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Catalogue of the beetles (Coleoptera) in Israel and adjacent areas: 1. Scarabaeoidea

Katalog brouků (Coleoptera) Israele a přilehlých území: 1. Scarabaeoidea

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This work is dedicated to the memory of Professor H. Bytinski-Salz, who contributed tremendously to the development of entomology and other areas of biology in Israel and whose collection was used in part for this study.

Catalogue, distribution, Coleoptera, Scarabaeoidea, Israel, Palaearctic region

Abstract. A catalogue is presented covering the scarabaeoid beetles of Israel and adjacent areas. In summary, we catalogued 386 species belonging to the families Lucanidae, Trogidae, Geotrupidae, Ochodaeidae, Hybosoridae, Glaphyridae and Scarabaeidae. Sixty three percent (242 species) of mentioned species were collected from stated locality within Israel. The work was done by checking the rich material preserved at the Zoological Museum, Tel Aviv University (TAU), Israel and published data. For each species is included information about its global and local distribution, and its relative abundance in Israel by the authors' opinion.

INTRODUCTION

In spite of centuries of enormous interest about Middle East, the taxonomic and faunistic inventorisation of many groups, including the insects has been limited to occasional records in the literature. Scarabaeid beetles have been studied in Israel (Palestine) for the last two centuries. A few important collection trips were organized in Middle East (including Palestine) in the last century and their results were reported by Reiche & Saulcy (1855-58, 1856), Saulcy (1864), Baudi (1881, 1894) and eventually by Hart (1891). The first comprehensive catalogue of beetles in Palestine including Scarabaeoidea was published by Bodenheimer (1937). He mentioned 185 species of scarabaeoid beetles but his records were mainly based on previously published data. A check list of beetles of Syria with data from literature only was published by El-Hariri (1971). More comprehensive and valuable catalogue of beetles from Egypt (and Sinai) was published by Alfieri (1976). His catalogue is based in large part on material collected by Alfieri himself. Other published books and articles have presented scanty, but important, faunistic and systematic contributions to our knowledge of scarabaeoid beetles of Israel and the Levant. Beetle fauna of Saudi Arabia (and Arabia) is different from the Levant and therefore recently published 13 volumes of

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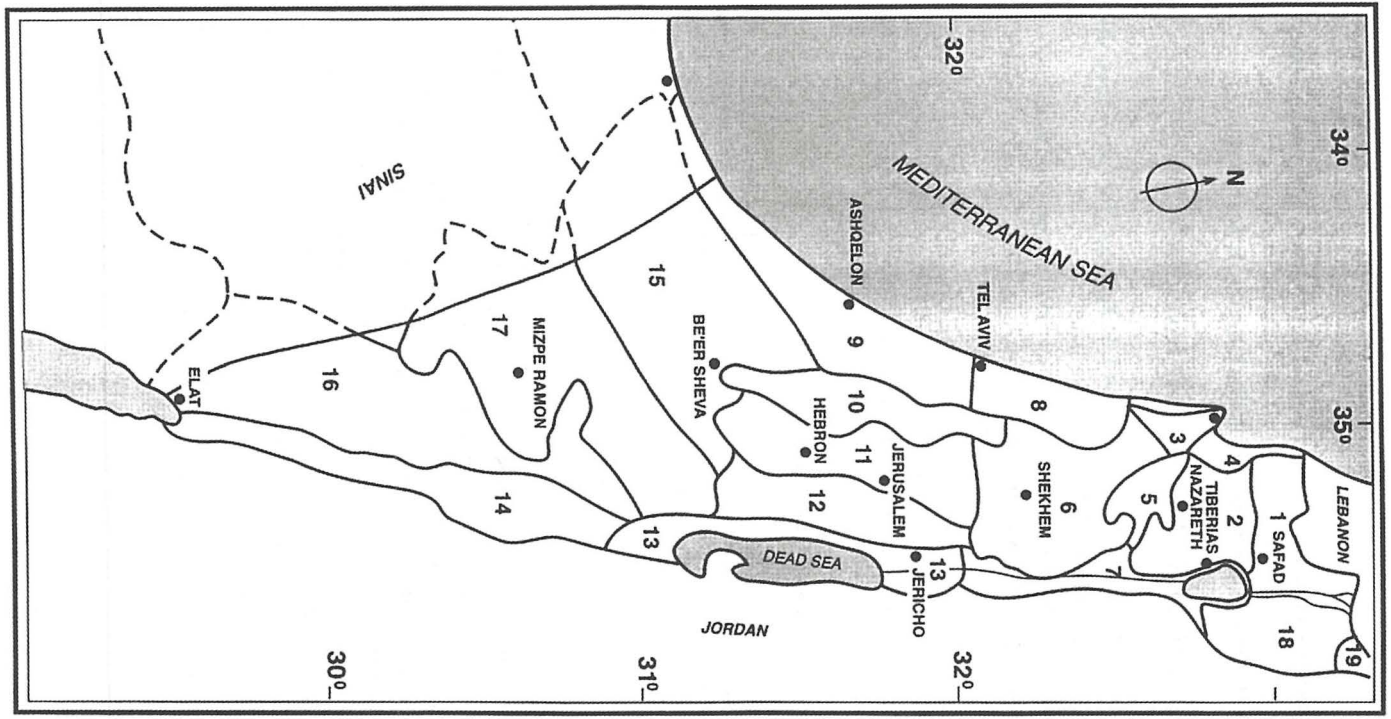


Fig. 1. Zoogeographical areas in Israel (according to Fishelson (1985), modified).
Obr. 1. Zoogeografické oblasti Israele (podle Fishelsona (1985), upraveno).
1. Upper Galilee (Vrchní Galilea) (UG), 2. Lower Galilee (Nižší Galilea) (LG), 3. Carmel Ridge (Pohoří Karmel) (C), 4. Northern Coastal Plain (Severní pobřežní rovina) (NCP), 5. Valley of Yizre'el (Údolí Yizre'el) (YV), 6. Samaria (Samaria) (S), 7. Jordan Valley and Southern Golan (Údolí řeky Jordán a jižní část Golanských výšin) (JV), 8. Central Coastal Plain (Centrální pobřežní rovina) (CCP), 9. Southern Coastal Plain (Jižní pobřežní rovina) (SCP), 10. Foothills of Judea (Předhoří Judejských hor) (JF), 11. Judean Hills (Judejské hory) (JH), 12. Judean Desert (Judejská poušť) (JD), 13. Dead Sea Area (Oblast Mrtvého moře) (DSA), 14. Arava Valley (Údolí Arava) (AV), 15. Northern Negev (Severní Negev) (NN), 16. Southern Negev (Jižní Negev) (SN), 17. Central Negev (Centrální Negev) (CN), 18. Golan Heights (Golanské výšiny) (GH), 19. Mount Hermon (Pohoří Hermon) (MH).

Fauna of Saudi Arabia can not (unfortunately) be regarded as an important source of faunistic information for Levantine area.

In the Zoological Museum of the Tel Aviv University (TAU) is deposited collection from Palestine (Israel) including 1) material from the time of British mandate, 2) the collection from the Hebrew University in Jerusalem, 3) the collection from the Museum "Bet Ussishkin", kibbutz Dan, Israel, and 4) beetles collected by the TAU students and employers. Scarabeid beetles were ideintified by G. J. Arrow, Q. Argaman, V. Balthasar, H. Bytinski-Salz, G. E. Bryant, E. Gridelli, R. Petrovitz, R. D. Pope, E. Reitter and F. Stäcklein and seen by authors.

In this catalogue we have used the family classification as used by Crowson (1981) and monographic works and group revisions by the following authors: Balthasar (1945, 1963a,b, 1964), Baraud (1965a,b, 1988, 1989a,b, 1990a,b,c, 1991), Dellacasa (1983, 1987), Endrödi (1985), Krell (1994), Kuijten (1989), Martín Piera (1987), Martín Piera & Zunino (1985, 1986), Mikšić (1958, 1959, 1982, 1987), Petrovitz (1964, 1969), Pittino (1983, 1991), Pope (1960), Stebnicka (1977), Tauzin (1991, 1992, 1993, 1994), and Young (1989).

Abbreviations used in the catalogue:
C, E, N, S, W - Central, East(ern), North(ern), South(ern), West(ern)
TAU - collection of the Zoological Museum of the Tel Aviv University
For abbreviations of zoogeographical areas in Israel see Fig. 1.

A SURVEY OF SPECIES

Superfamily S C A R A B A E O I D E A

1. Family L U C A N I D A E
species : 4

1. ***Lucanus cervus syriacus*** Planet, 1897 - Levantine: Syria (Winkler 1927-1932); Israel: C (TAU), UG (TAU), S (TAU), MH (TAU), JH (TAU). Rare.
2. ***Dorcus parallelipipedus*** (Linnaeus, 1758) - Palaearctic: Europe, Caucasus, Armenia, N Africa, Asia Minor (Baraud 1993), Turkey (Bytinski-Salz 1956), Syria (Winkler 1927-1932); Israel: UG (TAU), LG (TAU), GH (TAU), MH (TAU), C (TAU), CCP (TAU). Uncommon.
3. ***Dorcus peyronis*** Reiche et Saulcy, 1856 - E Mediterranean: From Greece to Transcaucasus (Baraud 1993), Syria (Reiche & Saulcy 1856, Baraud 1993), Iran (Petrovitz in Baraud 1993; TAU); Israel: S (TAU), JH (TAU), JF (TAU). Rare.
4. ***Platycerus delagrangei*** Fairmaire, 1892 - Levantine: Syria (Winkler 1927-1932), Antilebanon (Baudi 1894).

2. Family T R O G I D A E
species: 12

1. ***Trox cadaverinus*** Illiger, 1801 - Palaearctic: Syria (Winkler 1927-1932); Israel: possible.

2. ***Trox denticulatus*** Olivier, 1789 - Eremian: Egypt (Alfieri 1976), Syria (Winkler 1927-1932), Palestine (Bodenheimer 1937).
3. ***Trox granulipennis*** Fairmaire, 1852 (= *T. barbarus* Harold, 1872): Mediterranean: Spain, N Africa, Sinai, Canary Islands, Israel, Lebanon, Syria, Caucasus (Pittino 1983, Lopez-Colon 1991, Alfieri 1976); Israel: UG (TAU), LG (TAU), C (Haifa, Pittino 1983), SCP (TAU), JH (TAU), CCP (Tel Aviv-Jaffa, Bat Yam, Pittino 1983; TAU), JV (TAU), DSA (TAU), NN (TAU). Common.
4. ***Trox hispidus mixtus*** Harold, 1872 (= *T. berytensis* Petrovitz, 1980) - E Mediterranean: Lebanon, Syria, Israel, Cyprus, Anatolia (Pitino 1991); Israel: MC (Haifa, Pittino 1983; TAU), MH (TAU), SCP (Beit Nir, Pittino 1983). Rare.
5. ***Trox klapperichi*** Pittino, 1983: E Mediterranean and Arabian: Jordan, Palestine, Syria, Israel, Turkey, Rhodes, Cyprus, Crimea, Iran, Arabia (Pittino 1983); Israel: CCP (Tel Aviv - Jaffa, Pittino 1983).
6. ***Trox leonardii*** Pittino, 1983: Mediterranean: Spain, Portugal, N Africa, Israel, Asia Minor, S Europe (Pittino 1983); Israel: CCP (Bat Yam, Pittino 1983; TAU).
7. ***Trox perlatus granulatus*** Fabricius, 1801 - Mediterranean: Palestine (Bodenheimer 1937).
8. ***Trox quadrimaculatus*** Ballion, 1870 - Mediterranean and Irano-Turanian; Israel: CCP (TAU), SCP (TAU), JV (TAU), NN (TAU). Rare.
9. ***Trox sabulosus*** (Linnaeus, 1758) - Palaearctic: Syria (El-Hariri 1971).
10. ***Trox scaber*** (Linnaeus, 1767) - Cosmopolitan: Israel: UG (TAU), JH (TAU). Rare.
11. ***Trox transversus*** Reiche et Saulcy, 1856 - N and E Mediterranean: Syria (El-Hariri 1971), Lebanon (Reiche & Saulcy 1856) Israel: MH (TAU), C (TAU). Rare.
12. ***Glaresis handlirschi*** Reitter, 1893 - S Mediterranean: Egypt, Sinai (Alfieri 1976); Israel: possible.

3. Family **G E O T R U P I D A E**
species: 4

3.1. Subfamily **BOLBOCERATINAE**
species: 2

1. ***Bolbelasmus bocchus*** (Erichson, 1841) - Mediterranean: S & E Mediterranean, Egypt (Alfieri 1976); Israel: JF (TAU), CCP (TAU), CN (TAU). Rare.
2. ***Bolbelasmus nireus*** (Reitter, 1895) - Syria (orig. description; Winkler 1927-1932).

3.2. Subfamily **GEOTRUPINAE**
species: 2

3. ***Thorectes brullei syriacus*** Jekel, 1866 - Levantine: Syria (Winkler 1927-1932), Lebanon (TAU); Israel: UG (TAU), GH (TAU), MH (TAU), C (TAU), YV (TAU), JH (TAU). Uncommon.
4. ***Typhaeus fossor*** Waltl, 1838 - E Mediterranean: Syria (Winkler 1927-1932); Israel: UG (TAU), C (TAU), S (TAU), JH (TAU). Uncommon.

4. Family **O C H O D A E I D A E**
species: 4

1. ***Ochodaeus berytensis*** Petrovitz, 1964 - Levantine: Israel: UG (TAU). Rare.
2. ***Ochodaeus cornifrons*** Solsky, 1876 - Mediterranean and Irano-Turanian: Syria, Palestine (El-Hariri 1971).
3. ***Ochodaeus gigas*** Marseul, 1878 - Egypt, Sinai (Alfieri 1976).
4. ***Ochodaeus inscutellaris*** Pic, 1900 - Mediterranean: Palestine (Winkler 1927-1932, Bodenheimer 1937).

5. Family **H Y B O S O R I D A E**
species: 2

1. ***Brenskea coronata*** Reitter, 1892 (= *B. varentzovi* Semenov, 1896) - Eremian: Sinai (Alfieri 1976; TAU); Israel: CCP (TAU). Uncommon.
2. ***Hybosorus roei*** Westwood, 1845 (= *H. illigeri* Reiche, 1853) - Cosmopolitan (Martín Piera & Lobo 1992): Palaearctics, India, N America, Egypt, Sinai (Alfieri 1976); Israel: UG (TAU), GH (TAU), MH (TAU), NCP (TAU), CCP (TAU), SCP (TAU), JH (TAU), NN (TAU). Common.

6. Family **G L A P H Y R I D A E**
species: 29

1. ***Glaphyrus comosus*** Harold, 1869 - Levantine: Syria (Winkler 1927-1932); Israel: LG (TAU), CCP (TAU), S (TAU), JH (TAU), JD (TAU), DSA (Bytinski-Salz 1957; TAU), AV (TAU), CN (TAU), NN (TAU). Uncommon.
2. ***Glaphyrus haroldi*** Quedenfeldt, 1891 - Egypt, Sinai (Alfieri 1976).
3. ***Glaphyrus onopordi*** Reitter, 1903 - Eremian: Israel: JV (TAU), AV (TAU), NN (TAU), CN (TAU). Uncommon.
4. ***Glaphyrus rothi*** Harold, 1869 - Levantine: Syria (El-Hariri 1971); Israel: DSA (Bytinski-Salz 1957), NN (TAU). Rare.
5. ***Glaphyrus syriacus*** Harold, 1869 - Levantine: Syria (Winkler 1927-1932); Israel: UG (TAU), LG (TAU), JH (TAU), NN (TAU), CN (TAU). Uncommon.
6. ***Glaphyrus varians*** Ménétriés, 1836 - E Mediterranean: Turkey (Mitter 1992), Syria (Winkler 1927-1932), Armenia, Iran, Iraq, Palestine (Petrovitz 1972).
7. ***Eulasia arctos*** (Pallas, 1781) - Palaearctic: Syria (Winkler 1927-1932).
8. ***Eulasia fastuosa*** (Reitter, 1890) - E Mediterranean: Turkey, Israel, Lebanon, Syria (Winkler 1927-1932, Baraud 1990c), Palestine (Bodenheimer 1937).
9. ***Eulasia genei*** (Truqui, 1848) - E Mediterranean: Syria, Israel, Jordan, Iran (Winkler 1927-1932; Baraud 1990c), Palestine (Giachino 1982); Israel: LG (TAU), JV (TAU), JH (TAU), CCP (TAU). Uncommon.
10. ***Eulasia hyrax*** (Truqui, 1848) - E Mediterranean: Asia Minor, Syria, Lebanon, Israel (Petrovitz 1971), Palestine (Giachino 1982); Israel: UG (TAU), LG (TAU), GH (TAU), C (TAU), JH (TAU). Common.

11. ***Eulasia japhoensis*** (Petrovitz, 1973) - Israel: CCP (Jaffa, Holon, Baraud 1990c, Petrovitz 1973; TAU). Rare.
12. ***Eulasia jordanica*** Mitter, 1992 - Jordan (orig. description).
13. ***Eulasia nitidicollis*** (Reiche, 1862) - E Mediterranean: Turkey, Syria, Jordan, Israel (Baraud 1990c, Mitter 1992); Israel: JH (TAU), JF (TAU), JD (TAU). Uncommon.
14. ***Eulasia papaveris*** (Sturm, 1843) - E Mediterranean and Irano-Turanian: Turkey, Syria, Lebanon, Cyprus, Iran (Baraud 1990c, Winkler 1927-1932), Egypt (Alfieri 1976), Palestine (Giachino 1982); Israel: LG (TAU), GH (TAU), YV (TAU), JH (Jerusalem, Baudi 1894; TAU). Uncommon.
15. ***Eulasia pietschmanni*** (Breit, 1919) - E Mediterranean and Arabian: Jordan, Iraq, Arabia, Israel (Baraud 1990c, Petrovitz 1972).
16. ***Eulasia rapillyi*** Baraud, 1988 - Levantine: Lebanon, Israel, Syria (?) (Baraud 1990c); Israel: NN (Be'er Sheva).
17. ***Eulasia saccai*** (Petrovitz, 1957) - Levantine: Syria, Israel (Baraud 1990c); Israel: LG (TAU), GH (TAU), JV (Jericho, Baraud 1990c; TAU), JH (TAU), JD (TAU). Common.
18. ***Eulasia speciosa*** (Champenois, 1900) - E Mediterranean and Irano-Turanian: Turkey, Syria, Iran (Baraud 1990c, Winkler 1927-1932).
19. ***Eulasia vittata lineata*** (Faldermann, 1835) - E Mediterranean: Turkey (Mitter 1992), Syria (Winkler 1927-1932); Israel: UG (TAU), C (TAU), NCP (TAU), JH (TAU), SCP (TAU). Common.
20. ***Pygopleurus akbesianus*** (Petrovitz, 1957) - Syria (Baraud 1989b).
21. ***Pygopleurus aleppensis*** (Petrovitz, 1957) - E Mediterranean: Turkey, Syria, Israel (Baraud 1989b); Israel: UG (TAU), LG (TAU), JV (TAU), DSA (TAU), JH (Jerusalem, Baraud 1989b; TAU), CCP (Jaffa, Baraud 1989b; TAU). Uncommon.
22. ***Pygopleurus caesareae*** Baraud, 1989 - Israel: MH (Baraud 1989b), GH (Baniyas, S Mas'ada Wasit, Baraud 1989b).
23. ***Pygopleurus israelitus*** (Muche, 1963) - Levantine: Lebanon, Israel (Baraud 1989b); Israel: MH, LG (Nazareth), C (Haifa), S (Ramleh, Tefileh), JH (Jerusalem) (all Baraud 1989b).
24. ***Pygopleurus libanonensis*** (Petrovitz, 1957) - E Mediterranean: Turkey, Syria, Lebanon, Israel (Baraud 1989b); Israel: MH (TAU), UG (TAU), C (Haifa, Baraud 1989b; TAU), CCP (TAU). Rare.
25. ***Pygopleurus orientalis*** (Petrovitz, 1957) - Levantine: Israel, Lebanon (Baraud 1989b); Israel: LG (TAU), GH (TAU), MH (TAU), YV (Jenin, Baraud 1989b; TAU), S (Nablouse (cited as a locality in Jordan by Baraud 1989b), JH (TAU), CCP (Jaffa, Baraud 1989b; TAU), CN (TAU). Common.
26. ***Pygopleurus ponticus*** (Petrovitz, 1957) - E Mediterranean: Turkey, Syria, Israel (Baraud 1989b); Israel: CCP (Jaffa, Baraud 1989b).
27. ***Pygopleurus psilotrichius*** (Faldermann, 1835) - E Mediterranean: Turkey, Caucasus, Jordan (Baraud 1989b).
28. ***Pygopleurus sinaicus*** (Petrovitz, 1957) - N Sinai (orig. description).
29. ***Pygopleurus syriacus*** (Linnaeus, 1758) - Levantine: Syria, Lebanon, Jordan, Israel (Baraud 1989b, Winkler 1927-1932); Israel: UG (TAU), LG (TAU), GH (TAU), C (Haifa, Baraud 1989; TAU), YV (TAU), CCP (Jaffa, Baraud 1989b), JH (Jerusalem, Baraud 1989b; TAU). Common.

7. Family S C A R A B A E I D A E
species: 331

7.1. Subfamily SCARABAEINAE
species: 77

1. ***Mnematidium multidentatum*** Klug, 1845 - S and E Mediterranean: Egypt, Cyrenaika, Sinai, Transjordan, Palestine, Syria (Alfieri 1976, Balthasar 1963a, Winkler 1927-1932; TAU); Israel: LG (TAU), NCP (TAU), CCP (Jaffa, Tel Aviv, Balthasar 1963a; TAU), DSA (TAU), NN (TAU), CN (TAU). Common.
2. ***Mnematium silenus*** Gray, 1832 - S Mediterranean and Arabian: N Africa, Arabia, Iraq (Paulian 1980); Israel: AV (TAU), SN (TAU). Rare.
3. ***Scarabaeus armeniacus*** Ménétriés, 1832 - S Mediterranean: Egypt, Sinai (Alfieri (1976) such as *S. puncticollis* (Latreille, 1819); TAU), Syria, Palestine (Balthasar 1963a), Winkler 1927-1932); Israel: NCP (TAU), CCP (TAU), NN (TAU). Common.
4. ***Scarabaeus cristatus*** Fabricius, 1775 - Indo-African (Paulian 1980): Egypt (Alfieri 1976); Israel: DSA (Bytinski-Salz 1957), NN (TAU), SCP (TAU). Uncommon.
5. ***Scarabaeus gangeticus*** Castelnau, 1840 - Palaeotropical: Egypt (Alfieri 1976); Israel: NN (TAU). Rare.
6. ***Scarabaeus pius*** (Illiger, 1803) - Mediterranean and Irano-Turanian: S Europe, Asia Minor, Armenia, Caucasus, Afghanistan, Syria (Balthasar 1963a); Israel: LG (TAU), MH (TAU), SCP (TAU). Uncommon.
7. ***Scarabaeus sacer*** Linnaeus, 1758 - S Palaearctic: Mediterranean, Mesopotamia, Turkestan, Mallorca (Martín Piera & Lobo 1992), Morocco (Tauzin 1990), Turkey (Bytinski-Salz 1956), Egypt (Alfieri 1976, Balthasar, 1963a), Sinai (Peyerimhoff 1907, Bodenheimer & Theodor 1929, Alfieri 1976), Syria, Palestine (Balthasar 1963a); Israel: UG (TAU), YV (TAU), DSA (Hart 1891), JH (TAU), CCP (TAU), NN (TAU). Common.
8. ***Scarabaeus semipunctatus*** Fabricius, 1792 - Mediterranean (Balthasar 1963a): Morocco (Tauzin 1990), Egypt (Alfieri 1976), Palestine (Bodenheimer 1937).
9. ***Scarabaeus typhon*** Fischer von Waldheim, 1823 (= *S. affinis* Brullé, 1832) - S Palaearctic: S Europe, Asia Minor, Iran, Syria, Armenia, C Asia, China, Tibet, Korea (Balthasar 1963a).
10. ***Gymnopleurus calignosus*** Balthasar, 1962 - Israel: SCP (TAU), NN (TAU). Rare.
11. ***Gymnopleurus flagellatus*** (Fabricius, 1787) (= *S. coriarius* Herbst, 1789) - Mediterranean and Irano-Turanian: Morocco (Tauzin 1990), Egypt, Palestine (Balthasar 1963a), Syria (Baudi 1894, Balthasar 1963a); Israel: NCP (TAU), JD (Mar Saba, Baudi 1894), JV (TAU), JH (TAU), NN (TAU). Uncommon.
12. ***Gymnopleurus geoffroyi*** (Fuessly, 1775) - Palaearctic: Turkey (Bytinski-Salz 1956), Egypt (Balthasar 1963a); Israel: UG (TAU), NCP (TAU), JF (TAU), CCP (TAU). Uncommon.
13. ***Gymnopleurus mopsus*** (Pallas, 1781) - Palaearctic: Syria (Baudi 1894, Winkler 1927-1932), Egypt (Alfieri 1976), Palestine (Balthasar 1963a); Israel: UG (TAU), LG (TAU), GH (TAU), MH (TAU), S (TAU), JH (TAU), JF (TAU), CCP (TAU). Common.

Remark: Kabakov (1980) recorded *Scarabaeus acuticollis* Motschulsky, 1849 from Syria, Iran, Afghanistan, C Asia.

14. ***Gymnopleurus sturmi*** MacLeay, 1821 - Mediterranean: Morocco (Tauzin 1990), Syria (Winkler 1927-1932); Israel: C (TAU). Rare.
15. ***Sisyphus schaefferi boschniaki*** Fischer von Waldheim, 1823 - Mediterranean and Irano-Turanian: Turkey (TAU), Syria (TAU), Jordan (Djerach (Jerash), Baudi 1894); Israel: MH (Baudi 1894; TAU), UG (TAU), LG (TAU), GH (TAU), C (TAU), NCP (TAU), JH (TAU). Common.
16. ***Copris hispanus*** (Linnaeus, 1764) - Mediterranean and Irano-Turanian: Morocco (Tauzin 1990), Jordan (Es-Salt, Baudi 1894), Egypt (Alfieri 1976), Syria (Balthasar 1963a); Israel: UG (TAU), GH (TAU), MH (TAU), C (TAU), NCP (TAU), YV (TAU), JV (TAU), JH (TAU), CCP (TAU), SCP (TAU), AV (TAU), DSA (TAU), NN (TAU). Common.
17. ***Catharsius sesostris*** Waterhouse, 1888 - Palaeotropical: Egypt (Alfieri 1976), Arabia (Paulian 1980), Egypt, Syria, Palestine (Balthasar 1963a, Paulian 1980, Winkler 1927-1932); Israel: SCP (TAU). Rare.
18. ***Cheironitis furcifer*** (Rossi, 1792) - Mediterranean: N Africa, SE Mediterranean Europe, Turkey, Syria (Martín Piera 1987); Israel: UG (TAU), LG (TAU), C (TAU), NCP (TAU), JV (TAU), JH (TAU), CCP (TAU), NN (TAU). Common.
19. ***Cheironitis irroratus*** (Rossi, 1790) - Mediterranean: N Africa, SW Mediterranean Europe, Syria, Egypt, Sinai (Martín Piera 1987, Schatzmayr 1946); Israel: SCP (TAU), NN (TAU). Uncommon.
20. ***Cheironitis moeris*** (Pallas, 1781) - E Mediterranean and C Asian: Syria, Uzbekistan, Turkestan, Kazakhstan, Palestine (Lebanon?) (Martín Piera 1987).
    Remark: Martín Piera (1987) mentioned *Ch. moeris* from Sarepta in Palestine, but this is not probably correct, because Sarepta (or Sarephta) is place in Lebanon.
21. ***Cheironitis pamphilus*** (Ménétriés, 1849) - Mediterranean and Irano-Turanian: S Europe, Asia Minor, Syria, Lebanon, Palestine, Iran, Afghanistan, Transcaspian Region and Uzbekistan (Martín Piera 1987), Sinai (TAU); Israel: JF (TAU), CCP (TAU). Rare.
22. ***Onitis alexis septentrionalis*** Balthasar, 1942 - S and E Mediterranean: Morocco (Tauzin 1990), Ethiopia, Arabia (Paulian 1980), Egypt (Alfieri 1976), Syria (Winkler 1927-1932), Cyprus (TAU), Syria, Lebanon, Palestine (Balthasar 1963b); Israel: UG (TAU), NCP (TAU), JF (TAU), CCP (TAU), NN (TAU). Common.
23. ***Onitis damoetas*** Steven, 1806 - Mediterranean: Lebanon, Syria (Balthasar 1963b, Winkler 1927-1932); Israel: UG (TAU). Rare.
24. ***Onitis ezechias*** Reiche et Saulcy, 1856 - E Mediterranean: Syria (Reiche & Saulcy 1856; Winkler 1927-1932), Palestine, Egypt, Asia Minor (Balthasar 1963b); Israel: UG (TAU), LG (TAU), JV (TAU), JH (TAU), NN (TAU). Uncommon.
25. ***Onitis humerosus*** (Pallas, 1771) - Palaearctic: Syria, Lebanon, Palestine (Balthasar 1963b); Israel: UG (TAU), GH (TAU), MH (TAU), JD (Mar Saba; Baudi 1894), JV (TAU), JH (TAU), CCP (TAU), SCP (TAU), NN (TAU). Common.
26. ***Onitis ion*** (Olivier, 1789) - Mediterranean: S Europe, N Africa (Balthasar 1963b), Morocco (Tauzin 1990); Israel: JV (TAU), SC (TAU). Uncommon.
27. ***Bubas bubalus*** (Olivier, 1811) - Mediterranean: Syria, Lebanon, Palestine, Egypt (Alfieri 1976, Balthasar 1963b, Alfieri 1976), Morocco (Tauzin 1990); Israel: UG (TAU), NCP (TAU), C (Haifa, Schatzmayr 1944), JV (TAU), JH (Jerusalem, Schatzmayr 1944; TAU), CCP (TAU), SCP (Gaza, Hart 1891; TAU). Common.

28. ***Euoniticellus fulvus*** (Goeze, 1777) - European and Mediterraenan: C & S Europe, N Africa, Syria, Lebanon (Balthasar 1963b), Morocco (Tauzin 1990).
29. ***Euoniticellus pallipes*** (Fabricius, 1781) - S Palaearctic: Mediterranean, Caucasus, C Asia, Mongolia, introduced in India and Australia (Martín Piera & Lobo 1992), Syria (Winkler 1927-1932); Israel: UG (TAU), NCP (TAU), JV (TAU), JD (TAU), CCP (TAU). Common.
30. ***Caccobius histeroides*** (Ménétriés, 1832) - S European and E Mediterranean; Syria (Balthasar 1963b), Israel: UG (TAU), GH (TAU). Rare.
31. ***Caccobius mundus*** (Ménétriés, 1838) - Mediterranean and Irano-Turanian: Syria, Lebanon, Palestine (Balthasar 1963b, Winkler 1927-1932); Israel: UG (TAU), GH (TAU), MH (TAU), JH (TAU). Uncommon.
32. ***Caccobius pulicarius*** Harold, 1875 - Levantine: Syria (orig. description), Palestine (Balthasar 1949).
33. ***Caccobius schreberi*** (Linnaeus, 1767) - Mediterranean and Irano-Turanian: Turkey (Bytinski-Salz 1956), Egypt, Syria (Balthasar 1963b), Morocco (Tauzin 1990); Israel: UG (TAU), NCP (TAU), JV (TAU), JH (TAU), JF (TAU), CCP (TAU). Common.
34. ***Euonthophagus amyntas*** (Olivier, 1789) - Mediterranean and Irano-Turanian: Syria (Balthasar 1963b); Israel: UG (TAU), GH (TAU), JD (Mar Saba, Baudi 1894), JH (TAU), SCP (TAU), NN (TAU). Common.
35. ***Euonthophagus atramentarius*** Ménétriés, 1832 - Palaearctic: Syria, Palestine (Balthasar 1963b); Israel: UG (TAU), GH (TAU), MH (TAU), YV (TAU), JH (TAU), CCP (TAU), SCP (TAU). Common.
36. ***Euonthophagus bedeli conterrimus*** Petrovitz, 1971 - Eremian: Egypt, Sinai (Alfieri 1976), Morocco (Tauzin 1990); Israel: NN (TAU), CN (TAU). Uncommon.
37. ***Euonthophagus gibbosus*** (Scriba, 1790) - Palaearctic: Syria (Balthasar 1963b; Winkler 1927-1932); Israel: MH (TAU). Rare.
38. ***Euonthophagus hannas*** (Sahlberg, 1908) - Palestine (orig. description; Balthasar 1963b, Winkler 1927-1932); Israel: JH (Jerusalem, Balthasar 1963b).
39. ***Euonthophagus tissoni*** (Reitter, 1906) - E Mediterranean: Syria (Balthasar 1963b, Winkler 1927-1932); Israel: expected.
40. ***Onthophagus aerarius*** Reitter, 1893 - S Mediterranean and Arabian: N Africa, Syria, Arabia, Egypt (Alfieri 1976, Balthasar 1963b, Paulian 1980, Winkler 1927-1932), Palestine (Bodenheimer 1937).
41. ***Onthophagus aleppensis*** Redtenbacher, 1843 - E Mediterranean and Irano-Turanian: Syria, Palestine, Transjordan, Mesopotamia, Asia Minor, Iran (Balthasar 1963b, Winkler 1927-1932); Israel: MH (TAU), CCP (TAU), SCP (TAU). Uncommon.
42. ***Onthophagus angorensis*** Petrovitz, 1963 - E Mediterranean: S Turkey (Martín Piera & Zunino 1985), Yugoslavia, Israel (Baraud 1982); Israel: MH (Baraud 1982).
43. ***Onthophagus bytinskii*** Balthasar, 1960 - Israel: CCP (TAU). Uncommon.
44. ***Onthophagus carpanetoi*** Pittino, 1982 - E Mediterranean: Anatolia, Jordan (Martín Piera & Zunino 1986).
45. ***Onthophagus circulator*** Reitter, 1891 - Levantine: Syria, Lebanon (Balthasar 1963b, Winkler 1927-1932); Israel: GH (TAU). Rare.
46. ***Onthophagus cruciatus*** Ménétriés, 1832 - E Mediterranean: Cyprus, Rhodes, Anatolia, Palestine, Syria (Balthasar 1963b, Martín Piera & Zunino 1986, Winkler 1927-1932); Israel: NCP (TAU), CCP (TAU), SCP (TAU). Uncommon.

47. ***Onthophagus falzonii*** Goidanich, 1926 - E Mediterranean: Israel: JV (TAU). Rare.
48. ***Onthophagus fissicornis*** Steven, 1809 - E Mediterranean: Syria (Balthasar 1963b); Israel: UG (TAU), GH (TAU), MH (TAU), JH (TAU), CCP (TAU). Common.
49. ***Onthophagus fissinasus*** Fairmaire, 1895 - E Mediterranean: Turkey (TAU), Asia Minor, Mesopotamia, Syria (Balthasar 1963b, Winkler 1927-1932; TAU); Israel: MH (TAU). Rare.
50. ***Onthophagus fracticornis*** (Preyssler, 1790) - Holarctic: Syria (Balthasar 1963b), Palestine (Bodenheimer 1937).
51. ***Onthophagus furcatus*** (Fabricius, 1781) - Mediterranean and Arabian: S & C Europe, Turkey, Arabia, C Asia (Paulian 1980, Zunino 1981), Syria (Balthasar 1963b); Israel: MH (TAU), NCP (TAU), CCP (TAU). Uncommon.
52. ***Onthophagus furciceps*** Marseul, 1869 - Irano-Turanian: Syria, Irak, Kurdistan, Iran (Balthasar 1963b).
53. ***Onthophagus furcicornis*** Reitter, 1892 - E Mediterranean and Irano-Turanian: Syria, Lebanon, Iran (Balthasar 1963b).
54. ***Onthophagus gibbulus*** (Pallas, 1781) - Palaearctic: S Europe, Asia Minor, Transcaucasus, Syria, Mesopotamia, Turkestan, Mongoloia, Siberia, China (Balthasar 1963b).
55. ***Onthophagus illyricus*** (Scopoli, 1763) - E Mediterranean: Turkey (TAU), Syria (Balthasar 1963b, Winkler 1927-1932), Cyprus (TAU); Israel: UG (TAU). Rare.
56. ***Onthophagus kindermanni*** Harold, 1877 - E Mediterranean: S Europe, Syria (Balthasar 1963b).
57. ***Onthophagus lucidus*** (Sturm, 1800) - E Mediterranean: Syria (Balthasar 1963b); Israel: UG (TAU), LG (TAU), JH (TAU), CCP (TAU). Uncommon.
58. ***Onthophagus marginalis*** Gebler, 1817 - Palaearctic: Turkey, Syria, Palestine (Balthasar 1963b, Bodenheimer 1937, Bytinski-Salz 1956).
59. ***Onthophagus melanocephalus*** Klug, 1845 - Palaeotropical: Egypt, Sinai (Alfieri 1976); Israel: CCP (TAU), NN (TAU), CN (TAU). Uncommon.
60. ***Onthophagus nebulosus*** Reiche et Saulcy, 1854 - Palaeotropical: N Africa, Morocco, Arabia, Syria, Iraq (Paulian 1980, Zunino 1981), Egypt (Alfieri 1976), Syria (Winkler 1927-1932); Alfieri 1976, Balthasar 1963b, Zunino 1981); Israel: JV (TAU), DSA (TAU), NN (TAU). Common.
61. ***Onthophagus novaki*** Boucomont, 1927 - E Mediterranean: Syria, Turkey, Lebanon, Israel (Balthasar 1963b, Martín Piera & Zunino 1986, Schatzmayr 1944, Winkler 1927-1932); Israel: UG (TAU), GH (TAU), MH (TAU), C (Haifa, Schatzmayr 1944), JH (Jerusalem, Schatzmayr 1944; TAU), CCP (TAU). Common.
62. ***Onthophagus opacicollis*** Reitter, 1893 - Mediterranean: Syria, Palestine (Balthasar 1963b); Israel: UG (TAU), LG (TAU), S (TAU), JF (TAU), CCP (TAU), SCP (TAU). Common.
63. ***Onthophagus ovatus*** (Linnaeus, 1767) - European and C Asian (Martín Piera & Zunino 1986), Palestine (Bodenheimer 1937).
64. ***Onthophagus pictus*** Reitter, 1893 - S and E Mediterranean: Egypt, Syria (Balthasar 1963b, Winkler 1927-1932).
65. ***Onthophagus ruficapillus*** Brullé, 1832 (= *O. hermonensis* Baraud, 1982; = *O. ruficapillus guilanensis* Pittino, 1982) - S European and Irano-Turanian (Martín Piera & Zunino 1986): Turkey (Bytinski-Salz 1956), Syria (Balthasar 1963b), Greece (Reiche & Saulcy 1856); Israel: MH (TAU), UG (TAU), LG (TAU), JH (TAU), NCP (TAU), CCP (TAU). Common.

66. ***Onthophagus sellatus*** Klug, 1845 - S and E Mediterranean and Arabian: Nubia, Egypt, Cyprus, Saudi Arabia (Zunino 1979, 1981), Syria (Balthasar 1963b, Winkler 1927-1932); Israel: CCP (TAU), SCP (TAU). Common.
67. ***Onthophagus sericatus*** Reitter, 1893 - E Mediterranean: Israel: UG (TAU), MH (TAU). Rare.
68. ***Onthophagus similis*** (Scriba, 1790) - Mediterranean: Morocco (Tauzin 1990), Israel: UG (TAU), NCP (TAU), JH (TAU), CCP (TAU). Common.
69. ***Onthophagus simius*** Reitter, 1893 - Syria (Balthasar 1963b, Winkler 1927-1932).
70. ***Onthophagus speculifer*** Solsky, 1876 - Mediterranean and Irano-Turanian: Israel: GH (TAU), MH (TAU). Uncommon.
71. ***Onthophagus sticticus*** Harold, 1867 - Palaeotropical: C & N Africa, Erythrea, Somalia, S Arabia (Paulian 1980, Zunino 1981), Sinai (Alfieri 1976, Balthasar 1963b, Schatzmayr 1946).
72. ***Onthophagus suturellus*** Brullé, 1832 - Mediterranean: Syria (Balthasar 1963b), Palestine (Bodenheimer 1937).
73. ***Onthophagus taurus*** (Schreber, 1759) - Mediterranean and Irano-Turanian: Syria (Balthasar 1963b), Morocco (Tauzin 1990); Israel: UG (TAU), NCP (TAU), CCP (TAU). Uncommon.
74. ***Onthophagus transcaspicus*** Koenig, 1888 - Ethiopia, Somalia, Arabia, and S Palaearctic: N Africa, C Asia, Pakistan, Iran (Zunino 1979, 1981), Morocco (Chavanon 1994), Sinai (Bodenheimer & Theodor 1929 as *O. lineatus* (= *O. t. lineatus* Redtenbacher, 1888), Alfieri 1976); Israel: SCP (TAU), AV (TAU). Uncommon.
75. ***Onthophagus truchmenus*** Kolenati, 1846 - Palaearctic: Syria, Lebanon (Balthasar 1963b); Israel: MH (TAU). Uncommon.
76. ***Onthophagus vacca*** (Linnaeus, 1767) - N and E Mediterranean: Morocco (Tauzin 1990), Syria (Balthasar 1963b), Palestine (Bodenheimer 1937).
77. ***Onthophagus verticicornis*** (Laicharting, 1781) - N and E Mediterranean: C & S Europe, Asia Minor, Turkestan, Transcaucasus, Syria (Balthasar 1963b).

7.2. Subfamily **APHODIINAE**
species: 107

78. ***Aphodius aequalis*** A. Schmidt, 1907 (= *A. nitidus* Ballion, 1871) - S Palaearctic: Transcaucasus, Syria, Ural, Peloponnese, Italy, N Africa, Turkey, Iran, Afghanistan, C Asia, Arabia (Balthasar 1964, Dellacasa 1983, Pittino 1984), Palestine (Bodenheimer 1937); Israel: MH (Baudi 1894).
79. ***Aphodius affinis*** Panzer, 1823 - European and Mediterranean: Europe, NW Africa (Dellacasa 1983), Morocco (Tauzin 1990), Palestine (Bodenheimer 1937).
80. ***Aphodius angulosus*** Harold, 1869 - Levantine: Syria, Palestine (Balthasar 1964, Bodenheimer 1937).
81. ***Aphodius angustatus*** Klug, 1845 - Eremian: E & N Africa (Balthasar 1964), Palestine (Bodenheimer 1937).
82. ***Aphodius antilibanonicus*** Balthasar, 1961 - Levantine: Syria (Antilebanon, orig. description); Israel: MH (TAU). Rare.
83. ***Aphodius arabicus*** Harold, 1875 - S Mediterranean, Arabian and Ethiopian: Arabia, Ethiopia, Egypt, Sinai (Alfieri 1976, Balthasar 1964).

84. ***Aphodius assectator*** Balthasar, 1961 - Eremian: Arabia, Iraq, Egypt (Balthasar 1964); Israel: NN (TAU). Rare.
85. ***Aphodius brahminus*** Harold, 1879 - Burma, Laos (Balthasar 1964), Syria? (Reitter 1892).
86. ***Aphodius bytinskisalzi*** Petrovitz, 1971 - Israel: GH (orig. description, TAU). Rare.
87. ***Aphodius calliger*** Sahlberg, 1907 - Levantine: Lebanon, Palestine (Balthasar 1964, Bodenheimer 1937); Israel: CCP (Jaffa, orig. description).
88. ***Aphodius carinatus*** Germar, 1824 - Palaearctic: C & S Europe, Caucasus, Mongolia, China, Palestine (Balthasar 1964).
89. ***Aphodius chobauti*** Clouët, 1896 - S Mediterranean: N Africa, Iraq, Arabia, Palestine (Pittino 1984).
90. ***Aphodius cognatus*** Fairmaire, 1860 (= *A. klugi* A. Schmidt, 1910) - Palaeotropical: Africa, Egypt, Sinai, Turkey, Syria, Iran, Transcaspien region (Alfieri 1976, Balthasar 1964, Dellacasa 1983); Israel: possible.
91. ***Aphodius consputus*** Creutzer, 1799 - Palaearctic: C & S Europe, N Africa, Asia Minor, Caucasus (Dellacasa 1983), Syria (Balthasar 1964, Winkler 1927-1932), Palestine (Bodenheimer 1937).
92. ***Aphodius contractus*** Klug, 1845 - N Africa, Sinai, Rhodes, Afghanistan (Alfieri 1976, Balthasar 1964), Syria (Winkler 1927-1932); Israel: expected.
93. ***Aphodius cribrarius*** Brullé, 1836 - Mediterranean: SE Europe, Asia Minor, Syria, Transcaucasus (Balthasar 1964, Dellacasa 1983), Palestine (Bodenheimer 1937).
94. ***Aphodius desertus*** Klug, 1845 - S Mediterranean, Arabian and Ethiopian: Arabia, Somalia, Sudan, Senegal, Egypt, Sinai (Alfieri 1976, Balthasar 1964).
95. ***Aphodius discedens*** A. Schmidt, 1907 - Palestine (Balthasar 1964); Israel: DSA (Balthasar 1964), JV (TAU). Rare.
96. ***Aphodius distinctus*** (Müller, 1776) - European and Mediterranean: Europa, N Africa, Asia Minor, introduced in N America (Balthasar 1964, Dellacasa 1983), Palestine (Bodenheimer 1937).
97. ***Aphodius equinus*** Faldermann, 1835 - E Mediterranean: Syria, Iraq, C Asia (Turkmenistan) (Balthasar 1964, Winkler 1927-1932); Israel: GH (TAU), MH (TAU), JV (TAU), JH (TAU), JD (TAU), DSA (TAU), NN (TAU). Common.
98. ***Aphodius equitis*** W. Koshantshikow, 1912 - Irano-Turanian: Syria, Mesopotamia (Balthasar 1964).
99. ***Aphodius erraticus*** (Linnaeus, 1758) - Palaearctic (introduced in N America) (Dellacasa 1983): Israel: UG (TAU), LG (TAU), MH (TAU), JV (TAU), JF (TAU), JH (TAU), CCP (TAU), DSA (TAU), JD (TAU), NN (TAU), CN (TAU). Common.
100. ***Aphodius esimoides*** Reitter, 1893 - Eremian: N Africa (Balthasar 1964); Israel: JH (Jerusalem, Schatzmayr 1946).
101. ***Aphodius filitarsis*** Reitter, 1898 - Levantine: Syria, Lebanon (Balthasar 1964).
102. ***Aphodius fimetarius*** (Linnaeus, 1758) - Palaearctic (introduced in N America and Australia) (Dellacasa 1983): Syria (TAU); Israel: UG (TAU), GH (TAU), MH (TAU), C (TAU), NCP (TAU), JF (TAU), CCP (TAU). Common.
103. ***Aphodius fumigatulus*** Reitter, 1892 - E Mediterranean: Asia Minor, Transcaucasus, Georgia (Balthasar 1964); Israel: JH (TAU), DSA (TAU). Rare.
104. ***Aphodius ghardimaouensis*** Balthasar, 1929 - Mediterranean: N Africa, Turkey, Italy, Iran,

Cyprus, Creta, Rhodes, Syria, Palestine (Balthasar 1964, Schatzmayr 1944, Dellacasa 1983, Pittino 1984); Israel: NCP (TAU), UG (TAU) JV (TAU), DSA (TAU), JH (TAU), CCP (TAU). Uncommon.

105. ***Aphodius granarius*** (Linnaeus, 1767) - Cosmopolitan (Dellacasa 1983): Egypt (Alfieri 1976), Sinai (Peyerimhoff 1907), Syria (El-Hariri 1971); Israel: UG (TAU), GH (TAU), LG (TAU), MH (TAU), C (TAU), JV (TAU), JH (TAU), SCP (TAU), NN (TAU). Common.
106. ***Aphodius harpagonis*** Reitter, 1890 - Levantine: Syria, Lebanon, Palestine (Balthasar 1964, Winkler 1927-1932); Israel: UG (TAU). Rare.
107. ***Aphodius hieroglyphicus*** Klug, 1845 - Mediterranean and Irano-Turanian: N Africa, Canary Islands, Spain, Sicily, Syria, Persia (Balthasar 1964, Dellacasa 1983); Israel: UG (TAU), DSA (Schatzmayr 1946; TAU), CCP (TAU), NN (TAU). Uncommon.
108. ***Aphodius hilaris*** Harold, 1869 - E Mediterranean: Iran, Armenia, Palestine (Balthasar 1964); Israel: UG (TAU). Rare.
109. ***Aphodius hucklesbyi*** Paulian, 1942 - described from Israel: CCP (Yafo).
110. ***Aphodius hydrochaeris*** (Fabricius, 1798) - Palaearctic: C & S Europe, N Africa, Syria, Transcaucasus, Siberia (Balthasar 1964, Ratti 1987), Lebanon (Dellacasa 1983), Sinai (Alfieri 1976); Israel: C (TAU), NCP (TAU), JV (TAU), CCP (TAU), NN (TAU). Uncommon.
111. ***Aphodius hyxos*** (Petrovitz, 1962) - Mediterranean and African (Dellacasa 1983): Egypt (Alfieri 1976), Mesopotamia, Armenia, Kurdistan, Asia Minor, Syria, Palestine (Balthasar 1964); Israel: GH (TAU), JH (TAU). Uncommon.
112. ***Aphodius ictericus*** (Laicharting, 1781) (= *A. nitidulus* (Fabricius, 1792) - European and Mediterranean (Dellacasa 1983): Egypt (Alfieri 1976), Syria, Palestine (Balthasar 1964); Israel: JV (TAU), JH (TAU), JF (TAU), DSA (TAU), CCP (TAU), NN (TAU), CN (TAU), SCP (TAU). Common.
113. ***Aphodius immundus*** Creutzer, 1799 - Palaearctic: C & S Europe, Asia Minor, Syria, Egypt, Turkestan, C Siberia (Balthasar 1964, Dellacasa 1983); Israel: CCP (TAU). Uncommon.
114. ***Aphodius koshantschikovi*** Jacobson, 1911 (= *A. atratellus* A. Schmidt, 1916; = *A. fimicola* Reiche et Saulcy, 1854) - E Mediterranean: Greece, Asia Minor, Syria, Palestine (Balthasar 1964), Cyprus (TAU); Israel: GH (TAU), S (Naplouse (Nablus), Reiche & Saulcy 1854), JH (TAU), CCP (TAU), CN (TAU).Uncommon.
115. ***Aphodius laevicollis*** Harold, 1866 - Ethiopian, Arabian and S Mediterranean: NE Ethiopia, N & E Africa, Syria, Arabia (Pittino 1984); Israel: possible.
116. ***Aphodius lepidulus*** Harold, 1866 - E Mediterranean: Syria (Balthasar 1964, Winkler 1927-1932), Palestine (Bodenheimer 1937); Israel: JH (Jerusalem).
117. ***Aphodius leucopterus*** Klug, 1845 - Mediterranean: N Africa, Egypt, Palestine, Balearic Islands (Balthasar 1964, Alfieri 1976); Israel: CCP (Tel Aviv, Schatzmayr 1946).
118. ***Aphodius libanonensis*** Petrovitz, 1958 - E Mediterranean: Lebanon, Asia Minor, Syria (Balthasar 1964, Dellacasa 1983); Israel: possible.
119. ***Aphodius linearis*** Reiche et Saulcy, 1856 - Euro-Siberian: Portugal, Spain, France, Greece, Syria, Palestine, W Siberia (Balthasar 1964, Dellacasa 1983); Israel: S (Naplouse (Nablus), Reiche & Saulcy 1856), UG (TAU). Rare.
120. ***Aphodius lineimargo*** Reitter, 1893 - S and E Mediterranean: Egypt, Asia Minor, Iraq, Syria (Balthasar 1964, Winkler 1927-1932), Iran (TAU), Palestine (Bodenheimer 1937).

121. ***Aphodius lineolatus*** Illiger, 1803 - Mediterranean and Irano-Turanian: S Europe, Turkey, Transcaucasus, Syria (Balthasar 1964, Dellacasa 1983), Morocco (Tauzin 1990); Israel: UG (TAU), LG (TAU), JV (TAU), JH (TAU), DSA (TAU), CCP (TAU). Uncommon.
122. ***Aphodius lividus*** (Olivier, 1789) - Cosmopolitan (Dellacasa 1983): Sinai (Alfieri 1976; TAU); Israel: CCP (TAU), NN (TAU). Uncommon.
123. ***Aphodius longispina*** Küster, 1854 - Eremian: N Africa, S Spain, Sicily, Malta, Sardinia, Sinai (Balthasar 1964, Alfieri 1976); Israel: possible.
124. ***Aphodius longissimus*** Sahlberg, 1907 - Syria (Winkler 1927-1932), Palestine (Balthasar 1964; Bodenheimer 1937); Israel: CCP (Joppem (= Yafo), orig. description).
125. ***Aphodius longevittatus*** A. Schmidt, 1916 - Levantine: Syria, Lebanon, Palestine (Balthasar 1964, Bodenheimer 1937).
126. ***Aphodius lucidus*** Klug, 1845 - S Palaearctic: Canary Islands, N Africa, Egypt, Arabia, C Asia (Paulian 1989), Sinai (Alfieri 1976); Israel: UG (TAU), JH (TAU), CCP (TAU), NN (TAU). Uncommon.
127. ***Aphodius lugens*** Creutzer, 1799 - Palaearctic: C & S Europe, N Africa, Asia Minor, Transcaucasus, Transcaspic area, Iran, Turkestan, Afghanistan (Balthasar 1964, Dellacasa 1983), Sinai (Peyerimhoff 1907), Palestine (Bodenheimer 1937).
128. ***Aphodius luridus*** (Fabricius, 1775) - Holarctic (Balthasar 1964); Israel: S (TAU), JV (TAU), JH (TAU), CCP (TAU). Uncommon.
129. ***Aphodius melanostictus*** W. Schmidt, 1840 - Palaearctic: Transcaucasus, Turkestan, Syria, Egypt (Balthasar 1964, Dellacasa 1983), Morocco (Tauzin 1990); Israel: GH (TAU), MH (TAU). Uncommon.
130. ***Aphodius menetriesi*** Ménétriés, 1849 - Palaearctic: Syria (Balthasar 1964, Winkler 1927-1932); Israel: GH (TAU). Rare.
131. ***Aphodius merdarius*** (Fabricius, 1775) - Palaearctic: Europe, Caucasus, Persia, Kurdistan, Turkestan (Dellacasa 1983), Syria (El-Hariri 1971); Israel: possible.
132. ***Aphodius mesopotamicus*** Petrovitz, 1961 - Eremian: Iraq (TAU); Israel: AV (TAU), NN (TAU). Rare.
133. ***Aphodius nanoides*** Balthasar, 1961 - E Mediterranean: Asia Minor (Balthasar 1964): Israel; JH (TAU). Rare.
134. ***Aphodius obliteratus*** Panzer, 1823 - European and E Mediterranean: Europe (Dellacasa 1983), Transcaucasus (Balthasar 1964), Palestine (Bodenheimer 1937).
135. ***Aphodius obscurus*** (Fabricius, 1792) - Palaearctic: C & S Europa, Asia Minor, Caucasus (Dellacasa 1983), Palestine (Bodenheimer 1937).
136. ***Aphodius opacior*** W. Koshantschikov, 1894 (= *A. opacus* Reitter, 1892) - Eremian: N Africa, Sinai (Balthasar 1964, Alfieri 1976); Israel: possible.
137. ***Aphodius ornatulus*** Harold, 1866 - E Mediterranean: Asia Minor, Syria (Balthasar 1964).
138. ***Aphodius palaestinensis*** Petrovitz, 1963 - Israel: JH (Betlehem, orig. description), CCP (TAU). Rare.
139. ***Aphodius palmetincolus*** Karsch, 1881 - Eremian: N Africa, Egypt (Alfieri 1976, Balthasar 1964), Sinai (Peyerimhoff 1907).
140. ***Aphodius plagiatus*** (Linnaeus, 1767) - Euro-Siberian: NC Europe, Asia Minor, Caucasus, Syria, Siberia, China (Balthasar 1964, Dellacasa 1983), Lebanon (Schatzmayr 1946); Israel: possible.

141. ***Aphodius politus*** Mulsant et Rey, 1870 - Syria (orig. description; Winkler 1927-1932).
142. ***Aphodius praeustus*** Ballion, 1870 - E Mediterranean: Transcaucasus, Transcaspian area, Turkestan, Afganistan, Syria (Balthasar 1964).
143. ***Aphodius prodromus semipellitus*** Solsky, 1876 - E Mediterranean: Greece, Syria, Caucasus, C Asia (Dellacasa 1983), Turkey (TAU), Cyprus (TAU); Israel: GH (TAU), MH (TAU), YV (TAU), JH (TAU), CCP (TAU). Uncommon.
144. ***Aphodius pruinosus*** Reitter, 1892 - Mediterranean and Irano-Turanian: Transcaucasus, Turkestan, Iran, Afghanistan, Egypt, Algeria, Libya, Lebanon, Arabia, Iran, Iraq (Balthasar 1964, Dellacasa 1983, Pittino 1984), Syria (El-Hariri 1971); Israel: LG (TAU). Rare.
145. ***Aphodius pseudounicolor*** Balthasar, 1960 - Irano-Turanian: Syria, Iraq (Balthasar 1964).
146. ***Aphodius pubescens*** Sturm, 1800 - European and E Mediterranean: C & S Europe, Asia Minor, Caucasus (Dellacasa 1983), Palestine (Bodenheimer 1937).
147. ***Aphodius punctipennis*** Erichson, 1848 - Mediterranean and Irano-Turanian: Hungary, Balkan, S Ukraine, Transcaspic area, Turkestan, Iran, Afghanistan (Dellacasa 1983), Egypt, Sinai (Alfieri 1976); Israel: possible.
148. ***Aphodius pusillus*** (Herbst, 1789) - Palaearctic: Europe, Siberia, Turkestan, Japan (Balthasar 1964, Dellacasa 1983), Syria (El-Hariri 1971); Israel: possible.
149. ***Aphodius quadriguttatus*** (Herbst, 1783) - European and Irano-Turanian: N Africa, Europe, Caucasus, Mesopotamia, Syria, Transcaspic area (Balthasar 1964, Dellacasa 1983); Israel: UG (TAU), MH (TAU), JH (TAU). Uncommon.
150. ***Aphodius rutilus*** Klug, 1845 - Ethiopian, Arabian and S Mediterranean: Arabia, Egypt, Nubia, Kenya, Sinai (Alfieri 1976, Balthasar 1964).
151. ***Aphodius sabaeus*** Peyerimhoff, 1907 - S Mediterranean: Jordan (Peyerimhoff 1907, Dellacasa 1983), Sinai (Winkler 1927-1932), Palestine (Bodenheimer 1937).
152. ***Aphodius satellitius*** (Herbst, 1789) - Mediterranean: C & S Europe, N Africa, Transcaucasus, Syria (Balthasar 1964, Winkler 1927-1932), Morocco (Tauzin 1990); Israel: GH (TAU), MH (TAU). Uncommon.
153. ***Aphodius sculpturatus*** Reitter, 1892 (= *A. asperolineatus* Balthasar, 1936) - E Mediterranean: Asia Minor, Syria, Lebanon, Transcaucasus (Balthasar 1964).
154. ***Aphodius scybalarius*** (Fabricius, 1781) - Palaearctic: Europe, C & W Siberia, Caucasus, Mesopotamia (Dellacasa 1983), Syria, Transcaucasus (Balthasar 1964), Palestine (Bodenheimer 1937).
155. ***Aphodius serotinus*** (Panzer, 1799) - Palaearctic: C & S Europe, Siberia, Manchuria (Balthasar 1964, Dellacasa 1983); Israel: NCP (TAU), JH (TAU). Uncommon.
156. ***Aphodius signifer*** Mulsant et Rey, 1870 - S and E Mediterranean: Syria, N Africa (Alfieri 1976, Balthasar 1964, Baudi 1894, Winkler 1927-1932); Israel: UG (TAU), JV (Rive del Giordano, Baudi 1894), JH (Jerusalem, Schatzmayr 1946), CCP (TAU). Rare.
157. ***Aphodius sitiphoides*** Orbigny, 1896 - S Mediterranean and Arabian: N Africa, Palestina, Syria, Iraq, Arabia (Pittino 1984); Israel: NN (TAU). Rare.
158. ***Aphodius smoliki*** Käufel, 1914 - Levantine: Syria (orig. description; Winkler 1927-1932); Israel: probable.
159. ***Aphodius sordidus*** (Fabricius, 1775) - Palaearctic: C Europe, Siberia, Mongolia, China, Japan (Dellacasa 1983), N Africa (Alfieri 1976, Balthasar 1964), Sinai (Peyerimhoff 1907), Palestine (Bodenheimer 1937).

160. ***Aphodius sphacelatus*** (Panzer, 1798) (= *A. fimicola* Gebler, 1833) - Palaearctic: Europa, N & C Asia, Transcaucasus, W Mediterranean Africa (Balthasar 1964, Dellacasa 1983, Martín Piera & Lobo 1992), Morocco (Tauzin 1990), Syria (El-Hariri 1971); Israel: GH (TAU), GH (TAU). Uncommon.
161. ***Aphodius sturmi*** Harold, 1870 - Palaearctic: C & S Europe, N Africa, Asia Minor, Transcaucasus, Armenia, Iran, Turkestan, Manchuria, Corea, Japan (Balthasar 1964, Dellacasa 1983); Israel: UG (TAU). Rare.
162. ***Aphodius suarius*** Faldermann, 1835 - Palaearctic: JW Europe, N Africa, Asia Minor, Ukraine, Crimea, Syria, Transcaucasus (Balthasar 1964, Dellacasa 1983); Israel: NCP (TAU), CCP (TAU). Uncommon.
163. ***Aphodius subterraneus*** (Linnaeus, 1758) - Holarctic (Dellacasa 1983): Antilebanon (Baudi 1894); Israel: probable.
164. ***Aphodius suffertus*** A. Schmidt, 1916 (= *A. dilatatus* Reiche et Saulcy, 1854) - E Mediterranean: Italy, Greece, Turkey (Dellacasa 1983), Palestine (Bodenheimer 1937).
165. ***Aphodius suturinigra*** A. Schmidt, 1916 - E Mediterranean: Syria, Lebanon, Iraq, Transcaucasus (Balthasar 1964).
166. ***Aphodius syriacus*** Harold, 1863 - E Mediterranean: Syria, Lebanon (Balthasar 1964, Winkler 1927-1932); Israel: MH (TAU). Rare.
167. ***Aphodius trochilus*** Reitter, 1892 - Levantine: Syria, Palestine (Balthasar 1964, Winkler 1927-1932); Israel: probable.
168. ***Aphodius varians*** Duftschmid, 1805 - Palaearctic: C & S Europe, N Africa, Asia Minor, Anatolia, Transcaucasus, Caucasus, Turkestan, China (Balthasar 1964, Dellacasa 1983); Israel: DSA (TAU), JH (TAU), JD (TAU). Uncommon.
169. ***Aphodius vittatus*** Say, 1825 - Holarctic: N America, Siberia, Turkestan, Caucasus, Asia Minor, Syria (Dellacasa 1983); Israel: UG (TAU), CCP (TAU). Uncommon.
170. ***Aphodius vitellinus*** Klug, 1845 - Ethiopian, Arabian and Mediterranean: Sudan, Ethiopia, Mediterranean Europe, N Africa, Egypt, Palestine, Syria, Arabia, Iran, Iraq (Balthasar 1964, Dellacasa 1983, Pittino 1984), Sinai (Alfieri 1976); Israel: AV (TAU). Rare.
171. ***Aphodius wollastoni*** Harold, 1862 - S Palaearctic: Canary Islands, N Africa, Arabia, Persia, Pakistan, India (Dellacasa 1983, Pittino 1984), Egypt (Alfieri 1976), Sinai (Peyerimhoff 1907, Alfieri 1976); Israel: AV (TAU), NN (TAU), CN (TAU). Common.
172. ***Aphodius xanthopterus*** Balthasar, 1938 - Syria (orig. description).
173. ***Oxyomus sylvestris*** (Scopoli, 1763) (= *O. sculpturatus* Reitter, 1892) - Palaearctic: Europe, W & C Asia, N America (imported) (Dellacasa 1983), Syria (El-Hariri 1971), Palestine (Bodenheimer 1937); Israel: CCP (TAU). Rare.
174. ***Rhyssemus berytensis*** Marseul, 1878 (= *P. mediterranicus* Petrovitz, 1971) - E Mediterranean and Irano-Turanian: Syria, Palestina, Iraq, Iran (Balthasar 1964, Winkler 1927-1932), Lebanon (orig. description), Palestine (Bodenheimer 1937); Israel: possible.
175. ***Pararhyssemus coluber*** (Mayet, 1887) - Egypt (Alfieri 1976), Sinai (Peyerimhoff 1907, Alfieri 1976).
176. ***Leiopsammodius laevicollis*** (Klug, 1845) - Ethiopian, Arabian and S Mediterranean: Ethiopia, Arabia, S Yemen, N Africa, Egypt (Paulian 1980, Alfieri 1976), Syria, Palestine (Balthasar 1964, Winkler 1927-1932); Israel: CCP (TAU), NN (TAU). Rare.

177. ***Psammodius laevipennis*** Costa, 1844 - Palaearctic: S Europe, Turkey, N Africa, Transcaucasus, Syria, Lebanon, N America (introduced) (Rakovič 1981); Israel: CCP (TAU). Rare.
178. ***Psammodius nocturnus*** Reitter, 1892 - Mediterranean: Italy, Sicily, Tunisia, Israel, Lebanon (Rakovič 1981).
179. ***Rhyssemodes orientalis*** (Mulsant et Godart, 1875) - Saharo-Gobian: Egypt (Alfieri 1976), Sinai (Peyerimhoff 1907, Alfieri 1976; TAU); Israel: NN (TAU), CN (TAU). Uncommon.
180. ***Brindalus porcicollis*** (Illiger, 1803) - European, Mediterranean and Arabian: Europe, N Africa, Saudi Arabia, Syria, Lebanon, Egypt (Alfieri 1976, Rakovič 1981); Israel: CCP (TAU). Rare.
181. ***Platytomus tibialis*** (Fabricius, 1798) - Mediterranean; S Europe, N Africa, Syria, Canary Islands (Balthasar 1964); Israel: JH (TAU), CCP (TAU), NN (TAU). Uncommon.
182. ***Pleurophorus anatolicus*** Petrovitz, 1961 - E Mediterranean and Arabian: Turkey, Rhodes, Cyprus, Iraq, Iran, Arabia (Pittino 1984); Israel: UG (TAU), GH (TAU), MH (TAU), C (TAU), NCP (TAU), CCP (TAU), SCP (TAU), NN (TAU). Common.
183. ***Pleurophorus caesus*** (Creutzer, 1796) - Mediterranean: C & S Europe, N Africa, Transcaucasus, Asia Minor, introduced in N & S America and Madagascar, Sinai (Alfieri 1976, Balthasar 1964); Israel: possible.
184. ***Ataenius horticola*** Harold, 1869 - European and Mediterranean: Syria (Balthasar 1964, Winkler 1927-1932); Israel: UG (TAU), CCP (TAU). Rare.

7.3. Subfamily **AEGIALIINAE**
species: 1

185. ***Eremazus unistriatus*** Mulsant, 1851 - S Palaearctic: N Africa, N India, C Asia, Algeria, Turkey, Arabia, Armenia (Pittino 1984), Egypt, Sinai (Peyerimhoff 1907, Alfieri 1976), Morocco (Chavanon 1994); Israel: CCP (Tel Aviv, Stebnicka 1977), NN (TAU). Rare.

7.4. Subfamily **MELOLONTHINAE**
species: 34

186. ***Aplidia aegyptiaca*** Kraatz, 1882 - S Mediterranean: Egypt (Alfieri 1976).
187. ***Aplidia baudii*** Kraatz, 1882 - Levantine: Syria (Winkler 1927-1932), Lebanon (El-Hariri 1971), Antilebanon (Baudi 1894) Cyprus, Rhodes (Baraud 1988); Israel: expected.
188. ***Aplidia caesarina*** Reitter, 1902 - E Mediterranean: Turkey (Baraud 1988), Palestine (Bodenheimer 1937).
189. ***Aplidia chaifensis*** Kraatz, 1882 - Levantine: Syria (Winkler 1927-1932), Israel (Baraud 1988); Israel: UG (TAU), NCP (TAU), C (Haifa, Baraud 1988). Rare.
190. ***Aplidia endroedii*** Baraud, 1988 - Jordan (orig. description).
191. ***Aplidia fissa*** Burmeister, 1855 - Levantine: Syria, Lebanon (Baraud 1988, Baudi 1894, Winkler 1927-1932); Israel: UG (TAU), C (TAU), NCP (TAU), JH (TAU), CCP (TAU). Common.
192. ***Aplidia janczyki*** Baraud, 1988 - Syria (orig. description).

193. ***Aplidia joannis*** Baraud, 1988 - Levantine: Syria, Lebanon (Baraud 1988).
194. ***Aplidia leuthneri*** Petrovitz, 1971 - Levantine: Lebanon, Syria, Israel (Petrovitz 1971); Israel: UG (orig. description).
195. ***Aplidia nitidula*** Kraatz, 1882 - S and E Mediterranean: Turkey (Baraud 1988), Egypt (Alfieri 1976), Syria (Winkler 1927-1932); Israel: UG (TAU), NCP (TAU), S (TAU). Rare.
196. ***Aplidia petrovitzi*** Baraud, 1988 - Israel: C (Haifa, orig. description).
197. ***Aplidia pilicollis temperei*** Baraud, 1988 - Lebanon (orig. description).
198. ***Aplidia transversa*** (Fabricius, 1801) - Mediterranean: Syria (Winkler 1927-1932); Israel: UG (TAU), C (TAU), NCP (TAU), JH (TAU), CCP (TAU). Rare.
199. ***Aplidia villosicollis*** Kraatz, 1882 (= *A. leuthneri* Petrovitz, 1971) - Levantine: Syria, Lebanon, Israel (Baraud 1988, Winkler 1927-1932), Palestine (Bodenheimer 1937); Israel: UG (TAU), LG (Dafna, Baraud 1988), SCP (TAU), S (Baraud 1988), JH (Jerusalem, Baraud 1988).
200. ***Miltotrogus aequinoctialis*** Herbst, 1790 - S Palaearctic: C & S Europe, Caspian Sea, Ural, Transcaucasus, Caucasus, Turkey, Syria (Nonveiller 1965).
201. ***Miltotrogus angustifrons*** Nonveiller, 1965 - N Syria (orig. description).
202. ***Miltotrogus fallax*** (Marseul, 1879) (= *M. f. mandator* Reitter, 1902) - N and E Mediterranean: S Balkan, Asia Minor, Iran, Transcaucasus, Turkmenia, Syria (Nonveiller 1965, Winkler 1927-1932), Palestine (Reitter 1902).
203. ***Miltotrogus mimicus*** (Reitter, 1902) - Syria (Nonveiller 1965).
204. ***Miltotrogus pilicollis*** (Gyllenhal, 1817) - European and E Mediterranean: S & C Europe, Turkey, Syria (Nonveiller 1965).
205. ***Miltotrogus setiventris*** (Reitter, 1902) - Levantine: Israel, Syria (Nonveiller 1965, Winkler 1927-1932); Israel: UG (TAU), GH (TAU), MH (TAU), C (Haifa, Nonveiller 1965), CCP (Jaffa, Nonveiller 1965). Uncommon.
206. ***Miltotrogus syriacus*** (Brenske 1886) - E Mediterranean: Syria, Lebanon, S Turkey (Nonveiller 1965, Petrovitz 1969).
207. ***Amphimallon solstitiale*** (Linnaeus, 1758) - Palaearctic: Israel: GH (TAU). Rare.
208. ***Gnaphalostetha bonvoisini*** Reiche et Saulcy, 1856 - Levantine: Israel: LG (Reiche & Saulcy 1856), YV (TAU), JH (TAU), NN (TAU). Uncommon.
209. ***Melolontha albida*** Frivaldszky, 1835 - E Mediterranean: Syria (El-Hariri 1971); Israel: UG (TAU). Rare.
210. ***Anoxia cingulata*** Marseul, 1868 - Lebanon (Baraud 1989a).
211. ***Anoxia cypria*** Baraud, 1989 - Cyprus (orig. description).
212. ***Anoxia laevimacula*** Petrovitz, 1973 - Israel: UG (Dan, Petrovitz 1973; TAU), GH (TAU), CCP (TAU), SCP (Ashqelon, Bet Dagan, Baraud 1989a; TAU). Uncommon.
213. ***Anoxia maculiventris*** Reitter, 1890 (= *A. israelitica* Petrovitz, 1969) - Levantine: Lebanon, Syria, Israel (Baraud 1990, Winkler 1927-1932); Israel: NCP (TAU), C (Haifa, orig. description), JV (TAU), CCP (TAU), SCP (Nizzanim, Netaim, Baraud 1990a). Uncommon.
214. ***Anoxia mavromoustakisi*** Mikšić, 1959 - Cyprus (Baraud 1990b); Israel: NCP (TAU). Rare.
215. ***Anoxia naviauxi*** Baraud, 1990: Lebanon (orig. description).
216. ***Anoxia orientalis*** (Krynicky, 1832) - Mediterranean: S Europe, Turkey, Syria, Lebanon, Israel (Baraud 1989a, Winkler 1927- 1932); Israel: UG (TAU), NCP (TAU), C (Haifa, Baraud 1989a), CCP (TAU). Common.

217. ***Anoxoides bytinskisalzi*** Petrovitz, 1971 - Israel (Petrovitz 1971): CCP (orig. description, TAU).
218. ***Cyphonoxia praestabilis*** Reitter, 1889 - Eremian: Iran, Israel (Petrovitz 1971), Iraq (TAU), Iran (TAU); Israel: AV (TAU), SN (TAU). Rare.
219. ***Polyphylla olivieri*** Castelnau, 1840 - E Mediterranean: Transcaucasus, Armenia, Iran, Turkey, Syria (Baraud 1992d); Israel: UG (TAU). Rare.

7.5. Subfamily **PACHYDEMINAE**
species: 31

220. ***Elaphocera staudingeri*** Reitter, 1902 - Palaearctic: Syria (Winkler 1927-1932).
221. ***Elaphocera suturalis*** Schaufer, 1874 - E Mediterranean: Syria (El-Hariri 1971).
222. ***Elaphocera syriaca*** Kraatz, 1882 - Levantine: Syria (Winkler 1927-1932), Lebanon (TAU); Israel: UG (TAU), NCP (TAU). Rare.
223. ***Pachydemocera lucidicollis*** Kraatz, 1882 - E Mediterranean: Syria (El-Hariri 1971); Israel: probable.
224. ***Pachydemocera pubicavula*** Reitter, 1902 - Antilebanon (orig. description), Syria (Winkler 1927-1932).
225. ***Pachydemocera pubimargo*** Reitter, 1902 - E Mediterranean: Turkey (orig. description), Syria (Winkler 1927-1932).
226. ***Tanyproctus crinitus*** Petrovitz, 1971 - Israel: CCP (orig. description; TAU).
227. ***Tanyproctus delesserti*** (Reiche et Saulcy, 1856) - Levantine: Syria (Winkler 1927-1932), Palestine (Bodenheimer 1937); Israel: S (Nablus, Reiche & Saulcy 1856).
228. ***Tanyproctus festivus*** Burmeister, 1868 - Syria (Winkler 1927-1932).
229. ***Tanyproctus israeliticus*** Petrovitz, 1971 - Israel: JH (Jerusalem, orig. description).
230. ***Tanyproctus kindermanni*** Reiche, 1861 - Levantine: Syria (Winkler 1927-1932); Israel: UG (TAU), LG (TAU), GH (TAU), MH (TAU), C (TAU), NCP (TAU), CCP (TAU). Common. Remark: In N Israel appears two sspp.: brown (*T. kindermanni rufipennis* Petrovitz, 1973) and black nominate subspecies.
231. ***Tanyproctus kraatzi*** Reitter, 1902 - Levantine: Syria (Winkler 1927-1932); Israel: UG (TAU), MH (TAU). Rare.
232. ***Tanyproctus lanatus*** Chevrolat, 1873 - Levantine: Lebanon (orig. description), Syria (Winkler 1927-1932).
233. ***Tanyproctus latimanus*** Reitter, 1902 - Eremian: Syria (Winkler 1927-1932); Israel: AV (TAU). Rare.
234. ***Tanyproctus ledereri*** Reiche, 1861 - Syria (Winkler 1927-1932), Palestine (Reitter 1902, Bodenheimer 1937).
235. ***Tanyproctus longipes*** Burmeister, 1855 - Syria (Winkler 1927-1932).
236. ***Tanyproctus minutus*** Petrovitz, 1973 - Israel: DSA (TAU). Rare.
237. ***Tanyproctus nabataeus*** Petrovitz, 1973 - Israel: NN (Be'er Sheva).
238. ***Tanyproctus pumilus*** Petrovitz, 1971 - Israel: CN (Mizpe Ramon).
239. ***Tanyproctus pygidialis*** Reitter, 1902 - Levantine: Lebanon; Israel: probable.

240. ***Tanyproctus saulcyi*** Reiche et Saulcy, 1857 - E Mediterranean: Syria (Winkler 1927-1932), Iraq (TAU), Jordan (Reiche & Saulcy 1856); Israel: UG (TAU), YV (TAU), CCP (TAU). Uncommon.
241. ***Tanyproctus sinaiticus*** Heyden, 1899 - Sinai; Israel: NCP (TAU), CCP (Kibbutz Nezer-Sereni, Petrovitz 1971; TAU), C (Petrovitz 1971), SCP (Kvutzat Schiller, Petrovitz 1971). Uncommon.
242. ***Tanyproctus sinuatifrons*** Fairmaire, 1881 - Levantine: Antilebanon (Winkler 1927-1932); Israel: GH (TAU). Rare.
243. ***Pachydema abeillei*** Fairmaire, 1881 - Levantine: Syria (Winkler 1927-1932); Israel: CCP (TAU). Rare.
244. ***Pachydema albipilis*** Reitter, 1902 - Eremian: Egypt (Alfieri 1976); Israel: CCP (TAU). Rare.
245. ***Pachydema conica*** Reitter, 1902 - Egypt, Sinai (Alfieri 1976).
246. ***Pachydema israelitica*** Crotch, 1872 - Sinai (Alfieri 1976).
247. ***Pachydema palposa*** Reitter, 1902 - Egypt, Sinai (Alfieri 1976).
248. ***Pachydema sinaitica*** Crotch, 1872 - Sinai (orig. description; Hart 1891).
249. ***Pachydema volaki*** Roubal, 1945 - Israel: JV (orig. description).
250. ***Brenskiella flavomicans*** Brenske, 1897 - Palestine (orig. description); Israel: CCP (TAU). Rare.

7.6. Subfamily **SERICINAE**
species: 12

251. ***Serica brunnea*** (Linnaeus, 1758) - Palaearctic**:** Israel: CCP (TAU). Rare.
252. ***Omaloplia diabolica*** Reitter, 1887 - E Mediterranean: Syria, Asia Minor (Baraud 1965b).
253. ***Omaloplia labrata*** Burmeister, 1844 - E Mediterranean: Asia Minor, Syria (Baraud 1965b, Winkler 1927-1932); Israel: UG (TAU), JH (TAU), CCP (TAU), SCP (TAU). Uncommon.
254. ***Omaloplia spiraeae adulta*** Reitter, 1887 - E Mediterranean: Syria, Caucasus, Asia Minor (Baraud 1965b).
255. ***Maladera matrida*** Argaman, 1986 - Israel: CCP (TAU). Common.
256. ***Maladera modesta*** (Fairmaire, 1881) - Eremian: Egypt, Sinai (Alfieri 1976), Syria (Winkler 1927-1932, Petrovitz 1969); Israel: LG (TAU), CCP (Jaffa, Petrovitz 1969). Rare.
257. ***Maladera phoenicia*** Petrovitz, 1969 - described from Lebanon.
258. ***Maladera punctatissima*** (Faldermann, 1835) - E Mediterranean: Transcaucasus, Iran, Creta (Petrovitz 1969), Syria (Baraud 1965a); Israel: UG (TAU), CCP (TAU), CN (TAU). Uncommon.
259. ***Maladera syriaca*** Petrovitz, 1969 - E Mediterranean: Syria (orig. description); Israel: UG (TAU), C (TAU), YV (TAU), CCP (TAU). Common.
260. ***Maladera villiersi*** Petrovitz, 1969 - described from Syria.
261. ***Tridontella olivieri*** Blanchard, 1850 - Eremian: N Africa, Sinai (Alfieri 1976), Syria (El-Hariri 1971); Israel: SCP (TAU). Uncommon.
262. ***Tridontella tripolitana*** Brenske, 1889 - N Africa; Israel: SCP (TAU), NN (TAU). Rare.

7.7. Subfamily **RUTELINAE**
species: 29

263. ***Anomala osmanlis*** Blanchard, 1850 - S and E Mediterranean: Syria (Winkler 1927-1932), Egypt (Alfieri 1976); Israel: probable.
264. ***Anomala palaestina*** Pic, 1905 - Israel: CCP (TAU). Uncommon.
265. ***Asiopertha ganglbaueri*** (Reitter, 1885) - E Mediterranean: Turkey, Syria (Baraud 1991b).
266. ***Asiopertha nazarena*** (Marseul, 1878) - E Mediterranean: Turkey, Israel, Palestine (Baraud 1991b, Winkler 1927-1932); Israel: UG (TAU), LG (Nazareth, Baraud 1991b; TAU), NCP (TAU), C (Haifa, Baraud 1991b), YV (TAU), JV (TAU), CCP (TAU). Common.
267. ***Blitopertha lineata*** (Fabricius, 1798) - Mediterranean and Irano-Turanian: Algeria, Morocco, Tunis (Baraud 1979); Israel: UG (TAU), LG (TAU), GH (TAU), JV (TAU), NCP (TAU), SCP (TAU), JH (TAU), JF (TAU), CCP (TAU). Common.
268. ***Blitopertha lineolata*** (Fischer von Waldheim, 1823) - Mediterranean: S Europe, Turkey, Creta, Rhodes, Jordan (Baraud 1991b).
269. ***Blitopertha majuscula*** Medvedev, 1949 (= *B. abdita* Petrovitz, 1959) - E Mediterranean: Syria, Jordan, Cyprus, Turkey, Caucasus, Trancaspian area, Iran (Baraud 1991); Israel: LG (TAU), GH (TAU), MH (TAU), C (TAU), JH (TAU), JF (TAU), CCP (TAU). Common.
270. ***Taxipertha arenicola*** (Mulsant, 1870) - E Mediterranean: Crimea, Caucasus (Baraud 1991b), Palestine (Bodenheimer 1937).
271. ***Tribopertha aegyptiaca*** (Blanchard, 1850) - Eremian: Algeria, Libya, Tunis, Egypt (Baraud 1979); Israel: CCP (TAU), NN (TAU). Uncommon.
272. ***Tribopertha quedenfeldti*** (Reitter, 1890) - Eremian: Libya, Tunis (Baraud 1979), Sinai (Alfieri 1976); Israel: possible.
273. ***Trichopertha hirtella*** (Brullé, 1832) - E Mediterranean: Greece, Yugoslavia, Asia Minor, Jordan (Baraud 1991b).
274. ***Pharaonus varicoloreus*** (Burmeister, 1844) - Eremian: Israel: AV (TAU). Rare.
275. ***Anisoplia aprica*** Erichson, 1847 - E Mediterranean: Turkey, Syria (Baraud 1991b).
276. ***Anisoplia babylonica*** Petrovitz, 1973 - Eremian: Israel: DSA (TAU), NN (TAU). Rare.
277. ***Anisoplia campicola*** Ménétriés, 1832 - E Mediterranean: Greece, Turkey, Syria, Caucasus (Baraud 1991a).
278. ***Anisoplia ferruginipes*** Pic, 1901 - Israel: NCP (TAU), CCP (TAU), SCP (TAU). Uncommon.
279. ***Anisoplia inculta*** Erichson, 1847 - Eremian: Turkey (TAU), Syria (Winkler 1927-1932), Sinai (Alfieri 1976); Israel: GH (TAU), NCP (TAU), CCP (Jaffa, Winkler 1927-1932; TAU). Uncommon.
280. ***Anisoplia klapperichi*** Petrovitz, 1954 - Eremian: Israel: LG (TAU), DSA (TAU), CCP (TAU), NN (TAU), CN (TAU). Uncommon.
281. ***Anisoplia leucaspis*** Laporte, 1840 - Palaearctic: Syria (El-Hariri 1971), Sinai (Peyerimhoff 1907); Israel: LG (TAU), GH (TAU), MH (TAU), C (TAU), NCP (TAU), JV (Baudi 1894), DSA (TAU), JH (TAU), JD (TAU), CCP (TAU), NN (TAU). Common.
282. ***Anisoplia pumila*** Marseul, 1878 (= *A. sabulicola* Reitter, 1899) - Eremian: Egypt (Baraud 1979), Sinai (Alfieri 1976); Israel: NN (TAU). Uncommon.

283. ***Anisoplia segetum*** (Herbst, 1783) - Palaearctic; Israel: NCP (TAU), CCP (TAU). Uncommon.
284. ***Anisoplia signata akbesiana*** Baraud, 1991 - E Mediterranean: Turkey, Syria, Israel, Jordan (cited as Amanus in Syria) (Baraud 1991); Israel: JH (Jerusalem, Baraud 1991).
285. ***Anisoplia syriaca*** Burmeister, 1844 - S and E Mediterranean: Egypt (Alfieri 1976), Syria (Winkler 1927-1932), Antilebanon (Baudi 1894); Israel: MH (Baudi 1894), GH (TAU), JV (TAU), JH (TAU), JF (TAU), CCP (TAU), JD (TAU), NN (TAU), CN (TAU). Common.
286. ***Anisoplia tenebralis*** Burmeister, 1844 - E Mediterranean: Syria (Winkler 1927-1932).
287. ***Adoretus aegrotus*** Burmeister, 1844 - Arabian and S Mediterranean: Nubia, Algeria, Arabia (Baraud 1979), Sinai (Alfieri 1976).
288. ***Adoretus graniceps*** Reitter, 1889 - S Mediterranean: Egypt (Alfieri 1976, Baraud 1979), Jordan (TAU); Israel: DSA (TAU). Rare.
289. ***Adoretus irakanus*** Ohaus, 1914 - Eremian; Israel: UG (TAU). Rare.
290. ***Adoretus sterbae*** Reitter, 1909 - E Mediterranean; Israel: YV (TAU). Rare.
291. ***Phaeadoretus syriacus*** (Blanchard, 1850) - Irano-Turanian: Iraq (TAU); Israel: possible.

7.8. Subfamily **EUCHIRINAE**
species: 1

292. ***Propomacrus bimucronatus*** (Pallas, 1773) - E Mediterranean: Yugoslavia, Greece, Turkey, Cyprus, Syria, Iran (Young 1989), Iran (Abai & Zairi 1976); Israel: GH (TAU), MH (TAU), C (TAU), JH (TAU), CCP (Tel Aviv - Yafo (Jaffa), Young 1989); TAU). Uncommon.

7.9. Subfamily **DYNASTINAE**
species: 12

293. ***Temnorhynchus baal baal*** Reiche et Saulcy, 1856 - E Mediterranean: Greece, Lebanon, Syria, Palestine (Endrödi 1985, Krell 1994); Israel: LG (Nazareth, Krell 1994), S (Naplouse, Reiche & Saulcy 1856), JH (Ramleh, Krell 1994), CCP (Jaffa, Krell 1994; TAU), SCP (Deir El Belah, Krell 1994; TAU), C (Haifa, Krell 1994), NN (TAU), SN (TAU). Common.
294. ***Podalgus cuniculus arabicus*** Faimaire, 1887 - Eremian: Egypt, Sinai (Alfieri 1976); Israel: SN (TAU). Rare.
295. ***Pentodon algerinus dispar*** Baudi, 1870 (= *P. bispinosus* Küster, 1852) - Palaearctic: Turkey, Cyprus, Syria, Palestina, Armenia, Arabia, Iran, Iraq, Egypt (Alfieri 1976, Endrödi 1985, Winkler 1927-1932), Iran (TAU), Iraq (TAU); Israel: UG (TAU), NCP (TAU), JV (TAU), DSA (TAU), JH (TAU), CCP (TAU), NN (TAU), CN (TAU), SN (TAU). Uncommon.
296. ***Pentodon bidens sulcifrons*** Küster, 1848 - E and S Mediterranean: Turkey, Cyprus, Egypt, Irak, Iran Caucasus (Endrödi 1985); Israel: CCP (TAU), DSA (TAU), NN (TAU), CN (TAU). Common.
297. ***Pentodon caminarium*** Faldermann, 1835 - E Mediterranean: Syria, Iraq, Iran (Endrödi 1985).
298. ***Pentodon quadridens distantidens*** Reitter, 1899 - E Mediterranean: Turkey, Cyprus, Syria, Iran (Endrödi 1985, Winkler 1927-1932), Lebanon (orig. description); Israel: possible.
299. ***Pentodon idiota*** (Herbst, 1789) - Palaearctic: Palestine (Bodenheimer 1937).

300. ***Pentodon variolopunctatum deserti*** Heyden, 1899 - S Mediterranean and Arabian: Libya, Egypt, Sinai, Arabia (Endrödi 1980, Alfieri 1976); Israel: UG (TAU), JH (TAU), CCP (TAU), DSA (Bytinski-Saltz 1957), NN (TAU), CN (TAU), SN (TAU). Uncommon.
301. ***Heteronychus licas*** Klug, 1845 - Egypt, Sinai (Alfieri 1976).
302. ***Phyllognathus excavatus*** (Forster, 1771) - Mediterranean, Arabian and Ethiopian: S Europe, N Africa, Turkey, Syria, Iran, Arabia (Endrödi 1980), Senegal, Iran (Ratti 1986), Egypt, Sinai (Afieri 1976); Israel: LG (TAU), C (TAU), NCP (TAU), CCP (TAU), DSA (TAU), AV (TAU), NN (TAU). Common.
303. ***Oryctes nasicornis kuntzeni*** Minck, 1915 - E Mediterranean: Greece (TAU), Turkey (TAU), Sinai (Alfieri 1976), Syria (Winkler 1927-1932), Lebanon (Baudi 1894); Israel: UG (TAU), LG (TAU), GH (TAU), JV (TAU), DSA (Hart 1891), CCP (TAU). Uncommon.
304. ***Oryctes agamemnon sinaicus*** Walker, 1871 - Sinaitico - negevensis: Sinai (Alfieri 1976, Endrödi 1985; TAU); Israel: DSA (Bytinski-Salz 1957; TAU). Rare.
Remark: *O. agamemnon arabicus* Fairmaire, 1896 was described from Arabia.

7.10. Subfamily **TRICHIINAE**
species: 1

305. ***Trichius orientalis*** Reitter, 1894 - E Mediterranean: Syria (Winkler 1927-1932); Israel: possible.

7.11. Subfamily **CETONIINAE**
species: 24

306. ***Tropinota squalida pilosa*** (Brullé, 1832) - Mediterranean and Irano-Turanian: Europe, N Africa, Sinai, Jordan, Israel, Lebanon, Syria, Iraq, Iran (Alfieri 1976, Mikšić 1982), Sinai (TAU); Israel: GH (TAU), S (TAU), JV (TAU), CCP (Giaffa (Jaffa), Baudi 1894; TAU), JD (Mar Saba, Baudi 1894), JH (TAU), DSA (TAU), AV (TAU), NN (TAU), CN (TAU). Common.
307. ***Tropinota vittula*** Reiche et Saulcy, 1857 - Levantine: Syria, Lebanon, Israel (Mikšić 1982, Reiche & Saulcy 1856, Winkler 1927-1932), Lebanon (Reiche & Saulcy 1856); Israel: C (Haifa, Mikšić 1982), JD (Mar Saba, Baudi 1894), JH (TAU), JF (TAU), CCP (Giaffa (Jaffa), Baudi 1894, Mikšić 1982; TAU). Common.
308. ***Tropinota hirta suturalis*** (Reitter, 1913) - E Mediterranean: Asia Minor, Syria, Iran, Armenia (Mikšić 1982, Winkler 1927-1932), Greece (TAU), Turkey (TAU), Jordan (Djerach (Jerash), Baudi 1894), Iran (TAU); Israel: LG (TAU), C (Haifa, Mikšić 1982; TAU), NCP (TAU), CCP (Jaffa, Mikšić 1982; TAU), JH (Jerusalem, Mikšić 1982; TAU). Uncommon.
309. ***Oxythyrea abigail*** Reiche et Saulcy, 1857 - Levantine: Syria, Lebanon, Israel, N Egypt, Sinai (Alfieri 1976, Mikšić 1982, Reiche & Saulcy 1856, Winkler 1927-1932); Israel: UG (TAU), LG (TAU), C (Haifa, Mikšić 1982), S (TAU), JV (TAU), JH (TAU), JD (TAU), DSA (TAU), CCP (Jaffa, Mikšić 1982; TAU). Common.
310. ***Oxythyrea albopicta*** (Motschulsky, 1854) - S European and E Mediterranean: Macedonia, Anatolia, S Russia, Caucasus, Turkestan, Syria (Mikšić 1982).
311. ***Oxythyrea cinctella*** (Schaum, 1841) - S and E Mediterranean: Syria, Lebanon, Israel,

N Africa (Mikšić 1982), Turkey (Bytinski-Salz 1956), Sinai (Alfieri 1976), Jordan (Djerach (Jerach), Baudi 1894), Israel: MH (TAU), JH (Jerusalem; Baudi 1894; TAU). Uncommon.

312. ***Oxythyrea funesta*** (Poda, 1761) - Palaearctic: C & S Europe, Caucasus, N Africa (Mikšić 1982), Sinai (Alfieri 1976), Palestine (Bodenheimer 1937); Israel: CCP (Giaffa (Jaffa), Baudi 1894).
313. ***Oxythyrea noemi*** Reiche et Saulcy, 1856 - E Mediterranean: Asia Minor, Syria, Palestine, Jordan, Israel, Cyprus (Baudi 1894, Mikšić 1982, Reiche & Saulcy 1856, Winkler 1927-1932), Egypt, Sinai (Alfieri 1976); Israel: UG (TAU), LG (TAU), GH (TAU), MH (TAU), C (Haifa, Mikšić 1982; TAU), NCP (TAU), S (Naplouse (Nablus), Reiche & Saulcy 1856; TAU), JD (Mar Saba, Baudi 1894), JV (TAU), DSA (Gerico (Jericho), Baudi 1894), JH (TAU), JF (TAU), CCP (Jaffa, Mikšić 1982; TAU), SCP (Gaza, Mikšić 1982; TAU), DSA (TAU), NN (TAU), CN (TAU), Sidon (Mikšić 1982). Common.
314. ***Stalagmosoma albella*** (Pallas, 1781) - E Mediterranean and Irano-Turanian: Egypt, Sinai (Alfieri 1976; TAU), Syria (Mikšić 1982); Israel: LG (TAU), AV (TAU), S (TAU), JH (TAU), JD (TAU), DSA (Bytinski-Salz 1957; TAU), CN (TAU), NN (TAU). Uncommon.
315. ***Aethiessa floralis*** (Fabricius, 1787) - Mediterranean: SW Europe, N Africa (Ratti 1986), Sinai (Alfieri 1976); Israel: CCP (TAU), SCP (TAU), NN (TAU). Uncommon.
316. ***Aethiessa mesopotamica*** Burmeister, 1842 - E Mediterranean: Turkey, Syria, Palestine, Israel, Lebanon (Mikšić 1982, Winkler 1927-1932); Israel: GH (TAU), LG (TAU), JH (Jerusalem, Mikšić 1982; TAU), JV (Kineret, Deganya, Mikšić 1982; TAU), DSA (TAU), AV (TAU), CCP (Jaffa, Mikšić 1982), NN (TAU), CN (TAU). Uncommon.
317. ***Cetonia delagrangei*** Boucard, 1893 - E and S Mediterranean: Asia Minor, Armenia, Syria, Palestine, Egypt (Mikšić 1982, Winkler 1927-1932); Israel: C (Haifa, Mikšić 1982), JH (Jerusalem, Mikšić 1982).
318. ***Protaetia speciosa jousselini*** (Gory et Percheron, 1833) - Mediterranean: Asia Minor, Syria, Palestine, Persia (Giachino 1982, Mikšić 1982, Winkler 1927-1932), Syria (TAU), Turkey (TAU); Israel: C (Tauzin 1992), GH (TAU), JH (Jerusalem, Mikšić 1982; TAU), CCP (TAU). Rare.
319. ***Protaetia affinis pyrodera*** (Reitter, 1891) - E Mediterranean: Asia Minor, Syria, Palestine (Mikšić 1982, Winkler 1927-1932), Jordan (Baudi 1894), Syria, Lebanon, Israel (Tauzin 1991), Syria (TAU); Israel: JH (Jerusalem, Mikšić 1982, Tauzin 1991).
320. ***Protaetia afflicta*** (Gory et Percheron, 1833) - E Mediterranean: Greece, Turkey, Syria, Lebanon, Israel, Jordan, Egypt (Tauzin 1994), Greece (TAU), Rhodes (TAU), Cyprus (TAU); Sinai (Alfieri 1976), Syria (Winkler 1927-1932); Israel: MH (TAU), GH (Banias (mentioned as a locality in Syria), Tauzin 1994), UG (Safad, Mikšić 1982, Tauzin 1994; TAU; Qiryat Shemona, Tauzin 1994), LG (TAU), GH (TAU), C (Haifa, Mikšić 1982, Tauzin 1994; TAU), NCP (TAU), CCP (Giaffa (Jaffa), Baudi 1894; Casarea, Mikšić 1982,Tauzin 1994), S (TAU), JH (Jerusalem Betlehem, Mikšić 1982, Tauzin 1994; TAU), SCP (Gaza, Mikšić 1982, Tauzin 1994). Uncommon.
321. ***Protaetia angustata*** (Germar, 1817) - Mediterranean: S Europe, Turkey, Syria (Mikšić 1982); Israel: C (Haifa, Mikšić 1959).
322. ***Protaetia cuprea ignicollis*** (Gory et Percheron, 1833) - E and S Mediterranean: Asia Minor, Syria, Lebanon, Palestine, N Egypt (Alfieri 1976, Mikšić 1982, Winkler 1927-1932); Israel: UG (Safed, Mikšić 1982; TAU), LG (Tabor, Mikšić 1982; TAU), GH (TAU), MH (TAU),

C (Haifa, Mikšić 1982; TAU), NCP (TAU), YV (TAU), JH (Jerusalem, Mikšić 1982; TAU), CCP (Jaffa, Mikšić 1982; TAU). Common.

323. ***Protaetia funebris funesta*** (Ménétriés, 1838) - E Mediterranean: Asia Minor, Syria, Lebanon, Israel (Giachino 1982, Mikšić 1982), Turkey (TAU); Israel: UG (TAU), S (TAU), NCP (TAU), C (TAU), JH (TAU), JF (TAU). Uncommon.
324. ***Protaetia hungarica armeniaca*** (Ménétriés, 1832) - E Mediterranean: Armenia, Azerbaijan, Iran, Syria, Turkey (Tauzin 1994); Israel: GH (Banias (menitoned as a locality in Syria), Tauzin 1994).
325. ***Protaetia judith*** (Reiche, 1871) - Mediterranean: Asia Minor, Cyprus, Syria, Lebanon, Palestina, Egypt (Alfieri 1976, Mikšić 1982, Winkler 1927-1932), Lebanon (TAU); Israel: UG (TAU), LG (TAU), GH (TAU), C (Haifa, Mikšić 1982; TAU), NCP (TAU), JH (TAU). Uncommon.
326. ***Protaetia mirifica koenigi*** (Reitter, 1894) - E Mediterranean: Turkey, Syria, Israel (Tauzin 1991), Palestine, Syria (Mikšić 1982, Winkler 1927-1932), Syria (TAU); Israel: JH (Jerusalem, Mikšić 1982, Tauzin 1991).
327. ***Protaetia trojana syriaca*** (Reitter, 1891) - E Mediterranean: Turkey, Syria, Lebanon, Israel, Jordan, Palestine (Tauzin 1993), Lebanon (TAU); Israel: UG (TAU), YV (TAU), JH (Jerusalem, Tauzin 1993; TAU), NN (TAU). Rare.
328. ***Protaetia subpilosa*** (Desbrochers, 1869) (= *P. athalia* Reiche, 1871) - E Mediterranean: Greece, Asia Minor, Syria, Lebanon, Palestine, Israel, (Mikšić 1982, Winkler 1927-1932), Jordan, (Tauzin 1993); Israel: UG (TAU), LG (Nazareth, Tauzin 1993; TAU), GH (TAU), MH (TAU), JV (E Jordan, Tauzin 1993), C (Haifa, Mikšić 1982; TAU), NCP (TAU), S (Ramla, Tauzin 1993), JF (Lydda, Tauzin 1993), JH (Betlehem, Jerusalem, Tauzin 1993; TAU), NN (TAU). Common.
329. ***Protaetia vidua*** (Gory et Percheron, 1833) - Mediterranean: S Europe, Turkey, Syria, Lebanon, Palestine, Egypt (Mikšić 1982, Winkler 1927-1932); Israel: MH (TAU), CCP (Cesarea, Mikšić 1982), JH (Jerusalem, Mikšić 1982). Rare.

7.12. Subfamily **VALGINAE**
species: 2

330. ***Valgus hemipterus*** (Linnaeus, 1758) - Palaearctic: Israel: GH (TAU), MH (TAU). Uncommon.
331. ***Chromovalgus peyroni*** Mulsant, 1852 - E Mediterranean: Syria (Winkler 1927-1932).

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REFERENCES

ABAI M. & ZAIRI M. 1976: A new record of Propomacrus bimucronatus (Pall.) from Iran. *J. Iran Entomol. Soc.*, 3: 107-115.
ALFIERI A. 1976: The Coleoptera of Egypt. *Mém. Soc. Entomol. d'Egypte*, 5: 1-287.
ARGAMAN Q. 1986: A new Maladera in Israel. *Shappirit, Journal of the Israel Entomology Center*, 4: 41-46 (in Hebrew), 67-68 (in English).
ARGAMAN Q. 1990: Redescription of Maladera matrida Argaman (Coleoptera: Scarabaeidae: Melolonthinae). *Israel J. Entomol.*, 24: 21-27.

BALTHASAR V. 1936: Neue Aphodius-Arten aus China und Syrien. *Entomol. Nachrichenblatt*, 10: 1-6.
BALTHASAR V. 1945: Monographische Bearbeitung der Gattung Caccobius Thoms. aus palearktischen und orientalischen Region. *Acta Entomol. Mus. Nat. Pragae*, 26: 1-54.
BALTHASAR V. 1952: Wissenschaftlishe Ergebnisse der Zoologischen Expedition des National Museums in Prag nach der Turkey. 10.Coleoptera (Scarabaeidae). *Acta Entomol. Mus. Nat. Pragae*, 28: 19-26.
BALTHASAR V. 1960a: Neue laparosticte Scarabaeiden aus der Syrischen Wuste, aus Westpakistan und aus Java. *Opuscula Zool.*, 44: 1-8.
BALTHASAR V. 1960b: Eine neue Onthophagus-Art aus Israel. *Beitr. Entomol.*, 10: 201-203.
BALTHASAR V. 1961: Neue Arten der Gattung Aphodius Ill. aus der palearktischen Region. *Acta Entomol. Mus. Nat. Pragae*, 34: 359-380.
BALTHASAR V. 1963a: *Monographie der Scarabaeidae und Aphodiidae der palaearktischen und orientalischen Region. Coleoptera: Lamellicornia (I). Scarabaeinae, Coprinae.* Tschechoslowak. Akad. Wiss., Prag, 391 pp.
BALTHASAR V. 1963b: *Monographie der Scarabaeidae und Aphodiidae der palaearktischen und orientalischen Region. Coleoptera: Lamelicornia (II). Coprinae.* Tschechoslowak. Akad. Wiss., Prag, 627 pp.
BALTHASAR V. 1964: *Monographie der Scarabaeidae und Aphodiidae der palaearktischen und orientalischen Region. Coleoptera Lamelicornia (III). Aphodiidae.* Tschechoslowak. Akad. Wiss., Prag, 652 pp.
BARAUD J. 1965a: Révision des Euserica, Neomaladera, Serica et Maladera des pays europeens et circummediterraneens (Col., Scarabaeidae). *Ann. Soc. Entomol. Fr.,* 1: 71-116.
BARAUD J. 1965b: Révision du genre Homaloplia Stephens (Coleoptera Scarabaeidae). *Atti Soc. Ital. Sci. Natur. Mus. Civ. Stor. Natur. Milano,* 54: 391-448.
BARAUD J. 1979: Coléoptères Scarabaeoidea de l'Afrique du Nord. 1re note: les Rutelidae. *Nouv. Rev. Entomol.*, 9: 201-226.
BARAUD J. 1982: Nouveaux Pachydemini et Onthophagini de la faune paléarctique. *Nouv. Rev. Entomol.*, 12: 235-240.
BARAUD J. 1988: Contribution l'étude du genre Haplidia Hope (Coleoptera Scarabaeoidea Melolonthidae). *Rev. Suisse Zool.*, 95: 539-579.
BARAUD J. 1989a: Révision des Anoxia Castelnau d'Europe et d'Asie. 1re note: le sous-genre Protanoxia Medvedev (Col. Melolonthidae). *Bull. Soc. Entomol. Fr.*, 94: 283-301.
BARAUD J. 1989b: Révision du genre Pygopleurus Motschulsky (Coleoptera: Scarabaeoidea: Glaphyridae). *Ann. Soc. Entomol. Fr.*, 25: 331-375.
BARAUD J. 1990a: Révision des Anoxia Castelnau d'Europe et d'Asie. 2e note: le sous-genre Anoxia s.str. (Col. Melolonthidae). *Bull. Soc. Entomol. Fr.*, 94: 283-301.
BARAUD J. 1990b: Révision des Anoxia Castelnau d'Europe et d'Asie. 3e note: le sous-genre Mesanoxia Medvedev (Col. Melonthidae). *Bull. Soc. Entomol. Fr.*, 95: 111-120.
BARAUD J. 1990c: Contribution a la connaissance du genre Eulasia Truqui (Coleoptera Scarabaeoidea Glaphyridae). *Rev. Suisse Zool.*, 97: 107-138.
BARAUD J. 1991: Nouvelle classification proposée pour les espèces du genre Blitopertha Reitter (1903) (Coleoptera Rutelidae). *Lambillionea*, 41: 46-62.
BAUDI F. 1881: Heteromerum species ex Egypto, Syria et Arabia. *Deutsche Entomol. Zeitschr.*, 25: 273-296.
BAUDI F. 1894: Viaggio del Dr. E. Festa, nel Libano e regione vicine. VIII. Coleotteri. *Boll. Mus. Zool. Anatom. Compar. Univ. Torino*, 9: 1-13.
BODENHEIMER F.S. 1937: Prodromus Faunae Palestinae. *Mém. l'Institut d'Egypte*, 31: 141-145.
BODENHEIMER F.S. & THEODOR O. 1929: *Ergebnisse der Sinai-Expedition 1927.* J.C. Hinrichs'sche Buchhandlung, Leipzig. 143 pp.
BYTINSKI-SALZ H. 1956: Coleoptera and Hymenoptera from a journey through Asia Minor. 1. *Rev. Fac. Sci. Univ. Istanbul*, 21: 211-229.
BYTINSKI-SALZ H. 1957: [A partial list of some groups of insects characteristic for the Dead Sea Region and the Northern Araba valley (South to Ejn Hosb)]. *Nature Teacher's Communication*, 1957: 9-20 (In Hebrew).
BYTINSKI-SALZ H. 1966: Lucanus cervus syriacus Plan. in Israel. *Israel J. Entomol.*, 1: 189.
CHAVANON G. 1994: New or interesting Coleoptera from the Figuig's region (South-Eastern Morocco). *Nouv. Rev. Entomol.*, 11: 335-339.
CROTCH G.R. 1907: Coléoptères du Sinai. *L'Abeille*, 31: 50-60.
CROWSON R.A. 1981: *The Biology of the Coleoptera.* Academic Press, London - New York, xii + 812 pp.
DELLACASA G. 1983: Sistematica e nomenclatura degli Aphodiini italiani (Coleoptera Scarabaeidae Aphodiinae). *Monogr. Mus. Region. Sci. Natur. Torino*, 1: 1-464.
DELLACASA M. 1987: Contribution to a world-wide catalogue of Aegialiidae, Aphodiidae, Aulonocnemidae, Termitotrogidae (Coleoptera Scarabaeoidae). *Mem. Soc. Entomol. Ital.*, 66: 3-445.
EL-HARIRI G. 1971: A list of recorded insects fauna of Syria. *Aleppo*, 2: 149-159.
ENDRŐDI S. 1980: Insects of Saudi Arabia. Coleoptera: Fam. Scarabaeidae, Subf. Dynastinae. *Fauna of Saudi Arabia (Basel)*, 2: 157-158.

ENDRÖDI S. 1985: *The Dynastinae of the world.* Akad. Kiadó, Budapest, 800 pp.
FISHELSON L. 1985: *Fauna Palaestina, Insecta III. Orthoptera: Acridoidea.* Isr. Arcad. Sei. Human., Jerusalem, 229 pp.
GEORGHIOU G.P. 1977: *The insects and mites of Cyprus with emphasis on species of economic importance to agriculture, forestry, man, and domestic animals.* Benaki Phytopathol. Inst. Kiphissa, Athens, 347 pp.
GIACHINO P.M. 1982: Collezione Coleotterologica di Massimiliano Spinola. *Cataloghi Mus. Region. Sci. Natur. Torino*, 3: 1-616.
HART H.C. 1891: *Some account of the fauna and flora of Sinai, Petra, and Wâdy "Arabah".* Alexander P. Watt, London, 255 pp.
KLEIN H.Z. 1933: Zur Ökologie einiger Dunenkäfer. *Zeitschr. Wiss. Zool.*, 144: 240-262.
KRELL F.T. 1994: Phylogenetisch-systematische Revision des Genus Temnorhynchus Hope, 1837 (Coleoptera: Scarabaeoidea: Melolonthidae: Dynastinae: Pentodontini). 2 Teil: Bestimmungstabelle, Katalog, Bibliographie, Gazetter und Material - Listen. *Beitr. Entomol.*, 44: 83-155.
KUIJTEN P.J. 1980: Insects of Saudi Arabia. Coleoptera: Fam. Scarabaeidae, Subf. Hybosorinae. *Fauna of Saudi Arabia (Basel)*, 2: 155-156.
LOPEZ-COLON J. I. 1991: Nuevos datos sobre la presencia del Trox (Trox) granulipennis Fairmaire, 1852 (Col., Scarab., Trogidae) en la Península Ibérica. *Nouv. Rev. Entomol.*, 8: 215.
MARTÍN PIERA F. 1987: Review of the genus Chironitis Lansberge, 1875. I: Taxonomy, Phylogeny and Zoogeography of the Palearctic Species. *Entomol. Arb. Mus. G. Frey*, 36: 203-245.
MARTÍN PIERA F. & LOBO M.J. 1992: Los Scarabaeoidea Laprostici del Archipelago Balear (Coleoptera). *Nouv. Rev. Entomol.*, 9: 15-28.
MARTÍN PIERA F. & ZUNINO M. 1985: Taxonomie et biogéographie des Onthophagus du groupe de l'O. ovatus. I. (Coleoptera, Scarabaeoidea). *Nouv. Rev. Entomol.*, 2: 241-250.
MARTÍN PIERA F. & ZUNINO M. 1986: Analisi sistematica, filogenetica e biogeografica di un gruppo di specie del sottogenere Palaeonthophagus Zunino, 1979 (Coleoptera Scarabeidae: genere Onthophagus) il gruppo ovatus. *Boll. Mus. Region. Sci. Natur. Torino*, 4: 413-467.
MIKŠIĆ R. 1957: Beitrag zur Kenntnis der palearktischen Arten der Gattung Potosia Muls. *Acta Mus. Macedon. Sci. Natur.*, 5: 1-34.
MIKŠIĆ R. 1958: Beitrag zur Kenntnis der palearktischen Arten der Gattung Potosia Muls. *Acta Mus. Macedon. Sci. Natur.*, 5: 181-215.
MIKŠIĆ R. 1959: Beitrag zur Kenntnis der palearktischen Arten der Gattung Potosia Muls. *Acta Mus. Macedon. Sci. Natur.*, 6: 27-51.
MIKŠIĆ R. 1960: Beitrag zur Kenntnis der Scarabaeiden-Fauna von Cypern. *Fragmenta Balcanica*, 3: 77-84.
MIKŠIĆ R. 1982: *Monographie der Cetoniinae der Paläarktischen und Orientalischen Region. III.* Forstinstitut in Sarajevo, Sarajevo, 530 pp.
MIKŠIĆ R. 1987: *Monographie der Cetoniinae der Paläarktischen und Orientalischen Region. IV.* Grafički Zavod Hrvatske, Zagreb, 608 pp.
MITTER H. 1992: Faunistische und taxonomische Notizen über südostanatolische Glaphyrinae (Coleoptera: Scarabaeidae). *Koleopterol. Rundschau*, 62: 169-171.
NIKOLAEV G.V. 1987: [*Scarabaeoidea (Coleoptera) of Kazakhstan and Middle Asia*]. Alma-Ata, Nauka, 232 pp. (In Russian).
NONVEILLER Q. 1965: Monographie der Gattung Miltotrogus (Col. Melolonth.). *Entomol. Arb. Mus. G. Frey*, 16: 5-105.
ORBIGNY H. 1898: Synopsis des Onthophagides paléarctiques. *L'Abeille*, 29: 117-254.
PAULIAN R. 1980: Insects of Saudi Arabia. Coleoptera: Scarabaeoidea (1re contribution). *Fauna of Saudi Arabia (Basel)*, 2: 141-154.
PETROVITZ R. 1959: Phylopertha (Blitopertha) lineata F. ist eine Mischart (Coleoptera, Scarabaeidae). *Fragmenta Balcanica*, 2: 185-190.
PETROVITZ R. 1962: Neue und interessante Scarabaeidae aus dem vorderen Orient. *Reichenbachia*, 1: 107-124.
PETROVITZ R. 1963: Neue und interessante Scarabaeidae aus dem vorderen Orient. *Reichenbachia*, 1: 236-267.
PETROVITZ R. 1964: Amphicoma-Studien. *Reichenbachia*, 3: 99-105.
PETROVITZ R. 1969: Die mediterranean Arten der Gattung Maladera Mulsant (Lamellicornia, Coleoptera). *Ann. Naturhist. Mus. Wien*, 73: 383-400.
PETROVITZ R. 1971: Scarabaeidae from the Near East (Lamellicornia, Coleoptera). *Israel J. Entomol.*, 6: 215-237.
PETROVITZ R. 1973: Scarabaeidae from the Near East (Lamellicornia, Coleoptera). *Israel J. Entomol.*, 8: 23-34.
PETROVITZ R. 1981: Ergebnisse der Tschechoslovakisch-Iranischen Entomologischen Expeditionen nach dem Iran. Coleoptera: Lamellicornia. *Acta Entomol. Mus. Nat. Pragae*, 40: 317-332.
PEYERIMHOFF P. 1907: Liste de Coléoptères du Sinai. *L'Abeille*, 31: 1-48.
PITTINO R. 1983: Trox (s.str.) granulipennis Fairm. and allied "taxa", with two new species from Mediterranean area (Coleoptera: Trogidae). *Giorn. Ital. Entomol.*, 1: 265-284.
PITTINO R. 1984: Insects of Saudi Arabia: Coleoptera Scarabaeoidea: A Revision of the Family Aphodiidae. *Fauna of Saudi Arabia (Basel)*, 6: 267-360.

PITTINO R. 1991: On some Palaearctic "taxa" allied to Trox hispidus (Pontoppidan), with a brachypterous new species from Italy, Malta, Crete and the Balkan Peninsula (Coleoptera, Trogidae). *Boll. Ass. Romana Entomol.*, 45: 57-87.
POPE R.D. 1960: Aserica, Autoserica, Neoserica, or Maladera? (Coleoptera: Melolonthidae). *Ann. Mag. Natur. Hist.*, 3: 545-550.
RAKOVIČ M. 1981: A revision of the Psammodius Fallén species from Europe, Asia and Africa. *Rozpr. ČSAV, Ř. Matem. Přírod. Věd*, 91(1): 1-82
RATTI E. 1987: Ricerche Faunistiche del Museo Civico di Storia Naturale di Venezia Nell'Isola di Pantelleria. IV. Coleoptera Scarabaeoidea. *Boll. Mus. Civ. Stor. Natur. Venezia*, 37: 35-42.
REICHE L. & SAULCY F. 1856: Espèces nouvelles ou peu connues de Coléoptères, recueillies par M. F. de Saulcy, membre de L'Institut, dans son Voyage en Orient et décrites par MM. L. Reiche et Félicien de Saulcy. *Ann. Soc. Entomol. Fr.*, 4: 23-422.
REICHE L. & SAULCY F. 1855-1858: Coléoptères nouveaux ou peu connus. *Extrait des Ann. Soc. Entomol. Fr.*,: 101-141.
REITTER E. 1891: Darstellung der echten Cetoniden-Gattungen und deren mir bekannte Arten aus Europe und den angrenzenden Ländern. *Deutsche Entomol. Zeitschr.*, 35: 49-75.
REITTER E. 1893: Bestimmungs-Tabelle der Lucaniden und coprophagen Lamellicornen des palearktischen Faunegebietes. *Verh. Naturforsch. Ver. Brünn*, 24: 1-240.
REITTER E. 1902: Bestimmungs-Tabelle der Melolonthidae aus europaischen und angrenzenden Ländern. *Verh. Naturforsch. Ver. Brünn*, 49: 93-303.
ROUBAL J. 1945: Pachydema volaki sp. n. *Fol. Entomol.*, 8: 68-69.
SAULCY F. 1864: Descriptions des espèces nouvelles de Coléoptères recueillies en Syrie, en Égypte et en Palestine pendant les mois d'octobre 1863 janvier 1864 par M. de Saulcy, membre de l'Institut. *Ann. Soc. Entomol. Fr.*, 12: 421-440.
SCHATZMAYR A. 1936: Risultati scientifici delle cacce entomologiche di S.A.S. il Principe Alessandro della Torre e Tasso nelle isole dell'Egeo. VI. Scarabaeidae. *Boll. Lab. Zool. Gener. Agr.*, 30: 9-23.
SCHATZMAYR A. 1944: Appunti Coleotterologici 12. *Riv. Sci. Natur. "Natura" (Milano)*, 35: 3-8.
SCHATZMAYR A. 1946: Gli Scarabaeidi coprofagi della Libia a dell'Egitto. *Atti Soc. Ital. Sci. Natur. (Milano)*, 85: 40-84.
STEBNICKA Z. 1977: A revision of the world species of the tribe Aegialiini (Coleoptera, Scarabaeidae, Aphodiinae). *Acta Zool. Cracov.*, 22: 397-505.
TAUZIN P. 1990: Coléoptères Scarabaeoidea Coprophages du Moroc. *L'Entomologiste*, 46: 159-165.
TAUZIN P. 1991: Précision sur la répartition de quelques espèces de Cetoniinae Paléarctiques. Première note: Les Eupotosia Mikšić, 1954. *L'Entomolgiste*, 47: 293-305.
TAUZIN P. 1992: Précision sur la répartition de quelques espèces de Cetoniinae Paléarctiques. Deuxième note: Les Cetonischema Reitter, 1898. *L'Entomologiste*, 48: 169-183.
TAUZIN P. 1993: Précision sur la répartition de quelques espèces de Cetoniinae Paléarctiques. Troisième note: Les Netocia Costa, 1852. *L'Entomolgiste*, 49: 145-172.
TAUZIN P. 1994: Précision sur la répartition de quelques espèces de Cetoniinae Paléarctiques. Quatrième note: Les Netocia Costa, 1852 (fin). *L'Entomolgiste*, 50: 33-62.
WINKLER A. 1927-1932: *Catalogus Coleopterorum regionis palaearcticae.* A. Winkler, Wien, 1698 pp.
YOUNG R.M. 1989: Euchirinae (Coleoptera: Scarabaeidae) of the world: Distribution and taxonomy. *Coleopter. Bull.*, 43: 205-236.
ZUNINO M. 1979: Insects of Saudi Arabia. Coleoptera: Fam. Scarabaeidae, Tribus Onthophagini. *Fauna of Saudi Arabia (Basel)*, 1: 289-292.
ZUNINO M. 1981: Insects of Saudi Arabia. Coleoptera: Fam. Scarabaeidae, Tribe Onthophagini. *Fauna of Saudi Arabia (Basel)*, 3: 408-416.

SOUHRN

I přes ohromný, po staletí trvající zájem o Střední východ je taxonomická a faunistická inventarizace mnoha skupin omezena na příležitostné publikace. Fauna vrubounovitých byla na území Israele (Palestiny) studována poslední dvě století. V minulém století několik důležitých sběratelských cest vedlo na Střední východ (včetně Palestiny) a jejich výsledky publikovali především Reiche & Saulcy (1855-58, 1856), Saulcy (1864), Baudi (1881, 1894) a Hart (1891). První rozsáhlý katalog brouků Palestiny, včetně vrubounovitých, publikoval profesor F. S. Bodenheimer v roce 1937. V katalogu zmínil 185 druhů vrubounovitých, ale podstatná část jeho údajů pocházela z literatury. Podobný "check list" brouků Syrie publikoval G. El-Hariri v roce 1971. Rozsáhlejší a mnohem hodnotnější katalog brouků Egypta (včetně Sinaje) publikoval A. Alfieri v roce 1976. Jeho katalog byl vypracován především na základě materiálu, který on sám sbíral.

Další knihy a články obsahující údaje o vrubounovitých broucích Středního východu jsou velmi důležité, ale rozsahem většinou taxonomicky nebo faunisticky omezené. Fauna brouků Saudské Arabie (a celé Arabie) je natolik odlišná od fauny Levantu, že v současné době 13 vydaných dílů "Fauna of Saudi Arabia" není možno považovat pro levantskou oblast za zdroj faunistických informací zásadního významu.

V Zoologickem muzeu Tel Avivské university (TAU) je umístěna sbírka hmyzu zahrnující staré sběry z období Britského mandátu, sbírka pocházející z Hebrejské university v Jerusalémě, sbírka věnovaná muzeem "Bet Ussishkin" z kibucu Dan (Israel) a hmyz sebraný studenty a zaměstnanci Tel Avivské university. Na identifikaci vrubounovitých brouků se podíleli: G. J. Arrow, Q. Argaman, V. Balthasar, H. Bytinski-Salz, G. E. Bryant, E. Gridelli, R. Petrovitz, R. D. Pope, E. Reitter a F. Stäcklein. Material byl prohlédnut a roztříděn autory katalogu.

Klasifikace čeledí použitá v katalogu je podle Crowsona (1981). Při práci byly použity monografie a taxonomické revize následujících autorů: Balthasar (1945, 1963a,b, 1964), Baraud (1965a,b, 1988, 1989a,b, 1990a,b,c, 1991), Dellacasa (1983, 1987), Endrödi (1985), Krell (1994), Kuijten (1989), Martín Piera (1987), Martín Piera & Zunino (1985, 1986), Mikšić (1958, 1959, 1982, 1987), Petrovitz (1964, 1969), Pittino (1983, 1991), Pope (1960), Stebnicka (1977), Tauzin (1991, 1992, 1993, 1994) a Young (1989).

Předložený katalog se zabývá vrubounovitými brouky Israele a okolních zemí. V katalogu je uvedeno 386 druhů brouků z čeledí Lucanidae, Trogidae, Geotrupidae, Ochodaeidae, Hybosoridae, Glaphyridae a Scarabaeidae. Šedesát tři procent druhů (242 druhů) uvedených v katalogu bylo sebráno z nějaké konkrétní lokality v Israeli. U každého druhu je zmíněno jeho globální a regionální rozšíření a jeho hojnost resp. vzácnost v Israeli podle názoru autorů.