locality is there, Moldova, European Russia, Turkey, Greece, and Switzerland), and Kazakhstan.

**Microchelonus curvimaculatus* (Cameron, 1906) — 1♀: Nahal Qatif, 18.vii.1981. 1♀: Nazeret [Nazareth], 30.ix.1982. Remark: The female representing a melanic form, i.e., carapace entirely black. 1♂ Nizzana, 29.v.1984. – Widely distributed in tropical Africa, introduced into Cyprus.

Microchelonus elaeaphilus (Silvestri, 1907) — 1♂ (MNM): Nahal 'Ammud [Wadi Ammud], 16.v.1965. Erdős. 1♀: Zefat, 1.iv.1981. – In the Mediterranean subregion, known in Portugal, Italy, Serbia, Tunisia, and Israel. – Remark: The male specimen from Israel is identical with the male paralectotype, except the following features (cf. Papp, 1999): Male from Israel: (1) carapace less globose, in dorsal view twice as long as broad; (2) antenna with 21 antennomeres, penultimate flagellomere 1.5 times as long as broad. Male paralectotype from Italy: (1) carapace more globose, in dorsal view 1.7–1.8 times as long as broad (figure 1: 10 in Papp, 1999: 17); (2) antenna with 22–23 antennomeres, penultimate flagellomere 1.6–1.7 times as long as broad.

Microchelonus erdoesi Tobias, 2001 — 1♀ (holotype in MNM): "Izrael/Karmel/1965. V. 30./Dr. Erdős". 1♀: 'Akko [Acre], 10.v.1986. – Described and so far known in the eastern Mediterranean subregion (Cyprus, Israel, Syria).

**Microchelonus ferganicus* Tobias, 2001, ♂ new — 1♀: Arava Valley, 3.v.1983. 1♂: Jalazūn, 4 km N. Ramallah [Jalasun], 30.iii.1981. 1♀: Yeriho [Jericho], 8.iv.1981. 1♀: Judean Hills, 3.v.1983. 2♂: Mikhmoret, Miramar Hotel garden, viii.1980. 1♀: Sede Boker, 4viii.1981. – Described from Uzbekistan (Fergana) on the basis of the female holotype specimen. Israel is its second distributional repcord. Male new: antenna with 20–21 antennomeres, apical foramen of carapace twice as wide than high.

**Microchelonus flavoscaposus* Tobias, 2001 — 1♂: Bet She`an, 18.vi.1986. – Described from Italy, the type locality is uncertain: "Italia (?)" (Tobias, 2001: 175). Antenna with 22 antennomeres, carapace basally pale yellow (and not indistinctly yellow as in the male holotype.

**Microchelonus halperini* n. sp. — See the chapter description of the New Species.

**Microchelonus nigritibialis* (Abdinbekova, 1971) — 1♀: Nahal Perat [Wadi Qelt], 10.iii.1981. – Hitherto known in Azerbaijan, Moldova, and Turkey.

**Microchelonus pellucens* (Nees, 1816) — 3♀: Ma'alé, Gilboa', 19.vii.1981. 1♀: Zefat, 1.iv.1981. – Widely distributed in the western Palaearctic region. Frequent in Europe.

**Microchelonus pusilloides* (Tobias, 1972) — 3♂: Arava Valley, 3.v.1983. 2♀ (as *M. basalis* Curtis in Papp, 1970: 65, det. Tobias, 1990): Deganya. 2♂: Judean Hills, 3.v.1983. 1♀ (in Budapest, det. Tobias, 1990): Kefar Ruppin, 15.v.1965. Erdős. – Described from Mongolia, known in Kazakhstan (Yu et al., 2005).

**Microchelonus rugilobus* Tobias, 1986 — 1♂: Bet Zed, ix.1988. – Described from and so far known in Moldavia (Tobias, 1986a: 333).

**Phanerotoma (Bracotritoma) intermedia* Van Achterberg, 1990 — 1♀: Hawwat 'Eden, taken with light trap, vii.1984. Or and Argaman. – The species was described from Turkey on the basis of 1♀ (holotype) and 1♂ (paratype). The female specimen from Israel is less black, i.e., head and mesoscutum reddish-yellow, otherwise mesosoma rusty with more or less brownish suffusion, tergites darkening rusty brown. ♀:

3.1 mm. In 1990, Zettel named it as "Phanerotoma prope intermedia Acht.". The above locality in Israel is its second distributional record.

Phanerotoma (Phanerotoma) leucobasis Kriechbaumer, 1894 — 1♀ (det. Zettel 1990): Hawwat 'Eden, taken with light trap, iv.1986. Or and Argaman. 3♀ (det. Zettel): Ilanot, 24 .iv.1984. 2♀: "Israel", ex *Spectrobates ceratoniae* Zeller (Lepidoptera: Pyralidae). Nitzan. 1♀: Judean Desert, 3.v.1983. 1♀: Wadi Mallaha, 3.v.1983. 1♀, 1♂ (det. Zettel): Yotvata, 1♂: 9.i.1990. Halperin, 1♀: iv.1989. Eitam. 1♀: Zikhron Ya'aqov [Zichron Yaakov], ix.1967. Gurevitch. – Distributed in the Palaearctic and Ethiopian Regions. Frequent in the Mediterranean subregion.

**Phanerotoma (Phanerotoma) media* Shestakov, 1930 — 2♀ (det. Zettel): Hawwat 'Eden, taken with light trap, v.1986. Or and Argaman. 1♀: Khan Yunis, 13.iv.1981. 2♀: Yotvata, 23.xi.1983. – Described from Kyrgyzstan, known in Kazakhstan and Greece (Papp, 2003a: 32).

Phanerotoma (Bracotritoma) ?parva Kokujev, 1903 — 1♀, 1♂: Golan, Afiq, host's foodplant: *Pistacia atlantica*, 30.i.1968. Halperin.

**Phanerotoma (Bracotritoma) permixtellae* Fischer, 1968 — 1♀: Ilanot, 29.iv.1981. – Described from Syria, known in Greece.

**Phanerotoma (Phanerotoma) soror* Van Achterberg, 1990 — 1♂: Yotvata, 23.xi.1983. – Known in Spain, France, Italy, Switzerland, and Greece.

**Phanerotomella bisulcata* (Herrich-Schaeffer, 1838) — 1♂: Hadassim, v.1986. – Reported from several European countries (Germany, Austria, Hungary, Croatia, Italy, Spain, Moldova, European Russia). Nearest to Israel from Greece.

**Phanerotomella rufa* (Marshall, 1898) — 1♀: Bet Dagan, iv.1992. 1♀: Hawwat Hamataim, Sede Nehemya, taken with light trap, 27.v.1966. Shoham. 1♀: Hevron [Hebron], 6.iii.1981. 1♀: Hofit, 2–3.v.1981. 1♀: Kabri, 14.vi.1983. 2♀: Kefar Blum, 17.v.1962. Shoham. 1♂: Māqūra, v.1987. 1♀: Mikhmoret, 6.vi.1981. 1♂: Yavne, vii.1983. – Distributed in many European countries. Nearest to Israel known in Cyprus and Turkey.

Doryctinae

Dendrosoter hartigi (Ratzeburg, 1848) — 2♀: Zefat, 12.xi.1959. Halperin. – A frequent species in Europe. First reported from Israel by Papp (1989: 45).

**Dendrosotinus (Dendrosotinus) similis* Bouček, 1955 — 2♀: 'Evron, 25.v.1969. Halperin. 2♂, 1♂: 'Evron, host's host-plant *Ulmus* sp., 28.v.1969. Halperin. – Described from Poland (Polish Carpathian Mts.) (Bouček, 1955: 83), reported from Caucasus Mts. (Tobias, 1986a: 39).

Dendrosotinus (Gildoria) titubatus Papp, 1985 — 1♀: Horbat Bet Dikhrin, ii.1984. – Distribution: France (Corse), Spain, Italy, Greece, and Israel. It seems to be a true Mediterranean species.

Doryctes leucogaster (Nees, 1834) — 4♀, 3♂: 'Afula, host's foodplant: *Pistacia atlantica*, iv.1986. Halperin. – Most frequent doryctine species in the Palaearctic region.

**Ecphylus hylesini* (Ratzeburg, 1848) — 2♀: Ilanot, 8.v.1988. Halperin. – Reported from many European countries. Nearest to Israel from Hungary and Italy.

**Heterospilus divisus* (Wollaston, 1858) — 1♀: Māqūra, vi.1983. 1♀: Qiryat Gat, Mivhor, iii.1987. 1♀: Pelugot, x.1986. 1♂: Yavne, viii.1992. – The species was described from Madeira Islands (Portugal), reported from Crimea (Ukraine).

**Heterospilus tadzhicus* Belokobylskij, 1983 — 1♀: Yoqne'am, iv.1981. – The species was described from Tajikistan and the Israeli locality is its second reported distributional record.

**Heterospilus tauricus* Telenga, 1941 — 1♀: Gan Or, 20.xi.1984. 1♀: Hawwat 'Eden, vii.1986. 1♀: Mehola, 18.vi.1984. – Rather sporadic in the Palaearctic region. Nearest to Israel known in Italy.

Heterospilus cephi Rohwer, 1925 — 1♀: Neta'im, v.1992. – Widely distributed in the Palaearctic region. First reported from Israel under the name *H. testaceus* (Papp, 1970: 71).

Monolexis fuscicornis Foerster, 1862 — 1♂ (det. Papp, 1992, det. Belokobylskij, 2000): Ilanot, ex *Lyctus* sp., 22.xi.1985. Halperin.

Rhaconotus aciculatus Ruthe, 1854 — 1♀: Hofit, 17.viii. l980. 1♂: Lahav, iv.1984. 1♀: Tubās, 8.v.1986.

**Rhaconotus asiaticus* Belokobylskij, 1990 — 1♀ (det. Belokobylskij, 2000): Bene Berit, 24 km SW from Tiberias, 28.iii.1971. Goldstein. 1♀ (as *Rh. aciculatus* Ruthe in Papp, 1989: 47, det. Belokobylskij, 2000): Yerushalayim [Jerusalem], x.1963. Kugler. – The species was described from Central Asia (Kazakhstan, Turkmenia, Uzbekistan, and Tajikistan) on the basis of 16 females.

Euphorinae

**Allurus muricatus* (Haliday, 1833) — 1♀: Yavne, 24 .v.1986. – Widely distributed in the western Palaearctic region. Nearest to Israel known in Greece (Papp, 2007: 121).

**Leiophron (Leiophron) cubocephalus* Tobias, 1986 — 1♀: Lakhish, iv.1989. 1♂: Nahal 'Iddan [Wadi Iddan], vii.1993. – Described from and so far known only in Moldavia.

**Perilitus (Microctonus) aethiops* (Nees, 1834) — 4♀: Holon, ex *Coniocleonus excoriatus* (Gyllenhal) (Coleoptera: Curculionidae), 21.ii.1978. – One of the most common braconid species in the Holarctic region.

**Perilitus (Microctonus) stelleri* Loan, 1972 — 1♀: 'Enot Qane, vii.1985. 1♀, 1♂: Hamadya, iii.1983 (1♀) and v.1989 (1♂). 1♂: Hemed, iv.1985. 1♀: Lubban, iv.1984. 1♀: Kannot, ix.1980. – Widely distributed in the Holarctic region. Nearest to Israel known in European Russia (Krasnodar) and Hungary.

**Perilitus (Perilitus) eugenii* Haeselbarth, 1999 — 1♂: K. Uriyya, iii.1993. 1♀: Yavne, x.1984. – Described recently from Mongolia, found in Hungary.

**Perilitus (Perilitus) falciger* (Ruthe, 1856) — 1♂: Shahar, x.1986. – Sporadic to frequent in the Palaearctic region. Nearest to Israel reported from Kazakhstan and European Russia.

Helconinae

Diospilus capito (Nees, 1834) — 1♂: Eshta`ol, 21.v.1986. 2♀: Belvoir, 12.v.1988.

Halperin. 1♀: Biriyya, 21.v.1986. 1♂: Kabri, 30 km N. of Haifa, taken from *Ruscus* sp., 22.iv.1985. Halperin. 1♀: Kefar Darom, 18.viii.1981. 1♀: Ma'ale Efrayim, 12.xii.1984. 1♀: Maghar, ix.1986. 1♂: Mikhmoret, Miramar Hotel garden, viii.1980. 1♀: Mt. Carmel, 21.v.1986. 1♀: Negba, 14.vi.1983. 1♀: Shelomi, 18.iii.1982. 1♀, 1♂: Nahal Peza'el [Wadi Pesa'el], 1♀: 8.i.1985 and 1♂: 31.i.1985. 1♀: Yavne, viii.1984. – Widely distributed and common in the Palaearctic region; first reported from Israel by Papp (1970: 65).

**Diospilus productus* Marshall, 1894 — 1♂: Qetura, vii.1989. Argaman. – Distribution: Great Britain, Switzerland, Italy, Greece, Hungary, Ukraine, Armenia. A less frequent species.

Homolobinae

**Homolobus (Apatia) truncatoides* Van Achterberg, 1979 — 1♀: Arava valley, 3.v.1983. 2♀: Hawwat 'Eden, taken with light trap, vi.1986. Or and Argaman. 1♀: Israel, taken with light trap, 3.i.1966. Gasith. 2♀, 1♂: Mikhaoret, Miramar Hotel garden, viii.1980. 1♀: Pese'el, 7.ii.1982. – A cosmopolitan species. Nearest to Israel known in Saudi Arabia, Egypt, and Iraq.

Homolobus (Apatia) truncator (Say, 1828) — 1♀: Biriyya, 21.v.1986. 1♂: Jordan Valley, Hawwat 'Eden, 19–27.vi.1990. – A cosmoplitan species. Frequent to common in Europe. Reported from Israel (Yu et al., 2005).

Hormiinae

**Clinocentrus exsertor* (Nees, 1812) — 1♀: Hawwat 'Eden, taken with light trap, vi.1986. Or and Argaman. – Widely distributed and frequent in the Palaearctic region.

Hormius moniliatus (Nees, 1812) — 1♂: Nahal 'Arugot, v.1985. 1♀: 'Azza [Gaza], 13.iv.1981. 34♀, 7♂: Hawwat 'Eden, iv–viii.1984–1986. Or and Argaman. 3♀: Mikhmoret, Miramar Hotel garden, viii.1980. 1♀: Qesarya, v.1986. 1♀ (MNM): Nahal 'Ammud [Wadi Ammud], 16.v.1965. Erdős. 1♀: Yavne, 12.vii.1986. 1♂: Zalmon, iii.1987. – one of the most common braconid species in the Palaearctic region. Reported from Israel (Papp, 1970: 74).

**Hormisca tatianae* Telenga, 1941 — 6♀: Bene Berit, 24 km SW Tiberias, 16.ix.1971. Gerling. 1♀, 1♂: Bet Zera, 12 km SE Tiberias, 8.viii.1971. Gerling. 2♀: Hawwat 'Eden, taken with light trap, vii.1986. Or and Argaman. – Widely distributed in semi-desert/desert zone of the western Palaearctic region (Tobias et al., 1998: 175).

Macrocentrinae

Macrocentrus (Amicroplus) collaris (Spinola, 1808) — 1♀: Tel Aviv, Abu Kabir [Abu Cabir], 15.iii.1962. 12♀: Hawwat 'Eden, taken with light trap, x.1984 and v–vi.1986. 1♀: Hawwat Hamataim, Sedé Nehemya, taken with light trap, 13.v.1968. Shoham. 2♀: Mikhmoret, Miramar Hotel garden, viii.1980.1♀: Pelugot, iv.1986. 1♀: Tel Aviv, 22.iii.1962. Kugler. – One of the most common braconid species in the Palaearctic region.

Meteorinae

**Meteorus affinis* (Wesmael, 1835) — 1♀: Belvoir, taken from *Cercis siliquastrum*, 12.v.1988. Halperin. – Frequent to common in many European countries. Nearest to Israel known in Italy and Bulgaria.

**Meteorus colon* (Haliday, 1835) — 1♀: Yavne, ix.1984.– Frequent in many European countries. Nearest to Israel in Croatia and Italy.

*Meteorus pendulus (*Müller, 1776) — 1♂: Giv'at Brenner, 18vi.1972, ex larva *Heliothis (=Chloridea)* sp. (Lepedoptera: Noctuidae). Bar. 1♀: Hawwat Hamataim, Sede Nehemya, taken with light trap, 27.V.1966. Shoham. 1♂: Kannot, viii.1989. 1♀: Yodfat, ex larva *Plusia* sp. (Lepedoptera: Noctuidae), 21.v.1976. Simon. – Frequent to common in the Palaearctic and Oriental Regions. – For a long time, reported under the name *M. gyrator* (Thunberg, 1824), which, however, is a junior synonym.

Meteorus rubens (Nees, 1811) — 1♂: Horbat Bet Dikhirin, iv.1986. 1♂: 'En Gedi, 24.x.1985. 25♀: Hawwat 'Eden, taken with light trap, iv–ix.1984–1986. 1♀ (MNM): Karmel, 31.v.1965. Erdős. 2♀, 5♂: Mikhmoret, Miramar Hotel garden, viii.1980. 1♂: Qedumim, iv.1990. 1♂: Peza"el, 20.x.1985. 1♂: Silwān, vii.1989. – One of the most common braconid species in the Palaearctic region.

**Meteorus ruficeps* (Nees, 1834) — 5♀, 2♂: Hawwat 'Eden, taken with light trap, iv–viii.1985. 1♀: Mikhmoret, Miramar Hotel garden, viii.1980. – Reported from many European countries, of which the closest to Israel are Macedonia and Serbia.

Microgastrinae

**Apanteles articas* Nixon, 1965 — 1♀, 3♂ (1♀, 2♂; ZMHU): Yeriho [Jericho], 1♂: 29.x.1930 and 1♀, 1♂: 17.xi.1930. Bodenheimer. – Described from Senegal, and reported from Turkey.

**Apanteles carpatus* (Say, 1836) — 1♀: Alon Shevut, 25 km S. of Jerusalem, taken from *Rhamnus alaternus*, 8.x.1985. Halperin. 1♀: Bet She`an, 25.x.1984. 1♀: Karmel shore, 30.vii.1967. Freidberg. 1♀: Central Negev, Haluza, 24.iii.1980. Halperin. 15♀: Hawwat 'Eden, taken with light trap, iv–ix.1985–1986. Or and Argaman. 1♀: Ilanot, 24.iv.1981. 2♀: Yeriho [Jericho], 8.iv.1981. 1♀: Khan Yunis, 7.ii.1985. 1♀: Wadi Mallaha, 3.v.1983. 1♀: Mikhmoret, Miramar Hotel garden, viii.1980. 1♀: Néot Mordekhay, host's foodplant: *Populus euroamericana*, 19 vii.1970. Halperin. 1♀: Ofaqim, 16.v.1982. 1♀: Ramot Menashe, 20.v.1982. 1♀: Rehovot, 4.ix.1981. 1♀: Ro'i, 21.iii.1984. 1♀: Yavne, 21.v.1985. – A cosmopolitan species.

**Apanteles hemara* Nixon, 1965 — 1♀, 3♂: Tel Aviv, ex larva *Hydriris ornatalis* Duponchel (Lepedoptera: Pyralidae), 25.viii.1981, host's food-plant *Ipomoea digitata*. Argaman. – Introduced into several coutries, consequently became a cosmopolitan species.

Apanteles obscurus (Nees, 1834) — 1♀: HaOn, 2.vii.1984. – Frequent to fairly common in the Palaearctic region, closest to Israel known in Greece, Turkey, and Iran.

Apanteles olivierellae Wilkinson, 1936 — 3♀, 2♂: Arava, ex larva *Amblypalpis olivierella* Ragonot (Lepidoptera Gelechiidae), 10.iv.1972. A. Lupo. 2♀, 3♂: Nahal Zohar, ex larva *Amblypalpis olivierella* Ragonot (Lepidoptera: Gelechiidae), 15.vi.1971.

A. Lupo. – Described from Morocco, first reported from Israel by Lupo and Gerling (1984).

**Choeras dorsalis* (Spinola, 1808) — 1♂: Halhūl, iv.1981. 1♀: Isawiya, vii.1987. – Widely distributed in the southern half of Europe. Nearest to Israel known in Greece (Papp, 2007: 105).

**Choeras semele* (Nixon, 1965) — 1♀: Bet Guvrin, v.1989. 1♀: Nahal Sayif [W. Sayif], vi.1992. – Described from Morocco, reported from Greece (Papp, 2007), Spain (including Canary Islands), and Italy (Yu et al., 2005).

**Choeras tedellae* (Nixon, 1961) — 1♀: Haluza, iv.1983. – Widely distributed and fairly frequent in Europe. Nearest to Israel known in Romania and Hungary.

**Choeras tiro* (Reinhard, 1880) — 1♀ (MNM): Megiddo, 15.v.1965. Erdős. – Distributed in the Holarctic region. Nearest to Israel reported from Bulgaria and Hungary.

**Cotesia abjecta* (Marshall, 1885) — 1♀: Bet Alfa, ix.1983. 1♂: E. Yuvla, vii.1982. 1♂: Peri Gar, iii.1985. – Sporadic to frequent in Europe. Closest to Israel known in Italy and Hungary.

Cotesia acuminata (Reinhard, 1880) — 9♀, 10♂: Upper Nahal Zin [Negev Desert, Wadi Naphka], ex larva *Melitaea phoebe* Denis and Schiffermüller (Lepidoptera: Nymphalidae), 16.iv.1973. Nakamura. – A frequent nymphalid in Europe. First reported from Israel by Papp (1987: 209).

Cotesia glomerata (Linnaeus, 1758) — 1♂: Nahal 'Arugot, v.1985. 1♂: Kefar Darom, viii.1981. 1♂: Mezada [Massada] vi.1986. 1♂: Nahal Ef'e [Wadi Efe], iv.1987. – One of the most common braconid species in the Palaearctic region, currently a cosmopolitan species.

**Cotesia inducta* (Papp, 1973) (?=*Apanteles tenuivalvis* Tobias, 1986) — 1♀: Jalazūn, iv.1985. – Described from Hungary, reported from Slovakia, Bulgaria, Turkey, and Korea (Papp, 2003b: 124). The species *Apanteles tenuivalvis* (supposed identity with *C. inducta*) has been described from Moldova, Uzbekistan and European Russia (Sochi).

Cotesia kazak (elenga, 1949) — 1♂: Aswada, viii.1983. 1♀: Yerushalayim [Jerusalem], 27 .viii.1930. Bodenheimer. 1♀: Korazim, iv.1983. – In the Mediterranean Subregion widely distributed.

**Cotesia kurdjumovi* (Telenga, 1955) — 1♀: 'Azza [Gaza], 3 .v.1983. – Distributed fairly sporadically in the Palaearctic region. Nearest to Israel known in Turkey and Bulgaria.

**Cotesia lycophron*, (Nixon, 1974) — 1♀: Gedera, v.1985. – Distribution: France, Nederland and Hungary.

**Cotesia ofella* (Nixon, 1974) — 1♀: Isawiya, vi.1983. 1♀: Māqūra, v.1987. 1♀: Qabātiya, viii.1981. 1♂: Gesher, v.1987. 1♀: Yavne, x.1984. – Sporadic to frequent in Europe. Closest to Israel reported from Turkey and Iran (Yu et al., 2005).

Cotesia ordinaria (Ratzeburg, 1844) — 1♀: Tel Aviv, ex larva *Pieris brassicae* Linnaeus (Lepidoptera: Pieridae), 10.v.1954. Lewinsohn. – Widely distributed in the Palaearctic region, reported from the Oriental region (China) (Yu et al., 2005). The faunistic report of this species from Israel is based on a misidentification (Papp, 1970: 69), emendated to *C. ruficrus* (Haliday).

**Cotesia pieridis* (Bouché, 1834) — 3♀: Ramat Gan [Ramatan], 16.iii.1962. Kugler. – Pterostigma usually issuing radial vein hardly distally from its middle; in the three females from Israel, radial vein issuing clearly distally from pterostigma. Frequent in the western Palaearctic region. Nearest to Israel known in Armenia and Turkey.

**Cotesia plutellae* (Kurdjumov, 1912) — 1♀: Bet Berl, viii.1988. 1♀: Bet Dagan, v.1991. 1♀: Horbat Dardar, near Zur Natan [Dardar], ix.1983. 1♀: 'Azza [Gaza], iv.1984. 1♀: Har Seguv, ix.1987. 1♂: H. Yahav, vi.1983. 4♀, 2♂: Ilanot, Sharon, Central Coastal plain, 27.ii.1966. Halperin. 2♂: "Israel", ex larva *Syntomis mestralii* Bugnion (Lepidoptera: Ctenuchidae), 11.ii.1966. 1♀: Mikhmoret, Miramar Hotel garden, ix.1980. 1♂: Mizpe Ramon, iv.1985. 1♂: Neta'im, v.1992. 1♀: Nir 'Oz, iv.1987. 1♂: Nófekh, vii.1985.1♂: Horvot Kefar 'Otnay, SW Megiddo [Otnay], xi.1984. 3♀: Ramat Gan, 17.ii.1960, ex larva *Oecnogyna loewii* Zeller (Lepidoptera: Arctiidae), 3.iii.1960. Halperin. 7♀, 3♂: Nahal Poleg [W. Falik], 31.i.1961, ex larva *Oecnogyna* sp. (Lepidoptera: Arctiidae) 6.ii.1961. Kugler. 10♀: Nahal Poleg [Wadi Falik], 12.ii.1961. Kugler. 10♀: Yarhiv, viii.1984. 1♀: Yavne, xi.1983. 1♂: Zahala, iii.1983. 1♂: Zarzir, viii.1993. – Currently a cosmopolitan species, originally supposed to be a Palaearctic species that has spread around the globe.

Cotesia ruficrus (Haliday, 1834) — 1♂: Afeq, v.1992. 1♂: 'Akhbera, ix.1982. 1♂: Me 'Ammi, iv.1990. 1♂: 'Anata, iv.1983. 1♀: Bet Dagan, vi.1992. 1♂: Benaya, vii.1982. 1♀: Bet She`an [Beshan], x.1982. 1♀: Biriyya, viii.1982. 1♀: 'En Boqeq, iv.1985. 1♀: Daverat, x.1980. 1♀: Deganya, x.1980. 1♀: Horbat Bet Dikhrin, vi.1983. 1♀: Elqosh, iii.1981. 1♀: 'En Hod, iv.1989. 1♂: 'En Gedi, xi.1980. 1♂: Horbat Barod [H. Badad], viii.1985. 1♂: Hawwat 'Eden [H. Eden], vii.1991. 1♂: Ha 'Ogen, iii.1981. 1♂: Horbat Hazaza [Hazaza], vii.1985. 1♂: Hoshaya, v.1983. 1♂: Kelekh, viii.1982. 1♂: Kishor, viii.1986. 1♂: Kefar Neter, ix.1981. 1♀: ?'En Zurim [M. Zurim], vii.1989. 1♂: Manof, ix.1988. 1♂: Massu`a, vi.1986. 1♂: Meshar, xi.1986. 1♀: Nir Oz, vii.1984. 1♂: Nahal Perat, iv.1984. 2♂: Ofaqim, x.1990. 2♀: Nahal Soreq, vi–vii.1990. 1♀: Pelugot, x.1986. 1♀: Qesarya, viii.1987. 1♀: Segula, viii.1989. 1♂: Sharafāt, vi.1983. 1♂: Teradyon, iv.1989. 2♂: Nahal Kamus [W. Kamus], ix.1981. 1♀: Yahel, vi.1989. 1♂: Yatta, iv.1985. 3♀, 2♂: Yavne, iv–x.1983–1994. 1♂: Yehud, iv.1985. 1♂: Yevul, x.1985. 1♂: Zedata, ix.1980. 1♀: Zefat, 1.iv.1981. – Currently a cosmopolitan species, originally supposed to be a Palaearctic species that has spread and been introduced (e.g., to Australia and New Zealand) around the globe.

**Cotesia specularis* (Szépligeti, 1896) — 1♀: 'Ammiqam, vi.1985. 9♀, 1♂: Belvoir, 12.v.1988, ex larva *Lampides boeticus* Linnaeus (Lepidoptera: Lycaenidae), 23.v.1988, host's foodplant *Spartium junceum*. Halperin. 1♀: Benaya, v.1993. 1♀: Berakha, v.1987. 1♀: Berekhya, 10.viii.1981. 1♀: Bet Dagan, vi.1986. 1♀: Deganya x.1980. 1♀: Horbat Bet Dikhrin, vi.1983. 1♀: 'En HaNaziv, 3.vi.1981. 1♀: Nahal Darga, vii.1983. 2♀: Hawwat 'Eden [H. Eden], iii.1987. 1♀: Hamar, v.1983. 1♀: Iribin, ix.1983. 22♀, 12♂: Yerushalayim [Jerusalem], ex larva *Lampides boeticus* Linnaeus (Lepidoptera: Lycaenidae), 25 .vi.1985 (11♀, 7♂), Rosen, 24.vi.1967 (8♀, 1♂) and 21.viii.1964 (3♀, 4♂), Eisenstein. 7♀, 3♂: Jordan Valley, Hawwat 'Eden, 19–27.vi.1990. 1♀: Karmon, iii.1985. 1♀: Kharasa, iii.1981. 1♀: Kidod, iv.1985.

1♀: Mādamā, iv.1985. 1♂: Mikhmoret, iv.1984.1♀: Qadima, iv.1984. 1♀: Savyon, v.1989. 1♀: Semadar, v.1993. 1♀: Shoqeda, iv.1983. 1♀: Tirat Zevi, 25.x.1984. 4♀: Yavne, viii–xi.1983. – Distributed in the western Palaearctic region, where sporadic to less frequent. Nearest to Israel known in Jordan and Turkey.

**Cotesia spuria* (Wesmael, 1837) — 1♀, 1♂: Kefar, HaYaroq, 15.viii.1976. Simon. – Frequent to common in the Palaearctic region. Nearest to Israel known in Turkey and Italy.

**Cotesia telengai* (Tobias, 1972) — 1♂: Hanita, 21.i.1967. 1♂: Zur Natan, 26.viii.1981. – Fairly frequent in the western Palaearctic region. The closest countries to Israel from which the species is known are Turkey and Iran.

Cotesia tenebrosa (Wesmael, 1837) — 1♂: Tel Aviv, 25.xii.1963. Kugler. – Sporadic to frequent in Europe. First reported from Israel by Kugler (1966).

Cotesia tibialis (Curtis, 1830) — 1♂: Horbat Anusha, E. El'ad [Anusha], xi.1980. 1♂: 'En Boqeq, vii.1985. 1♀: El Majd, v.1982. 1♂: 'En Hod, iv.1989. 1♂: Etanim, vi.1985. 1♂: Gibbeton, vii.1985. 1♂: Horbat Barod [H. Badod], v.1981. 1♂: Hawwat 'Eden [H. Eden], vii.1983. 1♂: Nahal Hemar, ix.1989. 1♂: Khirbat Jubāra, iv.1985. 1♂: Khirbat Kashda, ix.1982. 1♂: Korazim, iv.1984. 1♂: Leqesh, iv.1981. 6♀: Mavqi'im, 5 km S. Ashkelon, 28.x.1972. Belinsky. 1♂: Musmus, iii.1993. 1♂: Negba, vi.1987. 1♂: 'Omer, iv.1984. 1♂: Horvot Kefar 'Otnay, SW Megiddo [Otnay], xi.1984. 1♂: Pedaya, ix.1980. 1♂: Pelugot, iv.1986. 3♀: Petah Tiqwa [Petah Tikva], 31.xii.1955. Kugler. 1♂: Poriyya, iii.1983. 1♂: Segula, iii.1985. 1♂: Shahar, vii.1983. 1♂: Shelomi, ix.1981. 1♀: Sho`eva, iv.1985. 1♂: Nahal Soreq, viii.1988. 1♀, 5♂: Yavne, ix–x.1983–1984. – One of the most common braconid species in the Palaearctic region. For a long time, reported under the name *Apanteles congestus* Nees, 1834.

**Cotesia vanessae* (Reinhard, 1880) — 22♀: 'Arad, ex larva *Cynthia cardui* Linnaeus (Lepidoptera: Nymphalidae), 2.ix.1978. Eisenstein. 12♀: Bet Dagan, ex larva *Cynthia cardui* Linnaeus (Lep. Nymphalidae), 17.iv.1984. Amitai. 1♀: Yerushalayim [Jerusalem], ex larva *Cynthia cardui* Linnaeus (Lepidoptera: Nymphalidae), 25.v.1980. Eisenstein. 30♀: Kefar Pines, 30.iii.1986. Bar-Zakkay. 18♀: Re'im, ex larva *Acontia lucida lugens* Alphenaky (Lepidoptera: Noctuidae) host new, host's foodplant *Brassica olerace gemmifera*, 29.iv.1987. Tamari. 3♀: Tel Aviv, host's foodplant *Chaenopodium murale*, 17.v.1989. Halperin. – Sporadic to frequent in the Palaearctic region. Reported from the Afrotropical Region (Ethiopia).

Cotesia vestalis (Haliday, 1834) — 8♀, 4♂: Har Hermon [Mt. Hermon], 2000 m, ex larva *Melitaea* sp. (Lepidoptera: Nymphalidae), 5.v.1973. Simon. – Frequent to common in the Palaearctic region. First reported from Israel by Papp (1970: 70).

**Cotesia zygaenarum* (Marshall, 1885) — 4♀: Petah Tiqwa [Petah Tikva], 20.xii.1954: 2♀ and 2.i.1956: 2♀, 2♂: Tel Aviv, 1.iii.1962. – Frequent in the Palaearctic region. Reported from the Oriental region (China). Nearest to Israel known in Turkey.

**Diolcogaster alvearia* (Fabricius, 1798) — 10♀, 9♂: Ilanot, vii.1983: 10♀, 3♂ and v.1984: 6♂. Halperin. – Sporadic to frequent in western Palaearctic region. Known sporadically in the eastern Palaearctic region. Nearest to Israel known in Turkey.

Dolichogenidea lacteicolor (Viereck, 1911) — 1♀: Giv'at Brenner. Bar. – First reported from Israel by Kugler (1966).

**Glyptapanteles porthetriae* (Muesebeck, 1928) — 1♂: 'En Gedi (N), ex larva *Amicta quadrangula* (Lep. Psychidae), 9.i.1990. Halperin. 1♀: Har Hermon [Mt. Hermon], 18.v.1976. Simon.

**Glyptapanteles rubens* (Reinhard, 1880) — 1♀: Leqesh, iv.1983. 1♀: Semadar, v.1993. – Described from Germany (Dresden). Reported from European Russia and Ukraine.

**Hygroplitis abdominalis* (Nees, 1834) — 1♂: Bet Dagan, 20.vi.1983. 1♂: Shamerat, 16iv.1981. – Frequent to common in the Palaearctic region. Nearest to Israel reported from Kazakhstan and Moldova.

**Iconella britannica* (Wilkinson, 1941) — 1♀: Māqūra, v.1985. 1♀: Shelomi, iii.1981. 1♀: Sho`eva, iii.1990. – Disribution: Great Britain, Hungary, Armenia, and Tajikistan.

**Iconella isus* (Nixon, 1965) — 1♀: 'En Tamar, vi.1992. 1♀, 2♂: Tirosh, ex larva *Rhyacionia buoliana* Denis and Schiffermüller (Lep. Tortricidae), host's foodplant: *Pinus halepensis*, 6.xii.1988. Mendel. – Distribution: Described from Hungary. Reported from Spain, Armenia, and Uzbekistan.

**Iconella merula* (Reinhard, 1880) —1♂: Nir 'Oz, viii.1988. – Fairly frequent in Europe. Nearest to Israel known in Bulgaria.

**Iconella meruloides* (Nixon, 1965) — 1♂: Bet Zur, v.1985. 1♂: Hevron [Hebron], vi.1982. 1♂: Hadera, vi.1983. 1♂: Hawwat 'Eden [H. Eden], iv.1984. 1♀: Holon, x.1988. 2♂: v and ix.1989. 1♂: Kharasa, iii.1981. 1♀: Musmus, vii.1989. 1♂: Nizzana, ix.1980. 1♂: Pedaya, vi.1989. 1♂: Peri Garr, x.1988. 1♂: Regba, vi.1989. 1♂: Reshef, v.1987. 1♂: Shahar, x.1989. 1♂: Suseya, vi.1987. 1♂: Taffūh, vii.1984. 1♂: Horbat Ukkam, v.1989. 1♂: Nahal Hemda [Waddi Hemda], iv.1990. 2♂: Yavne, iii and ix.1983. – Distribution: Turkey, Jordan, and Romania. It appears to be a frequent *Iconella* species in Israel.

**Iconella myeloenta* (Wilkinson, 1937) — 1♀: Kefar Menahem, 40 km SE of Tel Aviv, 13.i.1981, ex larva *Rhyacionia buoliana* ssp. *thurificana* Lederer (Lepidoptera: Tortricidae), host's foodplant *Pinus halepensis*, 19.iv.1981. Halperin. – Described from Cyprus. Known from Turkey, Turkmenistan, Moldova, and Spain.

**Iconella subcamilla* (Tobias, 1976) — 1♂: Shuweika, ix.1986. – Described from and up to now, known only in Azerbaijan.

**Microgaster curvicrus* Thomson, 1895 — 1♂: Zur Natan, 26.viii.1981. – Frequent to common in Europe. Closest countries to Israel are Bulgaria and Armenia. – Reported from many European countries. Nearest to Israel from Serbia and Turkmenistan (Yu et al., 2005).

**Microplitis flavipalpis* (Brullé, 1832) — 1♀: Yodfat, 20.v.1976. Simon. – Frequent in Europe. Nearest to Israel known in Turkey and Greece.

Microplitis idia Nixon, 1970 — 1♀: ?Tel Gamzu [Tel Gmar], 11.iii.1973, ex larva *Euchloe belemia* Esper (Lepidoptera: Pieridae), 22.iii.1973. Nakamura. – Described from Sweden. Known in European Russia (Leningrad region), Germany, Bohemia, Hungary, and Turkey. First reported from Israel by Papp (1984: 114). A rare species.

Microplitis rufiventris Kokujev, 1914 — 2♀: Giv'at Brenner, ex *Spodoptera exigua* Boisduval (Lepidoptera: Noctuidae), 25.viii.1968. Gerling. 1♀: Judean Hills, 3.v.1983. 1♂: Mikhmoret, 17.vii.1980. 2♂: Dor [Tantur], 4.viii.1984. – First reported from Israel by Gerling (1969) and Papp (1970: 71). It seems to be a fairly frequent species in Israel.

**Microplitis spectabilis* (Haliday, 1834) — 1♀: Ajajira, iii.1986. 1♂: Bet Dagan, vi.1993. 1♂: Bet Lehem [Bethlehem], v.1983. 1♂: Kefar haRo`e, vi.1986. 1♂: Kefar Neter, x.1982. 1♂: Lubban, iv.1984. 1♂: Ma'barot, iv.1984. 1♂: Mādamā, viii.1980. 1♂: Mahseya, iv.1984. 1♂: Qazrin, v.1987. 1♂: 'Omer, iv.1984. 1♂: Qesarya, iv.1988. 1♀: Reshef, ii.1981. 1♂: Segula, iv.1984. 1♂: Shezor, vii.1986. 1♂: Tel es-Sultan, iii.1986. 1♂: Yavne, vi.1983. – Frequent to common in the Palaearctic region. Reported nearest to Israel from Tunisia, Italy, and Turkey.

**Microplitis tuberculata* (Bouché, 1834) — 1♀: Afeq, vii.1980. 1♂: 'Akhbera, viii.1989. 1♀: Bardala, vii.1981. 3♀, 2♂: Benaya, v and vii–viii.1982. 1♀, 1♂: Bet Dagan, v–vi. 1♀: 'En Mor, v.l984. 1♀: Gevar'am, vii.1983. 1♀: Harduf, iv.1985. 1♂: Hawwat 'Eden [H. Eden], vi.1982. 1♀: Nahal Yahav, iv.1988. 1♀: Yafo [Jaffo], ix.1989. 1♀: Moran, vii.1982. 1♀: Nahal Soreq, vii.1985. 1♀: Ofaqim, v.1989. 1♀: 'Omer, iv.1984. 1♀: Pelugot, v.1982. 1♂: Peri Gar, iv.1981. 1♀: Poriyya, iv.1986. 1♂: Taiyiba, v.1981. 1♂: Tushiyya, v.1984. – Reported from many countries in the Palaearctic region. Nearest to Israel from Italy and Hungary.

**Microplitis tuberculifer* (Wesmael, 1837) — 1♂: Bet Dagan, iii.1982. 1♂: Mukhmās, vii.1983. 1♂: Neqofa, v.1987. 1♂: Nahal Sayif [W. Sayif], iii.1983. – One of the most common microgastrine species in Europe. Nearest to Israel reported from Greece.

**Napamus vipio* (Reinhard, 1880) — 1♂: Zefat [Safad], 17.vii.1970. Bytinski-Salz. – The genus *Napamus* was described by Papp (1993: 168, type species *Apanteles vipio*) and two species were assigned to it: *N. vipio* and *N. zombori* Papp, 1993. Distribution: England, France, Germany, Austria, Hungary, Croatia, Spain, Italy, and Turkey (Yu et al., 2005).

**Pholetesor arisba* (Nixon, 1973) — 1♀: Israel, Yeriho ["Palaestina Jericho"], 17.xi.1930. Bodenheimer. – Widely distributed in Europe. Nearest to Israel known in Egypt and Greece.

**Pholetesor bicolor* (Nees, 1834) — 2♀, 1♂: near Zova, 5.v.1961. Kugler. – Frequent to common in the Palaearctic region. Introduced into Canada, U.S.A. (Nearctic region), and New Zealand (Australian region). Nearest to Israel known in Italy, Ukraine, and Georgia.

Miracinae

**Mirax dryochares* Marshall, 1898 — 1♀ (in HNHM): Karmel, 14.v.1965. Erdős. – Distribution: Germany, Czech Republic, and Hungary.

Opiinae

Apodesmia aethiops (Haliday, 1837) — 1♂: Mikhmoret, Miramar Hotel garden, viii.1980. – Widely distributed in Europe; first reported from Israel by Fischer (1997).

**Indiopius cretensis* Fischer, 1983 — 1♀: Bet Alfa, 3.vi.1987. – Described from Crete (Greece), known in Cape Verde Islands (Papp 2003c: 141) and Turkey (Yu et al., 2005).

**Opius (Phaedrotoma) biroi* Fischer, 1960 — 1♂: Regba, vi.1983. 1♀: Tirosh, vi.1983. 1♀: Tel Gat, vii.1993. 1♀: Yavne, ix.1983. – Described from Hungary. Known in North Italy, Turkey (Papp, 1981a: 122, Fischer and Beyarslan, 2005: 51), Spain, and China (Yu et al., 2005).

**Opius (Tolbia) caesus* Haliday, 1837 — 1♀: Hawwat 'Eden, v.1984. 1♀: Magen Sha`ul, 20.x.1983. – Frequent to common in the Palaearctic region. Nearest to Israel reported from Syria, Italy, and Romania (Yu et al., 2005).

**Opius (Nosopaea) cingulatus* Wesmael, 1835 — 1♀: Mizpe Ramon, iv.1985. – Reported from many countries in Europe. Nearest to Israel from Greece (Yu et al., 2005).

Opius (Phaedrotoma) exiguus Wesmael, 1835 — 1♀: Mezad Mahmal, vi.1983. – Frequent to common in the Palaearctic region, reported from the Oriental and Ethiopian regions. First reported from Israel by Papp, 1989: 58.

**Opius (Cryptonastes) gracilis* var. *nigrithorax* (Fischer, 1958) — 1♀: Negba, 4.ix.1981. – A dark-colored form. Known in Austria, Hungary, and Spain (Yu et al., 2005).

Opius (Opiostomus) levis Wesmael, 1835 — 1♀: 'En Mabbua', 7.ii.1985. 1♂: Shizzafon, host's foodplant: *Anvillea gareni*, 13.iii.1990. Halperin. – Frequent to common in the Palaearctic region. Reported from the Ethiopian region. First reported from Israel by Papp (1989: 58).

**Opius (Nosopoea) maculipes* Wesmael, 1835 — 1♀: Adderet, v.1989. 1♀: Qedumim, v.1989. 1♀: Yerushalayim, Talpiyyot, v.1989. – Fairly common in the Palaearctic region. First reported from Israel by Fischer (1997).

**Opius (Phaedrotoma) ocuvergens* n. sp. — See the chapter description of the New Species.

**Opius (Opius) pallipes* Wesmael, 1835 — 1♀: Sede Eliyyahu, ex larva *Liriomyza trifolii* Borgess (Diptera Agromyzidae), host's foodplant: *Nasturtium officinale*, 25.iii.1981. Steinberg. – One of the most common opiine species in the Palaearctic region. Known also in Israel (Yu et al., 2005).

**Opius (Cryptonastes) tersus* (Foerster, 1862) — 1♀: Qaffin, vi.1987. 2♀: Sede Eliyyahu, ex larva *Liriomyza trifolii* Borgess (Diptera Agromyzidae), host's food plant: *Nasturtium officinale*, 25.iii.1980. Steinberg. – Frequent to common in the Palaearctic region. Nearest to Israel known in Uzbekistan and Italy (Yu et al., 2005).

Psyttalia concolor (Szépligeti, 1910) — 1♀: 'En Gedi, 9.i.1990. Halperin. 1♀: Hawwat Hamataim, Sede Nehemya, taken with light trap, 14.xi.1967. Shoham. 1♀: Jebel Sindas, ix.1982. 1♂: Morag, iii.1983. – Considering its known distribution, it seems to be a true Mediterranean species.

**Utetes hilaris* (Fischer, 1962) — 1♀: Zefat, 1.iv.1981. – Sporadically distributed in Europe. Nearest to Israel known in Hungary.

**Xynobius scutellatus* (Fischer, 1962) — 1♂ (det. Fischer l995): Nahal Peza'el [Wadi Pesa'al], 31.x.1985. – Up to now, known in four countries: Ireland, Hungary, Israel, and Tunisia.

Orgilinae

**Microtypus desertorum* Shestakov, 1932 — 2♂: Hawwat 'Eden, taken with light trap, vi.1986. Or and Argaman. – Present albeit less frequent in the semidesert–desert zone of the Palaearctic region. Nearest to Israel known in Algeria and Turkmenistan.

Orgilus caliginosus Taeger, 1989 — 1♀ (holotype): Yerushalayim [Jerusalem], 18.iii.1976. Teunissen. 1♂: 'Ofarim, 16.v.1982. – Described from Israel and Egypt (Taeger 1989: 63–64), up to now not known elsewhere.

Orgilus mediterraneus Taeger — 1♀ (holotype), 1♂: Kefar Shemu`el [Kefar Shemel], 25.iii.1968. Blezynski. 1♂: Horbat Migdal, 13.ii.1980. Söderland. – Described from Israel and Cyprus (Taeger 1989: 118–120), up to now, not known elsewhere.

Orgilus priesneri Fischer, 1958 — 1♀: Tomer, 30.viii.1982. – Described from Egypt. Reported from Israel, Jordan, Saudi Arabia, and Kazakhstan (Taeger 1989: 162–164, Yu et al., 2005).

Rogadinae

Aleiodes (Chelonorhogas) aestuosus (Reinhard, 1863) — 19♀, 4♂: Jordan Valley, Hawwat 'Eden, taken partly with light trap, iv–v 1986. Or and Argaman. – Its two localities in Israel were reported earlier (Papp, 1989: 52).

**Aleiodes (Aleiodes) bicolor* (Spinola, 1808) — 1♀: Hawwat 'Eden, taken with light trap, vii.1986. – Sporadic to frequent in the Palaearctic region (Hungary, European and Asiatic Russia, Georgia, Kazakhstan, Iran, Mongolia, and China (Yu et al., 2005).

Aleiodes (Chelonorhogas) ductor (Thunberg, 1822) — 1♀: Kalanit, 17.i.1985. 1♀: Kefar 'Azza, viii.1981. – Frequent to common in the Palaearctic region; first reported from Israel by Papp (1970: 74).

Aleiodes (Aleiodes) gastritor (Thunberg, 1824) — 1♀, 1♂: Hawwat 'Eden, taken with light trap, vii.1986. 1♀: Nes Ziyyona, 3.ii.1990. 1♀: Yaqum, ex larva *Gymnoscelis rufifasciata* Haworth (Lepidoptera Geometridae), host's foodplant: *Diospyros kaki*, 29.v.1990. Wysoki. – frequent to common in the Palaearctic region. First reported from Israel by Halperin (1986).

Aleiodes (Aleiodes) nocturnus (Telenga, 1941) — 1♀: Hawwat 'Eden, 18.vi.1996. – Inhabitant of the steppe- and forest-steppe zone of the Palaearctic region. Nearest to Israel known in Iran.

Aleiodes (Aleiodes) pallidator (Thunberg, 1822) — 1♂ (as "Rogas rossicus Kok." in Papp, 1970: 74, emendation): Deganya, 6.vi.1943. Palmoni. – Frequent to common in the Palaearctic region; first reported from Israel by Papp (1989: 52).

**Aleiodes (Chelonorhogas) schirjajewi* (Kokujev, 1898) — 1♀: Mikhmoret, Miramar Hotel garden, viii.1980. 1♀: Kishor, vii.1988. – Inhabitant of the steppe- and forest-steppe zone of the Palaearctic region. Nearest to Israel known in Azerbaijan and Georgia.

Aleiodes (Aleiodes) signatus (Nees, 1811) — 1♂: Caesarea, host's foodplant *Teucrium* sp., 13.iv.1990. Halperin. 2♀: Hawwat 'Eden, taken with light trap, vi–vii.1986.– Frequent to common in the Palaearctic region; first reported from Israel by Papp (1989: 53).

DESCRIPTIONS OF NEW SPECIES

ALYSIINAE: ALYSIINI

Dinitrema paucilica Papp, n. sp.
(Figs. 1–8)

Description of the Female Holotype

Body 2 mm long. Antenna short, as long as head, mesosoma and anterior third of metasoma combined, with 16 antenomeres. First flagellomere three times and penultimate flagellomere 1.6 times as long as broad, flagellomeres gradually shortened (Fig. 1).

Head in dorsal view transverse (Fig. 2), almost 1.7 times as broad between temples as long, temple slightly swollen, just longer than eye. Pair of toruli well protruding (Fig. 2). Ocelli small, forming high triangle, OOL three times as long as POL. Eye in lateral view 1.7 times as high as wide, temple almost one-fourth as wide as eye. Mandible 1.6 times as long as broad between dorsal and ventral teeth, clearly broadening distally, dorsal tooth less projecting (Fig. 3). Tentorial pit short, i.e not reaching ventral margin of eye. Head polished, face and clypeus hairy.

Mesosoma in lateral view 1.2 times as long as high, polished. Notaulix absent, its run indicated by row of hairs. Precoxal suture (”sternaulica”) short, restricted to middle of mesopleuron (Fig. 4). Posterior margin of mesopleuron not crenulated. Propodeum with areola basalis, rugulo-uneven, pair of spiracles small (Fig. 5). – Hind femur thick, 3.6 times as long as broad distally (Fig. 6). Hind basitarsus as long as tarsomeres 2–4 combined.

Fore wing somewhat longer than body. Vein *r* 1.4 times as long as width of pterostigma. Second submarginal cell relatively short: *3–SR* 1.75 times as long as *2–SR*; *SR1* slightly bent and reaching tip of wing (Fig. 7). *1–2CU1* 2.2 times length of *m–cu*.

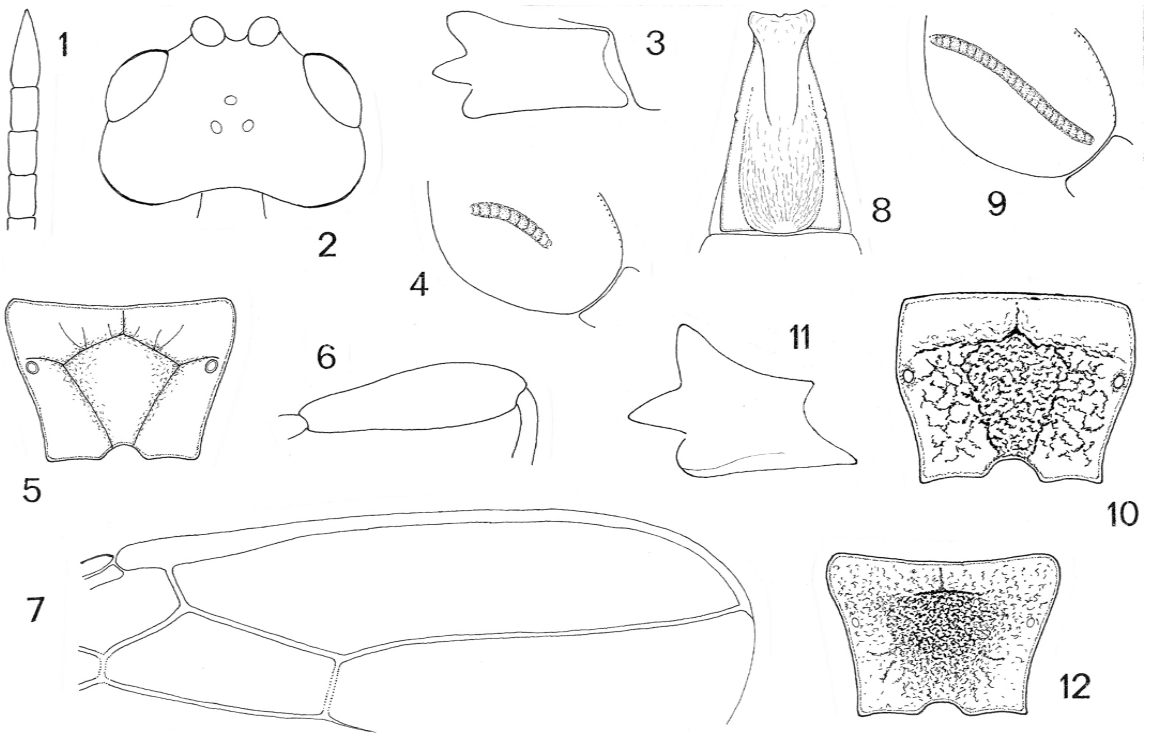
Tergite 1 (Fig. 8) 1.8 times as long as broad posteriorly, evenly broadening posteriorly; pair of basal keels reaching middle of tergite, tergite finely striated. Rest of tergites polished. Ovipositor sheath as long as hind tarsomeres 1–2 combined.

Ground color of body brownish-black, metasoma (except first tergite) somewhat more brownish. Scape and pedicel light brown, flagellum brown to dark brown. Mandible light brown, palpi pale brown. Tegula brown. Legs brownish-yellow. Hind femur and tibia apically and tarsomeres 1–3 with weak brownish suffusion. Wings hyaline, pterostigma and venation light brown.

Male and host unknown.

Material Examined

Holotype♀: ISRAEL: North Soreq, July 1985. Q. Argaman. The holotype is in good condition, glued onto a rectangular card by the right side of the body, and the left flagellum is missing. The holotype is deposited in TAUI.



Figs. 1–12. Characters of *Dinotrema* spp. Figs. 1–8. *D. paucilica* n. sp. 1. Ultimate four flagellomeres, 2. Head in dorsal view. 3. Mandible. 4. Ventral part of mesopleuron with precoxal suture. 5. Propodeum. 6. Hind femur. 7. Distal part of right fore wing. 8.First tergite. Figs. 9–11. *D. sternaulica* (Fischer). 9. Ventral part of mesopleuron with precoxal suture. 10. Propodeum. 11. Mandible. Fig. 12. *D. sphaerimembre* (Fischer), propodeum.

Distribution

Israel.

Differential Diagnosis

The new species, *Dinotrema paucilica*, runs to three species using Fischer's key (1976): *D. sternaulica* (Fischer), *D. sphaerimembre* (Fischer) and *D. amoenidens* (Fischer) and can be distinguished from them using the following keys:

Distinction between D. paucilica and D. sternaulica

1. Precoxal suture short, not reaching fore margin of mesopleuron (Fig. 4). Propodeum weakly rugose and with areola basalis (Fig. 5). Mandible distally less broadening, dorsal tooth less projecting (Fig. 3). Antenna with 16 antennomeres.♀: 2 mm (Israel) ..... ***D. paucilica* n. sp.**
-. Precoxal suture long, reaching fore margin of mesopleuron (Fig. 9). Propodeum rugose, without areola basalis (Fig. 10). Mandible distally more broadening, dorsal tooth projecting upwards (Fig. 11). Antenna with 23–26 antennomeres.♀: 2.4–2.5 mm (Austria) ..... ***D. sternaulica* (Fischer, 1973a)**

Distinction between D. paucilica and D. sphaerimembre

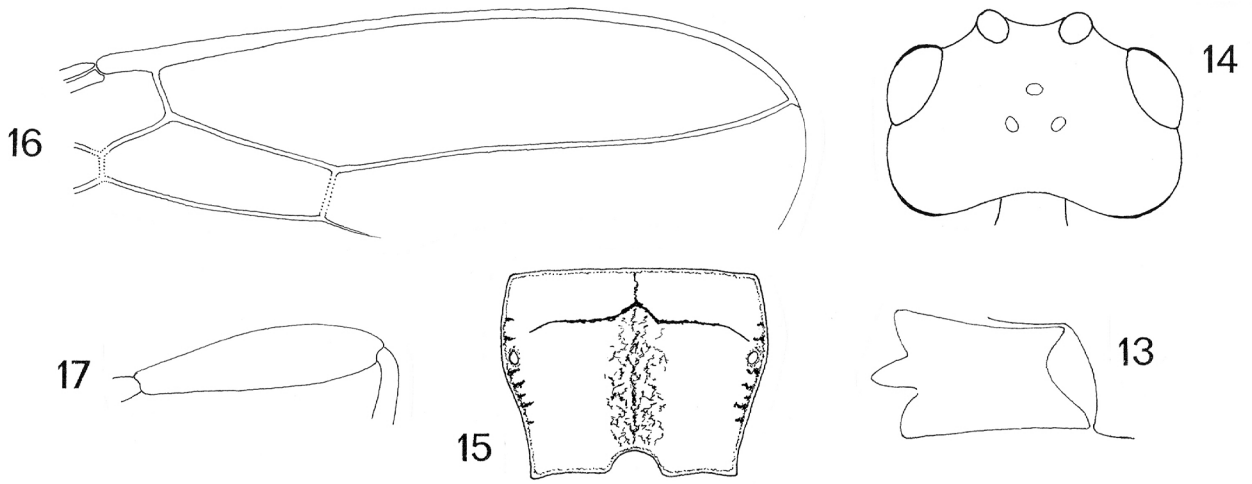
1. Penultimate three flagellomeres 1.6 times longer than broad (Fig. 1). Mandible broadening distally, dorsal tooth large (Fig. 3). Propodeum weakly rugose and with areola basalis (Fig. 5).♀: 2 mm (Israel) ..... ***D. paucilica* n. sp.**
-. Penultimate three flagellomeres cubic (Fig. 31 in Fischer 1973b: 121). Mandible less broadening distally, dorsal tooth smaller (Fig. 13). Propodeum rugose, areola basalis faintly distinct (Fig. 12).♀: 1.9–2.4 mm (Austria, Hungary) ..... ***D. sphaerimembre* (Fischer, 1973b)**

Distinction between D. paucilica and D. amoenidens

1. Temple in dorsal view slightly swollen, pair of toruli protruding (Fig. 2). Propodeum with areola basalis, along keels rugulose (Fig. 5). Fore wing: second submarginal cell shorter, *3–SR* 1.75 times as long as *2–SR* (Fig. 7). Hind femur thick, 3.6 times as long as broad distally (Fig. 6). Antenna with 16 antennomeres.♀: 2 mm (Israel) ..... ***D. paucilica* n. sp.**
-. Temple in dorsal view not swollen, pair of toruli less protruding (Fig. 14). Propodeum with medio-longitudinal (less distinct) and transverse carinae, along carinae rugulose (Fig. 15). Fore wing: second submarginal cell long, *3–SR* 2.4–2.5 times as long as *2–SR* (Fig. 16). Hind femur less thick, 3.8–4 times as long as broad distally (Fig. 17). Antenna with 18 antennomeres.♀: 1.8–2.1 mm (Austria, Hungary, Asiatic Russia (Far East), Mongolia) ..... ***D. amoenidens* (Fischer, 1973b)**

Etymology

The name *paucilica* is an abbreviated epiphet of paucisternaulica (i.e., shortened precoxal suture of sternaulica).



Figs. 13–17. Characters of *Dinotrema* spp. Fig. 13. *D. sphaerimembre* (Fischer): mandible. Figs. 14–17. *D. amoenidens* (Fischer). 14. Head in dorsal view. 15. Propodeum. 16. Distal part of right fore wing. 17. Hind femur.

Etymology

The name *paucilica* is an abbreviated epiphet of paucisternaulica (i.e., shortened precoxal suture of sternaulica).

Idiasta argamani Papp, n. sp.

(Figs. 18–28)

Description of the Female Holotype

Body 4 mm long. Antenna slightly shorter than body and with 21 antennomeres. First flagellomere 2.5 times, second flagellomere five times as long as broad apically, second flagellomere 1.6 times as long as first flagellomere (Fig. 18); further flagellomeres gradually shortening and indistinctly thickening so that penultimate flagellomere 1.5 times as long as broad.

Head in dorsal view transverse (Fig. 19), almost 1.9 times as broad as long, temple slightly swollen, i.e slightly broader between temples than between eyes; eye as long as temple, temple rounded, occiput excavated. Eye in lateral view almost twice as high as wide and 0.6 times as wide as temple. Mandible 1.6 times as long as broad between dorsal and ventral teeth, middle tooth pointed and basally broad (Fig. 20). Head polished.

Mesosoma in lateral view 1.5 times as long as high. Pronope deep. Notaulix distinct, finely crenulate and almost reaching mesoscutal dimple; dimple short furrow-form, deep (Fig. 21). Mesoscutum and scutellum polished. Metanotal keel in lateral view dentiform (Fig. 22). Propodeum rugose. Precoxal suture wide and rugose (Fig. 23).Hind femur five times as long as broad distally (Fig. 24). Hind basitarsus twice longer than second tarsomere.

Fore wing as long as body. Pterostigma (Fig. 25) 3.8 times as long as wide, issuing *r* from its distal third, *r* 0.45 times width of pterostigma; second submarginal cell long: *2–SR* 1.4 times as long as *3–SR*, *SR1* straight, 3.2 times as long as *3–SR* and reaching tip of wing. Vein *m–cu* near antefurcal to *2–SR*. Vein *cu–a* interstitial (Fig. 26), first subdiscal cell narrow. Hind wing: *cu–a* issuing medially from *M+CU, 1–M* (Fig. 27, see arrows).

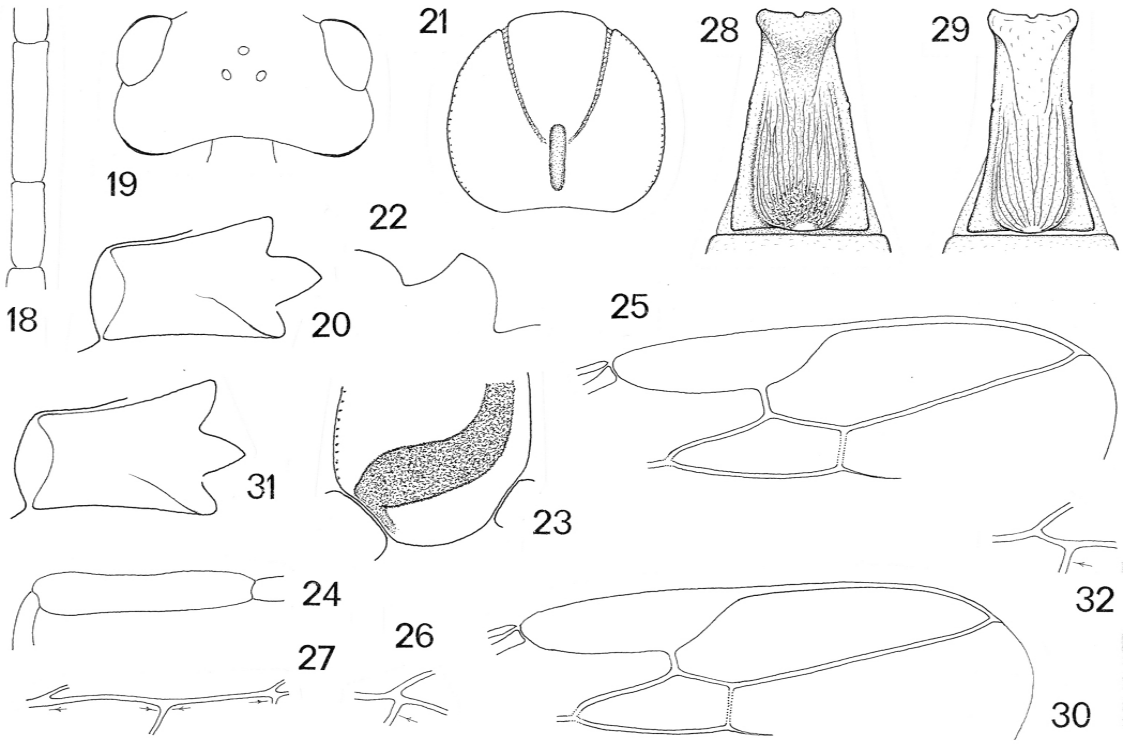
Tergite 1 long (Fig. 28), 1.6 times as long as broad posteriorly, evenly broadening posteriorly, pair of spiracles before middle of tergite, less distinct pair of keels meeting at level of spiracles; tergite 1 densely striate-rugulose (Fig. 28). Rest of tergites polished. Ovipositor sheath long, just shorter than hind tibia.

Body black. Scape, pedicel and flagellomeres 1–2 darkening rusty, rest of flagellum brownish-black. Mandible rusty. Palpi brown. Coxae yellowish-brown, legs rusty to dark rusty. Wings evenly brownish-fumous, pterostigma dark brown, veins light brown.

Male and host unknown.

Material Examined

Holotype ♀: Israel, Yafo [Jaffo], July 1989. Q. Argaman. The holotype is in good condition, glued onto a pointed card by its right fore coxa (body slightly emerging above card), and the left fore leg is less visible owing to its mounting. The holotype is deposited in TAUI.



Figs. 18–32. Characters of *Idiasta* spp. Figs. 18–28. *I. agamani* n. sp. 18. Flagellomeres 1–2. 19. Head in dorsal view. 20. Mandible. 21. Mesoscutum with notaulix and prescutellar dimple. 22. Denticule of metanotum in lateral view. 23. Ventral part of mesopleuron with precoxal suture. 24. Hind femur. 25. Distal part of right fore wing. 26. *cu–a* of fore wing. 27. *cu–a* of hind wing. 28. First tergite. Figs. 29–32. *I. dichromus* Königsmann. 29. First tergite. 30. Distal part of right fore wing. 31. Mandible. 32. *cu–a* of fore wing.

Idiasta argamani Papp, n. sp.

(Figs. 18–28)

Description of the Female Holotype

Body 4 mm long. Antenna slightly shorter than body and with 21 antennomeres. First flagellomere 2.5 times, second flagellomere five times as long as broad apically, second flagellomere 1.6 times as long as first flagellomere (Fig. 18); further flagellomeres gradually shortening and indistinctly thickening so that penultimate flagellomere 1.5 times as long as broad.

Head in dorsal view transverse (Fig. 19), almost 1.9 times as broad as long, temple slightly swollen, i.e slightly broader between temples than between eyes; eye as long as temple, temple rounded, occiput excavated. Eye in lateral view almost twice as high as wide and 0.6 times as wide as temple. Mandible 1.6 times as long as broad between dorsal and ventral teeth, middle tooth pointed and basally broad (Fig. 20). Head polished.

Mesosoma in lateral view 1.5 times as long as high. Pronope deep. Notaulix distinct, finely crenulate and almost reaching mesoscutal dimple; dimple short furrow-form, deep (Fig. 21). Mesoscutum and scutellum polished. Metanotal keel in lateral view dentiform (Fig. 22). Propodeum rugose. Precoxal suture wide and rugose (Fig. 23).Hind femur five times as long as broad distally (Fig. 24). Hind basitarsus twice longer than second tarsomere.

Fore wing as long as body. Pterostigma (Fig. 25) 3.8 times as long as wide, issuing *r* from its distal third, *r* 0.45 times width of pterostigma; second submarginal cell long: *2–SR* 1.4 times as long as *3–SR*, *SR1* straight, 3.2 times as long as *3–SR* and reaching tip of wing. Vein *m–cu* near antefurcal to *2–SR*. Vein *cu–a* interstitial (Fig. 26), first subdiscal cell narrow. Hind wing: *cu–a* issuing medially from *M+CU, 1–M* (Fig. 27, see arrows).

Tergite 1 long (Fig. 28), 1.6 times as long as broad posteriorly, evenly broadening posteriorly, pair of spiracles before middle of tergite, less distinct pair of keels meeting at level of spiracles; tergite 1 densely striate-rugulose (Fig. 28). Rest of tergites polished. Ovipositor sheath long, just shorter than hind tibia.

Body black. Scape, pedicel and flagellomeres 1–2 darkening rusty, rest of flagellum brownish-black. Mandible rusty. Palpi brown. Coxae yellowish-brown, legs rusty to dark rusty. Wings evenly brownish-fumous, pterostigma dark brown, veins light brown.

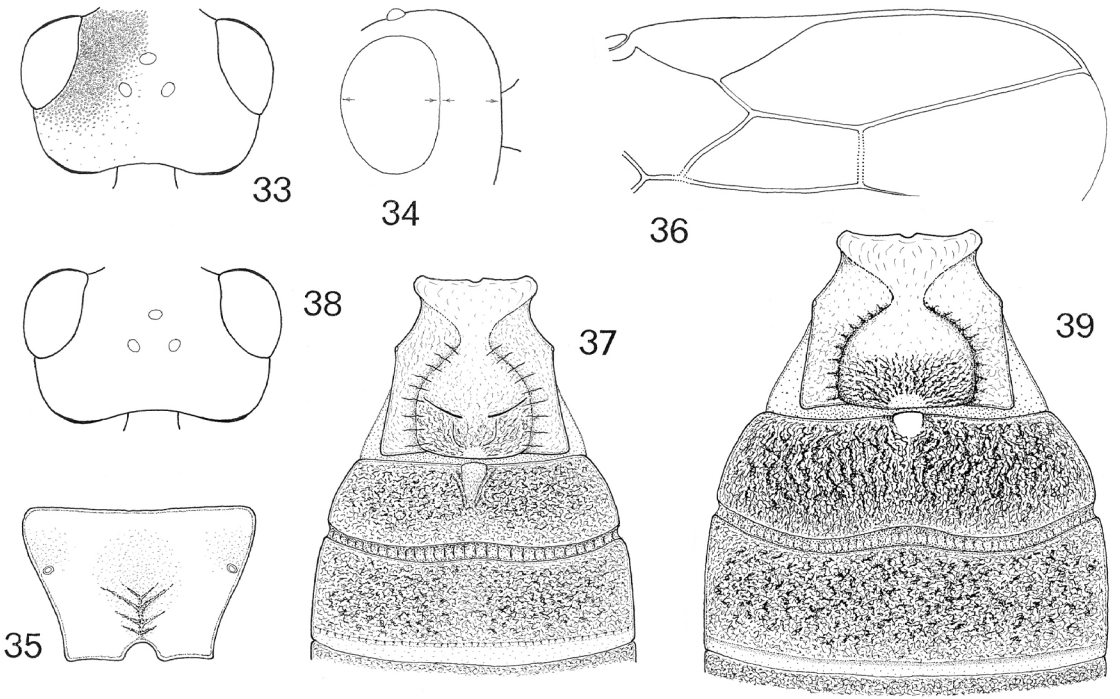
Male and host unknown.

Material Examined

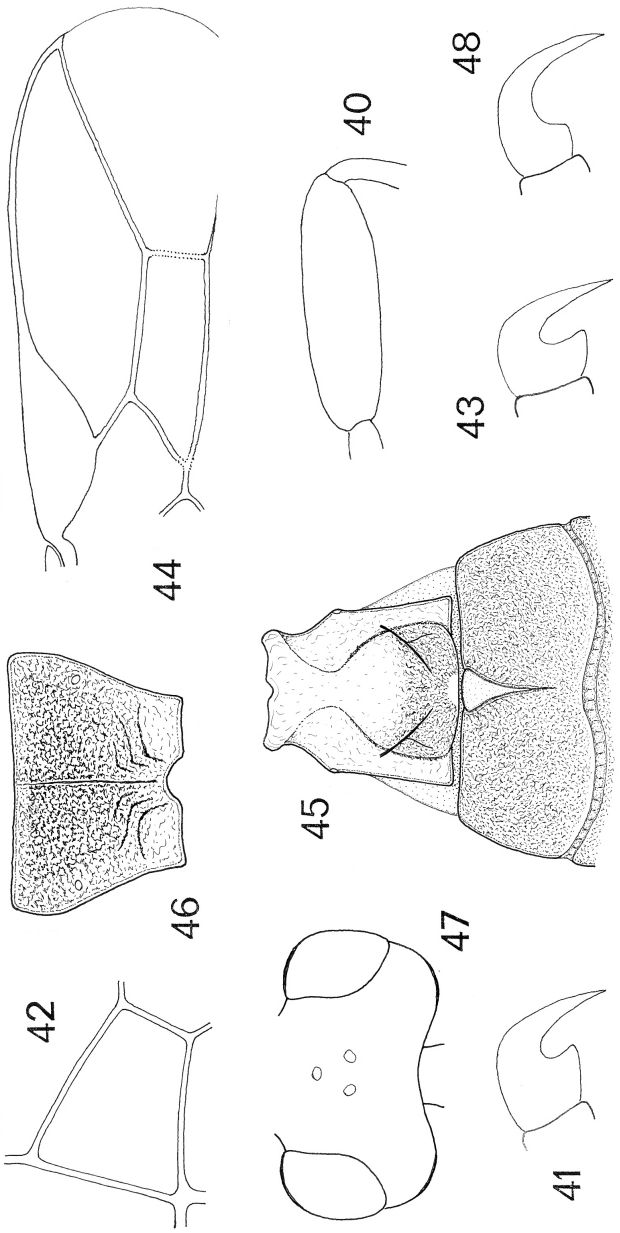
Holotype ♀: Israel, Yafo [Jaffo], July 1989. Q. Argaman. The holotype is in good condition, glued onto a pointed card by its right fore coxa (body slightly emerging above card), and the left fore leg is less visible owing to its mounting. The holotype is deposited in TAUI.

Distribution

Israel.



Figs. 33–39. Characters of *Bracon (Bracon)* spp. Figs. 33–37. *B. (B.) heberola* n. sp. 33. Head in dorsal view with indication of its granulose sculpture. 34. Head in lateral view. 35. Propodeum. 36. Distal part of right fore wing. 37. Tergites 1–3. Figs. 38, 39. *B. (B.) pectoralis* Wesmael. 38. head in dorsal view. 39. Tergites 1–3.



Figs. 40–48. Characters of *Bracon* spp. Figs. 40–42. *Bracon (Bracon) heberola* sp. n. 40. Hind femur. 41. Claw. 42. First discal cell of right fore wing. Figs. 43–44. *Bracon (Bracon) pectoralis* Wesmael. 43. Claw. 44. Distal part of right fore wing. Figs. 45–48. *Bracon (Asiabracon) quadrimaculatus* Telenga. 45. Tergites 1, 2. 46. Propodeum. 47. Head in dorsal view. 48. Claw.

Differential Diagnosis

The new species, *Idiasta argamani*, runs unambiguously to *I. dichrocera* Königsmann using Königsmann's key and description (1960) as well as with Fischer's key (2008). The two species are distinguished by the following characters:

1. Tergite 1 evenly broadening posteriorly (Fig. 28). Fore wing: second submarginal cell relatively long: *2–SR* 1.4 times as long as *3–SR*, *SR1* 3.2 times as long as *3–SR* (Fig. 25). Mandible less broadening distally (Fig. 20). Wings brownish-fumous. ♀: 4 mm (Israel) ..... ***I. argamani* n. sp.**
-. Tergite 1 subparallel, i.e., weakly broadening posteriorly (Fig. 29). Fore wing: second submaginal cell relatively short: *2–SR* 1.75 times as long as *3–SR*, *SR1* four times as long as *3–SR* (Fig. 30). Mandible more broadening distally (Fig. 31). Wings hyaline. ♀: 3–4 mm. (Palaearctic region) ..... ***I. dichrocera* Königsmann, 1960**

Etymology

The new species is dedicated to its collector, the late Dr. Qabir Argaman.

BRACONINAE

Bracon (Bracon) heberola Papp, n. sp.

(Figs. 33–37, 40–42)

Description of the Female Holotype

Body 3.9 mm long. Antenna 0.7 times as long as body and with 23 antenomeres. First flagellomere 1.6 times and penultimate flagellomere 1.25 times as long as broad.

Head in dorsal view transverse (Fig. 33), 1.6 times as broad as long, eye 1.5 times as long as temple, temple moderately rounded, occiput excavated. Ocelli middle-sized, OOL less than twice as long as POL. Eye in lateral view 1.4 times as long as wide and 1.5 times as wide as temple, temple beyond eye evenly broad (Fig. 34). Horizontal diameter of oral opening 1.5 times longer than shortest distance between opening and eye. Head finely and densely granulose, vertex and occiput almost smooth and shiny (Fig. 33).

Mesosoma in lateral view 1.5 times as long as high. Notaulix faintly distinct. Following parts finely granulose: pronotum anteriorly, mesoscutum laterally and posteriorly, mesopleuron ventrally, metapleuron (a bit denser). Propodeum almost smooth and shiny, dorsal to lunule with oblique rugulae and subgranulose (Fig. 35). – Hind femur 3.1 times as long as broad medially (Fig. 40). Claw downcurved, its basal lobe large as in Fig. 41.

Fore wing about as long as body. Pterostigma (Fig. 36) 2.7 times as long as wide and issuing *r* slightly proximally from its middle, *r* 0.7 times as long as width of pterostigma. Second submarginal cell shorter and narrower: *3–SR* somewhat longer than *2–SR*, *SR1* clearly twice longer than *3–SR*, straight and reaching tip of wing. First discal cell usual in form: *1–M* twice longer than *m–cu*, *1–SR–M* indistinctly bent and somewhat longer than *1–M* (Fig. 42).

Tergite 1 (Fig. 37) quadrate in form, somewhat broader posteriorly than long, beyond pair of spiracles faintly broadening. Margin of scutum crenulate, scutum posteriorly rugose, tergite laterally from scutum uneven with a few striate elements. Rest of tergites transverse. Second tergite four times as broad posteriorly as long laterally, anteromedially with faintly distinct areola (Fig. 37). Third tergite somewhat longer than second tergite, suture between tergites 2 and 3 bisinuate and crenulate. Tergites 3–5 with subcrenulated sulcus before posterior margin (Fig. 37). Tergites densely rugulo-rugose. Ovipositor sheath long, as long as hind tibia and tarsus combined.

Ground color of body testaceous. Scape black, pedicel and flagellum brownish-black. Ocellar field black; oral organs (palpi, mandible) light brownish-yellow. Lateral lobe of mesoscutum, mesosternum and propodeum black. Mesopleuron with blackish suffusion. Legs light brownish-yellow (like oral organs), hind femur and tibia black (apex of femur and basal third of tibia light brownish-yellow), hind tarsus with blackish pattern. Wings hyaline, pterostigma brown, veins brownish.

Male and host unknown.

Material Examined

Holotype ♀: Israel, Shezor, July 1986. Argaman. The holotype is in good condition, glued onto a pointed card by the right side of mesosoma, and the left flagellum is deficient, i.e., with 17 flagellomeres. The holotype is deposited in TAUI.

Distribution

Israel.

Differential Diagnosis

Within the subgenus *Bracon* s. str. the new species is most closely related to *B. (B.) pectoralis* Wesmael based on the following common features: tergites 3–6 with transverse sulci before hind margin of tergites (sulci of tergites 3–5 finely crenulate, Figs. 37, 39), all tergites rugose, ovipositor apparatus long, head in dorsal view less transverse (Fig. 33, 38). The two species differ in a few characters:

1. Head polished, i.e., not granulose in any part; in dorsal view temple slightly less rounded (Fig. 38). Propodeum polished. Claw slightly more curved ventrally (Fig. 43). Tergites 1–3 rugose as in Fig 39. Fore wing: second submarginal cell long, *3–SR* clearly longer than *2–SR*, pterostigma yellow (Fig. 44).♀: (2.3–)3–5 mm (Palaearctic region)..... ***B. (B.) pectoralis* Wesmael, 1838**

-. Head, except vertex and occiput, finely and densely granulose; in dorsal view temple slightly more rounded (Fig. 33). Propodeum above lunule with oblique rugulae and subrugulose (Fig. 35). Claw slightly less downcurved (Fig. 41). Tergites 1–3 rugose as in Fig. 37. Fore wing: second submarginal cell less long, *3–SR* somewhat longer than *2–SR*, pterostigma brown (Fig. 36).♀: 3.9 mm (Israel) .... ***B. (B.) heberola* n. sp.**

The new species runs to *Bracon (Asiabracon) quadrimaculatus* Telenga based on the

following common features: granulose to subgranulose head and mesosoma and the more or less distinct areola on second tergite anteromedially (subgeneric features of *Asiabracon* Tobias); the two species are separated by the following characters:

1. Antero-median areola of second tergite clearly distinct; margin of scutum of tergite 1 without crenulae; tergites finely sculptured (Fig. 45). Propodeum rugose and with a medio-longitudinal carina (Fig. 46). Head in dorsal view transverse, 1.8–1.85 times as broad as long (Fig. 47). Tergites 3–5 without transverse sulci before hind margin. Claw less down-curved, its basal lobe smaller (Fig. 48). Hind femur and tibia testaceous, at most apically darkening.♀: 3.5–4.6(–6) mm (Turkmenia, Azerbaijan, Turkey, Greece)..... ***B. (Asiabracon) quadrimaculatus*** **Telenga, 1936**
2. Antero-median areola of tergite 2 faintly distinct; margin of scutellum of tergite 1 crenulate; tergites strongly sculptured (Fig. 37). Propodeum polished, dorsal to lunule with oblique rugulae and subgranulose (Fig. 35). Head in dorsal view less transverse, 1.6 times as broad as long (Fig. 33). Tergites 3–4 with transverse and finely crenulated sulci before hind margin (Fig. 37). Claw more downcurved, its basal lobe large (Fig. 41). Hind femur and tibia black (apex of femur and base of tibia brownish yellow). ♀: 3.9 mm (Israel).....***B. (Bracon) heberola*** **n. sp.**

Comments

Bracon (Bracon) heberola n. sp. is a transitional species between the subgenera *Bracon* s. str. and *Asiabracon* based on its granulose to subgranulose head and mesosoma and the faintly distinct anteromedian areola of the second tergite (Fig. 37). The species is assigned to the subgenus *Bracon* s. str. owing to its transverse and finely crenulated sulci of tergites 3–5 as well as the strongly sculptured tergites. More specimens of *B. heberola* of a related (although at present, unknown) species are needed to solve this taxonomic problem. Further study will likely change the current taxonomic pstatus.

Etymology

The species name *heberola* is an abbreviated epiphet of hebes-areola, i.e., a hardly distinct areola.

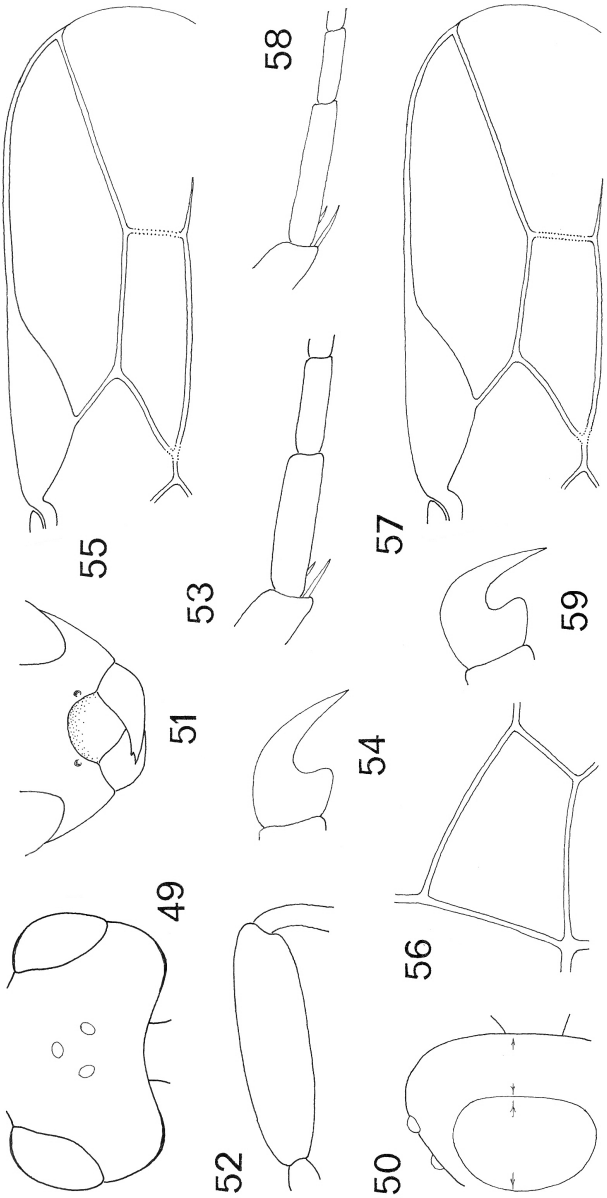
Bracon (Glabrobracon) propebella **Papp, n. sp.**

(Figs. 49–56, 60)

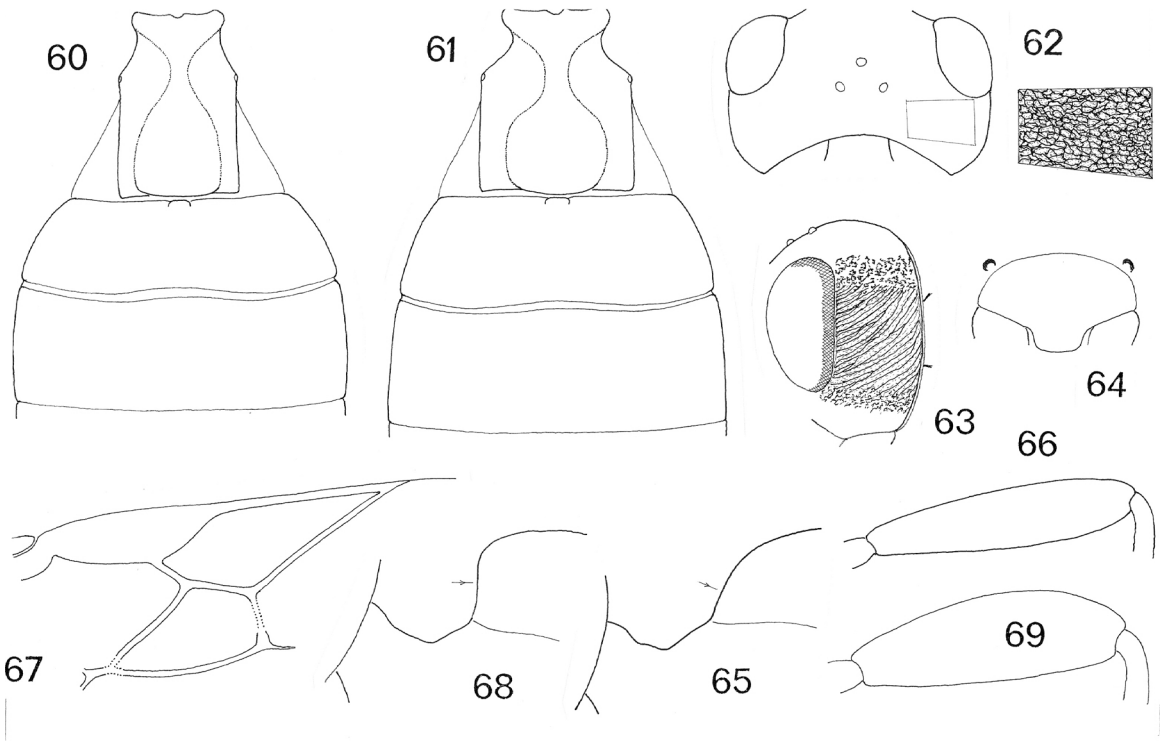
Descripion of the Female Holotype

Body 3.3 mm long. Antenna shorter than body and with 38 antennomeres. First flagellomere 1.6 times and penultimate flagellomere 1.5 times as long as broad.

Head in dorsal view transverse (Fig. 49), 1.8 times as broad as long, eye 1.4 times as long as temple, temple rounded, occiput excavated. Eye in lateral view almost 1.6 times as high as wide and 1.4 times as wide as temple, temple beyond eye evenly broad (Fig. 50). Horizontal diameter of oral opening 1.4 times longer than shortest distance between opening and compound eye (Fig. 51). Head polished.



Figs. 49–59. Characters of *Bracon (Glabrobracon)* spp. Figs. 49–56. *B. (G.) propebella* n. sp. 49. Head in dorsal view. 50. Head in lateral view. 51. Ventral half of head in frontal view. 52. Hind femur. 53. Hind tarsomeres 1,2. 54. Claw. 55. Distal part of right fore wing. 56. First discal cell of right fore wing. Figs. 57–59. *B. (G.) terebella* Wesmael. 57. distal part of right fore wing. 58. Hind basitarsus 1, 2. 59. Claw.



Figs. 60–69. Characters of *Bracon (Glabrobracon)* and *Chelonus* spp. Fig. 60. *B. (G.) propebella* n. sp., tergites 1–3. Fig. 61. *B. (G.) terebella* Wesmael, tergites 1–3. Figs. 62–67. *C. argamani* n. sp. 62. Head in dorsal view with indication of its sculpture. 63. Head in lateral view with indication of its sculpture. 64. Clypeus. 65. Fore part of mesoscutum in lateral view. 66. Hind femur. 67. Distal part of right fore wing. Figs. 68, 69. *C. mediterraneus* Schmiedeknecht. 68. Fore part of mesoscutum in lateral view. 69. Hind femur.

Mesosoma in lateral view 1.5 times as long as high, polished. Notaulix almost indistinct. Propodeum polished, around lunule with weak and short rugulae. Hind femur 3.3 times as long as broad medially (Fig. 52). Hind basitarsus 1.5 times as long as second tarsomere (Fig. 53). Claw moderately curved ventrally, its basal lobe as in Fig. 54.

Fore wing as long as body. Pterostigma (Fig. 55) almost three times as long as wide and issuing *r* proximally from its middle, *r* somewhat shorter (i.e., 0.85 times) than width of pterostigma. Second submarginal cell long and somewhat narrow: *3–SR* 2.2 times as long as *r* and 1.45 times as long as *2–SR*; *SR1* straight, 1.5 times as long as *3–SR* and reaching tip of wing. First discal cell usual in form: *1–M* 1.7 times longer than *m–cu*, *1–SR–M* almost straight and 1.3 times as long as *1–M* (Fig. 56).

Tergite 1 long (Fig. 60), 1.45 times as long as broad polsteriorly, pair of spiracles before middle of tergite, beyond spiracles parallel-sided, smooth and shiny. Second tergite 3.5 times as broad posteriorly as long laterally and third tergite one-fifth longer medially than second tergite laterally, suture between tergites 2–3 faintly bisinuate, smooth; tergites polished. Ovipositor sheath (in lateral view) somewhat shorter than hind tibia.

Head and mesosoma black, metasoma reddish-yellow. Scape and pedicel black, flagellum black. Palpi dark brown, mandible yellowish. Tegula and parategula dark rusty. Tergite 1 rusty, scutum darkening brown. Metasoma apically blackish. Legs black, femora apically and tibia proximally light rusty, tarsi dark brown. Wings feebly brownish-fumous, pterostigma brown, veins light brown.

Male and host unknown.

Material Examined

Holotype ♀: Israel, Lahav, April 1984. Argaman. The holotype is in good condition, glued onto a pointed card by its hind right coxa and base of metasoma (body in lateral position on card), the right flagellum (except first flagellomere) is missing. The holotype is deposited in TAUI.

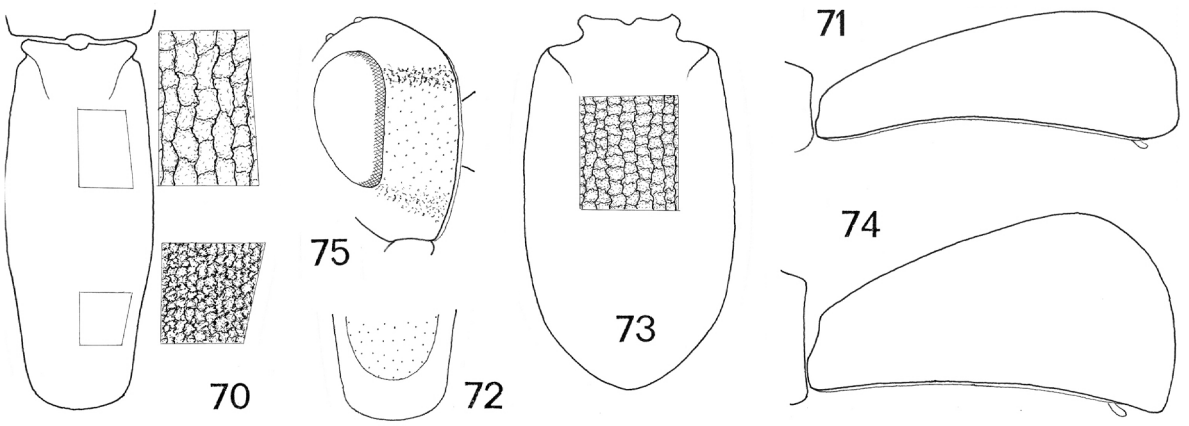
Distribution

Israel.

Differential Diagnosis

The new species, *Bracon (Glabrobracon) propebella*, is closest to *B. (Glabrobracon) terebella* Wesmael based on the following common features: short ovipositor sheath, brownish-fumous wings, form of head in dorsal view, somewhat thickened hind femur and metasoma anteriorly reddish-yellow to rusty. The two species are distinguished by the following characters:

1. Tergite 1 long: 1.3 times longer than broad posteriorly, tergites 2–3 somewhat more transverse: second tergite 3.5 times as broad posteriorly as long laterally (Fig. 60). Fore wing: second submarginal cell long: *3–SR* 2.2 times longer than *r*, cell



Figs. 70–75. Characters of *Chelonus* spp. Figs. 70–72. *C. argamani* n. sp. 70. Carapace in dorsal view with indication of its sculpture. 71. Carapace in lateral view. 72. Hind end of carapace in ventral view. Figs. 73–75. *C. mediterraneus* Schmiedeknecht. 73. Carapace in dorsal view with indication of its sculpture. 74. Carapace in lateral view. 75. Head in lateral view with indication of its sculpture.

relatively narrow (Fig. 55). Hind basitarsus 1.5 times as long as second tarsomere, tarsomeres thick (Fig. 53). Claw less curved ventrally (Fig. 54). Antenna with 38 antennomeres.♀: 3.3 mm (Israel).....***B. (Glabrobracon) propebella*** **n. sp.**

-. Tergite 1 short, somewhat longer than broad posteriorly, tergites 2–3 somewhat less transverse, second tergite 2.8 times as broad posteriorly as long laterally (Fig. 61). Fore wing: second submarginal cell short: *3–SR* twice as long as *r*, cell relatively wide (Fig. 57). Hind basitarsus twice as long as second tarsomere, tarsomeres thin (Fig. 58). Claw downcurved (Fig. 59). Antenna with 28–32 antennomeres.♀: 3–3.5 mm. – (Palaearctic region, common in Europe). ....***B. (Glabrobracon) terebella*** **Wesmael, 1838**

Etymology

The epithet *propebella* is an abbreviation of "propetereblla" (=near to terebella) indicating the similarity of the two species, *B. terebella* and *B. propebella*.

CHELONINAE

Chelonus argamani Papp, n. sp.

(Figs. 60–67, 70–72)

Description of the Female Holotype

Body 6.5 mm long. Antenna about 0.75 as long as body and with 32 antennomeres. First flagellomere three times and penultimate flagellomere almost 1.3 times as long as broad, flagellomere gradually shortening and attenuating.

Head in dorsal view transverse (Fig. 62), 1.76 times as broad as long, eye as long as temple, temple weakly rounded, occiput deeply excavated. Ocelli small, OOL 0.25 longer than POL (Fig. 62). Eye in lateral view twice as high as wide, temple 0.33 as wide as eye (Fig. 63). Clypeus and vertex rugose, face rather horizontally rugose, temple arched striate (Fig. 63). Clypeus produced ventrally as in Fig. 64.

Mesosoma in lateral view 1.5 times as long as high. Mesoscutum in lateral view not convex dorsal to pronotum (Fig. 65, arrow). Transverse keel of propodeum less distinct and ending laterally in weak tubercule. Mesosoma rugose to strongly rugose, scutum anteriorly with almost smooth field. Hind femur thin, 4.6 times as long as broad distally (Fig. 66). Hind basitarsus almost as long as tarsomeres 2–5 combined.

Fore wing about 0.33 shorter than body. Pterostigma (Fig. 67) 3.3 times as long as wide and issuing *r* clearly distally from its middle; *r* half as long as width of pterostigma; *2–SR* nearly twice as long as *3–SR*, *SR1* just bent; *1–R1* almost as long as pterostigma.

Carapace in dorsal view long, 2.3 times as long as broad medially (Fig. 70); in lateral view 2.75 times as long as high posteriorly, less produced posteroventrally (Fig. 71), lateroposteriorly moderately compressed. Carapace in ventral view somewhat incurved apically (Fig. 72), i.e., ventral cavity almost as long as carapace itself. Carapace on its anterior half striate, posteriorly rugose (Fig. 70). Ovipositor apparatus concealed.

Scape black, flagellum blackish. Head and mesosoma black, tegula brownish-yellow. Palpi brownish-yellow, mandible vivid rusty. Carapace reddish-yellow, its hind third black. Legs reddish-yellow, coxae black to blackish, hind tibia blackish, tarsi distally blackish-fumous and fifth tarsomere black. Wings subfumous, pterostigma brown, venation proximo-distally yellow to brownish.

Male and host unknown.

Material Examined

Holotype ♀: Israel, Bet She`an, 25 June 1981. Argaman. — The holotype is in good condition; it is pinned by mesoscutum/mesosternum; and hind pair of wings less visible, i.e., covered by fore wing. The holotype is deposited in TAUI.

Distribution

Israel.

Differential Diagnosis

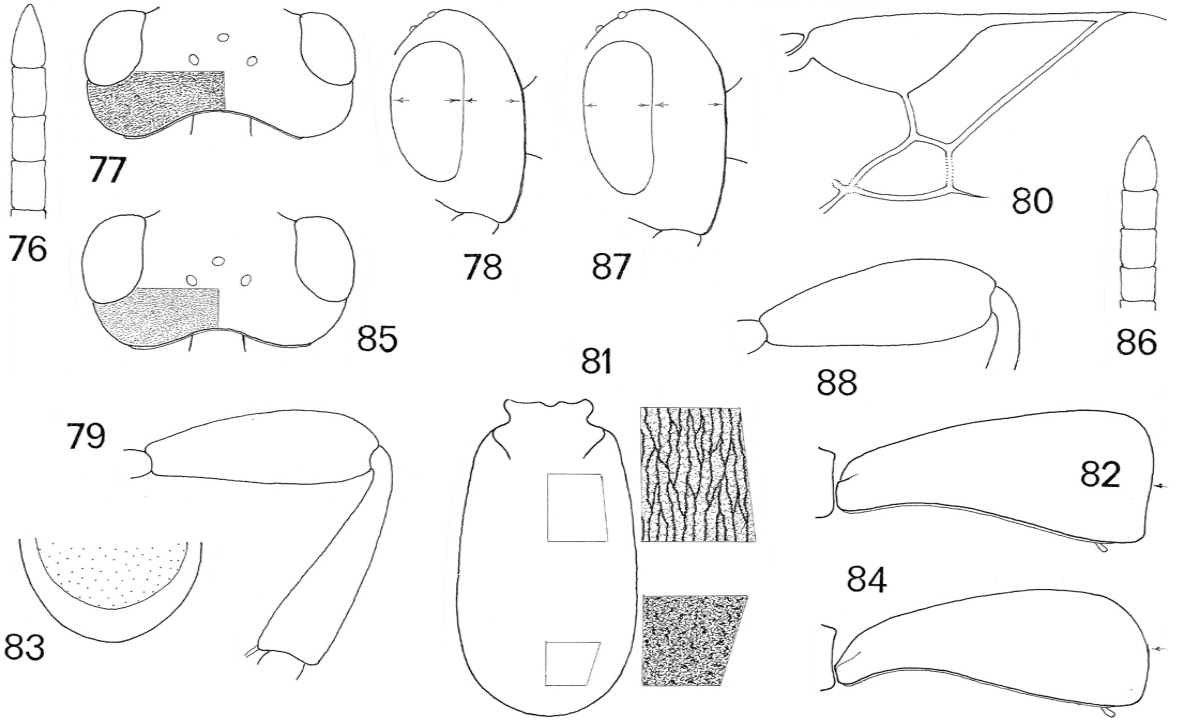
The new species, *Chelonus argamani*, is closest to *Ch. mediterraneus* Schmiedeknecht based on their following common features: carapace lateroposteriorly moderately compressed, occiput deeply excavated and vertex strongly to roughly rugose. The two species differ as follows:

1. Carapace in dorsal view elongate, 2.35 times as long as broad medially (Fig. 70), in lateral view less doomed posteriorly, 2.7 times as long as high posteriorly (Fig. 71). Mesoscutum not projecting, i.e., convex dorsal to pronotum (Fig. 65, see arrow). Temple in lateral view striate and shiny (Fig. 63). Hind femur thin, 4.6 times as long as broad distally (Fig. 66). Antenna with 32 antennomeres. Palpi brownish yellow. ♀: 6.5 mm (Israel) ..... ***Ch. argamani* n. sp.**
-. Carapace in dorsal view less elongate, 1.6 times as long as broad medially (Fig. 73); in lateral view highly doomed posteriorly, 1.8 times as long as high posteriorly (Fig. 74). Mesoscutum projecting dorsal to pronotum (Fig. 68, arrow). Temple in lateral view finely punctate, interspaces much greater than punctures and polished (Fig. 75). Hind femur thick, 3–3.3 times as long as broad distally (Fig. 69). Antenna with 27 antennomeres. Palpi rusty and fumous. ♀: 7–7.5 mm (Algeria) .... ***Ch. mediterraneus* Schmiedeknecht, 1934**

Comments

I (Papp, 1981b: 156) provided a key to four *Chelonus* species, *Ch. erythrogaster* Lucas, *Ch. mediterraneus* Schmiedeknecht, *Ch. obturbator* Papp and *Ch. oculator* (Panzer) which can also be relevant for the identification of the new species.

I (Papp, 1981b) designated a female of *Ch. mediterraneus* Schmiedeknecht as lectotype and one male and three additional females as paralectotypes. This series was kindly lent to me by Dr. M. Fischer (Naturhistorisches Museum, Wien). The collecting data (first labels) were: “Schmiedeknecht/Oran 1895”, the second labels bear Schmiedeknecht’s determination, and the third labels are the lectotype and paralectotype cards,



Figs. 76–88. Characters of *Microchelonus* spp. Figs. 76–83. *M. atrotibia* n. sp. 76. Ultimate four flagellomeres. 77. Head in dorsal view with indication of its sculpture. 78. Head in lateral view. 79. Hind femur and tibia. 80. Distal part of right wing. 81. Carapace in dorsal view with indication of its sculpture. 82. Carapace in lateral view. 83. Hind end of carapace in ventral view. Figs. 84–88. *M. erdoesi* Tobias. 84. Carapace in lateral view. 85. Head in dorsal view. 86. Ultimate four flagellomeres. 87. Head in lateral view. 88. Hind femur.

that were attached by me.

Etymology

The new species is dedicated to the late Dr. Qabir Argaman, who collected the holotype specimen (for further details see Etymology of *Idiasta argamani*).

Microchelonus atrotibia Papp, n. sp.

(Figs. 76–83)

Description of the Female Holotype

Body 2.8 mm long. Antenna short, about as long as head and mesosoma combined, with 16 antennomeres. First flagellomere 2.7 times, second flagellomere 2.1 times and flagellomeres 11–13 slightly longer than broad (Fig. 76).

Head in dorsal view transverse (Fig. 77), 2.1 times as broad as long, eye 1.8 times as long as temple, temple rounded, occiput excavated. Ocelli on low triangle, POL just longer than OOL. Eye in lateral view almost twice as high as wide and 1.2 times as wide as temple (Fig. 78, arrows). Clypeus 0.25 wider than high. Face horizontally strio-rugulose, otherwise head densely rugulose dorsally (Fig. 77).

Mesosoma in lateral view 1.5 times as long as high. Mesoscutum anteriorly rugulose, interspaces shiny, posteriorly rugose. Scutellum smooth and shiny. Propodeum without transverse keel, pair of lateral tubercules small. Hind femur 2.9 times as long as broad distally, hind tibia three times as long as broad distally (Fig. 79). Hind basitarsus slightly longer than second tarsomere.

Fore wing 0.33 shorter than body. Pterostigma wide (Fig. 80), 2.3 times as long as wide and issuing *r* from its middle. *1–R1* 0.6 times as long as pterostigma. Vein *r* a bit longer than *3–SR*, *SR1* straight.

Carapace in dorsal view 1.75 times as long as broad distally (Fig. 81), on its anterior half distinctly anastomose striate, on its posterior half rugose (Fig. 81). Carapace in lateral view 2.3 times as long as high posteriorly, its posterior end truncate (Fig. 82, arrow). Carapace apicoventrally somewhat incurved (Fig. 83).

Body black, carapace with transverse light yellow streak. Scape and pedicel rusty, flagellomeres 1–3 darkening rusty, rest of flagellum brownish-black. Mandible brown, palpi proximo-distally brown to yellow. Tegula dark brown, parategula brown. Legs blackish-brown to brown, tibiae and tarsi 1–2 with much yellowish to yellow pattern. Hind tibia entirely black. Hind basitarsus lemon-yellow, tarsomeres 2–5 yellow with faint brownish tint. Wings hyaline, pterostigma brown, veins light brown.

Male and host unknown.

Material Examined

Holotype ♀: Israel, Mikhmoret, Miramar Hotel garden, August 1990. Argaman. –The holotype is in good condition, glued onto a pointed card by the mesosternum, and fore pair of tarsi hardly visible owing to the mounting. The holotype is deposited in TAUI.

Distribution

Israel.

Differential Diagnosis

The new species, *Microcheonus atrotibia*, runs to *M. brevicornis* Tobias and *M. erdoesi* Tobias using Tobias's (1989, 2001) keys and descriptions, and can be distinguished from them by the following keys:

Distinction between M. atrotibia and M. erdoesi

1. Carapace in lateral view 2.1 times as long as high posteriorly, its posterior end truncate (Fig. 82, arrow). Temple in dorsal view rounded, its sculpture relatively less fine, eye 1.8 times as long as temple (Fig. 77). Flagellomeres 11–13 slightly longer (Fig. 76). Eye in laterl view less high, almost twice as high as wide, 1.2 times wider than temple (Fig. 78, arrows). Hind femur less thick, 2.9 times as long as broad distally (Fig. 79). Hind tibia black. ♀: 2.8 mm (Israel) ..... ***M. atrotibia* n. sp.**
-. Carapace in lateral view three times as long as high behind, its hind end rounded (Fig. 84, arrow). Temple in dorsal view receded, its sculpure relatively fine, eye twice longer than temple (Fig. 85). Flagellomeres 11–13 cubic (Fig. 86). Eye in lateral view high, 2.4 times as high as wide, temple slightly wider than eye (Fig. 87, arrows). Hind femur thick, 2.6 times as long as broad distally (Fig. 88). Hind tibia brown, medially pale yellow. ♀: 2.8–3.3 mm (Israel, Syria, Cyprus)..... ***M. erdoesi* Tobias, 2001**

Distinction between M. atrotibia and M. brevicornis

1. Vein *1–R1* of fore wing 0.6 times as long as pterostigma (Fig. 80). Carapace in lateral view high, 2.1 times as long as high (Fig. 82). Flagellomeres 11–13 slightly longer than broad (Fig. 76). Temple in dorsal view rounded (Fig. 77). Hind tibia black. ♀: 2.8 mm (Israel) ..... ***M. atrotibia* n. sp.**
2. Vein *1–R1* of fore wing 0.3 times as long as pterostigma (Tobias, 2001: 502, Fig. 185). Carapace in lateral view less high, 3.5 times as long as high. Flagellomeres 11–13 slightly shorter than broad (Tobias, 2001: 502, Fig. 185). Temple in dorsal view receded (Tobias, 2001: 502, Fig. 182). Hind tibia yellow, apically darkening. ♀: 2.5 mm. (Mongolia) ..... ***M. brevicornis* Tobias, 1989**

Etymology

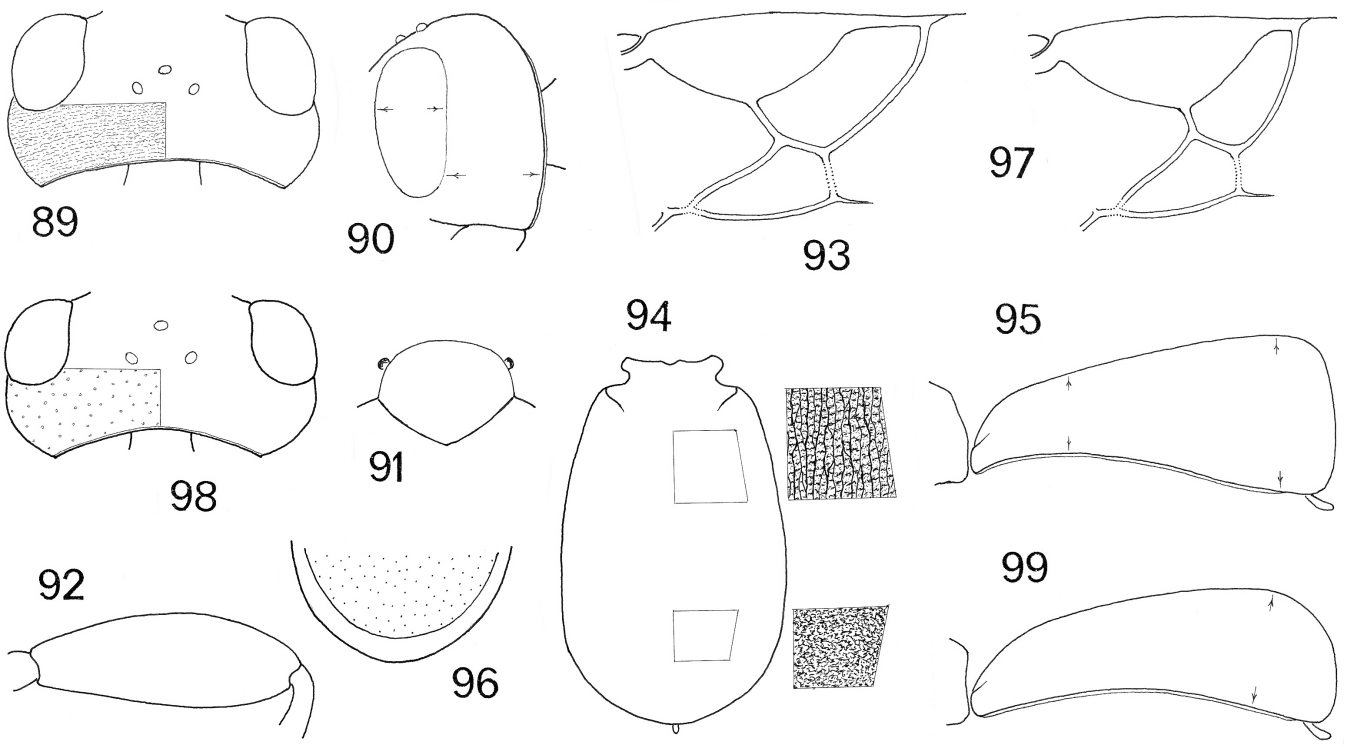
The species name *atrotibia* refers to the entirely black hind tibia.

Microchelonus halperini Papp, n. sp.

(Figs. 89–96)

Description of the Female Holotype

Body 3.6 mm long. Antenna about as long as head and mesosoma combined and with 16 antennomeres. First flagellomere six times as long as broad apically and penultimate flagellomere cubic.



Figs. 89–99. Characters of *Microchelonus* spp. Figs. 89–96. *Microchelonus halperini* n. sp. 89. Head in dorsal view. 90. Head in lateral view. 91. Clypeus. 92. Hind femur. 93. Distal part of right fore wing. 94. Carapace in dorsal view with indication of its sculpture. 95. Carapace in lateral view. 96. Hind end of carapace in ventral view. Figs. 97–99. *Microchelonus rudolphae* (Tobias). 97. Distal part of right fore wing. 98. Head in dorsal view. 99. Carapace in lateral view.

Head in dorsal view transverse (Fig. 89), 1.8 times as broad as long, eye 1.35 times as long as temple, temple rounded; head between temples slightly broader close beyond eye than between eyes. Ocelli small, forming low triangle, POL somewhat shorter than OOL (Fig. 89). Eye in lateral view twice higher than wide, temple beyond eye broadening ventrally and 1.4 times as wide as eye (Fig. 90, arrows). Clypeus moderately pointed ventrally (Fig. 91). Malar space 1.4 times as long as basal width of mandible. Head dorsally (i.e., frons, vertex, occiput) with very fine and transverse rugulo-striation, dull to subshiny.

Mesosoma in lateral view somewhat elongate, 1.6 times as long as high. Mesoscutum with confluent punctation (or apperantly rugulose), interspaces shiny, anterior to prescutellar furrow longitudinally rugose. Prescutellar furrow with eleven crenulae. Scutellum medially almost smooth, laterally uneven, shiny. Propodeum roughly rugose, without transverse carina and laterally with a pair of tubercules. Hind femur 2.8 times as long as broad medially (Fig. 92). Hind basitarsus as long as tarsomeres 2–4 combined.

Fore wing almost as long as body. Pterostigma wide (Fig. 93), 2.5 times as long as wide and issuing *r* from its middle; first marginal cell short, along metacarp (or *1–R1*) 0.27 times as long as pterostigma, *r* a bit longer than *3–SR*, *SR1* distally somewhat incurved.

Carapace slightly longer than mesosoma and elongate-oval, in dorsal view 1.6 times as long as broad posteriorly (Fig. 94). Carapace rugose and anteriorly with striate elements, on its posterior third rugo-rugulose and on its declivous part uneven to smooth, shiny. Carapace in lateral view 2.3 times as long as high posteriorly and twice as high posteriorly as basally (Fig. 95, arrows), its hind end truncate. Carapace in ventral view apically somewhat incurved (Fig. 96), i.e., ventral cavity of carapace almost as long as carapace itself. Ovipositor apparatus concealed.

Body tricolored. Head, metanotum, propodeum, metapleuron and carapace black; mesoma rusty brownish. Scape, pedicel, first flagellomere yellowish brown, rest of flagellum dark colored. Palpi and legs brownish-yellow, fore tibia and tarsus yellow, middle and hind tibiae brown. Anterior (and not basal) transverse band of carapace pale yellow. Wings hyaline, pterostigma brown, veins proximally whitish, distally opaque brownish.

Male and host unknown. Host's foodplant: *Tamarix* sp.

Material Examined

Holotype ♀: Israel, 'En Gedi, 19 June 1974. Halperin. The holotype is in good condition, glued onto a pointed card by hind part of the mesosternum and middle pair of coxae; left flagellum deficient, but flagellomeres 1–5 are present, left fore wing medially at carpal vein torn. The holotype is deposited in TAUI.

Distribution

Israel.

Differential Diagnosis

The new species, *Microchelonus halperini*, runs to *M. rudolphae* Tobias in Tobias's key (1986a: 318–335). The two species differ as follows:

1. Fore wing: *1–R1* 0.27 times as long as pterostigma, pterostigma issuing *r* from its middle, pterostigma brown (Fig. 93). Head in dorsal view less transverse, 1.8 times as broad as long, temple a bit less rounded (slightly swollen close beyond eye); head dorsally with very fine and transverse rugulo-striation, dull to subshiny (Fig. 89). Carapace in lateral view posteriorly high, 2.3 times as long as high posteriorly, its posterior end truncate (Fig. 95, arrows). Body tricolored: head, propodeum and carapace black; fore tibia and tarsus and anterior transverse band of carapace yellow; mesosoma rusty. ♀: 3.6 mm (Israel) ..... ***M. halperini* n. sp.**
-. Fore wing: *1–R1* very short, 0.12–0.14 times) as long as pterostigma, pterostigma issuing *r* somewhat distally from its middle, pterostigma yellow (Fig. 97). Head in dorsal view transverse, twice as broad as long, temple a bit more rounded; head dorsally punctate, interspaces much greater than punctures and polished (Fig. 98). Carapace in lateral view behind less high, 2.6 times as long as high posteriory, its hind end rounded (Fig. 99, arrows). Body black, carapace basally and tegula yellow. ♀: 2.5–3 mm (Kazakhstan) ..... ***M. rudolphae* (Tobias, 1964)**

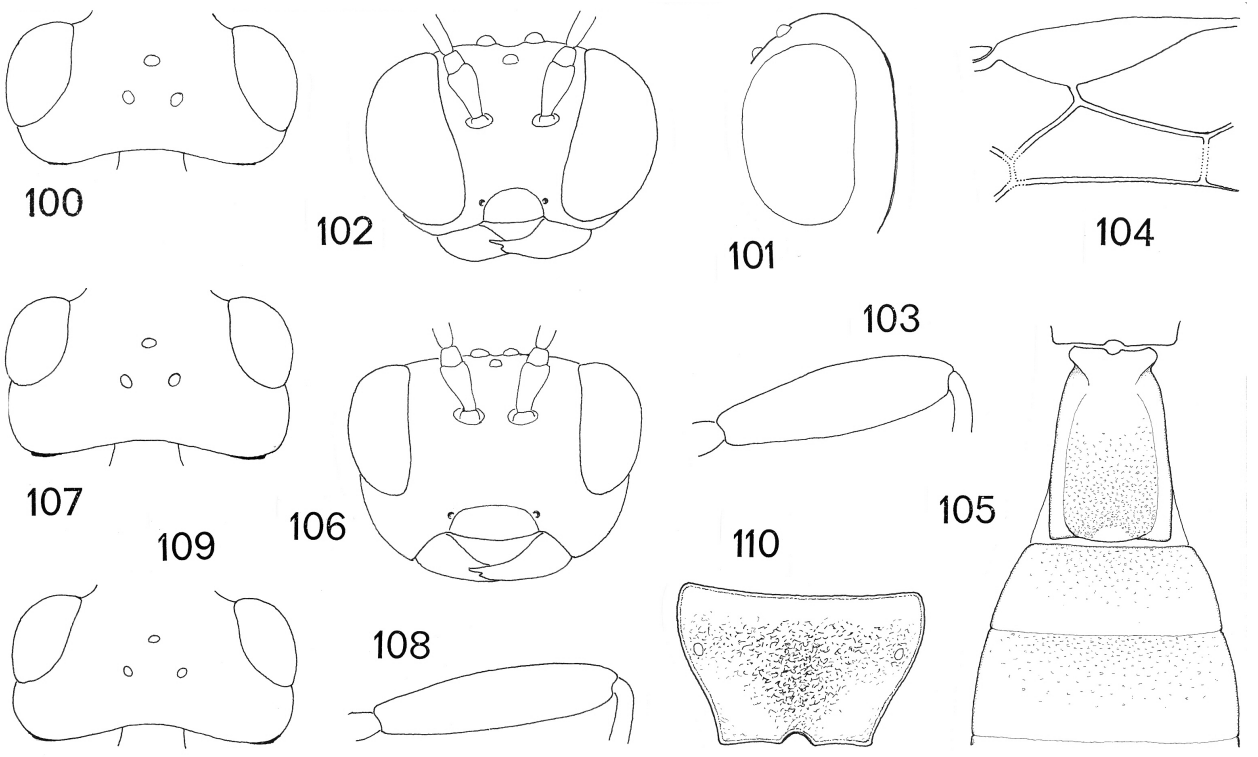
Microchelonus halperini n. sp. is likewise related to two recently described species: *M. falcovichi* Tobias and *M. Testaceus* Tobias (Tobias, 2001: 167–169). These two species differ from *M. halperini* as follows:

Distinction between *M. halperini* and *M. falcovichi*

1. Propodeum without transverse carina. POL somewhat shorter than OOL (Fig. 89). Pterostigma wide, 2.1 times as long as wide, *r* only a bit longer than *3–SR* (Fig. 93). Temple in dorsal view 0.65 times as long as eye (Fig. 89). Carapace in dorsal view 1.6 times as long as broad posteriorly (Fig. 94), in lateral view 2.3 times as long as high posteriorly (Fig. 95, arrows). Mesosoma rusty brown, propodeum black. ♀: 3.6 mm (Israel) ..... ***M. halperini* n. sp.**
-. Propodeum with distinct transverse carina. POL twice as long as OOL (Tobias, 2001: 167, Fig. 5). Pterostigma narrower, 2.8 times as long as wide, *3–SR* somewhat longer than *r* (Tobias, 2001: 167, Fig. 6). Temple in dorsal view 0.8 times as long as eye. Carapace in dorsal view 1.8 times as long as broad (Tobias, 2001: 167, Fig. 7), in lateral view three times as long as high posteriorly. Mesosoma anteriorly reddish-yellow, posteriorly dark brown.♀: 3.2 mm (Uzbekistan) ..... ***M. falcovichi* Tobias, 2001**

Distinction between *M. halperini* and *M. testaceus* (propodeum of both species without transverse carina)

1. Pterostigma wide, 2.1 times as long as wide, brown (Fig. 93). Ocelli forming a less low triangle, POL somewhat shorter than OOL (Fig. 89). Carapace in dorsal view 1.6 times as long as broad (Fig. 94), in lateral view 2.3 times as long as high posteriorly (Fig. 95). Vertex with very fine and weak sculpture, dull to subshiny (Fig. 89). Meso-



Figs. 100–110. Characters of *Opius (Phaedrotoma) and O. (Pendopius)* spp. Figs. 100–105. *O. (P.) ocuvergens* n. sp. 100. Head in dorsal view. 101. Head in lateral view. 102. Head in frontal view. 103. Hind femur. 104. Distal part of right fore wing. 105. Tergites 1–3. Figs. 106–108. *O. (P.) depeculator* Foerster. 106. Head in frontal view. 107. Head in dorsal view. 108. Hind femur. Figs. 109, 110. *O. (P.) exilis* Haliday. 109. Head in dorsal view. 110. Propodeum.

soma rusty-brown, propodeum black, carapace black and anteriorly with transverse pale yellow band. ♀: 3.6 mm (Israel)..... ***M. halperini*** **n. sp.**

-. Pterostigma less wide, three times as long as wide, yellow (Tobias, 2001: 167, Fig. 4). Ocelli forming low triangle, POL twice as long as OOL (Tobias, 2001: 167, Fig. 3). Carapace in dorsal view 1.8 times as long as broad, in lateral view three times as long as high posteriorly. Vertex with weak and transverse rugosity, less shiny. Mesosoma and carapace brownish-yellow to yellowish-brown. ♀: 2.6 mm (Turkmenia) .... ***M. testaceus*** **Tobias, 2001**

Etymology

The new species is dedicated to its collector, the late Dr. J. Halperin, a forest entomologist and a resolute explorer of the insect fauna of Israel.

OPIINAE

Opius (Phaedrotoma) ocuvergens Papp, n. sp.

(Figs. 100–105)

Description of the Male Holotype

Body 1.7 mm long. Antenna somewhat longer than body and with 21 (right antenna) and 22 (left antenna) antennomeres. First flagellomere almost 4 times as long as broad apically, further flagellomeres gradually shortening so that penultimate flagellomere 2.5 times as long as broad.

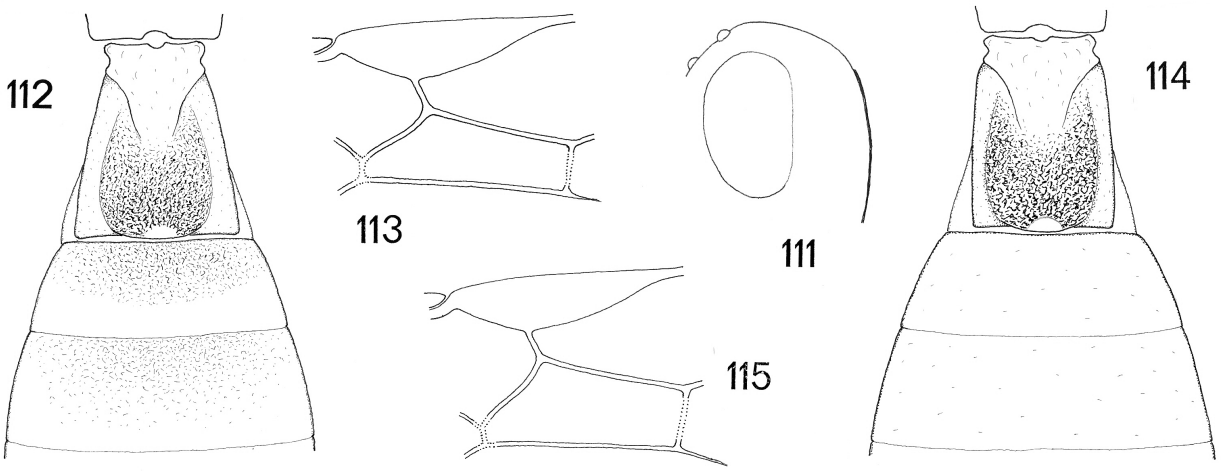
Head in dorsal view transverse (Fig. 100), twice as broad as long, eye 4 times as long as temple, temple receded. Ocelli rather small, elliptic, and forming high triangle, OOL nearly twice as long as POL (Fig. 100). Eye in lateral view large, 1.6 times as high as wide and just less than three times as wide as temple (Fig. 101). In frontal view medial margin of eyes convergent ventrally (Fig. 102). Mandible basally convex, i.e., not angular. Mouth open, i.e., mandible not touching clypeus. Maxillar palpus about as long as height of head. Head polished.

Mesosoma in lateral view 1.6 times as long as high, polished. Pronope, notaulix (also on declivous part of mesoscutum), prescutellar dimple and precoxal suture missing. Propodeum entirely polished. Hind femur 3.3 times as long as broad medially (Fig. 103). Hind tibia and tarsus equal in length.

Fore wing about one-fifth longer than body. Pterostigma (Fig. 104) five times as long as wide and issuing *r* proximally from its middle, *r* nearly 0.4 times as long as width of pterostigma; *3–SR* almost 1.4 times as long as *2–SR*, *SR1* twice as long as *3–SR* and reaching tip of wing.

Tergite 1 (Fig. 105) 1.5 times as long as broad posteriorly, moderately broadening posteriorly, shagreened and subshiny. Tergites 2–3 finely (i.e., weakly visible) shagreened (Fig. 105), together with rest of tergites shiny to polished.

Antenna brown. Head and mesosoma black with very weak brownish tint. Palpi



Figs. 111–115. Characters of *Opius (Phaedrotoma) and O. (Pendopius)* spp. Figs. 111–113. *O.(P.) depeculator* Foerster. 111. Head in lateral view. 112. Tergites 1–3. 113. Distal part of right fore wing. Figs. 114, 115. *O. (P.) exilis* Haliday. 114. tergites 1–3. 115. Distal part of right fore wing.

ochre, mandible brown. Mesosoma brown, tegula brownish-yellow. Legs yellow, coxae pale yellow, fifth tarsomeres brownish. Wings hyaline, pterostigma brown, veins light brown to brownish.

Female and host unknown.

Material Examined

Holotype ♂: Israel, Hofit, May 1981. Argaman. The holotype is in good condition, glued onto a pointed card by its right legs, right hind wing somewhat less visible owing to its mounting, and tibia and tarsus of left hind leg missing. The holotype is deposited in TAUI.

Distribution

Israel.

Differential Diagnosis

Within the subgenus *Phaedrotoma* the new species, *Opius (Ph.) ocuvergens*, is closest to *Opius depeculator* Foerster based on their elongate mesosoma and sculptured tergites 2–3. The males of the two species differ as follows:

1. Medial margin of eyes parallel (Fig. 106). Temple in dorsal view moderately rounded, eye one-fourth longer than temple (Fig. 107); in lateral view eye somewhat wider than temple (Fig. 111). Antenna with 25–26 antennomeres, occasionally 22. Tergite 1 1.1–1.3 times longer than broad posteriorly (Fig. 112). Hind femur (3.6–)4 times as long as broad medially (Fig. 108). Tergites 2–3 variably shagreened to rugulose (Fig. 112). Fore wing: *r* half as long as width of pterostigma, *3–SR* 1.8–2 times as long as *2–SR* (Fig. 113). Mesosoma black. ♂: 1.8–2.2 mm (Palaearctic region, common in Europe).....***O. (Phaedrotoma) depeculator*** Foerster, 1862

-. Medial margin of eyes convergent ventrally (Fig. 102). Temple in dorsal view receded, eye 4 times longer than temple (Fig. 100); in lateral view eye almost 3 times as wide as temple (Fig. 101). Antenna with 21–22 antennomeres. Tergite 1 1.5 times as long as broad posteriorly (Fig. 105). Hind femur 3.3 times as long as broad medially (Fig. 103). Tergites 2–3 very finely (i.e., weakly visible) shagreened (Fig. 105). Fore wing: *r* less than half as long as width of pterostigma, *3–SR* almost 1.4 times as long as *2–SR* (Fig. 104). Mesosoma brown. ♂: 1.7 mm (Israel)..... ..... ***O. (Phaedrotoma) ocuvergens* n. sp.**

Disregarding the extremely weak sculpture of tergites 2–3 of the new species, *Opius ocuvergens* runs to the subgenus *Pendopius* in view of its elongate mesosoma (cf. Fischer, 1972: 67–71, 409–416), within this subgenus the nearest species is *Opius exilis* Haliday; the new species differs from *O. exilis* as follows:

1. Medial margin of eyes parallel (cf. Fig. 106). Eye in dorsal view less than1.3 times as long as temple, temple rounded (Fig. 109). Tergite 1 subparallel-sided, rugose-rugulose, tergites 2–3 polished (Fig. 114). Fore wing: second submarginal cell relatively wide, *3–SR* 1.7–1.8 times as long as *2–SR*, *r* almost half as long as width of pterostigma (Fig. 115). Antenna with 24–26 antennomeres. Propodeum laterally

weakening rugulose as in Fig. 110. Mesosoma brownish-black to black. ♂: 1.8–2 mm (Palaearctic region, in Europe fairly common) ..... ***O. (Pendopius) exilis* Haliday, 1837**

-. Medial margin of eyes convergent ventrally (Fig. 102). Eye in dorsal view four times longer than temple, temple receded (Fig. 100). Tergite 1 weakly broadening posteriorly, shagreened and subshiny, tergites 2–3 very weakly shagreened, shiny (Fig. 105). Fore wing: second submarginal cell relatively narrow, 3–SR almost 1.4 times as long as *2–SR*, *r* very short (Fig. 104). Antenna with 21–22 antennomeres. Propodeum polished. Mesosoma brown. ♂: 1.7 mm (Israel) ..... ***O. (Phaedrotoma) ocuvergens* n. sp.**

Etymology

The species name "ocuvergens" is an abbreviation of oculoconvergens; it refers to the ventrally convergent medial margin of eyes, a unique feature among the *Opius (Phaedrotoma/Pendopius)* species in the western Palaearctic region.

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