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On the Staphylinidae of Israel II, with a revision of some species of *Dinusa* SAULCY (Insecta: Coleoptera)

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A b s t r a c t : The results of extensive pitfall trap studies conducted in Israel in 2010 and 2011 are presented, and material of some species of Dinusa SAULCY, 1865 is revised. Records of zoogeographic interest of 49 species are reported, among them 25 first records from Israel, three from Jordan, three from Iraq, one from Syria, one from Egypt, and one from Malta. Three species of Paederinae and Aleocharinae from Israel and one species of Aleocharinae from southern Turkey are described and illustrated: Astenus (Eurysunius) affimbriatus nov.sp. (Israel: Hula valley), Pseudosemiris torta nov.sp. (Israel: numerous localities), Geostiba (Sibiota) meronica nov.sp. (Israel: Mount Meron), and Dinusa subangulata nov.sp. (Turkey: Gaziantep). The distributions of Astenus affimbriatus and Pseudosemiris torta are mapped. Astenus (Eurysunius) platynotus (SAULCY, 1865) is redescribed and illustrated. Neotypes are designated for Sunius platynotus SAULCY, 1865 and Dinusa jebusaea SAULCY, 1865. Lectotypes are designated for Dinusa hierosolymata SAULCY, 1865, D. particeps ABEILLE DE PERRIN, 1896, and D. angulicollis FAUVEL, 1886. The following taxonomic and nomenclatural acts are proposed: Quedius josue SAULCY, 1865 = Q. troodites FAGEL, 1968, nov.syn.; Dinusa hierosolymata SAULCY, 1865 = D. saulcyi ABEILLE DE PERRIN, 1896, nov.syn.; Dinusa jebusaea SAULCY, 1865 = D. particeps ABEILLE DE PERRIN, 1896, nov.syn.; Notothecta hipponensis (FAUVEL, 1886), nov.comb. (ex Dinusa). Dinusa santschii WASMANN, 1912 from Tunisia is excluded from Dinusa and tentatively moved to Cypha LEACH, 1819. Dinusa now contains eight myrmecophilous species associated with harvester ants (Messor spp.) and distributed in the East Mediterranean from southern Greece across Turkey to the Middle East. A checklist of the named species of Dinusa is provided.

K e y w o r d s : Coleoptera, Staphylinidae, *Dinusa, Pseudosemiris, Geostiba, Astenus*, Palaearctic region, East Mediterranean, Middle East, Israel, Jordan, taxonomy, neotype designations, lectotype designations, new species, new combination, redescriptions, new records, distribution map, checklist, myrmecophily.

Introduction

The poorly studied Staphylinidae fauna of Israel previously comprised only some 300 species (ASSING & FELDMANN 2012). Owing to its geographic situation in the East Mediterranean region, its topological and ecological diversity, however, Israel can be expected to host at least three times as many species. Numerous widespread West Palaearctic and Mediterranean Staphylinidae should be represented in the fauna of this country, but have not yet been reported from there.

The present study is primarily based on numerous samples containing staphylinid bycatches from pitfall trap studies conducted in various localities in Israel in 2010-2011, which had kindly been offered to me by Claudia Drees, University of Hamburg. Aside from thousands of specimens of common species such as *Aleochara sparsa* HEER, 1839 and *Atheta mucronata* (KRAATZ, 1859), which had evidently been attracted by the ethanol in the pitfall traps, the samples included also a considerable number of more interesting species. Additional material considered in this study was collected by Heinrich Meybohm (Großhansdorf) in Jordan, was communicated to me by Benedikt Feldmann (Münster), or came from other collections. Aside from the discovery of (at least) three undescribed species, this material yielded numerous records of zoogeographic significance, among them 34 new country records from Israel (25), Jordan (3), Iraq (3), Syria (1), Egypt (1), and Malta (1).

The myrmecophilous oxypodine genus *Dinusa* SAULCY, 1865 was previously represented by eleven named species distributed in the East Mediterranean (ASSING 2013b, c; SMETANA 2004). Seven species from the Middle East and from North Africa have never been subject to a modern revision and their sexual characters have never been illustrated, which renders a reliable identification of *Dinusa* from these regions virtually impossible. In order to clarify the taxonomy of these taxa, type and non-type material from various collections was studied.

Material and measurements

The material t	reated in this paper is deposited in the following collections:
IRSNB	. Institut Royal des Sciences Naturelles de Belgique, Bruxelles (Y. Gérard)
MNHNP	. Muséum National d'Histoire Naturelle, Paris (A. Taghavian)
MNHUB	. Museum für Naturkunde der Humboldt-Universität Berlin (J. Frisch, J. Willers)
TAU	National Museum of Natural History, Tel Aviv University (A. Freidberg, via B. Feldmann)
cAss	author's private collection
cFel	. private collection Benedikt Feldmann, Münster
cSch	private collection Michael Schülke, Berlin

cZan private collection Adriano Zanetti, Verona

Material of numerous species not listed in the results sections is deposited in the collections of the MNHUB.

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). Some of the images of the habitus, the forebody, the antennae, and the abdomen were created using a photographing device constructed by Arved Lompe (Nienburg) and CombineZ software. For the remaining photographs a digital camera (Nikon Coolpix 995) was used. The map was created using MapCreator 2.0 (primap) software.

Head length was measured from the anterior margin of the clypeus (Aleocharinae) or from the anterior margin of the frons (Paederinae) to the posterior margin of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, total length from the anterior margin of the mandibles (in resting position) to the apex of the abdomen, the length of the forebody from the anterior margin of the mandi-

bles to the posterior margin of the elytra, and the length of (the median lobe of) the aedeagus from the apex of the ventral process to the base of the aedeagal capsule. The side of the aedeagus with the sperm duct opening is referred to as the ventral, the opposite side as the dorsal aspect.

Results

Species descriptions and records of special zoogeographic interest

Aside from the (re-)descriptions, this section focuses on new country records, records of more or less locally endemic species, and records that are of interest for other reasons. Numerous additional species were seen, but are not listed as they were already known from Israel and are either widespread or common in the East Mediterranean region.

Micropeplus porcatus (PAYKULL, 1789)

M a t e r i a l e x a m i n e d : Israel: 1 Å, Nahal Tavor N.R., 32°37'N, 35°33'E, -220 m, stream bank, 21.II.2011, leg. Drees (cAss).

C o m m e n t : *Micropeplus porcatus* is widespread in the Palaearctic region, but was previously unknown from Israel (SMETANA 2004).

Mimogonus fumator (FAUVEL, 1889)

M a t e r i a l e x a m i n e d : <u>Israel:</u> l ex., Ma'agan, 32°43'N, 35°35'E, -210 m, tamarisk plain, 16.VII.2010, leg. Drees (cAss).

C o m m e n t : This species was only recently reported from Israel for the first time (Assing & Feldmann 2012).

Omalium saulcyi FAUVEL, 1875

M a t e r i a l e x a m i n e d : <u>Israel:</u> 3♂♂, 2♀♀, Har Hermon, 33°18'N, 35°46'E, 1780 m, Sslope, pitfall, 2.IV.2011, leg. Drees (cAss, cZan). <u>Jordan:</u> 2♀♀, Irbid, Zubia, 32°26'N, 35°46'N, 600-840 m, 22.II.2014, leg. Meybohm (cAss).

C o m m e n t : *Omalium saulcyi* is a rare species previously known from Greece, Cyprus, Turkey, Syria, and West Bank (SMETANA 2004; ZANETTI 2002). The above specimens represent the first records from Israel and Jordan.

Omalium schuberti ZANETTI, 2002

M a t e r i a l e x a m i n e d : <u>Israel:</u> 3♂♂, 1♀, Har Hermon, 33°18'N, 35°46'E, 1780 m, S-slope, pitfall, 2.IV.2011, leg. Drees (cAss); 1♀, Har Hermon, 33°18'N, 35°47'E, 2000 m, doline, pitfall, 13.XI.2010, leg. Drees (cAss).

C o m m e n t : The previously known distribution of *O. schuberti* was confined to Turkey, where this species is widespread but rather uncommon (ASSING 2009a, 2013a; ZANETTI 2002). The above specimens represent the first records from Israel.

Phyllodrepa devillei (BERNHAUER, 1902)

M a t e r i a l e x a m i n e d : Israel: 1♂ [det. Zanetti], Har Meron, 30°00'N, 35°25'E, 1110 m, forest, pitfall, 24.IV.2010 leg. Drees (cAss).

C o m m e n t : The previously known, vast distribution of *P. devillei* ranged from Turkey to the Faroe Islands and Madeira (JÁSZAY & HLAVÁČ 2006). The above specimen expands the distribution southeastwards and represents the first record from Israel.

Aphaenostemmus rhodicus Assing, 2006

M a t e r i a l e x a m i n e d : Israel: 1 \overline, En Avedat, 700 m, spring, 24.IV.2011, leg. Drees (cAss).

C o m m e n t : *Aphaenostemmus rhodicus* was originally described from Rhodos and subsequently reported also from Antalya, southwestern Anatolia (ASSING 2013b). The above first record from Israel suggests that the species is widespread in the East Mediterranean.

Carpelimus transversicollis (SCHEERPELTZ, 1947)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂ [det. Gildenkov], Wadi Kelt, St. George Monastery, 31°50'N, 35°24'E, -110 m, moist spots on sandy soil, 15.III.2011, leg. Meybohm (cAss).

C o m m e n t : According to SMETANA (2004), *C. transversicollis* is widspread in the East Mediterranean, but was previously unknown from Israel. The above specimen was recorded as *Carpelimus* sp. 2 in ASSING & FELDMANN (2012).

Coprophilus cf. rufipennis (REITTER, 1894)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 \bigcirc , Mizpe Ramon, 800 m, 24.II.2011, leg. Drees (cAss); 2 exs. [det. Feldmann], Negev, Dimona env., 31°03'N, 35°00'E, 55 m, 28.II.2005, leg. Starke (cFel); 3 exs. [det. Feldmann], Negev, S Be'er Sheva, Giv'at Khablanim, 6.XII.2007, leg. Aßmann (cFel).

C o m m e n t : According to SMETANA (2004), *C. rufipennis* has been recorded from Middle Asia, South Russia, and Iran. The type material of this species was not examined, so that the identification should be regarded as tentative.

Acanthoglossa orientis (FAUVEL, 1873)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 ♀, N Har Meron, Ziv'on, 800 m, pitfall, 1.IV.2011, leg. Drees (cAss). <u>Jordan:</u> 1 ♀, Ajlun, Ajlun Castle, 32°20'N, 35°43'E, 980 m, 21.II.2014, leg. Meybohm (cAss); 2♂♂, 1♀, Irbid, Zubia, 32°26'N, 35°46'N, 600-840 m, 22.II.2014, leg. Meybohm (cAss).

C o m m e n t : The previously known distribution of *A. orientis* was confined to few localities in Israel and Lebanon (ASSING 2009b). The above specimens from Jordan represent new country records.

Astenus nigromaculatus (MOTSCHULSKY, 1858)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, Ma'agar Yeroham, 450 m, pitfall, 30°59'N, 34°54'E, 14.III.2011, leg. Drees (cAss).

C o m m e n t : According to SMETANA (2004), this species is widespread in the Mediterranean region, but was previously unknown from Israel.

Astenus (Eurysunius) platynotus (SAULCY, 1865) (Figs 1-9)

Sunius platynotus SAULCY, 1865b: 653.

T y p e m a t e r i a l e x a m i n e d : <u>Neotype δ , present designation</u>: "Jerusalem Pal. P. Nadar / platynotus Saulcy / Neotypus δ *Sunius platynotus* Saulcy, desig. V. Assing 2014 / Astenus platynotus (Saulcy), det. V. Assing 2014" (MNHNP).

A d d i t i o n a l m a t e r i a l e x a m i n e d : <u>West Bank:</u> 3 ざ ざ, same data as neotype (MNHNP). <u>Israel:</u> 1 ざ, N-Golan, Mount Hermon Reserve, 1100-1400 m, 16.IV.1987, leg. Heinz (cAss).

C o m m e n t : The original description of *A. platynotus* is based on "Un seul mâle, trouvé a Naplouse [= Nablus]" (SAULCY 1865b). According to the curator in charge at the MNHNP, where the Saulcy collection is housed (HORN et al. 1990), a careful search for the holotype proved unsuccessful; it yielded only four non-type specimens in the Jarrige collection (TAGHAVIAN e-mail 27 May, 2014). Thus, like many other types of species described by Saulcy, the holotype of *A. platynotus* is most likely lost. This species belongs to a group of very similar, possibly myrmecophilous species, at least three of which are represented in Israel. In the interest of the stability of nomenclature, therefore, one of the four males from Nablus in the Jarrige collection is designated as the neotype. The specimen is in agreement with the original description and was collected only some 50 km from the original type locality of *A. platynotus*.

R e d e s c r i p t i o n : Body length 3.6-4.8 mm; length of forebody 2.0-2.5 mm. Habitus as in Fig. 1. Coloration: body black, with the posterior margins of the elytra occasionally indistinctly and narrowly paler; legs dark-yellowish; antennae reddish.

Head (Fig. 2) 1.15-1.20 times as broad as long; posterior margin strongly concave; punctation shallow, very dense, and umbilicate; interstices reduced to narrow ridges. Eyes approximately as long as postocular region. Antenna (Fig. 3) 1.1-1.2 mm long; antennomeres IV-X of distinctly conical shape and very weakly oblong.

Pronotum (Fig. 2) approximately as broad as long and 0.9 times as broad as head, laterally or antero-laterally usually with a very shallow impression on either side; lateral margins straight to weakly convex in dorsal view, distinctly converging posteriad; anterior and posterior angles each with a long black seta (often broken off) of approximately half the length of lateral margin; posterior margin convexly produced in the middle; punctation similar to that of head.

Elytra (Fig. 2) 0.62-0.66 times as long as pronotum; humeral angles moderately marked; punctation distinctly granulose; interstices glossy. Hind wings completely reduced.

Abdomen 1.00-1.10 times as broad as elytra; punctation very dense on anterior tergites, gradually decreasing in density from tergite III to tergite VIII, moderately dense on tergites VII and VIII; posterior margin of tergite VII with narrow rudiment of a palisade fringe.

 δ : sternite VIII shaped as in Fig. 4; aedeagus approximately 0.7 mm long, shaped as in Figs 5-9.

Distribution and natural history: The confirmed distribution is confined to Israel and West Bank. The species has been reported also from Lebanon (SMETANA 2004), but this record requires revision. The external morphology (broad body; short antennae) suggests that *A. platynotus* may be associated with ants of the genus *Tetramorium* MAYR, 1855.





Figs 1-9: *Astenus platynotus* (SAULCY) (**1-6**: neotype; **7-9**: male from Mt. Hermon): (**1**) habitus; (**2**) forebody; (**3**) antenna; (**4**) male sternite VIII; (**5**, **8**) aedeagus in lateral view; (**6**, **9**) apical portion of aedeagus in ventral view; (**7**) apical portion of aedeagus in lateral view. Scale bars: 1-2: 1.0 mm; 3-6, 8-9: 0.2 mm; 7: 0.1 mm.





Figs 10-16: Astenus affimbriatus nov.sp.: (10) habitus; (11) forebody; (12) head; (13) male sternite VIII; (14) aedeagus in lateral view; (15) apical portion of aedeagus in ventral view; (16) apical portion of aedeagus in lateral view. Scale bars: 10-12: 1.0 mm; 13-15: 0.2 mm; 16: 0.1 mm.

Astenus (Eurysunius) affimbriatus nov.sp. (Figs 10-16, Map 1)

T y p e m a t e r i a l : <u>Holotype \vec{c} </u>: "ISRAEL - Hula N.R., 33°04'N, 35°36'E, 65 m, shore of pond, 27.IV.2010, C. Drees / Holotypus \vec{c} Astenus affimbriatus sp. n. det. V. Assing 2014" (cAss).

E t y m o l o g y : The specific epithet (Latin, adjective) alludes to the absence of a palisade fringe at the posterior margin of the male tergite VII.

D e s c r i p t i o n : Body length 5.3 mm; length of forebody 2.3 mm. Habitus as in Fig.

10. Coloration: body black; legs and antennae dark-brown. (Note that the holotype has apparently been subject to post-mortem darkening.).

Head (Figs 11-12) approximately 1.2 times as broad as long; posterior margin strongly concave; antero-median dorsal portion somewhat elevated, on either side of this elevation with oval impression; punctation shallow, very dense, and umbilicate; interstices reduced to narrow ridges. Eyes approximately as long as postocular region. Antenna (Fig. 12) 1.0 mm long; antennomeres IV-X distinctly conical, very weakly oblong, nearly as broad as long.

Pronotum (Fig. 11) approximately as broad as long and 0.9 times as broad as head, laterally shallowly impressed on either side; lateral margins straight, distinctly converging posteriad in dorsal view; anterior and posterior angles each with a seta (broken off in the holotype); punctation similar to that of head.

Elytra (Fig. 11) short, 0.58 times as long as pronotum; humeral angles moderately marked; punctation distinctly granulose; interstices glossy. Hind wings completely reduced.

Abdomen approximately as broad as elytra; punctation very dense on anterior tergites, gradually decreasing in density from tergite III to tergite VIII, moderately dense on tergites VII and VIII; posterior margin of tergite VII without palisade fringe.

♂: sternite VIII shaped as in Fig. 13; aedeagus 0.65 mm long, shaped as in Figs 14-16.

C o m p a r a t i v e n o t e s: From the similar and geographically close *A*. *platynotus*, the new species differs by the more slender body, the even shorter antennae, the shorter elytra, the absence of a palisade fringe at the posterior margin of tergite VII, and by the shape of the ventral process of the aedeagus (apically more slender and with longer dorsal carina in lateral view and subapically broader in ventral view).

D is tribution and natural his tory: The type locality is situated in the Hula valley in northern Israel (Map 1). The holotype was collected with a pitfall trap near the edge of a pond at an altitude of only 65 m. It seems likely that, like many consubgeners of similar habitus, the species is associated with ants of the genus *Tetramorium*.

Astenus (Eurysunius) sp.

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 ç, Hermon, 33°18'N, 35°47'E, 1900 m, 20.IV.2005, leg. Aßmann (cFel).

C o m m e n t : The above female probably represents an undescribed species. In external characters it is similar to *A. platynotus* and *A. affimbriatus*, but differs by distinctly paler coloration (head reddish-brown; pronotum reddish; elytra with the humeral angles and the posterior margins broadly yellowish-red).

Platyprosopus bagdadensis STIERLIN, 1867

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 \overlineq, Sede Boqer range, 30°51'N, 34°46'E, 500 m, wadi, 15.XI.2010, leg. Drees (cAss); 1 \overlineq [det. Feldmann], Sea of Galilee, Capernaum, Jordan river, 32°54'N, 35°37'E, -198 m, 5.III.2009, leg. Starke (cFel); 1 \overlineq [det. Feldmann], Upper Galilee, Jordan river, river bank, 26.III.2008, leg Aßmann (cFel).

C o m m e n t : According to SMETANA (2004), this species is widespread in the East Mediterranean and the Caucasus region, but was previously unknown from Israel.

Stenistoderus turcicus (COIFFAIT, 1956)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 Å, Berekhat Ya'ar, 32°25'N, 34°45'E, 10 m, shore of pond, pitfall, 17.III.2010, leg. Drees (cAss).

C o m m e n t : This species was previously known from Greece, Bulgaria, and Turkey (ASSING 2007a; SMETANA 2004). The above male represents the first record from Israel.

Xantholinus sidonensis COIFFAIT, 1956

M a t e r i a l e x a m i n e d : <u>Israel:</u> 13, 2 km NW Gesher, 32°38'N, 35°31'E, 250 m, pitfall, 21.II.2011, leg. Drees (cAss); 13 [det. Feldmann], Upper Galilee, Hurfeish, 33°01'N, 35°21'E, ca. 670 m, open land, pitfall, 13.XI.2005 (cFel)

C o m m e n t : Confirmed records of this species are known only from Lebanon and Israel, from where a single male was reported recently (AssING 2007a).

Xantholinus oronticus COIFFAIT, 1956

M a t e r i a l e x a m i n e d : <u>Israel:</u> 2♂♂, 2 km NW Gesher, 32°38'N, 35°31'E, 250 m, pitfall, 21.II.2011, leg. Drees (cAss).

C o m m e n t : *Xantholinus oronticus* was only recently reported from Israel for the first time (ASSING 2007a).

Bisnius sp.

M a t e r i a l e x a m i n e d : Israel: 1♂, Pura N.R., 31°30'N, 34°47'E, 210 m, grassland, pitfall, 19.IV.2010, leg. Drees (cAss); 1♀, same data, but 1.IV.2010 (cAss); 1♀, same data, but 2.VIII.2010 (cAss); 1♂, same data, but 18.IV.2010 (cAss).

C o m m e n t : According to Harald Schillhammer (Vienna), this species is allied to *Bisnius batkhizensis* (COIFFAIT, 1967) from Turkmenistan and *B. bucharensis* (COIFFAIT, 1967), also from Middle Asia (Kyrgyzstan, Tajikistan, Uzbekistan). Based on a study of type material, it is not conspecific with the latter (SCHILLHAMMER pers. comm.).

Philonthus flavocinctus MOTSCHULSKY, 1858

M a t e r i a l e x a m i n e d : Israel: $2\delta\delta$ [identified by Lubomir Hromádka], Nahal Tavor N.R., $32^{\circ}37'N$, $35^{\circ}33'E$, -220 m, stream bank, 10.V.2010, leg. Drees (cAss, Hro); $4\delta\delta$, $5\varphi\varphi$, same data, but 26.IV.2010 (cAss, cFel); 1φ , Nahal Qidron, $31^{\circ}40'N$, $35^{\circ}26'E$, -370 m, 2.XII.2010, leg. Drees (cAss); 1φ , same data, but 16.III.2011 (cAss).

C o m m e n t : *Philonthus flavocinctus* was originally described from "Indes orientalis" (probably Myanmar) and subsequently recorded from numerous localities in the Oriental region and from the south of the East Palaearctic, as well as from Sudan and from Réunion in the Afrotropical region (HROMÁDKA 2012, SMETANA 2004). This species was previously unknown from Israel.

Quedius ochripennis (MENETRIES, 1832)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, Har Hermon, 33°18'N, 35°47'E, 2000 m, doline, pitfall, 13.XI.2010, leg. Drees (cAss); 1♀, Har Hermon, 33°18'N, 35°46'E, 1780 m, S-slope, pitfall, 13.XI.2010, leg. Drees (cAss).

C o m m e n t : This species was only recently recorded from Israel for the first time (Assing 2007e).

Quedius problematicus FAGEL, 1965

M a t e r i a l e x a m i n e d : Israel: 1♂, Har Meron, 33°00'N, 35°25'E, 1110 m, forest, pitfall, 31.I.2011, leg. Drees (cAss); 1♂, 1♀, same data, but 11.V.2010 (cAss); 1♂, same data, but 17.XII.2011 (cAss); 1♂, Nahal Keziv, 33°03'N, 35°13'E, 190 m, forest, pitfall, 27.IV.2010, leg. Drees (cAss); 1♂ [det. Feldmann], Upper Galilee, near Meron, 33°01'N, 35°24'E, flight interception trap, 15.V.-5.VI.2007, leg. Buse (cFel).

C o m m e n t : The distribution of *Q. problematicus* is confined to Lebanon and Israel (SMETANA 2004).

Quedius hermonensis COIFFAIT, 1963

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, 3♀♀, Hula N.R., 33°04'N, 35°36'E, 65 m, shore of pond, 8.IV.2010, leg. Drees (cAss); 2♂♂, same data, but 30.I.2011 (cAss). <u>Iraq:</u> 8 exs. [det. Feldmann and Solodovnikov], Rawanduz env., 36°30'N, 44°36'E, 1200-1400 m, pitfall, XI.2007-III.2008, leg. Reuter (cFel).

C o m m e n t : *Quedius hermonensis* was previously known only from Lebanon and Israel (SMETANA 2004). The above specimens from Iraq represent a new country record.

Quedius semiaeneus (STEPHENS, 1833)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, Berekhat Ya'ar, 32°25'N, 34°45'E, 10 m, shore of pond, pitfall, 22.II.2011, leg. Drees (cAss).

C o m m e n t : According to SMETANA (2004), this widespread and common species was previously unknown from Israel.

Quedius josue SAULCY, 1865

Quedius josue SAULCY, 1865b: 636 f. *Quedius troodites* FAGEL, 1968: 7 ff.; **nov.syn.**

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, Carmel, Nahal Oren, 32°43'N, 35°00'E, 150 m, pitfall, 4.IV.2010, leg. Drees (cAss); 3 ex. [det. Feldmann], Upper Galilee, Meron env., 33°01'N, 35°24'E, flight interception trap, 15.V.-5.VI.2007, leg. Buse (cFel). <u>Iraq:</u> 12 exs. [det. Feldmann & Solodovnikov], Rawanduz env., 36°30'N, 44°36'E, 1400 m, pitfall, 14.-22.XI.2007, leg. Reuter (cFel).

C o m m e n t : The original description of *Quedius josue* is based on a single female from "Arag-el-Emir" (SAULCY 1865), today Iraq al Amir $(31^{\circ}55'N, 35^{\circ}45'E)$ in Jordan, that of *Q. troodites* FAGEL, 1968 on a male holotype from "Chypre: Mt. Troodos, vers le sommet" (FAGEL 1968). In the introduction to the description of *Q. troodites*, FAGEL (1968) states that this species is highly similar to *Q. josue*, that it possibly represents a "race insulaire", and that "seul un abondant matériel pourra permettre de trancher la question".

An examination of numerous specimens previously identified as *Q. troodites* from Cyprus, many of them from Troodos (see ASSING & WUNDERLE 2001), and *Q. josue* from central southern Anatolia and Israel revealed no significant differences in the morphology of the aedeagus whatsoever. The shape of the apex of the median lobe and the arrangement of the peg-setae on the paramere are subject to some variation, but the extremes are linked by transitional conditions. Consequently, *Q. troodites* is placed in synonymy with the senior name *Q. josue*.

The previously known distribution of *Q. josue* included Cyprus, central southern Turkey, Lebanon, Israel, and Jordan. The above specimens from Iraq represent a new country record.

Quedius macchabaeus SAULCY, 1865

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 ♂ [det. Solodovnikov], <u>H</u>ermon, 33°18'N, 35°47'E, 1900 m, 20.IV.2005, leg. Aßmann (cFel). <u>Egypt:</u> 2 ♂ ♂, 1 ♀ [det. Feldmann], Sinai, Musa, Wadi Shagg, 6.XII.2010, leg. Aßmann (cFel).

C o m m e n t : This species had been recorded from Iran, Israel, Lebanon, Syria, and Turkey (SMETANA 2004). The above specimens from Sinai represent the first record from Egypt.

Ocypus syriacus syriacus BAUDI DI SELVE, 1848

M a t e r i a l e x a m i n e d : <u>Israel:</u> $2\delta\delta$, Carmel, Nahal Oren, $32^{\circ}43'N$, $34^{\circ}59'E$, 125 m, pitfall, 22.II.2011, leg. Drees (cAss); 1δ , Kohov Yahir, pitfall, 25.II.2010, leg. Friedman & Drees (cAss); $3\varphi\varphi$, 2 km NW Gesher, $32^{\circ}38'N$, $35^{\circ}31'E$, 250 m, pitfall, 30.I.2011, leg. Drees (cAss); 1δ , same data, but 7.IV.2010 (cAss); 1δ , same data, but 21.II.2011 (cAss); 8 exs. [det. Feldmann], Upper Galilee, Ha Khula Valley, Ma'ager Einan lake, $33^{\circ}05'N$, $35^{\circ}35'E$, 70 m, moist loamy soil, 1.-2.V.2006, leg. Wrase (cFel, cSch).

C o m m e n t : According to SMETANA (2004), the distribution of this flightless subspecies ranges from Ukraine to Lebanon and Syria. The above material represents the first records from Israel.

Platydracus kasyi (SCHEERPELTZ, 1962)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 ♂, Har Hermon, 33°18'N, 35°46'E, 1780 m, S-slope, pitfall, 24.V.2011, leg. Drees (cAss); 1 ♀, same data, but 3.VII.2011 (cAss).

C o m m e n t : *Platydracus kasyi* was previously known only from Syria (SMETANA 2004).

Tasgius atronitidus (MÜLLER, 1932)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, 1♀, Berekhat Ya'ar, 32°25'N, 34°45'E, 10 m, shore of pond, pitfall, 5.XII.2010, leg. Drees (cAss).

C o m m e n t : The known distribution of *T. atronitidus* is confined to Cyprus and Israel (SMETANA 2004).

Tasgius cf. rubripennis (REICHE & SAULCY, 1856)

M a t e r i a l e x a m i n e d : cf. *rubripennis* sp. 1: <u>Israel:</u> 1♂, Berekhat Ya'ar, 32°25'N, 34°45'E, 10 m, shore of pond, pitfall, 17.III.2010, leg. Drees (cAss); 1♀, Berekhat Ya'ar, ca. 32°25'N, 34°54'E, 17.II.2010, leg. Starke (cFel); 1♂, Hula N.R., 33°04'N, 35°36'E, 65 m, shore of pond, 8.IV.2010, leg. Drees (cAss); 1♂, Berekhat Ramadanr, 26.II.2010, leg. Drees (cFel). <u>Turkey:</u> 1♂, Mersin, Anamur, 4.-17.VI.1993, leg. Eichler (cAss). <u>Cyprus:</u> 1♂, 7 km SW Polis, 11.XII.1988, leg. Grimm & Rachinsky (cSch).

cf. *rubripennis* sp. 2: Israel: 1δ , 2 km NW Gesher, 32°38'26"N, 35°31'27"E, 250 m, pitfall, 21.II.2011, leg. Drees (cAss); 1δ , Upper Galilee, Ziv'on, 33°01'N, 35°25'E, 715 m, pitfall, 10.I.2006 (cFel); 1φ , Merom Golan, 12.VI.2000, leg. Chikatunov (TAU).

C o m m e n t : The type material of *T. rubripennis* (type locality: "Des bords du Jourdain") has not been subject to a modern revision. Two species fitting the original description of *T. rubripennis* are present in Israel, one of them (cf. *rubripennis* sp. 1) more widespread and one of them (cf. *rubripennis* sp. 2) apparently confined to Israel. Neither of these two species is conspecific with the interpretation sensu COIFFAIT (1974), whose illustration of the aedeagus is based on a male from Uzbekistan.

Mycetoporus ignidorsum EPPELSHEIM, 1880

M a t e r i a l e x a m i n e d : Israel: 1♂, Gilboa, 200-400 m, open pine forest, 1.IV.2011, leg. Drees (cAss).

C o m m e n t : The known distribution of *M. ignidorsum* previously included Bosnia-Herzegovina, Croatia, Greece, and Turkey (ASSING 2013a; SMETANA 2004). The above male represents the first record from Israel.

Diestota guadalupensis PACE, 1987

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, Ma'agan, 32°43'N, 35°35'E, -210 m, tamarisk plain, 26.IV.2010, leg. Drees (cAss); 3 exs., same data, but 12.XI.2010 (cAss); 4 exs., same data, but 3.XII.2010 (cAss); 7 exs., same data, but 30.I.2010 (cAss); 1 ex., N Har Meron, Ziv'on, 800 m, pitfall, 12.XI.2010, leg. Drees (cAss); 1 ex., Nahal Hagal, 32°38'N, 35°32'E, 5 m, pitfall, 12.XI.2010, leg. Drees (cAss); 1 ex., Nahal Qidron, 31°40'N, 35°26'E, -370 m, 28.I.2011, leg. Drees (cAss); 2 exs., 2 km NE Kefar Nahum, 32°54'N, 35°36'E, -210 m, 30.I.2011, leg. Drees (cAss).

C o m m e n t : In the Palaearctic region, this adventive species was previously recorded only from Italy and Spain (ASSING 2010). The above specimens represent the first records from Israel.

Caloderina hierosolymitana (SAULCY, 1865)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 \circ , Har Hermon, 33°18'N, 35°46'E, 1780 m, S-slope, pitfall, 2.IV.2011, leg. Drees (cAss); 1 \circ , 1 \circ , Gilboa, 200-400 m, open pine forest, 1.IV.2011, leg. Drees (cAss). <u>Malta:</u> 1 \circ , Bongiemma, 240 m, 4.IV.1993, leg. Sprick (cAss). <u>Iraq:</u> 1 ex. [det. Feldmann], N Mosul, Al-Amadiya, 1200 m, 28.IV.2007, leg. Reuter (cFel).

C o m m e n t : According to SMETANA (2004), *C. hierosolymitana* is widespread in the East Mediterranean, but was previously unknown from Malta and Iraq. Remarkably, the species is not listed for Israel, although its original descriptions is based on a unique specimen from "Jérusalem" (SAULCY 1865a).

Outachyusa raptoria (WOLLASTON, 1854)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 3♂♂, 4♀♀, 2 km NE Kefar Nahum, 32°54'N, 35°36'E, -210 m, 23.V.2010, leg. Drees (cAss); 1 ex., Nahal Tavor N.R., 32°37'N, 35°33'E, -220 m, stream bank, 30.I.2011, leg. Drees (cAss).

C o m m e n t : According to SMETANA (2004), *O. raptoria* is widespread in the Mediterranean region, including the Atlantic Islands, and has also been reported from the Afrotropical region and Hongkong. It was previously unknown from Israel.





Figs 17-24: *Pseudosemiris torta* nov.sp.: (17) forebody; (18) antenna; (19) apex of male abdomen in dorsal view; (20) male tergite VIII; (21) male sternite VIII; (22) female tergite VIII; (23-24) spermatheca. Scale bars: 17: 1.0 mm; 18-22: 0.5 mm; 23-24: 0.1 mm.





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Figs 25-31: *Pseudosemiris torta* nov.sp. (25-29; 25, 29: holotype) and *P. stricticornis* FAGEL, holotype (30-31): (25-27, 30) median lobe of aedeagus in lateral view; (28) median lobe of aedeagus in ventral view; (29, 31) ventral process of aedeagus in ventral view. Scale bar: 0.2 mm.



Map 1: Distributions of Astenus affimbriatus (open circle) and Pseudosemiris torta (filled circles) in Israel.

Pseudosemiris torta nov.sp. (Figs 17-29, Map 1)

T y p e m a t e r i a 1 : Holotype \vec{c} : "ISRAEL - 2 km NW Gesher, 250 m, pitfall, 32°38'26"N, 35°31'27"E, 21.II.2011, leg. Drees / Holotypus \vec{c} *Pseudosemiris torta* sp. n. det. V. Assing 2014" (cAss). <u>Paratypes:</u> 1 \vec{c} , 3 \vec{c} \vec{q} : same data as holotype (cAss); 1 \vec{c} , 1 \vec{q} : "ISRAEL - Pura N.R., 31°30'N, 34°47'E, 210 m, grassland, pitfall, 24.II.2011, leg. Drees" (cAss); 2 \vec{c} \vec{c} : "Israel: 314 (3), Adullam [31°39'N, 35°00'E], 15.I.2004, U. Columbus, T. Levanony" (TAU); 1 \vec{q} : same data, but "214 (10)" (TAU); 1 \vec{q} : same data, but "224 (9)" (TAU); 1 \vec{d} : same data, but "226 (5)" (TAU); 1 \vec{d} : same data, but "26 (5)" (TAU); 1 \vec{d} : same data, but "26 (6)" (TAU); 1 \vec{d} : same data, but "305 (11)" (cAss); 4 \vec{d} \vec{d} , 1 \vec{q} [1 \vec{d} teneral]: "Israel: Adullam, 3.IV.2003, U. Columbus, T. Levanony" (TAU, cFel); 1 \vec{q} : "Israel: Adullam, 18.I.2002, Y. Mandelik" (TAU); 1 \vec{q} : "Israel, Hurfeish, 33°00'N, 35°22'E, pitfall, 660 m, 10.I.2006" (cFel); 2 \vec{q} \vec{q} : "[2877] Israel, Zekharya [31°42'N, 34°57'E], 18.i.2002, Mandelik, Y." (TAU); 1 \vec{q} : "Israel: Ramot Avishov [=Ramat Avishur; 31°39'N, 34°575'E], 18.I.2002, Y. Mandelik" (TAU); 1 \vec{q} : "Israel: Tel Aviv University, 15.XI.2006, W. Kuslitzky, light trap" (TAU); 1 \vec{q} : "Israel: Lehavim [ca. 31°21'N, 34°47'E], 18.ii.2006, E. Groner" (cAss); 3 \vec{d} \vec{d} : "Israel: Lehavim, 25.III.2005, O. Shelef, V. Chikatunov" (TAU, cAss).

E t y m o l o g y : The name (Latin, adjective: twisted) refers to the shape of the spermathecal duct.

D e s c r i p t i o n : Measurements (mm) and ratios: body length: 3.0-5.1; length of antenna: 1.28-1.53; length of antennomere X: 0.07-0.09; length of antennomere XI: 0.21-0.27; head width (HW): 0.53-0.63; width of pronotum (PW): 0.63-0.79; length of pronotum (PL): 0.53-0.62; length of elytra from apex of scutellum to elytral hind margin (EL): 0.47-0.60; length of metatibia: 0.60-0.77; length of metatarsus: 0.41-0.54; length of median lobe of aedeagus: 0.51-0.56; PW/HW: 1.14-1.27; PW/PL: 1.20-1.27; EL/PL: 0.83-0.98.

Coloration: head and pronotum dark-brown to blackish; elytra reddish brown to blackish, rarely as dark as pronotum; legs, antennae, and maxillary palpi brown to blackish-brown.

Head (Fig. 17) with pronounced microreticulation and almost matt; punctation fine and inconspicuous, barely noticeable in the microsculpture. Eyes of moderate size, usually slightly shorter than postocular region in dorsal view. Antenna (Fig. 18) slender.

Pronotum (Fig. 17) usually with shallow, but more or less extensive median impression; microsculpture as pronounced as that of head; punctation slightly more distinct than that of head.

Elytra (Fig. 17) at suture almost as long as pronotum (see ratio EL/PL); punctation much more distinct than that of head and pronotum, weakly granulose; interstices with distinct microreticulation and with subdued shine.

Abdomen with very fine and sparse punctation; microsculpture shallow; tergites VII and VIII with sexual dimorphism.

 δ : tergite VII (Fig. 19) near posterior margin with smooth and weakly elevated median tubercle; tergite VIII as in Fig. 20; posterior margin of sternite VIII produced, obtusely angled in the middle (Fig. 21); median lobe of aedeagus as in Figs 25-29.

 φ : tergite VII unmodified; posterior margins of tergite VIII (Fig. 22) and sternite VIII strongly convex; spermatheca (Figs 23-24) with capsule proximally twisted, not truncate.

Intraspecific variation: The species is subject to considerable variability especially regarding the coloration of the elytra, body size, and the shape of the pronotum.

C o m p a r a t i v e n o t e s : The shapes of the slender antennae and of the spermatheca suggest that the species is most closely allied to *P. stricticornis* FAGEL, 1966 from Lebanon and *P. atavia* ASSING, 2001 from central southern Anatolia. From the former, *P. torta* is distinguished by shorter antennae (holotype of *P. stricticornis*: 1.60 mm; despite smaller body size), a broader pronotum (PW/PL in *P. stricticornis*: 1.17), relatively shorter elytra (EL/PL in *P. stricticornis*: 0.99), the stouter tarsi, the presence of a tubercle on the male tergite VII, the differently shaped male tergite VIII, and an aedeagus with a relatively shorter and differently shaped ventral process and with a broader crista apicalis (lateral view). From *P. atavia*, the new species is separated by larger body size, a broader pronotum, the stouter tarsi, and by the longer, more slender, and smoothly curved (in *P. atavia* more abruptly curved) ventral process of the aedeagus. From all other species of the genus, *P. torta* is distinguished especially by the slender antennae and the shape of the spermatheca. For illustrations of *P. stricticornis* and *P. atavia* see Figs 30-31 and ASSING (2001b, c; 2004).

D is tribution and bionomics: The species was found in various localities both in the north and in the south of Israel (Map 1). The type specimens were collected in January-April, and November, mostly with pitfall traps. The specimen taken in November was caught at a light trap. One male collected in the beginning of April is teneral.

Geostiba (Sibiota) meronica nov.sp. (Figs 63-69)

T y p e m a t e r i a l : <u>Holotype δ </u>: "IL (4), Upper Galilee, Mt. Meron, Peak Trail, 1130 m, N32°59'36" E35°24'52", 17.III.2011, leg. Hetzel / Holotypus δ Geostiba meronica sp. n. det. V. Assing 2014" (cAss).

E t y m o l o g y : The specific epithet is an adjective derived from the name of the mountain where the species is probably endemic.

D e s c r i p t i o n : Body length 2.3 mm; length of forebody 0.9 mm. Coloration of whole body yellowish.

Head (Fig. 63) with extremely fine, barely noticeable punctation and with shallow microsculpture. Eyes reduced to minute rudiments (similar in size to base of antennomere III in cross-section) without ommatidia and without pigmentation. Antenna distinctly incrassate; antennomeres IV-X strongly transverse and of gradually increasing width; X nearly three times as broad as long.

Pronotum (Fig. 63) approximately 1.1 times as broad as long and 1.1 times as broad as head; punctation and microsculpture (Fig. 64) similar to those of head.

Elytra (Figs 63, 65) approximately 0.55 times as long as pronotum. Hind wings completely reduced.

Abdomen (Fig. 66) distinctly broader than elytra; punctation extremely fine, barely noticeable; microsculpture very shallow; posterior margin of tergite VII without palisade fringe.

 δ : elytra with distinct sutural carinae reaching neither scutellar apex nor posterior margin of elytra (Figs 63, 65); tergite VII in posterior third with moderately pronounced pair of parallel carinae (Figs 66-67); tergite VIII in posterior third with pair of rather weakly pronounced parallel carinae and with convex posterior margin (Figs 66-67); sternite VIII with moderately convex posterior margin; median lobe of aedeagus (Figs 68-69) 0.27 mm long.

♀: unknown.

C o m p a r a t i v e n o t e s : Based on the similarly modified male elytra and male tergites VII-VIII, *G. meronica* is most closely allied to, and most likely the adelphotaxon of, the similar and geographically close *G. loebliana* PACE, 1984 from Mt. Hermon, from which it differs by the more transverse pronotum, the less pronounced and shorter sutural carinae of the male elytra, the less pronounced and more distinctly parallel carinae of the male tergites VII and VIII, as well as by the shape of the median lobe of the aedeagus (ventral process less strongly curved in lateral view and apically more gradually narrowed in ventral view). For illustrations of *G. loebliana* see PACE (1984).

D is tribution and bionomics: Geostiba meronica is most likely endemic to Mount Meron, which is separated from Mount Hermon, where G. loebliana is endemic, by the Hula valley. The holotype was collected at an altitude of 1130 m.

Drusilla endorica (SAULCY, 1865)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 ç, Carmel, Nahal Oren, 32°43'N, 34°59'E, 125 m, pitfall, 9.V.2010, leg. Drees (cAss).

C o m m e n t : This species was previously known only from the type locality (Haifa), and some regions without specified localities in Lebanon and "Syria" (ASSING 2005).

Drusilla cernens ASSING, 2005

- M a t e r i a l e x a m i n e d : <u>Israel:</u> 2 exs. [det. Feldmann], Upper Galilee, near Alma cave, 9.III.2008, leg. Buse (cFel); 2 exs. [det. Feldmann], Upper Galilee, Meron, 8.III.2008, leg. Buse (cFel).
- C o m m e n t : The distribution of *D. cernens* is confined to Israel and Syria (ASSING 2005).

Myrmoecia libanensis (PIC, 1901)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, Nahal Keziv, 33°03'N, 35°13'E, 190 m, forest, pitfall, 11.V.2010, leg. Drees (cAss).

C o m m e n t : *Myrmoecia libanensis* was originally described from Lebanon and subsequently reported also from southern Anatolia (ASSING 2006b). The above specimen represents the first record from Israel.

Peltodonia bodemeyeri (BERNHAUER, 1936)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 ♀ [det. Feldmann], ca. 10 km S Haifa, Lower Nahal Oren, 32°43'N, 34°58'E, flight interception trap, 19.VI.2009, leg. Buse (cFel); 1 ♀ [det. Feldmann], same data, but 30.VII.2009 (cFel).

C o m m e n t : The previously known distribution of *P. bodemeyeri* was confined to Turkey (Assing 2009e).

Tetralaucopora bicolorata Assing, 2007

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, En Avedat, 700 m, spring, 24.IV.2011, leg. Drees (cAss); 1 ♀, same data, but 1.XII.2010 (cAss).

C o m m e n t : The previously known distribution of *T. bicolorata* was confined to Iran (Assing 2007d).

Amarochara inermis Assing, 2002

M a t e r i a l e x a m i n e d : <u>Israel:</u> 13, 2 km NW Gesher, 32°38'N, 35°31'E, 250 m, pitfall, 17.IV.2010, leg. Drees (cAss); 13, Carmel, Nahal Oren, 32°43'N, 35°00'E, 150 m, pitfall, 4.IV.2010, leg. Drees (cAss).

C o m m e n t : The distribution of A. inermis is confined to Israel (AssING 2002).

Oxypoda collaris SAULCY, 1865

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1♂, 2♀, Har Hermon, 33°18'N, 35°46'E, 1600 m, pitfall, 27.IV.2010, leg. Drees (cAss); 1♀, Har Hermon, 33°18'N, 35°46'E, 1780 m, S-slope, pitfall, 13.IX.2010, leg. Drees (cAss)

C o m m e n t : The distribution of *O. collaris* is confined to the Middle East and includes southern Anatolia, Israel, and Iran (ASSING 2006a).

Oxypoda disiuncta ASSING, 2006

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 Å, Har Meron, 33°00'N, 35°25'E, 1110 m, forest, pitfall, 26.IV.2010, leg. Drees (cAss).

C o m m e n t : This recently described species has been recorded only from southern Anatolia and Israel (AssING 2006a).

Oxypoda libanotica FAGEL, 1965

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 Å, 1 \circ , Har Hermon, 33°18'N, 35°46'E, 1780 m, S-slope, pitfall, 13.IX.2010, leg. Drees (cAss).

C o m m e n t : *Oxypoda libanotica* was originally described from Lebanon and subsequently also reported from Turkey and Greece (ASSING 2006a). The above specimens represent the first record from Israel.

Piochardia schaumii (KRAATZ, 1857)

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 \circ , HaBesor N.R., 31°18'N, 34°29'E, 70 m, river bank, pitfall, 15.XI.2010, leg. Drees (cAss).

C o m m e n t : This myrmecophilous species was only recently reported from Israel for the first time (ASSING & FELDMANN 2012).

Pseudocalea angulata (EPPELSHEIM, 1880)

M a t e r i a l e x a m i n e d : <u>Israel</u>: 1 Q, Har Meron, 33°00'N, 35°25'E, 1110 m, forest, pitfall, 26.IV.2010, leg. Drees (cAss); 9 exs., Golan Heights, Mas'ada, Ya'ar Odem R., 30°13'N, 35°45'E, 1015 m, 2.II.2007, leg. Aßmann (cFel, cAss).

C o m m e n t : The previously known distribution of *P. angulata* ranged from Albania and Croatia across Greece to Turkey (ASSING 2000, 2007c, 2009a). The above specimens represent the first records from Israel.

The aedeagus of this species, in particular the shape of the ventral process, and the coloration are subject to some intraspecific variation. In contrast to material seen from Greece and Turkey, most of the specimens from Israel have dark-brown legs.

Megalogastria crassiventris ASSING, 2007

M a t e r i a l e x a m i n e d : <u>Israel:</u> 4δ δ, 7 φ φ, Berekhat Ya'ar, 32°25'N, 34°45'E, 10 m, shore of pond, pitfall, 17.III.2010, leg. Drees (cAss); 1 φ, Khokav [?] Ya'ar, pitfall, 17.III.2010, leg. Drees (cAss); 1 φ, Pura N.R., 31°30'N, 34°47'E, 210 m, grassland, pitfall, 18.IV.2010, leg. Drees (cAss).

C o m m e n t : The known distribution of this recently described species is confined to Israel (AssiNG 2007b).

Aleochara (Ceranota) erythroptera GRAVENHORST, 1806

M a t e r i a l e x a m i n e d : Israel: 13, 2qq, Nahal Keziv, $33^{\circ}03'N$, $35^{\circ}13'E$, 190 m, forest, pitfall, 22.II.2011, leg. Drees (cAss); 13', 2qq, N Har Meron, Ziv'on, 800 m, pitfall, 22.II.2011, leg. Drees (cAss).

C o m m e n t : The previously known Ponto-Mediterranean distribution of *A. erythroptera* ranged from Turkey, Ukraine, and Russia to West Europe (ASSING 2009c). The above specimens represent the first records from Israel.

Aleochara (Ceranota) libanica EPPELSHEIM, 1889

M a t e r i a l e x a m i n e d : <u>Israel:</u> 1 φ , Nahal Keziv, 33°03'N, 35°13'E, 190 m, forest, pitfall, 17.IV.2010, leg. Drees (cAss); 1 φ , same data, but 27.IV.2010 (cAss); 2 $\varphi \varphi$, same data, but 22.II.2011 (cAss).

C o m m e n t : *Aleochara libanica* was originally described from Lebanon and recently also recorded from Israel (ASSING 2009c).

Aleochara (Xenochara) laevigata GYLLENHAL, 1810

M a t e r i a l e x a m i n e d : <u>Israel:</u> 5 ぷ ぷ [det. Feldmann], Har Hermon, 33°18'N, 35°47'E, 2000 m, doline, pitfall, 3.VII.2010, leg. Drees (cAss, cFel).

C o m m e n t : *Aleochara laevigata* was previously unknown from Israel (ASSING 2009d).

Aleochara (Xenochara) sparsa HEER, 1839

C o m m e n t : This common and widespread species was represented in numerous samples from various localities by thousands of specimens, which is why they are not listed individually. According to SMETANA (2004), *A. sparsa* had not been reported from Israel.

On the Dinusa species in the Middle East and North Africa

The oxypodine genus Dinusa SAULCY, 1865 previously contained eleven species, most of them associated with ants of the genus Messor, very rarely found, and distributed in the Mediterranean region from Algeria and Greece to the Middle East (ASSING 2013b, c; SMETANA 2004). Five species, none of them revised, have been recorded from the Middle East from Lebanon and Syria southwards to Israel; two unrevised species, D. hipponensis FAUVEL, 1886 (Algeria) and D. santschii WASMANN, 1912 (Tunisia), have been reported from North Africa. Except for D. hierosolymata SAULCY, 1865 and D. *particeps* ABEILLE DE PERRIN, 1896, attempts at locating the type material of the Middle East species have been unsuccessful. According to the curator in charge at the MNHNP, where the Saulcy and Abeille de Perrin collections are housed, there are no type specimens of D. jebusaea SAULCY, 1865 and D. davidica SAULCY, 1865 (a junior synonym of D. hierosolymata) in the Saulcy collection, nor was any type material of D. angulicollis ABEILLE DE PERRIN, 1896, D. particeps, and D. saulcyi ABEILLE DE PERRIN, 1896 located in the Abeille de Perrin collection. In fact, in the latter collection there are labels of D. saulcyi, D. davidica, and D. particeps with corresponding pin holes and ants, but the beetles are missing (TAGHAVIAN e-mail 27 May, 2014), an observation confirmed by MARC TRONQUET (pers. comm.). The only Dinusa specimens found in the MNHNP are three syntypes and one additional specimen of D. hierosolymata in the Jarrige collection and one non-type female of D. jebusaea in the Abeille de Perrin collection. A subsequent search in the Fauvel collection yielded a syntype of D. particeps, but no specimens qualifying as unambiguous type material of the species described by Saulcy or of D. saulcyi.

As can be inferred from the external characters (body size 1.6-1.7 mm; very slender antennae) and the host ant indicated in the original description of *D. santschii*, which is based on two specimens collected from nests of "*Pheidole pallidula*" in Tunisia (WASMANN 1912) and deposited in the Wasmann collection (housed at the Natuurhistorisch Museum Maastricht), this species undoubtedly belongs to a different genus, possibly *Cypha* LEACH, 1819, where it is placed with some doubt.

Dinusa hierosolymata SAULCY, 1865 (Figs 32-39)

Dinusa hierosolymata SAULCY, 1865a: 434 f. *Dinusa davidica* SAULCY, 1865a: 435 f.

Dinusa hierosolvmitana SAULCY, 1865b: 660.

Dinusa saulcyi ABEILLE DE PERRIN, 1896: 130; nov.syn.

T y p e m a t e r i a l e x a m i n e d : <u>Lectotype δ , present designation</u>: "Jerusalem / Coll. J. Magrini [?] / Lectotypus δ *Dinusa hierosolymata* Saulcy, desig. V. Assing 2014 / Dinusa hierosolymata Saulcy, det. V. Assing 2014" (MNHNP). <u>Paralectotypes:</u> 1 φ : same data as lectotype (MNHNP); 1 φ : "Jerusalem" (MNHNP).

A d d i t i o n a l m a t e r i a l e x a m i n e d : <u>Jordan</u>: 1♂, Irbid, Zubia, 32°26'N, 35°46'E, 600-840 m, 22.II.2014, leg. Meybohm (cAss). <u>Israel</u>: 1♀, Acre ["St. Jean d'Acre"; 32°56'N, 35°05'E] (IRSNB). <u>Locality not specified or ambiguous</u>: 1♀: "Damas / Bethel" (IRSNB); 1♀: "Jerus / Aïourn Mousa près Mt. Kebó (Syrie) " (IRSNB); 1 ex. [without labels] (MNHNP).

C o m m e n t : The original description of *D. hierosolymata* is based on an unspecified number of syntypes from "Jérusalem et Naplouse" (SAULCY 1865a). Three syntypes, a male and two females, from Jerusalem were located in the Jarrige collection. The male is designated as the lectotype.

According to the original description of *D. saulcyi*, which is based on an unspecified number of syntypes (probably a single specimen) from "Damas", and the key provided by ABEILLE DE PERRIN (1896), this species is distinguished from the otherwise similar *D. hierosolymata* by the erect pubescence of the body. This character condition is most likely an artefact. Other *Dinusa* material seen from Damascus belongs to either *D. hierosolymata* or *D. jebusaea*. It can be concluded, therefore, that *D. hierosolymata* and *D. saulcyi* refer to the same species. Hence the synonymy proposed above.

Dinusa hierosolymata is characterized by a large median lobe of the aedeagus (0.75-0.78 mm) with a stout and apically deeply bifid ventral process (Figs 34-37). The antennae, the forebody, and the spermatheca are illustrated in Figs 32-33, 38-39. The ventral process of the aedeagus of the examined male from Jordan is apically slightly longer, more slender, and more acute (Fig. 36), but otherwise no convincing characters were found suggesting that it should represent a distinct species. More material is required to assess if these differences are constant. The species was previously unknown from Jordan.

Dinusa jebusaea SAULCY, 1865 (Figs 40-47)

Dinusa jebusaea SAULCY, 1865a: 436 f.

Dinusa particeps ABEILLE DE PERRIN, 1896: 130; nov.syn.

T y p e m a t e r i a l e x a m i n e d : <u>Neotype φ , present designation</u>: "Bethel / Coll. R. I. Sc. N. B., particeps Abeille / Neotypus φ *Dinusa jebusaea* Saulcy, desig. V. Assing 2014 / Lectotypus φ *Dinusa particeps* Abeille, desig. V. Assing 2014 / Dinusa jebusaea Saulcy, det. V. Assing 2014" (IRSNB).

A d d i t i o n a l m a t e r i a l e x a m i n e d : <u>Lebanon</u>: 1 ♀ [identification uncertain], "Liban" (MNHNP). <u>Syria</u>: 1 ♂, Damascus (IRSNB). <u>Israel</u>: 1 ♀: "Bethel / Coll. R. I. Sc. N. B. puncticollis Fvl. [unavailable name]" (IRSNB).

C o m m e n t : The original description of *D. jebusaea* is based on two syntypes ("Deux individus" from "Jérusalem" (SAULCY 1865a). Neither of these syntypes was found in the collections of the MNHNP and the IRSNB, so that they must be regarded as lost. In view of the similarity of *Dinusa* species and the previous taxonomic confusion in the genus, a neotype designation is necessary to stabilize the name *D. jebusaea*.





Figs 32-39: *Dinusa hierosolymata* SAULCY (**32-34**, **37**: lectotype; **35**: male from Israel; **36**: male from Jordan): (**32**) forebody; (**33**) antenna; (**34-35**) median lobe of aedeagus in lateral view; (**36**) median lobe of aedeagus in ventral view; (**38-39**) spermatheca in different aspects. Scale bars: **32**: 1.0 mm; **33**: 0.5 mm; **34-39**: 0.2 mm.





Figs 40-47: Dinusa jebusaea SAULCY (40, 45: neotype): (40-41) forebody; (42) antenna; (43) median lobe of aedeagus in lateral view; (44) apical portion of median lobe of aedeagus in ventral view; (45-47) spermatheca. Scale bars: 40: 1.0 mm; 41: 0.5 mm; 42-47: 0.2 mm.





Figs 48-55: *Dinusa angulicollis* FAUVEL (**48, 50-51**: lectotype; **49**: paralectotype) and *Notothecta hipponensis* (FAUVEL), holotype (**52-55**): (**48-49, 53**) forebody; (**50, 55**) median lobe of aedeagus in lateral view; (**51**) apical portion of median lobe of aedeagus in ventral view; (**52**) habitus; (**54**) male tergite VIII. Scale bars: 48-49, 52: 1.0 mm; 53: 0.5 mm; 50-51, 54-55: 0.2 mm.





Figs 56-62: *Dinusa subangulata* nov.sp.: (56) habitus; (57) forebody; (58) antenna; (59) median lobe of aedeagus in lateral view; (60-61) apical portion of median lobe of aedeagus in ventral view; (62) spermatheca. Scale bars: 56-57: 1.0 mm; 58: 0.5 mm; 59-61: 0.2 mm; 62: 0.1 mm.





Figs 63-69: *Geostiba meronica* nov.sp.: (63) male forebody; (64) median portion of pronotum; (65) male elytra; (66) male abdomen; (67) male abdominal segments VII-VIII; (68-69) median lobe of aedeagus in lateral and in ventral view. Scale bars: 63, 66: 0.5 mm; 65, 67: 0.2 mm; 64, 68-69: 0.1 mm.

Dinusa particeps was described from an unspecified number of syntypes, possibly a single specimen, from "Béthel" (ABEILLE DE PERRIN 1896). One syntype, a female, was located in the Fauvel collection. This specimen is designated as the lectotype.

According to ABEILLE DE PERRIN (1896), *D. particeps* is distinguished from *D. jebusaea* by a pronotum of paler coloration and with sparser punctation. However, a comparative

study of the external characters of the lectotype of *D. particeps* and of material identified as *D. jebusaea* yielded no clear-cut differences; the coloration and the punctation of the pronotum are subject to some variation in *D. jebusaea*, as well as in *Dinusa* species in general. Moreover, the shape of the spermatheca is identical. Consequently, there is little doubt that both names refer to the same species. In order to stabilize this synonymy, the lectotype of *D. particeps*, which was collected close to the original type locality of *D. jebusaea*, is designated as the neotype of *D. jebusaea*, thus rendering the synonymy of both names objective.

Dinusa jebusaea is distinguished from the sympatric *D. hierosolymata* particularly by the shorter antennae (antennomeres VII-X transverse; Fig. 42), the much smaller and differently shaped median lobe of the aedeagus (Figs 43-44), and by the much longer and differently shaped proximal portion of the spermathecal capsule (Figs 45-47). It differs from *D. angulicollis* by the shape of the pronotum (posterior angles not marked; Figs 40-41).

Dinusa angulicollis FAUVEL, 1886 (Figs 48-51)

Dinusa angulicollis FAUVEL 1886: 85 f.

T y p e m a t e r i a l e x a m i n e d : Lectotype δ , present designation [in poor condition; dissected prior to the present study]: "Dumeir / près hipponensis / angulicollis Fvl. / Coll. et det. A. Fauvel, Dinusa, R.I.Sc.N.B. 17.479 / Dinusa angulicollis Fvl., det. R. Pace 1986, Lectotypus δ *Dinusa angulicollis* Fauvel, desig. V. Assing 2014 / Dinusa angulicollis Fauvel, det. V. Assing 2014" (IRSNB). <u>Paralectotype ϕ [in poor condition; dissected prior to present study]</u>: "Jerusal /Coll. et det. A. Fauvel, Dinusa angulicollis, R.I.Sc.N.B. 17.479 / Dinusa angulicollis Fvl., det. R. Pace 1986, Paralectotypus ϕ *Dinusa angulicollis* Fauvel, desig. V. Assing 2014 / Dinusa angulicollis Fvl., det. R. Pace 1986, Paralectotypus ϕ *Dinusa angulicollis* Fauvel, desig. V. Assing 2014 / Dinusa angulicollis Fvl., det. R. Pace 1986, Paralectotypus ϕ *Dinusa angulicollis* Fauvel, desig. V. Assing 2014 / Dinusa angulicollis Fauvel, det. V. Assing 2014 / Dinusa angulicollis Fauvel, desig. V. Assing 2014 / Dinusa angulicollis Fauvel, desig. V. Assing 2014 / Dinusa angulicollis Fauvel, det. V. Assing 2014 / Dinusa angulicollis Fauvel, desig. V. As

C o m m e n t : This species has been attributed to ABEILLE DE PERRIN (1896) (SMETANA 2004). However, in providing a name and distinguishing characters FAUVEL (1886) made the name available. The original type locality is "Palestine". Two syntypes, a male and a female, were located in the Fauvel collection; both specimens had been dissected prior to the present study and are in poor condition. The male is designated as the lectotype. It already had a lectotype label by R. Pace attached to it, but this designation was never published. The forebody and the median lobe of the aedeagus of the lectotype, as well as the forebody of the paralectotype are illustrated in Figs 48-51. As in *D. hierosolymata*, the median lobe is apically incised, but it is much smaller (0.54 mm) and the ventral process is distinctly more slender. The spermatheca of the paralectotype is damaged, so that it was not possible to assess and illustrate the original shape. Aside from the shape of the aedeagus, *D. angulicollis* is characterized by marked posterior angles of the pronotum. The type locality is situated in Syria (today probably Ad Dumayr; 33°38'N, 36°42'E).

Dinusa taurica Assing, 2001

M a t e r i a l e x a m i n e d : <u>Turkey:</u> 1 d, Istanbul ["Constantinople"] (IRSNB); 1 d, Gaziantep, Sakçagöze ["Sakcagözü"], 900-1300 m, 21.IV.1973, leg. Heinz (MNHUB).

C o m m e n t : This species was previously known only from Mersin in central southern Anatolia (ASSING 2001a). The above record from Istanbul considerably expands the distribution northwestwards. The male from Gaziantep was collected in the same locality and on the same day as the type specimens of *D. subangulata*.

Notothecta hipponensis (FAUVEL, 1886), nov.comb. (Figs 52-55)

Dinusa hipponensis FAUVEL, 1886: 85.

T y p e m a t e r i a l e x a m i n e d : <u>Holotype ♂</u> [in poor condition; dissected prior to the present study]: "Bòne 3 / Oxysoma Schaumii Kr. / hipponensis Fvl. / Coll. et det. A. Fauvel, Dinusa, R.I.Sc.N.B. 17.479 / Eidodinusa hipponensis (Fvl.), det. R. Pace 1986, Holotypus ♂ Dinusa hipponensis Fauvel, rev. V. Assing 2014 / Notothecta hipponensis (Fauvel), det. V. Assing 2014" (IRSNB).

C o m m e n t : The original description is based on "Un seul exemplaire" from "Bone" (FAUVEL 1886). The holotype, which had been dissected prior to the present study and which is in poor condition, was located in the Fauvel collection. An examination of the specimen revealed that it belongs to the Athetini. Based on the morphology of the aedeagus, the habitus, and the shape of the antennae, it is transferred to the genus *Notothecta* THOMSON, 1858. The species is distinguished from other *Notothecta* species by the broader body (pronotum and elytra more transverse) alone. The habitus, the forebody, the median lobe of the aedeagus, and the male tergite VIII are illustrated in Figs 52-55.

Dinusa subangulata nov.sp. (Figs 56-62)

T y p e m a t e r i a l : <u>Holotype</u> δ : "Anatolia mer., 21.IV.73, Heinz leg. / Sakzagözü, 900-1300 m / Dinusa taurica Assing, det. M. Schülke 2014 / Holotypus δ *Dinusa subangulata* sp. n., det. V. Assing 2014" (MNHUB). <u>Paratypes:</u> $3\delta \delta$, 1ϕ , 1 sex?: same data as holotype (MNHUB, cAss, cSch).

E t y m o l o g y : The specific epithet (Latin, adjective) alludes to the moderately marked posterior angles of the pronotum.

D e s c r i p t i o n : Body length 4.4-5.0 mm; length of forebody 2.0-2.2 mm. Habitus as in Fig. 56. Coloration: head dark-brown to blackish-brown; pronotum pale-brown to brown; elytra yellowish-brown, with the scutellar region indistinctly darker; abdomen brown to dark-brown, with the apex (posterior half of segment VII; segments VIII-X) yellowish; legs dark-yellowish; antennae pale-reddish with the basal two antennomeres yellowish.

Head (Fig. 57) transverse, with very fine and rather dense punctation, with short and depressed pubescence, and without microsculpture. Antenna (Fig. 58) approximately 1.3 mm long; antennomeres VII-X distinctly transverse.

Pronotum (Fig. 57) strongly transverse, 1.9-2.0 times as broad as long and 1.75-1.83 times as broad as head; posterior angles moderately marked; posterior margin weakly sinuate near posterior angles; disc with dense and fine punctation, with short yellowish pubescence, and without microsculpture.

Elytra (Fig. 57) 0.85-0.90 times as long as pronotum, strongly sinuate near posterior angles; disc with fine and dense punctation, with short depressed yellowish pubescence, and without microsculpture. Hind wings present. Metatarsomere I approximately as long as, or slightly longer than, the combined length of II-IV.

Abdomen with tergites III-VI densely and finely punctate and with tergites VII-VIII more or less densely punctate; interstices without microsculpture; pubescence depressed and yellowish; posterior margin of tergite VIII with palisade fringe.

 δ : sternite VIII posteriorly strongly convexly produced in the middle; median lobe of aedeagus (Figs 59-61) 0.63-0.65 mm long; ventral process apically with deep median incision in ventral view.

 ϕ : posterior margin of sternite VIII weakly, but noticeably concave in the middle; spermatheca as in Fig. 62.

Comparative notes: Dinusa subangulata is distinguished from all its congeners by the morphology of the aedeagus. Regarding the shape of the pronotum (posterior angles noticeable, posterior margin sinuate on either side), it is most similar to D. angulicollis, from which it differs by larger body size (length of forebody in D. angulicollis 1.5-1.6 mm), by the less convex (cross-section) and more transverse pronotum with less pronounced posterior angles, and by the morphology of the larger median lobe of the aedeagus (ventral process broader in ventral view, shorter in relation to basal portion in lateral view, and apically with more pronounced apical incision). The new species is distinguished from the geographically close *D. jebusaea*, with which it shares a similar body size, short antennae with distinctly transverse antennomeres, an aedeagus of similar size, and a similarly shaped spermatheca by the more transverse pronotum with more pronounced posterior angles, by the shape of the median lobe of the aedeagus (ventral process shorter in relation to the basal portion in lateral view, broader and apically of different shape in ventral view), and by the different shape of the distal portion of the spermathecal capsule.

D is tribution and natural history: The type locality, today Sakçagöze, is situated in Gaziantep province, central southern Anatolia, at an altitude of 900-1300 m. The type specimens were collected in the same place and on the same day as a specimen of D. taurica.

Checklist of the species of Dinusa SAULCY, 1865

An updated checklist of the species of *Dinusa* is provided below. The genus currently contains eight named myrmecophilous species associated with harvester ants (*Messor* spp.) and distributed in the East Mediterranean from southern Greece to the Middle East.

Species	Distribution	
angulicollis FAUVEL, 1886	Syria; Israel/West Bank	
cretica Assing, 2013	Greece: Crete	
hierosolymata SAUCLY, 1865	Syria; Israel; West Bank; Jordan	
= davidica SAULCY, 1865		
= hierosolymitana SAULCY, 1865		
<i>= saulcyi</i> Abeille de Perrin, 1896; nov.syn.		
jebusaea SAULCY, 1865	Lebanon; Syria; Israel	
= <i>particeps</i> ABEILLE DE PERRIN; 1896, nov.syn.		
smyrnensis Assing, 2007	Turkey: Izmir	
subangulata nov.sp.	Turkey: Gaziantep	
taurica Assing, 2001	Turkey: Mersin, Adana, Gaziantep,	
	Istanbul	
taygetana Eppelsheim, 1880	Greece: Pelopónnisos	

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Zusammenfassung

Die Ergebnisse umfangreicher, im Zeitraum 2010-2011 an verschiedenen Lokalitäten in Israel durchgeführter Bodenfallenuntersuchungen werden ausgewertet und Material einiger Arten der Gattung Dinusa SAULCY, 1865 wird revidiert. Zoogeographisch interessante Nachweise von 49 Arten werden gemeldet, darunter 25 Erstnachweise aus Israel, drei aus Jordanien, drei aus dem Irak, einer aus Syrien, einer aus Ägypten sowie einer von Malta. Drei Arten der Paederinae und Aleocharinae aus Israel und eine Art der Aleocharinae aus der Südtürkei werden beschrieben und abgebildet: Astenus (Eurysunius) affimbriatus nov.sp. (Israel: Hula-Tal), Pseudosemiris torta nov.sp. (Israel: zahlreiche Lokalitäten), Geostiba (Sibiota) meronica nov.sp. (Israel: Mount Meron) und Dinusa subangulata nov.sp. (Türkei: Gaziantep). Die Verbreitung von Astenus affimbriatus und Pseudosemiris torta wird anhand einer Karte illustriert. Astenus (Eurysunius) platynotus (SAULCY, 1865) wird redeskribiert und abgebildet. Für Sunius platynotus SAULCY, 1865 und Dinusa jebusaea SAULCY, 1865 werden Neotypen, für Dinusa hierosolymata SAULCY, 1865, D. particeps ABEILLE DE PERRIN, 1896 und D. angulicollis FAUVEL, 1886 werden Lectotypen designiert. Die folgenden Namen werden synonymisiert bzw. neu kombiniert: Quedius josue SAULCY, 1865 = Q. troodites FAGEL, 1968, nov.syn.; Dinusa hierosolymata SAULCY, 1865 = D. saulcyi ABEILLE DE PERRIN, 1896, nov.syn.; Dinusa jebusaea SAULCY, 1865 = D. particeps ABEILLE DE PERRIN, 1896, nov.syn.; Notothecta hipponensis (FAUVEL, 1886), nov.comb. (ex Dinusa). Dinusa santschii WASMANN, 1912 wird aus Dinusa entfernt und vorläufig in die Gattung Cypha LEACH, 1819 gestellt. Dinusa enthält damit nur noch acht beschriebene Arten, die myrmecophil bei Ernteameisen (Messor spp.) leben und die im östlichen Mittelmeerraum von der Peloponnes bis in den Nahen Osten verbreitet sind. Ein aktualisierter Katalog der Gattung Dinusa wird erstellt.

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