

The beetle fauna (Insecta, Coleoptera) of the Rawdhat Khorim National Park, Central Saudi Arabia

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Abstract

This study was conducted as a part of a comprehensive baseline survey of insect biodiversity of Rawdhat Khorim National Park (RKNP), Central Kingdom of Saudi Arabia (KSA). During this study a total of 262 Coleoptera species belong to 182 genera in 35 families were identified, of which 247 are named at a species level. Fifteen species (6.0%) are apparently endemic to KSA. Thirty-eight species are new to the known beetle fauna of KSA, including 25 species reported from the Arabian Peninsula for the first time. The families Tenebrionidae (45 species), Scarabaeidae (34 species), and Carabidae (27 species) were the most species rich families. About 37% of the beetle abundance was represented by species of Scarabaeidae, especially *Aphodius ictericus ghardimaouensis* Balthasar. *Karumia inaequalis* Pic (Dascillidae) was also an abundant species. Approximately 43.5% of beetle species collected during this study are considered very rare taxa in RKNP. The RKNP beetle fauna shows more affinity to Sahro-Arabian (36.4%), Afrotropical-

Sahro-Arabian (17.4%) and Palaearctic-Sahro-Arabian (10.5%). Twenty-three species (9.3%) are considered cosmopolitan or subcosmopolitan. The data on month of collection, method of collection, and abundance status within RKNP, together with the distribution within KSA and the general distribution (zoogeography) of each species are presented.

Keywords

Arabian fauna, distribution, endemic species, new records, zoogeography

Introduction

Beetles (Coleoptera) are considered the most taxonomically diverse insect group that comprises major components of ecosystems in terms of biomass, species richness and ecological roles (Stack 2015). About 400,000 species have been described (Hammond 1992), comprising about 25% of the Earth's total animal diversity (Rosenzweig 1995; Hunt et al. 2007). Beetles play important roles in pollination, herbivory, granivory, predator-prey interactions, decomposition and nutrient cycling, and soil disturbances (Huffaker and Gutierrez 1999).

The foundation of our knowledge of the beetles of the Kingdom of Saudi Arabia (KSA) was presented by various authors in the series “Fauna of Saudi Arabia,” currently published as part of the “Fauna of Arabia” (Wittmer and Buttiker 1979- to date). Additionally, sixteen years ago, Al-Ahmadi and Salem (1999) listed 1,343 beetle species from KSA. Additional data on the beetles in KSA are available in the Catalogue of Palaearctic Coleoptera (Löbl and Smetana 2003–2007).

Rawdhats, naturally occurring moist basins, are one of the major components that considered as biological cores in the hyper-arid ecosystems of Central KSA (Tag El-Din et al. 1994; Al-Farraj et al. 1997; Alfarhan 2001; Al-Qarawi 2011). The flora and fauna of these unique habitats are under constant threat due to increased anthropogenic activities (Al-Nafie 2007; Al-Qarawi 2011). However, relatively little is known about their insect fauna (e.g., Al Dhafer and Platia 2013, Al Dhafer et al. 2016; Sharaf et al. 2013; Alqarni et al. 2015; Abdel-Dayem et al. 2015, 2016) that contribute to the faunal biodiversity of KSA.

Rawdhat Khorim National Park (RKNP) in Riyadh Province is important element in the conservation network of KSA and its landscape is characterized by relative diverse pristine native plant communities. (Tag El-Din et al. 1994; Al-Farraj et al. 1997; Alfarhan 2001; Al-Qarawi 2011). Recent studies of the insects occurring in RKNP have revealed several new taxa, Coleoptera: *Dicromychnus latifahae* (Elateridae) (Al Dhafer and Platia 2013); *Reichardtius aldhafari* (Histeridae) (Lackner 2014); *Borromorphus saudicus* (Tenebrionidae) (Schawaller et al. 2013); and Hymenoptera: *Tetramorium saudicum* (Formicidae) (Sharaf et al. 2013).

The objective of the current study was to provide a comprehensive list of the beetles from one of the more unique habitats in the world, specifically RKNP contributing to the knowledge of the beetle fauna of KSA and the Arabian Peninsula in general.

Materials and methods

Study area

The Rawdhat Khorim National Park is situated in the northeastern Riyadh Province of Central KSA (Fig. 1a). This is part of the Najd Plateau, a sedimentary rectangular plateau of Saudi Arabia. It covers an area of 24 km² and located about 95 km northeast of the capital of Riyadh (25°23'N, 47°17'E, 560 m.a.s.l.). It is a densely vegetated alluvial basin (Vesey-Fizberald 1957) (Figure 1b) supporting a characteristic floral community in the hyper-arid desert of central Saudi Arabia (Al-Farraj et al. 1997; Alfarhan 2001). This area has low rainfall, but drainage from surrounding foothills of the adjacent highlands provides additional moisture forming temporary water pools and high plant diversity occurs during spring (Al-Farraj et al. 1997).

Climate

The climate of RKNP is characterized by a hot summer and a mild winter with an average relative humidity of 33%. The average annual temperature is 26°C, June to August is the hottest period of the year (35-37.4 °C) and December to February is the coldest (14.6-15.7 °C). The average annual precipitation is 122 mm, the highest amount of precipitation occurs during March and April (30 and 27 mm, respectively), while no rainfall occurs during June to September (Sharaf et al. 2013).

Flora

The flora of RKNP includes a total of 153 plant species belonging to 32 families (Alfarhan 2001). The vegetation is complex consisting of perennial and annual herbs, shrubs and trees (Al-Farraj et al. 1997). *Matricaria aurea* (Loeffl.) Sch.-Bip. (Compositae), *Plantago boissieri* Hausskn. & Bornm., *P. ciliata* Desf. (Plantaginaceae), and *Phalaris minor* Retz. (Poaceae) are the dominant annual herbs (Al-Farraj et al. 1997; Alfarhan 2001). *Acacia ehrenbergiana* Heyne, *A. gerrardii* Benth. (Fabaceae), *Calotropis procera* (Aiton) W.T. Aiton (Apocynaceae), *Lycium shawii* Roem. & Schult. (Solanaceae), *Rhazya stricta* Decne. (Apocynaceae) and *Ziziphus nummularia* (Burm. f) Wight & Arn. (Rhamnaceae) are the dominated shrub and trees (Al-Farraj et al. 1997). Plant growth is higher during spring than in other seasons (Al-Farraj et al. 1997).

Beetle collection

The species listed here are based on the survey that was conducted biweekly from October, 2011 to September, 2013 in the RKNP. The material was collected using a variety

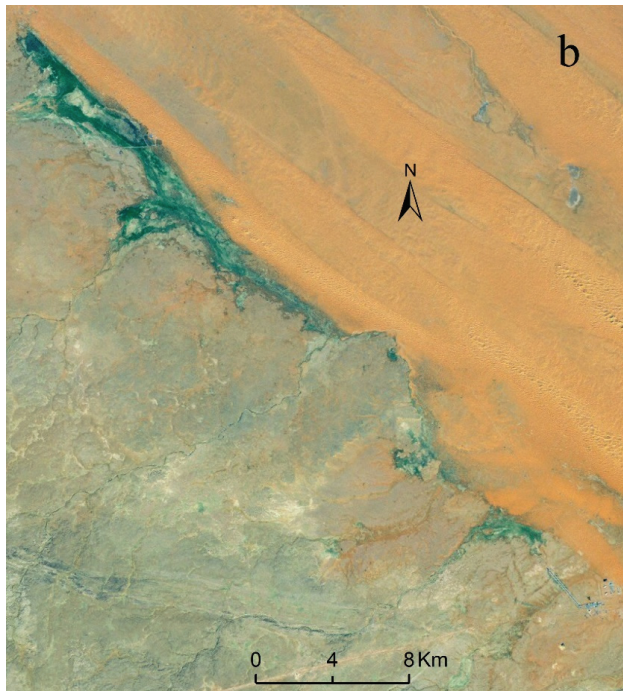
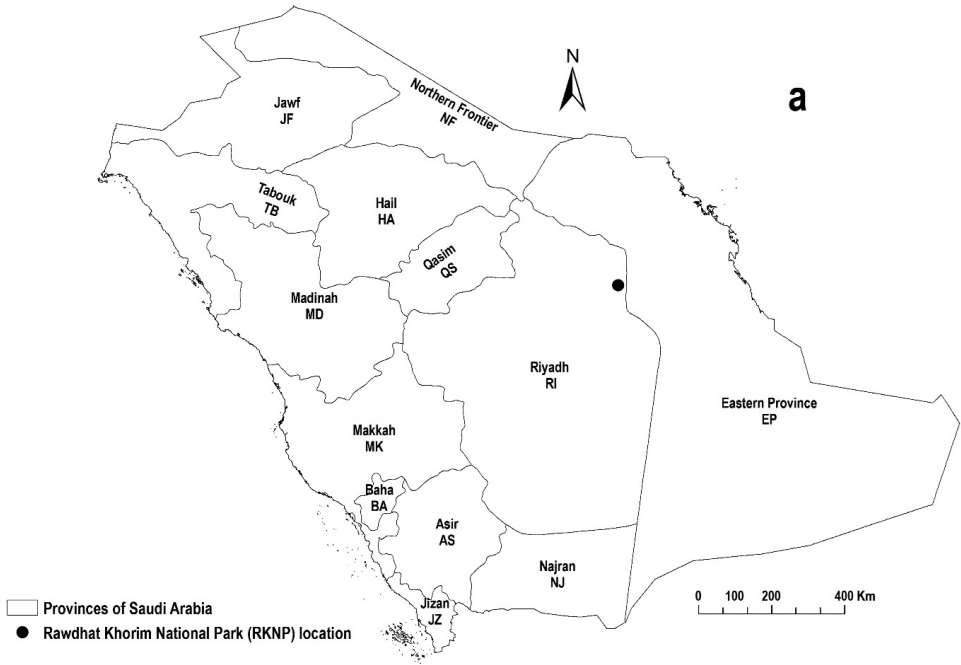


Figure 1. **a** Map showing the provinces and geographic location of Rawdhat Khorim National Park within the Central Region of Kingdom of Saudi Arabia **b** Photo of Rawdhat Khorim National Park (Produced by ArcMap 10.4).

of collecting methods including pitfall trapping (PT), UV-light trapping (LT), Malaise trapping (MT), net sweeping (SW), beating vegetation (BV), vacuuming (VC), and hand-picking (HP). All collected beetles were sorted, identified and deposited in the King Saud University Museum of Arthropods (KSMA), College of Food and Agricultural Sciences, King Saud University, KSA.

Species format and arrangement

Species identification is based on specialists “see Acknowledgments” and numerous publications not included here. Beetles were not being identified to the species level were included in the study if specimens were morphologically different from other (congeneric) species. The identified species are arranged systematically to subfamily level and alphabetically thereafter. The classification and nomenclature of subfamilies and higher levels follows Bouchard et al. (2011). The valid name followed by the author and date of publication for species were given and these were not cited in the reference section and they can be found in the Catalogue of Palaearctic Coleoptera (Löbl and Smetana 2003–2007). The world distribution for each species is indicated as two capital letters for each country (according ISO 3166: http://www.iso.org/iso/country_codes). The world distribution is based mainly on Catalogue of Palaearctic Coleoptera (Löbl and Smetana 2003–2007), Global Biodiversity Information Facility (GBIF: <http://www.gbif.org>), and Beetles and Rock Art in Libya (<http://jcringenbach.free.fr>). The general distribution (zoogeography) of each species is also indicated as a letter code (see “Abbreviations”) corresponding to main zoogeographic regions of the world proposed by Holt et al. (2013) (Fig. 2). The KSA distribution of each species is indicated (abbreviated as two letters for the Saudi provinces) (Fig. 1a). The KSA distributional records are based mainly on published records in the series “Fauna of Saudi Arabia”, being published as part of the “Fauna of Arabia (Wittmer and Buttiker 1979-to date) and other available papers on Saudi beetles. The absence of a geographic entry after a species name indicates that the species was recorded from Arabia or KSA but no locality was specified. For each species the following information is given: local abundance (all values of collected specimens were log transformed and then they classified into five categories using equal interval classification: very rare: <5 individuals, rare: 5-17, frequent: 18-70, common: 71-300, and abundant: > 300); collecting method (see abbreviation in “Beetle collection” above); and months of collection (Roman numerals) within RKNP.

Abbreviations for the zoogeographical regions

| | |
|------------|--------------|
| AFR | Afrotropical |
| AUS | Australian |
| COS | Cosmopolitan |

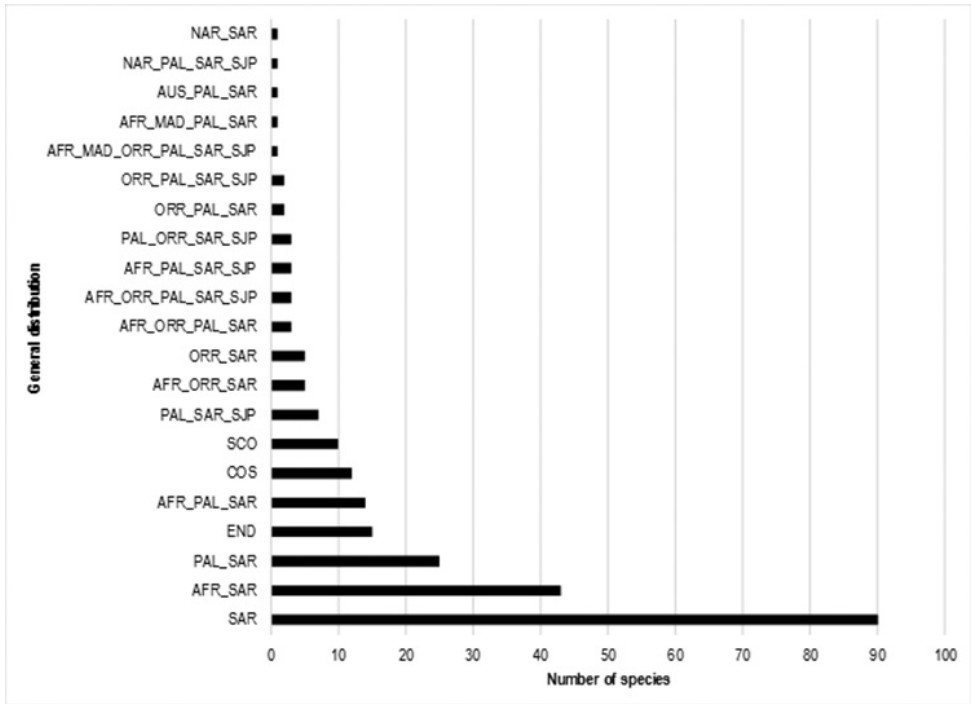


Figure 2. The general distributions frequency of the beetle fauna of Rawdhat Khorim National Park, Central Kingdom of Saudi Arabia.

| | |
|------------|-----------------|
| MAD | Madagascan |
| NAR | Nearctic |
| NTR | Neotropical |
| OCN | Oceanic |
| ORR | Oriental |
| PAL | Palaeartic |
| SAR | Saharo_Arabian |
| SCO | Subcosmopolitan |
| SJP | Sino_Japanese |

Results and discussion

This study represents the first inventory of beetles in RKNP, within arid region of central KSA. In total, 15,658 specimens were collected and identified to 262 species belonging to 182 genera included in 83 subfamilies and 35 families. Forty percent of known faunal diversity is accounted for by three beetle families, Tenebrionidae (45 spp.), Scarabaeidae (34 spp.) and Carabidae (27 spp.) (Table 1). The families with the greatest abundant were Scarabaeidae (36.6%) followed by Tenebrionidae (16.7%)

Table 1. The taxonomical and faunistic analysis of the beetle fauna in Rawdhat Khorim National Park, Central Kingdom of Saudi Arabia.

| Family | Subfamily | Genera | Species | New record | Relative abundance |
|-----------------|-----------|------------|------------|------------|--------------------|
| Anthicidae | 2 | 5 | 7 | 1 | 0.27 |
| Bolboceratidae | 1 | 1 | 1 | 0 | 0.01 |
| Bostrichidae | 2 | 3 | 3 | 1 | 1.30 |
| Brentidae | 2 | 2 | 2 | 0 | 1.10 |
| Buprestidae | 5 | 7 | 10 | 0 | 1.30 |
| Carabidae | 8 | 22 | 27 | 8 | 5.36 |
| Cerambycidae | 2 | 2 | 2 | 0 | 0.11 |
| Chrysomelidae | 5 | 8 | 8 | 1 | 3.95 |
| Cleridae | 2 | 4 | 4 | 0 | 0.51 |
| Coccinellidae | 1 | 8 | 15 | 0 | 3.44 |
| Cryptophagidae | 2 | 2 | 2 | 1 | 0.14 |
| Curculionidae | 4 | 15 | 20 | 0 | 1.99 |
| Dascillidae | 1 | 1 | 1 | 0 | 8.02 |
| Dermestidae | 4 | 6 | 15 | 5 | 1.58 |
| Dytiscidae | 2 | 3 | 3 | 0 | 0.56 |
| Elateridae | 2 | 8 | 13 | 2 | 9.30 |
| Glaresidae | 0 | 1 | 2 | 0 | 0.02 |
| Heteroceridae | 1 | 1 | 2 | 2 | 0.08 |
| Histeridae | 3 | 8 | 14 | 0 | 0.54 |
| Hybosoridae | 1 | 1 | 1 | 0 | 3.48 |
| Hydrophilidae | 1 | 1 | 1 | 1 | 0.04 |
| Laemophloeidae | 1 | 1 | 1 | 1 | 0.01 |
| Leiodidae | 1 | 1 | 1 | 1 | 0.01 |
| Meloidae | 2 | 2 | 4 | 0 | 0.17 |
| Melyridae | 2 | 3 | 4 | 1 | 1.23 |
| Mycetophagidae | 1 | 1 | 1 | 0 | 0.02 |
| Nitidulidae | 3 | 3 | 3 | 0 | 0.70 |
| Oedemeridae | 1 | 1 | 1 | 0 | 0.03 |
| Phalacridae | 1 | 1 | 1 | 0 | 0.17 |
| Ptinidae | 2 | 2 | 3 | 2 | 0.06 |
| Scarabaeidae | 7 | 18 | 34 | 3 | 36.62 |
| Scraptiidae | 1 | 1 | 2 | 0 | 0.47 |
| Staphylinidae | 5 | 7 | 8 | 4 | 0.66 |
| Tenebrionidae | 4 | 31 | 45 | 4 | 16.71 |
| Thanerocleridae | 1 | 1 | 1 | 0 | 0.03 |
| Total 35 | 83 | 182 | 262 | 38 | |

(Table 1). Thirty-eight species have not been previously reported from KSA are listed, including 25 new records for the Arabian Peninsula. Ten families were represented by single species in the RKNP.

Eleven species (4.2%) are classified as abundant species, from which *Aphodius ictericus ghardimaouensis* (Scarabaeidae) (1,238 specimens) and *Karumia inaequalis*

(Dascillidae) (1,262 specimens) were the highest abundant species. Thirty-six (13.7%) and 46 (17.6%) species are considered as common and frequent, respectively. While, 64.5% of the species considered as rare (55 spp.) or very rare (114 spp.).

The RKNP beetle fauna demonstrated variable zoogeographical affinities (Figure 2), 15 species (6.1%) are endemic to KSA. The remainder of the species showed high affinities to SAR (36.4%), AFR_SAR (17.4%), and PAL_SAR (10.5%).

This work has confirmed the occurrence of four species in KSA previously reported as occurring in “Arabia”: *Pseudoathyreus flavohirtus* (Bolboceratidae) (Paulian, 1980); *Saprinus figuratus* (Histeridae) (Penati & Vienna, 2006); *Sphenoptera gabani* (Buprestidae) (Kerremans 1913); and *Syntomus lateralis* (Carabidae) (Schatzmayr 1936). The holotypes of three species originated from RKNP: *Boromorphus saudicus* Schawaller, Al Dhafer & Fadl, 2013; *Dicronychus latifahae* Al Dhafer & Platia, 2013 and *Reichardtius aldhaferi* Lackner, 2014.

In particular, *Adelostoma subtile arabicum* and *A. subtile sabulosum*, described from KSA by Kaszab (1981), but the characters for the differentiation of the two subspecies and the nominate *A. subtile subtile* Reitter that proposed by Kaszab (1981) are not useful for separation, and accordingly, this taxon is treated here as *A. subtile*.

It is expected that the results of this study of the beetle fauna of RKNP will be used for future studies related to long-term monitoring of the beetle fauna for evaluating impacts of increased use by the growing population of nearby Riyadh and impact of climate change (Bale et al. 2002).

List of species

Suborder: Adephaga

Carabidae

Subfamily: Cicindelinae

Myriochila melancholica (Fabricius, 1798)

World distribution. **Africa:** AO, BF, BJ, BW, CD, CF, CG, CI, CM, CV, ER, ET, GH, GM, GN, GQ, GW, KE, MG, MS, MW, MZ, NA, NG, SD, SL, SN, SO, TD, TO, TZ, ZA, ZM, ZW. **Asia:** AE, AF, AZ, BH, CN, CY, EG (Sinai), IL, IN, IQ, IR, JO, KG, KW, KZ, LB, NP, OM, PK, QA, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AL, AM, ES, FR, GE, GR, IT, MT, NO (Svalbard), PT. **North Africa:** DZ, EG, ES (Canary Island), LY, MA, TN.

General distribution. AFR_MAD_ORR_PAL_SAR_SJP.

Local distribution. AS, NJ (Britton 1948; Cassola and Schneider 1997)

Collecting month and method. A very rare species. The adults were collected by LT during V-VI.

Subfamily: Carabinae

***Calosoma imbricatum* Klug, 1832**

World distribution. **Africa:** DJ, SD, TD (Britton 1948). **Asia:** AE, QA, SA, YE. **North Africa:** EG. Widespread all over Africa, the Arabian Peninsula and south Asia (Felix 2009).

General distribution. AFR_ORR_SAR.

Local distribution. AS, MK (Britton 1948), BA (El-Hawagry et al. 2013), EP, JZ, RI (Heinertz 1979).

Collecting month and method. A very rare species collected only by LT through III-IV.

***Calosoma olivieri* Dejean, 1831**

World distribution. **Asia:** AE (Felix 2009), AZ, IQ, IR, JO, PK, SA, SY, TM, UZ. **Europe:** MT, PT (Azores). **North Africa:** DZ, EG, ES (Canary Island), LY, MA, TN.

General distribution. PAL_SAR.

Local distribution. MK (Britton 1948), RI (Heinertz 1979).

Collecting month and method. Very rare species. The beetles were collected by HP, and by PT under canopy of *R. stricta* in II.

Subfamily: Scaritinae

***Distichus planus* (Bonelli, 1813)**

World distribution. **Asia:** AZ, IQ, IR, JO, KZ, PK, SA, SY, TJ, TM, UZ, YE. **Europe:** ES, FR, GE, GR, IT, MT, PT. **North Africa:** EG, MA, TU.

General distribution. PAL_SAR.

Local distribution. RI (Balkenohl 1994).

Collecting month and method. A frequent species that was collected HP, LT and PT during II, IV-VI, VIII, X, and XII.

***Dyschirius beludscha ganglbaueri* Znojko, 1927**

World distribution. **Asia:** AE (Felix 2009), AF, EG (Sinai), IL, IQ, IR, KZ, MN, PK, SY, TJ, TM. **North Africa:** DZ, EG, MA, TU. New to KSA.

General distribution. PAL_SAR.

Collecting month and method. Very rare species that was collected by LT during IV.

***Scarites procerus eurytus* Fischer von Waldheim, 1828**

World distribution. **Asia:** AF, IQ, IR, KG, KW, KZ, PK, SA, SY, TM, TR, UZ. **Europe:** ES, GE, GR, IT, PT, RU. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. PAL_SAR.

Local distribution. EP, QS, RI (Balkenohl 1994), MK (Beccari 1971).

Collecting month and method. Very rare species. The adults were collected by HP and PT during V.

Subfamily: Siagoninae***Siagona europaea* Dejean, 1826**

World distribution. **Asia:** AF, CY, EG (Sinai), IL, IN, IQ, IR, JO, KZ, LB, PK, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AL, AM, AZ, BG, ES, GE, GR, HR, IT, MK, PT, RU.

General distribution. ORR_PAL_SAR.

Local distribution. MK (Britton 1948), RI (Al Dhafer et al. 2016).

Collecting month and method. A rare species. The beetles were collected by HP, LT and PT through IV-V, VII and XII.

Subfamily: Melaeninae***Cymbionotum pictulum* (Bates, 1874)**

World distribution. **Africa:** SD. **Asia:** Af, IQ, IR, KZ, SA, TM, TR. **E:** RU.

General distribution. AFR_PAL_SAR.

Local distribution. MK (Britton 1948; Ball and Shpeley 2005), RI (Al Dhafer et al. 2016).

Collecting month and method. Frequent species that was collected by HP and LT during II-V and XII. HP.

***Cymbionotum semelederi* (Chaudoir, 1864)**

World distribution. **Africa:** MR, NE, SD, SO, TD. **Asia:** AE (Felix 2009), AF, AZ, CY, IQ, IR, JO, KW, KZ, PK, SA, SY, TM, TR, UZ, YE. **Europe:** AM, GE, RU. **North Africa:** DZ, EG, MA, TN.

General distribution. AFR_PAL_SAR.

Local distribution. EP, RI (Basilewsky 1979), MK (Britton 1948).

Collecting month and method. Frequent species. It was collected by LT and PT during II-V and XII.

Subfamily: Trechinae

***Bembidion wittmeri* (Basilewsky, 1979)**

World distribution. Asia: SA.

General distribution. END.

Local distribution. RI (Basilewsky 1979).

Collecting month and method. Common species. Its specimens were collected by HP, LT and PT through I-V and XII.

***Tachyura lucasi* (Jacquelin du Val, 1852)**

World distribution. Africa: CD, CF, CM, ET, GQ, NG, ZA. **Asia:** CY, IL, IR, LB, SY, TR. **Europe:** ES, IT, PT. **North Africa:** DZ, EG, MA, TN. New to Arabian Peninsula.

General distribution. AFR_MAD_PAL_SAR.

Collecting month and method. A rare species. The beetles were collected by LT through IV-V and VII.

Subfamily: Brachininae

***Brachinus crepitans* (Linné, 1758)**

World distribution. Asia: AZ, CY, IQ, IR, KG, KZ, SY, TJ, TM, TR, UZ. **Europe:** AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IT, LT, LU, LV, MD, NL, NO, PL, PT, RO, RS, RU, SE, SI, SK, UA. New to Arabian Peninsula.

General distribution. PAL_SAR.

Collecting month and method. Rare species. It was collected by HP during IV and XII; and by LT during V.

***Brachinus nobilis* Dejean, 1831**

World distribution. Asia: IL, IQ, IR, SA, SY, TR, YE. **North Africa:** DZ, MA, TN.

General distribution. SAR.

Local distribution. MK (Britton 1948), RI (Basilewsky 1979).

Collecting month and method. Rare species. The adults were collected by HP under debris and stones around temporary fresh water pool during XII.

Subfamily: Harpalinae***Amara aulica* (Panzer, 1796)**

World distribution. **Asia:** AZ, CN, KG, KZ, MN, RU, TJ, TM, TR, UZ. **Europe:** AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, EE, ES, FI, FO, FR, GB, GE, GR, HR, HU, IE, IT, LI, LT, LV, MD, MK, NL, NO, PL, RO, RS, RU, SK, SE, SI, UA. **North Africa:** ES (Canary Island). New to Arabian Peninsula.

General distribution. PAL_SAR_SJP.

Collecting month and method. A frequent species that was collected HP and PT through I-IV and XII.

***Amara maindroni* Bedel, 1907**

World distribution. **Asia:** AE (Felix 2009), AF, IQ, IR, JO, PK, SA, SY. **North Africa:** DZ, MA, TN.

General distribution. SAR.

Local distribution. RI (Hieke 1993).

Collecting month and method. Very rare species. The adult was very rare and collected by Lt in XI.

***Anthia duodecimguttata* Bonelli, 1813**

World distribution. **Asia:** AE (Felix 2009), IQ, IR, JO, KW, OM, QA, SA, YE. **North Africa:** EG.

General distribution. SAR.

Local distribution. AS, JZ, MK, RI (Britton 1948; Beccari 1971; Heinertz 1979).

Collecting month and method. Very rare species. The adult beetles were collected by HP and LT at sandy area during IV.

***Calodromius mayeti* (Bedel, 1907)**

World distribution. **Asia:** AE (Felix 2009), IR, SA. **North Africa:** MA, TN.

General distribution. SAR.

Local distribution. MD (Mateu 1986).

Collecting month and method. Very rare species that was collected by HP under stones in IV.

***Chlaenius flavipes* Menetries, 1832**

World distribution. **Asia:** AF, AZ, IQ, IR, KG, KZ, TJ, TM, TR, UZ. **Europe:** AL, AM, BA, BG, GE, GR, HR, HU, MD, MK, RO, RS, RU, UA. New to Arabian Peninsula.

General distribution. PAL_SAR.

Collecting month and method. Very rare species that was collected by HP under plant debris during XII.

***Harpalus affinis* (Schrank, 1781)**

World distribution. **Asia:** AZ, CN, CY, IL, IR, KG, KP, KZ, MN, TR. **Australia:** AU, NZ. **Europe:** AD, AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IT, LI, LT, LU, LV, MD, MK, NL, NO, PL, PT, RO, RS, RU, SE, SI, SK, UA. **North America:** CA, US. New to Arabian Peninsula.

General distribution. SCO.

Collecting month and method. A rare species. The specimens were collected by HP under stones and plant debris during II, IV and XII.

***Merizomena buettikeri* (Mateu, 1986)**

World distribution. **Asia:** SA.

General distribution. END.

Local distribution. MD (Mateu 1986).

Collecting month and method. Very rare species. It was collected by LT in IV and VI.

***Microlestes discoidalis* (Fairmaire, 1892)**

World distribution. **Africa:** ER, KE, MR, NE, SD, SO, TD. **Asia:** AE, AF, IL, IN, IR, SA, TR, YE.

General distribution. AFR_ORR_SAR.

Local distribution. MK (Britton 1948; Mateu 1979).

Collecting month and method. Very rare species that was collected by LT through V.

***Orthotrichus cymindoides* (Dejean, 1831)**

World distribution. **Asia:** AF, CN, IN, SY. **North Africa:** EG. New to Arabian Peninsula.

General distribution. ORR_PAL_SAR_SJP.

Collecting month and method. Frequent species. The adults were collected by HP, LT and PT during I-V, IX and XII.

***Platytarus faminii faminii* (Dejean, 1826)**

World distribution. **Africa:** CV. **Asia:** AE (Felix 2009), AZ, CY, IL, IQ, KG, KZ, SA, SY, TM, TR, UZ, YE (Socotra). **Europe:** AM, ES, FR GR, IT, PT. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. AFR_PAL_SAR.

Local distribution. AS, EP, RI (Mateu 1986).

Collecting month and method. Very rare species that was collected by LT in III.

***Poecilus wollastoni* (Wollaston, 1854)**

World distribution. **Asia:** IQ, KW, SA, YE. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN.

General distribution. SAR.

Local distribution. It was recorded from Arabia without exact locality by Emden (1954) and a recent occurrence in KSA has been confirmed by Al Dhafer et al. (2016).

Collecting month and method. Frequent species, which was collected by HP, LT and PT during I-II, IV-VI and XI-XII.

***Stenolophus marginatus* Dejean, 1829**

World distribution. **Asia:** AE (Felix 2009), AF, AZ, CY, IL, IQ, IR, JO, KW, KZ, SA, SY, TJ, TM, TR, UZ. **Europe:** AL, AM, BA, BG, ES, FR, GE, GR, HR, IT, MK, PT, RS, UA. **North Africa:** DZ, EG, ES (Canary Islands), MA, PT (Madeira Archipelago), TN.

General distribution. PAL_SAR.

Local distribution. EP, RI (Basilewsky 1979).

Collecting month and method. Frequent species. The beetles were collected by LT in IV-V, VII and IX.

***Stenolophus pseudoobockianus* Felix & Muilwijk, 2009**

World distribution. **Asia:** AE (Felix 2009). New to KSA.

General distribution. SAR.

Collecting month and method. Very rare species that was collected by LT during IV.

***Syntomus lateralis* (Motschulsky, 1855)**

World distribution. **Asia:** AE (Felix 2009), IL, IQ, IR, SA, SY. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

Local distribution. Schatzmar (1936) mentioned Arabia among the distribution of this species in his work on Carabidae of Egypt, without given any further detailed about the locality.

General distribution. SAR.

Collecting month and method. Common species that was collected by HP, LT and PT in I-XII.

Dytiscidae**Subfamily: Dytiscinae*****Eretes sticticus* (Linné, 1767)**

World distribution. **Africa:** BW, KE, MG, NA, SD, ZA, ZW. **Asia:** AE, AZ, BT, CN, CY, EG (Sinai), IN, IQ, IR, JA, á, KW, NP, OM, PK, SA, SY, TM, TR, TW, YE. **Europe:** AM, BA, BG, ES, FR, GE, GR, HR, HU, IT, PT, RU, SI, UA, RS. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN. **North America:** MX, PR, US. **South America:** EC, PE, VE.

General distribution. COS.

Local distribution. AS, EP, MD, RI (Brancucci 1979 1984).

Collecting month and method. A frequent species. The adult beetles were collected by LT in IV-VI.

Subfamily: Hydroporinae***Hydroglyphus signatellus* (Klug, 1834)**

World distribution. **Africa:** ET, KE, SD, SN. **Asia:** AE (Hájek and Brancucci 2011), AZ, CY, EG (Sinai), IL, IQ, IR, JO, KW, KZ, PK, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AM, BA, ES, GE, GR, HR, IT, RS, RU. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. AFR_PAL_SAR.

Local distribution. EP, RI (Brancucci 1979 1984).

Collecting month and method. Very rare species that was collected by LT during V.

***Hygrotus inscriptus* (Sharp, 1882)**

World distribution. **Asia:** AE, IQ, IR, KW, SA, SY, TM, UZ. **North Africa:** EG. The distribution is updated from Hájek and Brancucci (2011).

General distribution. SAR.

Local distribution. EP (Brancucci 1984).

Collecting month and method. Frequent species that was collected by LT in VI.

Suborder: Polyphaga

Hydrophilidae

Subfamily: Hydrophilinae

Hydrochara flavipalpis (Boheman, 1851)

World distribution. **Asia:** OM, YE. New to KSA.

General distribution. SAR.

Collecting month and method. A rare species, which was collected by HP during V and XII.

Histeridae

Subfamily: Abraeinae

Teretrius pulex Fairmaire, 1877

World distribution. **Africa:** MR, NE, SN. **Asia:** AE (Kanaar 2007), OM, SA, SY. **North Africa:** DZ, EG, TN.

General distribution. AFR_SAR.

Local distribution. EP (Mazur 1994; Penati and Vienna 2006).

Collecting month and method. Very rare species that was collected by BV on branches of *Z. nummularia* during V.

Subfamily: Saprinae

Pholioxenus sp.1

Collecting month and method. A rare species. The specimens were collected by PT under canopy of *A. ehrenbergiana*, *A. gerrardii* and *R. stricta* during IV-V and X.

Pholioxenus sp.2

Collecting month and method. Frequent species. The beetles were collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by LT through V- XI.

***Reichardtius aldhaferi* Lackner, 2014**

World distribution. Asia: SA (Lackner 2014).

General distribution. END.

Local distribution. RI (Lackner 2014).

Collecting month and method. A rare species. The beetles were collected by HP and LT during I-II and XII.

***Saprinus chalcites* (Illiger, 1807)**

World distribution. Africa: AO, BF, ET, GM, KE, ML, MR, NA, SD, SN, SO, TZ. Asia: AE, AF, CY, ID, IL, IN, IQ, IR, JO, KW, KZ, MM, MN, OM, PK, SA, TR, YE. Australia: AU. Europe: ES, FR, GR, IT, MT, PT, RU. North Africa: DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN. South America: AR.

General distribution. SCO (Penati and Vienna 2006).

Local distribution. AS, BA, JZ, MK, NJ, RI (Kryzhanovskij 1979; Mazur 1994; Penati and Vienna 2006).

Collecting month and method. Very rare species. The adults were collected by PT under canopies of *A. ehrenbergiana*, *L. shawii* and *Z. nummularia* during IV and VII.

***Saprinus confalonierii* G. Müller, 1933**

World distribution. Africa: MR. Asia: AE (Kanaar 2007), OM, SA. North Africa: DZ, EG, LY, TN.

General distribution. AFR_SAR.

Local distribution. AS, EP, HA, NB, NJ, RI (Mazur 1994; Penati and Vienna 2006).

Collecting month and method. Very rare species that was collected by LT in X.

***Saprinus figuratus* Marseul, 1855**

World distribution. Asia: IL, JO, SA, SY. North Africa: DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. SAR.

Local distribution. just recorded from Arabia (Penati and Vienna 2006).

Collecting month and method. Very rare species that was collected by HP during II.

***Saprinus moyses* Marseul, 1862**

World distribution. **Asia:** IR, KW, SA, SY, TR. **Europe:** GR. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. PAL_SAR.

Local distribution. HA (Mazur 1994; Penati and Vienna 2006).

Collecting month and method. Very rare species. The beetles were collected by BT and LT during V, VII and X.

***Saprinus muelleri* Mazur, 1997**

World distribution. **Asia:** AE (Kanaar 2007), AF, PK, SA.

General distribution. SAR.

Local distribution. EP, MK, RI (Penati and Vienna 2006).

Collecting month and method. Very rare species that was collected by LT during I-II.

***Saprinus* sp.**

Collecting month and method. A rare species. The adults were collected by LT during V-VI and X.

***Xenonychus tridens* (Jacquelin Duval, 1853)**

World distribution. **Africa:** CV, MR, NG, TD. **Asia:** AE (Kanaar 2007), CY, IL, OM, SA, SY, TR.

Europe: ES, FR, GR, IT, PT. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. AFR_PAL_SAR.

Local distribution. EP, MK (Mazur 1994; Penati and Vienna 2006), RI (Al Dhafer et al. 2016).

Collecting month and method. Very rare species that was recorded by PT under canopy of *A. ehrenbergiana* during IV.

***Xenophilothis choumovitchi* (Thérond & Hollande, 1965)**

World distribution. **Asia:** AE (Kanaar 2007), OM, SA. **North Africa:** DZ.

General distribution. SAR.

Local distribution. EP, RI (Penati and Vienna 2006).

Collecting month and method. Very rare species, which was collected by LT in V.

***Zorius* sp.**

Collecting month and method. A rare species. The adults were collected by PT under canopies of *A. gerrardii*, *C. procera*, *L. shawii* and *R. stricta* during III-IV.

Subfamily: Histerinae***Atholus bimaculatus* (Linnaeus, 1758)**

World distribution. **Africa:** BF, CF, CM, DJ, KE, MR, SN, TD. **Asia:** AE (Kanaar 2007), AF, CN, CY, IL, IN, IQ, IR, JO, JP, KG, KP, KR, KZ, MM, OM, RU, SA, SY, TJ, TM, UZ, YE. **Europe:** AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IT, LI, LV, NL, NO, PL, PT, RO, RS, RU, SE, SI, SK, UA. **North Africa:** DZ, ES (Canary Islands), LY, MA, TN. **North America:** CA, US. **South America:** AR, BR, CL.

General distribution. SCO (Penati and Vienna 2006).

Local distribution. AS (Kryzhanovskij 1979), RI (Al Dhafer et al. 2016).

Collecting month and method. Very rare species that was collected by PT under canopy of *A. ehrenbergiana* during IV.

Leiodidae**Subfamily: Leiodinae*****Chobautiella anisotomoides* (Fairmaire, 1876)**

World distribution. **Asia:** AE (Švec 2010a). **North Africa:** DZ, ES (Canary Islands), MA, TN (Švec 2010). New to KSA.

General distribution. SAR.

Collecting month and method. Very rare species. The specimens were collected by LT in XII.

Staphylinidae**Subfamily: Pselaphinae*****Ctenisomorphus major* (Raffray, 1877)**

World distribution. **Africa:** ET. **Asia:** AE (Besuchet and Cuccodoro 2011), EG (Sinai), IL, IR, JO, SA, TR, YE. **North Africa:** DZ, EG, TN.

General distribution. AFR_SAR.

Local distribution. AS, BA, EP, MD, RI (Besuchet 1981).

Collecting month and method. Very rare species that was collected by LT in IV-V and VII.

***Enoptostomus arabicus* Besuchet & Cuccodoro, 2011**

World distribution. Asia: AE (Besuchet and Cuccodoro 2011). New to KSA.

General distribution. SAR.

Collecting month and method. Very rare species, which was collected by LT during VII.

Subfamily: Tachyporinae

***Sepedophilus* sp.**

Collecting month and method. Very rare species. It was collected by PT under canopy of *Z. nummularia* in III.

Subfamily: Aleocharinae

***Atheta atramentaria* (Gyllenhal, 1810)**

World distribution. Africa: MR, ZA. Asia: AZ, CN, CY, IN, IR, JP, KP, KZ, NP, PK, RU, TR. Europe: AL, AT, BE, BG, CH, CZ, DE, DK, EE, ES, FI, FO, FR, GB, GE, GR, HU, IE, IS, IT, LT, LU, NL, NO, PL, PT, RU, SE, SK. North Africa: DZ, EG, ES (Canary Islands), MA, PT (Madeira Archipelago), TN. New to Arabian Peninsula.

General distribution. AFR_PAL_ORR_SAR_SJP.

Collecting month and method. Rare species. The specimens of this species were collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *L. shawii*, *R. stricta*, and *Z. nummularia* in I-II and X-XI; and by SW on branches of *C. procera* through VII.

Subfamily: Oxytelinae

***Bledius niloticus* Erichson, 1840**

World distribution. Africa: AO, ET, SN, ZA. Asia: CN, IL, IN, JP, KP, KR, LB, LK, SA (Beccari 1971), SY. North Africa: DZ, EG, MA, TN.

General distribution. AFR_ORR_PAL_SAR_SJP.

Local distribution. RI (Beccari 1971).

Collecting month and method. Very rare species that was collected by LT during X.

Carpelimus pusillus (Gravenhorst, 1802)

World distribution. **Asia:** CY, IR, KZ, RU, TR. **Australia:** AU. **Europe:** AL, AM, AT, BA, BE, BG, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IS, IT, LT, LV, NL, NO, PL, PT, RO, RU, SE, SI, SK, UA. **North Africa:** DZ, EG, ES (Canary Islands), PT (Madeira Archipelago). **North America:** US. New to Arabian Peninsula.

General distribution. SCO.

Collecting month and method. Very rare species, which was collected by LT through XII.

Carpelimus sp.

Collecting month and method. Very rare species that was collected by LT in VII.

Subfamily: Paederinae

Philonthus sp.

Collecting month and method. Very rare species that was collected by LT through VI.

Glaresidae

Glaresis arabica (Paulian, 1980)

World distribution. **Asia:** OM, SA.

General distribution. SAR.

Local distribution. EP, RI (Paulian 1980).

Collecting month and method. Very rare species that was collected by LT during V.

Glaresis sp.

Collecting month and method. Very rare species that was collected by LT in IV.

Bolboceratidae**Subfamily: Bolboceratinae*****Pseudoathyreus flavohirtus* (Wlaker, 1871)**

World distribution. **Asia:** Arabia

General distribution. SAR.

Local distribution. Paulian (1980) recorded this species from Arabia without exact locality.

Collecting month and method. Very rare species that was collected by LT in IV.

Hybosoridae**Subfamily: Hybosorinae*****Hybosorus illigeri* Reiche, 1853**

World distribution. **Africa:** KM, MG, UG. **Asia:** AF, AZ, CN, CY, EG (Sinai), IL, IN, IQ, IR, JO, PK, SA, SY, TJ, TM, TR, UZ, YE, VN. **Europe:** AM, BG, ES, FR, GE, GR, HR, IT, MK, PT, RO, RS, RU, UA. **North Africa:** DZ, EG, LY, MA, TN. **North America:** CU, HT, MX, NI, US. **South America:** VE.

General distribution. SCO.

Local distribution. EP, MD, MK, NJ, RI (Beccari 1971, Kuijten 1980).

Collecting month and method. An abundant species. The adult beetles were collected by HP, LT and PT through II, IV–VIII.

Scarabaeidae**Subfamily Eremazinae*****Eremazus giganteus* Král, 2015**

World distribution. **Asia:** AE (Král and Batelka 2015). New to KSA.

General distribution. SAR.

Collecting month and method. Very rare species that collected by LT during V.

***Eremazus unistriatus* Mulsant, 1851**

World distribution. **Africa:** NE, SD. **Asia:** AE, AF, IL, IN, IQ, IR, KZ, PK, SA, TJ, TM, TR, UZ. **Europe:** AM, GE. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. AFR_ORR_PAL_SAR.

Local distribution. EP, HA, MD, MK, QS, RI (Pittino 1984).

Collecting month and method. A frequent species. The adults of this species were collected by PT under canopy of *A. ehrenbergiana*, and by HP and LT during I-II, IV-VII and IX.

Subfamily: Aphodiinae

***Aphodius adustus* Klug, 1855**

World distribution. Africa: CD, CM, DJ (Pittino 1984), GW, KE, MZ, NA, SD (Balthasar 1972), SN, TD, TZ. **Asia:** SA, YE.

General distribution. AFR_SAR.

Local distribution. The species was reported from Arabia without exact locality (Pittino 1984) and recently its occurrence in KSA: RI has been confirmed by Abdel-Dayem et al. (2016).

Collecting month and method. Very rare species that was collected by LT during IV.

***Aphodius arabicus* Harold, 1875**

World distribution. Asia: EG (Sinai), IL, IR, KW, SA, YE. **North Africa:** EG

General distribution. SAR.

Local distribution. EP, JZ, MD, MK, RI (Pittino 1984).

Collecting month and method. Common species that was collected by LT through V-VII and IX-X.

***Aphodius beluchistanicus* Petrovitz, 1962**

World distribution. Asia: IQ, IR, SA.

General distribution. SAR.

Local distribution. EP, RI (Pittino 1984).

Collecting month and method. A rare species, which was collected by LT in I and XII.

***Aphodius chobauti* Clouët, 1896**

World distribution. Asia: IL, IQ, IR, JO, SA. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. SAR.

Local distribution. MD, QS, RI (Pittino 1984).

Collecting month and method. Rare species. The specimens were collected by BV on branches of *A. gerrardii*, and by HP and LT during IV-V and XI.

***Aphodius ictericus ghardimaouensis* Balthasar, 1929**

World distribution. **Asia:** CY, IL, IR, JO, LB, SA, SY, TR. **Europe:** ES, FR, GR, HR, IT, MT, PT. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. PAL_SAR.

Local distribution. EP (Pittino 1984).

Collecting month and method. Abundant species that was collected by LT during I, III and IX.

***Aphodius lividus* (Olivier, 1789)**

World distribution. **Africa:** MG, NA. **Asia:** CN, CY, EG (Sinai), IL, IR, KG, KW, KZ, LB, MN, NP, OM, SA, SY, TJ, TM, TR, TW, UZ. **Australia:** AU, NZ, PG. **Europe:** AL, AM, AT, BA, BE, BY, CH, CZ, DE, EE, ES, FI, FR, GB, GE, GR, HR, HU, IT, LT, LV, MK, MT, NL, PL, PT, RO, RS, RU, SE, SI, SK, UA. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT ((Madeira Archipelago), TN. **North America:** CU, GT, MX, NI, PA, US.

General distribution. SOC.

Local distribution. AS, BA, EP, JZ, MD, MK, QS, RI (Beccari 1971, Pittino 1984; El-Hawagry et al. 2013).

Collecting month and method. Common species. The beetles were collected by LT through IV-VII and IX-XII.

***Aphodius luridus* (Fabricius, 1775)**

World distribution. **Asia:** CN, CY, IL, IR, KG, KZ, RU, SA, SY, TJ, TM, TR. **Europe:** AL, AM, AT, BA, BE, BG, BY, CH, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IT, LT, LV, MK, NL, NO, PL, PT, RO, RS, RU, SE, SI, SK, TR, UA. **North Africa:** MA, TN.

General distribution. PAL_SAR_SJP.

Local distribution. RI (Abdel-Dayem et al. 2016).

Collecting month and method. Very rare species that was collected by LT in I and X.

***Aphodius pruinosus* Reitter, 1892**

World distribution. **Africa:** MR. **Asia:** AF, IL, IQ, IR, KG, KW, KZ, LB, OM, PK, SA, TJ, TM, TR, UZ. **Europe:** RU. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. AFR_PAL_SAR.

Local distribution. BA, EP, HA, JZ, MD, MK, QS, RI (Pittino 1984).

Collecting month and method. An abundant species. The adults were collected by PT by PT under canopies of *L. shawii* and *R. stricta*; and by LT through II-VI and IX-X.

***Aphodius rendallii* (Wollaston, 1867)**

World distribution. Asia: IL, IQ, JO, SA. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. SAR.

Local distribution. EP, HA, QS, RI (Pittino 1984) [under the name *Aphodius opacior* D. Koshantschikov 1894] (Král and Batelka 2015).

Collecting month and method. Common species. The specimens of this species were collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by LT through IV-V and IX-X.

***Aphodius translucidus* Petrovitz, 1961**

World distribution. Asia: AF, IN, IQ, IR, OM, PK, RU, SA, TM. **North Africa:** EG (Pittino 1984).

General distribution. ORR_SAR.

Local distribution. EP, MD, MK, RI (Pittino 1984).

Collecting month and method. Common species that was collected by LT in IV-V and IX-XI.

***Aphodius wollastoni iranicus* Balthasar, 1946**

World distribution. Asia: EG (Sinai), IN, IQ, IR, JO, OM, PK, SA, SY, YE.

General distribution. ORR_SAR.

Local distribution. EP, HA, MD, QS, RI (Pittino 1984).

Collecting month and method. Abundant species. It was collected by PT under canopies of *A. ehrenbergiana* and *C. procera*; and by HP and LT through I-V and XI-XII.

***Granulopsammodius plicatulus* (Fairmeire, 1892)**

World distribution. Africa: ET, SD, SO. **Asia:** SA, YE. **North Africa:** DZ, EG, LY, MA.

General distribution. AFR_SAR.

Local distribution. AS, BA, EP, MD, MK, RI (Paulian 1980; Pittino 1984; El-Hawagry et al. 2013).

Collecting month and method. Common species, which was collected by PT under canopy of *Z. nummularia*; and by LT through IV-VIII.

***Leiopsammodius laevicollis* (Klug, 1845)**

World distribution. **Africa:** CG, DJ, ER, ET, SD, SO. **Asia:** IL, SA, SY, YE. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. AFR_SAR.

Local distribution. BA, HA, JZ, MD, MK, RI (Pittino 1984; El-Hawagry et al. 2013).

Collecting month and method. A rare species that was collected by PT under canopy of *L. shawii* and *R. stricta*; and by LT through IV-VI, IX and XII.

***Pararhyssemus coluber* (Mayet, 1887)**

World distribution. **Africa:** SO. **Asia:** AF, EG (Sinai), IR, SA. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. AFR_SAR.

Local distribution. AS, BA, HA, MD, MK, RI (Pittino 1984).

Collecting month and method. Very rare species. The beetles were collected by LT in IV.

***Pleurophorus arabicus* (Pittino & Mariani, 1986)**

World distribution. **Asia:** AZ, IR, JO, SA, TM. **Europe:** RU.

General distribution. PAL_SAR.

Local distribution. EP, QA, RI (Pittino 1984) [under the name *Pleurophorus anatolicus* Petrovitz 1961] (Kral and Batelka 2015).

Collecting month and method. A common species. The adult beetles were collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera* and *R. stricta*; and by HP and LT through III-V and XII.

***Pseudomothon* sp.**

Collecting month and method. Rare species that was collected by LT during IV.

***Rhyssemus brevitarsis* Pittino, 1984**

World distribution. **Asia:** SA.

General distribution. END.

Local distribution. BA, JZ, MD, MK, QS, RI (Pittino 1984; El-Hawagry et al. 2013).

Collecting month and method. Very rare species that was collected by LT during IV.

***Rhysemus granosus* (Klug & Erichson, 1842)**

World distribution. **Africa:** CM, CV, ET, KE, ML, MR, NE, NG, SD, SN, SO, TD, TZ. **Asia:** SA, YE. **North Africa:** EG.

General distribution. AFR_SAR.

Local distribution. AS, BA, EP, JZ, MD, MK, QS, RI (Beccari 1971, Pittino 1984; El-Hawagry et al. 2013).

Collecting month and method. A rare species. The beetles were collected by LT through IV-V, VII and X.

***Rhysemus saoudi* Pittino, 1984**

World distribution. **Asia:** SA.

General distribution. END.

Local distribution. AS, BA, JZ, MK, RI (Pittino 1984; El-Hawagry et al. 2013; Abdel-Dayem et al. 2016).

Collecting month and method. Common species. The adult beetles were collected by PT under canopies of *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by HP and LT through III-V and VII-XI.

Subfamily Scarabaeinae

***Metacatharsius inermis* (Laporte, 1840)**

World distribution. **Africa:** ER, ET, GM, KE, MR, SD, SN, SO, TD. **Asia:** IN, IQ, IR, PK, SA. **North Africa:** EG.

General distribution. AFR_ORR_SAR.

Local distribution. AS, EP, RI (Paulian 1980).

Collecting month and method. Rare species, which was collected during V.

***Scarabaeus bannuensis* A. Janssens, 1940**

World distribution. **Africa:** MR, TD. **Asia:** IQ, IR, PK, SA. **North Africa:** DZ, LY, MA, TN.

General distribution. AFR_SAR.

Local distribution. RI (Ziani and Gudenzi 2012)

Collecting month and method. Common species. The specimens were collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *L. shawii* and *R. stricta*; and by HP, LT, SW during III-VIII.

***Scarabaeus cristatus* Fabricius, 1775**

World distribution. **Africa:** ER, GN, MR, NE, SD, SN, TD. **Asia:** AE, AF, IL, IQ, IR, PK, SA. **North Africa:** EG, LY.

General distribution. AFR_SAR.

Local distribution. AS, EP, MK, RI (Paulian 1980).

Collecting month and method. Very rare species. The specimens were collected by HP and LT during V and VIII.

Subfamily: Dynamopodinae***Orubesa plicifrons* (Fairmaire, 1897)**

World distribution. **Africa:** ET, NE, SN. **Asia:** SA (Paulian 1980). **North Africa:** MA.

General distribution. AFR_SAR.

Local distribution. RI (Paulian 1980).

Collecting month and method. A common species. The adult beetles were collected by HP and LT in IV.

Subfamily Melolonthinae***Maladera insanabilis* (Brenske, 1894)**

World distribution. **Asia:** AE, AF, IL, IN, IQ, IR, JO, KW, NP, OM, PK, SA. **North Africa:** LY.

General distribution. ORR_SAR.

Local distribution. EP, RI (Ahrens 2000).

Collecting month and method. Very rare species that was collected by LT during V, VII and XI.

***Schizonycha buettikeri* Sabatinelli & Pontuale, 1998**

World distribution. **Asia:** OM, SA.

General distribution. SAR.

Local distribution. EP, HA, RI (Sabatinelli and Pontuale 1998).

Collecting month and method. A rare species that was collected by LT during IV-V.

***Schizonycha flavicornis* Brenske, 1898**

World distribution. Africa: SD, SO. **Asia:** SA, YE. **North Africa:** EG.

General distribution. AFR_SAR.

Local distribution. AS, BA, EP, JZ, MD, MK, RI (Sabatinelli and Pontuale 1998).

Collecting month and method. Rare species, which was collected by LT in IV and X-XI.

***Sphaerotrochalus somalicola* (Frey, 1960)**

World distribution. Africa: ET, SO. **Asia:** OM, SA, YE.

General distribution. AFR_SAR.

Local distribution. AS, BA, HA, JZ, MK, RI (Ahrens 2000).

Collecting month and method. A common species. The specimens were collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii* and *R. stricta*; and by LT during I, IV-V and X-XII.

Subfamily Rutelinae

***Clipadoretus habibi* Král, 2015**

World distribution. **Asia:** AE (Král and Batelka 2015). New to KSA.

General distribution. SAR.

Local distribution. RI (Beccari 1971).

Collecting month and method. A rare species that was recorded by LT in V-VII and IX.

***Clipadoretus* sp.**

Collecting month and method. Moderately common species that was collected by LT during V.

***Phaeadoretus syriacus* (C. É. Blanchard, 1851)**

World distribution. **Asia:** IQ, IR. New to Arabian Peninsula.

General distribution. SAR.

Collecting month and method. Abundant species. The specimens were collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *L. shawii* and *Z. nummularia*; and by HP and LT through I-V.

Subfamily Dynastinae

Pentodon algerinus dispar Baudi, 1870

World distribution. **Africa:** ER. **Asia:** CY, IL, IQ, IR, JO, KW, OM, QA, SA, SY, YE. **Europe:** AM, GR.

General distribution. AFR_PAL_SAR.

Local distribution. EP, MK, RI (Endrödi 1980).

Collecting month and method. Common species. The adults were collected by PT under canopies of *R. stricta* and *Z. nummularia*; and by HP and LT through IV-V and VIII-IX.

Podalgus cuniculus arabicus Fairmaire, 1895

World distribution. **Asia:** AE, EG (Sinai), IL, KW, OM, SA, YE. **North Africa:** EG.

General distribution. SAR.

Local distribution. EP, MK, RI (Endrödi 1980).

Collecting month and method. A common species that was collected by HP and LT through IV-XI.

Dascillidae

Subfamily: Karumiinae

Karumia inaequalis Pic, 1929

World distribution. **Asia:** SA.

General distribution. END.

Local distribution. EP, RI (Wittmer 1979).

Collecting month and method. Abundant species that was collected by PT under canopies of *A. ehrenbergiana*, and by LT during IV-IX.

Buprestidae

Subfamily: Julodinae

Julodis euphratica Laporte & Gory, 1835

World distribution. **Asia:** AF, EG (Sinai), IQ, IR, JO, OM, SA.

General distribution. SAR.

Local distribution. EP, QS, RI (Bílý 1982 1985).

Collecting month and method. It is a rare and was collected by BV, HP and VC during I and IV-VI.

Subfamily: Polycestinae

***Acmaeoderella arabica* Cobos, 1963**

World distribution. Asia: IL, IR, OM, SA.

General distribution. SAR.

Local distribution. RI (Cobos 1963).

Collecting month and method. Very rare species, which was collected by BV on branches of *Z. nummularia* during VI.

***Xantheremia pantherina* (Bílý, 1979)**

World distribution. Asia: IL, IQ, SA. **North Africa:** EG.

General distribution. SAR.

Local distribution. EP, RI (Bílý 1982 1985).

Collecting month and method. A rare species. The specimens were collected by BV on branches of *L. shawii*, HP and by SW of *R. stricta* during V, VII and VIII.

Subfamily: Chrysochroinae

***Sphenoptera gabani* Kerremans, 1913**

World distribution. Asia: Arabia (Kerremans 1913)

General distribution. END.

Local distribution. This species is described by Kerremans (1913) from Arabia, without any further information about the type locality.

Collecting month and method. Very rare species that was collected only by BV on branches of *A. gerrardii* during X.

***Sphenoptera magna* Gory & Laporte, 1839**

World distribution. Asia: IL, IQ, IR, JO, SA, SY, TR.

General distribution. PAL_SAR.

Local distribution. EP, QS (Bílý 1980).

Collecting month and method. Very rare species that was collected by HP during V.

Subfamily: Buprestinae***Anthaxia kneuckeri* Obenberger, 1920**

World distribution. Asia: EG (Sinai), IL, JO, OM, SA.

General distribution. SAR.

Local distribution. AS, MK, RI (Bílý 1980), BA (El-Hawagry et al. 2013).

Collecting month and method. Common species. The adults were collected by BV and VC on branches of *A. ehrenbergiana* and *A. gerrardii*, and by HP, LT and PT during IV-XI.

***Anthaxia marginifera metallenscens* Bílý, 1999**

World distribution. Asia: IL, SA.

General distribution. SAR.

Local distribution. RI (Bílý 1979).

Collecting month and method. Very rare species that was collected by BV on branches of *A. ehrenbergiana* during IV.

Subfamily: Agrilinae***Agrilus desertus* (Klug, 1829)**

World distribution. Africa: MR, SO, TD. **Asia:** IL, IR, JO, SA, YE. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. AFR_SAR.

Local distribution. AS (Bílý 1982).

Collecting month and method. A rare species. The specimens were collected by BV on branches of *A. ehrenbergiana*, *A. gerrardii* and *L. shawii*, and HP during IV-V, VIII and X.

***Agrilus lituratus* (Klug, 1829)**

World distribution. Africa: MR, SD, SN, TD (Bílý 1982). **Asia:** IL, IR, JO, SA, SY, YE. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. AFR_SAR.

Local distribution. AS, BA, MK, RI (Bílý 1982).

Collecting month and method. Frequent species that was collected by BV, SW and VC on branches of *A. ehrenbergiana*, *A. gerrardii* and *C. procera*, and PT during IV-VII and IX.

Trachys latifrons Kerremans, 1907

World distribution. Africa: ER, ET, SD. Asia: AE, SA, YE.

General distribution. AFR_SAR.

Local distribution. AS (Bílý 1979), RI (Al Dhafer et al. 2016).

Collecting month and method. Very rare species. It was collected by PT under the canopy of *Z. nummularia* during IV.

Heteroceridae

Subfamily: Heterocerinae

Augyles sericans (Kiesenwetter, 1843)

World distribution. Asia: IL, SY. Europe: AL, AT, BG, CH, CZ, DE, DK, ES, FR, GB, HR, HU, IT, NL, PL, RO, SE, SI, SK, UA. New to Arabian Peninsula.

General distribution. PAL_SAR.

Collecting month and method. Rare species that was collected by Lt during IV-V.

Augyles turanicus (Reitter, 1887)

World distribution. Asia: AE (Mascagni 2009), IL, IQ, IR, KZ, SY, TM, TR, UZ. Europe: GE. North Africa: DZ. New to KSA.

General distribution. PAL_SAR.

Collecting month and method. Very rare species, which was collected by LT in IV.

Elateridae

Subfamily: Agrypninae

Aeoloides grisescens (Germar, 1844)

World distribution. Africa: SD, TD. Asia: AE, AF, AZ, CN, CY, IQ, IR, KG, KZ, MN, OM, PK, QA, SA, SY, TJ, TM, TR, UZ, YE. Europe: AM, GE, GR, RU, UA. North Africa: EG, LY, MA.

General distribution. AFR_PAL_SAR_SJP.

Local distribution. EP, JZ, QS, RI (Platia and Schimmel 1997).

Collecting month and method. Common species. The adults were collected by PT under canopies of *A. ehrenbergiana*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by HP and LT during I-VII and IX-X.

***Aeoloides bolzschuhi* Platia & Schimmel, 1997**

World distribution. Asia: AE (Platia 2007), IR, OM, PA. New to KSA.

General distribution. SAR.

Collecting month and method. Frequent species that was collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *L. shawii* and *R. stricta*; and by LT during I-V and XI.

***Conoderus productus arabicus* (Chassain, 1979)**

World distribution. Asia: AE (Platia 2007), IR, OM, QA, SA, YE.

General distribution. SAR.

Local distribution. EP, MK, QS, RI (Chassain 1979 1983).

Collecting month and method. A frequent species. It was collected by LT through IV-VII.

***Heteroderes gallagheri* Platia & Schimmel, 1997**

World distribution. Asia: AE (Platia 2007), IR, OM, PK. New to KSA.

General distribution. SAR.

Collecting month and method. Frequent species. The adults were collected by LT through IV-VI and X.

***Heteroderus ruteri* Chassain, 1979**

World distribution. Asia: OM, SA.

General distribution. SAR.

Local distribution. MD, MK, RI (Chassain 1979).

Collecting month and method. Very rare species that was collected by PT under canopies of *A. gerrardii* and *C. procera* during I-II.

***Lacon modestus* (Boisduval, 1835)**

World distribution. Africa: SN. **Asia:** AE (Platia 2007), ID, IL, IQ, IR, JP, LA, OM, PK, QA, SA, TW, VN, YE (Socotra). **Australia:** AU, FJ, MP, NC. **North America:** GT, US. **South America:** GF.

General distribution. COS.

Local distribution. EP, MK, RI (Chassain 1983).

Collecting month and method. 28.XII.2011

Collecting method. Very rare species, which was collected by HP in XII.

***Lanelater buettikeri* Chassain, 1983**

World distribution. Asia: AE (Platia 2007), OM, SA, YE.

General distribution. SAR.

Local distribution. JZ, MK, NJ, RI (Chassain 1983, Platia and Schimmel 1997).

Collecting month and method. Frequent species. The beetles were collected by LT during VIII-X.

Subfamily: Cardiophorinae

***Craspedostethus dilutus* (Erichson, 1840)**

World distribution. Africa: ER, ET, SO. Asia: AE, EG (Sinai), IR, OM, SA, SY, YE.

North Africa: DZ, EG, MA. The distribution was updated from (Platia 2012).

General distribution. AFR_SAR.

Local distribution. BA, EP, MK (Platia and Schimmel 1997), RI (Al Dhafer et al. 2016).

Collecting month and method. Abundant species that was collected by PT under canopies of *Z. nummularia* and by LT during IV-IX.

***Craspedostethus flavescens* Chassain, 1979**

World distribution. Asia: AE (Platia 2007), OM, SA, YE.

General distribution. SAR.

Local distribution. RI (Chassain 1979).

Collecting month and method. Frequent species, which was collected by LT in IV-V and VII-X.

***Dicronychus brancuccii* Platia & Schimmel, 1997**

World distribution. Asia: AE (Platia 2007), IQ, JO, KW, OM, QA, SA.

General distribution. SAR.

Local distribution. BA, EP, MK (Platia and Schimmel 1997).

Collecting month and method. Frequent species that was collected by LT through IV-VI.

***Dicronychus latifae* Al Dhafer & Platia, 2013**

World distribution. Asia: SA.

General distribution. END.

Local distribution. RI (Al Dhafer and Platia 2013).

Collecting month and method. Abundant species that was collected by LT during IV.

***Dicronychus talhouki* Platia & Schimmel, 1997**

World distribution. Asia: SA, YE.

General distribution. SAR.

Local distribution. AS, BA (Platia and Schimmel 1997), RI (Al Dhafer et al. 2016).

Collecting month and method. Rare species, which was collected by PT under canopy of *A. gerrardii*, and by HP and LT during II-V.

***Drasterius aegypticus* Buysson, 1905**

World distribution. Asia: SA, YE. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. SAR.

Local distribution. JZ, RI (Platia and Schimmel 1997).

Collecting month and method. Rare species. It was collected by LT through III and V-VI.

Dermestidae

Subfamily: Dermestinae

***Dermestes ater* DeGeer, 1774**

World distribution. Asia: AE, AF, AZ, CH, CN, CY, EG (Sinai), IL, IN, IQ, IR, JO, JP, KG, KP, KR, KZ, LB, MN, NP, OM, PK, RU, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AD, AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, ES, FI, FR, GB, GE, GR, HR, HU, IE, IS, IT, LT, LU, LV, MK, MT, NL, NO, PL, PT, RO, RS, RU, SE, SI, SK, UA. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN.

General distribution. COS (Háva 2013).

Local distribution. EP, RI (Mroczkowski 1979).

Collecting month and method. Very rare species. It was collected by LT during III.

***Dermestes maculatus* De Geer, 1774**

World distribution. Asia: AE, AF, AZ, CN, CY, EG (Sinai), IL, IN, IQ, IR, JO, JP, KG, KP, KR, KZ, LB, MN, NP, OM, PK, RU, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AD,

AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IS, IT, LT, LU, LV, MK, MT, NL, NO, PL, PT, RO, RS, RU, SE, SI, SK, UA.
North Africa: DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN.

General distribution. COS (Háva 2003).

Local distribution. MK (Mroczkowski 1979), RI (Al Dhafer et al. 2016).

Collecting month and method. Very rare species. The adult was collected by LT and PT during III and V.

Subfamily: Thorictinae

Thorictodes heydeni Reitter, 1875

World distribution. **Africa:** SD. **Asia:** CN, IL, IN, JP, PK, TR. **Australia:** AU. **Europe:** ES, FR, GB, IT, RU. **North Africa:** DZ, EG, MA. **North America:** CA, MX, US. New to Arabian Peninsula.

General distribution. SCO.

Collecting month and method. Very rare species. The beetles were collected by PT under the canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera* and *L. shawii* during IV.

Thorictus castaneus Germar, 1834

World distribution. **Asia:** SY. **North Africa:** DZ, EG, LY, MA. New to Arabian Peninsula.

General distribution. SAR.

Collecting month and method. Very rare species. It was collected by PT under the canopies of *A. gerrardii*, *C. procera* and *L. shawii* during IV-VI.

Thorictus foreli Wasmann, 1894

World distribution. **North Africa:** DZ, MA, TN. New to Arabian Peninsula.

General distribution. SAR.

Collecting month and method. Very rare. The species was collected by PT under the canopy of *A. gerrardii* during XII.

Subfamily: Attageninae

Attagenus fasciolatus (Solsky, 1876) 34

World distribution. **Asia:** KZ, MN, SA, TJ, TM, UZ.

General distribution. PAL_SAR.

Local distribution. EP (Mroczkowski 1979), RI (Al Dhafer et al. 2016).

Collecting month and method. A frequent species. The adults were collected by BV, SW, VC and PT on branches/under the canopies of *A. gerrardii*, *C. procera*, *R. stricta* and *Z. nummularia*; and by MT through V-VI and VIII-XI.

Attagenus lobatus Rosenhauer, 1856 1

World distribution. **Asia:** AE, AF, CN, IN, IQ, IR, KG, KZ, MN, PK, SA, TJ, TM, TR, UZ. **Europe:** BG, CZ, ES, FR, GR, IT, RO, RU. **North Africa:** DZ, EG, MA, TN. The distribution is updated from Háva (2013).

General distribution. PAL_ORR_SAR_SJP.

Local distribution. EP, MK (Mroczkowski 1979), RI (Al Dhafer et al. 2016).

Collecting month and method. Very rare species. It is collected by PT under canopy of *C. procera* during V.

Attagenus posticalis Fairmaire, 1879

World distribution. **Africa:** MR, NE, SD, SN. **Asia:** AE, IL, OM, QA, SA, SY, YE. **Europe:** ES. **North Africa:** DZ, EG, MA, TN. The distribution is updated from Háva (2013).

General distribution. AFR_SAR.

Local distribution. EP (Háva 2011); RI (Alqarni et al. 2015; Al Dhafer et al. 2016).

Collecting month and method. Frequent species. The adults were collected by BV, SW, VC and PT on branches/under canopies of *A. ebrenbergiana*, *A. gerrardii*, *C. procera*, *R. stricta* and *Z. nummularia* through IV-X.

Attagenus reitteri (Mroczkowski, 1968)

World distribution. **Europe:** ES, PT. **North Africa:** DZ, MA, TN. New to Arabian Peninsula.

General distribution. SAR.

Collecting month and method. Very rare species that was collected by SW on branches of *R. stricta* during II.

Attagenus scalaris (Pic, 1893)

World distribution. **North Africa:** EG, LY. New to Arabian Peninsula.

General distribution. SAR.

Collecting month and method. Very rare species. It was collected by SW during VI.

Subfamily: Megatominae***Anthrenus buettikeri* Mroczkowski, 1980****World distribution. Asia:** SA.**General distribution.** END.**Local distribution.** RI (Mroczkowski 1980).**Collecting month and method.** Very rare species. The specimens were collected by BV on branches and PT canopies of *A. gerrardii*, *R. stricta* and *Z. nummularia* during IV, VI-VII and X.***Anthrenus flavipes* LeConte, 1854****World distribution. Asia:** AE (Háva 2013), AF, CN, IL, IR, JP, OM, RU, SA, TJ.**Europe:** CZ, DE, DK, ES, FI, FR, GB, IT, NL. **North Africa:** EG, MA, TN.**General distribution.** COS (Háva 2013).**Local distribution.** MK, RI (Mroczkowski 1979).**Collecting month and method.** Very rare species that was collected by BV on branches of *Z. nummularia* in IX.***Anthrenus malkini* Mroczkowski, 1980****World distribution. Asia:** AE, OM, QA, SA, YE (Háva 2013).**General distribution.** SAR.**Local distribution.** AS (Mroczkowski 1980).**Collecting month and method.** Very rare species. The beetles were collected by BV and SW on branches of *Z. nummularia* in IV and IX.***Anthrenus verbasci* (Linnaeus, 1767)****World distribution. Asia:** AE, AF, AZ, CN, CY, EG (Sinai) IL, IN, IQ, IR, JO, JP, KG, KP, KR, KZ, LB, MN, NP, OM, PK, RU, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AD, AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IS, IT, LT, LU, LV, MK, MT, NL, NO, PL, PT, RO, RS, RU, SE, SI, SK, UA. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN. COS.**General distribution.** PAL_ORR_SAR_SJP.**Local distribution.** RI (Alqarni et al. 2015; Al Dhafer et al. 2016).**Collecting month and method.** Common species that was collected by BV, VC, SW and PT on branches/under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *R. stricta* and *Z. nummularia*; and by LT through IV-X.

***Phradonoma nobile* (Reitter, 1881)**

World distribution. **Africa:** ER, NA, SD, TJ, ZA, ZW. **Asia:** AE, AF, CY, IL, IN, IQ, IR, JO, PK, QA, SA, SY, TJ, TM, UZ. **Europe:** ES, GB, GR, PT. **North Africa:** DZ, EG, LY, MA, TN. The distribution is updated from Háva (2013).

General distribution. AFR_ORR_PAL_SAR.

Local distribution. AS, RI (Mroczkowski 1979).

Collecting month and method. A frequent species. The specimens were collected by BV, VC, SW and PT on branches/under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *R. stricta* and *Z. nummularia*; and by LT through IV-X.

Bostrichidae**Subfamily: Bostrichinae*****Enneadesmus forficula* (Fairmaire, 1883)**

World distribution. **Africa:** ER, ET, SO. **Asia:** AE (Geistharde 2010), IL, IR, JO, OM, PK, SA, YE. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. AFR_SAR.

Local distribution. MK, RI (Damoiseau 1979).

Collecting month and method. Common species that was collected by BV and LT during all months except II and VII.

***Sinoxylon senegalense* Karsch, 1881**

World distribution. **Africa:** SN. **Asia:** AE (Geistharde 2010), SA, YE. **North Africa:** DZ, EG, LY, MA.

General distribution. AFR_SAR.

Local distribution. RI (Damoiseau 1979).

Collecting month and method. Frequent species that was collected by BV and LT during all months except II, III and VIII.

Subfamily: Lyctinae***Acantholyctus cornifrons* (Lesne, 1898)**

World distribution. **Africa:** DJ, ER, MZ, NA, SN, SO. **Asia:** AE (Geistharde 2010). **North Africa:** DZ, EG, MA, TN. New to KSA.

General distribution. AFR_SAR.

Collecting month and method. Rare species and its adults were collected by BV and LT during V, IX and X.

Ptinidae

Subfamily: Xyletininae

Lasioderma baudii Schilsky, 1899

World distribution. Asia: CY, IL, LB, SY. **Europe:** ES, FR, GR, HR, IT, PT. **North Africa:** DZ, EG, ES (Canary Islands), LY, TN. New to Arabian Peninsula.

General distribution. PAL_SAR.

Collecting month and method. Very rare species, which was collected by LT during IX-X.

Lasioderma redtenbacheri (Bach, 1852)

World distribution. Asia: AZ, CY, EG (Sinai), IL, IQ, KZ, MN, SY, TM, TR, UZ. **Europe:** AM, AT, BE, BG, CH, CZ, DE, ES, FR, GE, GR, HR, HU, IT, MK, NL, PL, PT, RO, RU, SK, UA. **North Africa:** EG, LY, TN. New to Arabian Peninsula.

General distribution. PAL_SAR.

Collecting month and method. A rare species. The adult beetles were collected by LT during IV-V and X.

Subfamily: Dorcatominae

Stagetus montanus Toskina, 1998

World distribution. Asia: OM, SA.

General distribution. SAR.

Local distribution. AS (Toskina 1998).

Collecting month and method. Very rare species. It was collected by LT in V.

Thanerocleridae

Subfamily: Thaneroclerinae

Thaneroclerus buquet (Lefebvre, 1835)

World distribution. Asia: CN, IN, JP, RU, SA, TW. **Europe:** BE, DE, HU, NL, PL. **North Africa:** EG.

General distribution. ORR_PAL_SAR_SJP.

Local distribution. BA (El-Hawagry et al. 2013), RI (Al Dhafer et al. 2016).

Collecting month and method. A rare species. It was collected by BV on branches and PT under canopies of *A. ehrenbergiana*, *A. gerrardii* and *C. procera* during V-VII.

Cleridae**Subfamily: Tillinae*****Eucymatodera senegalensis* (Castelanu, 1832)**

World distribution. **Africa:** SN. **Asia:** AE, IR, OM, SA, YE. **North Africa:** DZ, EG, LY, TN. The distribution is updated from Gerstmeier (2010)

General distribution. AFR_SAR.

Local distribution. BA, EP, JZ, RI (Menier 1986).

Collecting month and method. Frequent species that was collected by LT during V and IX-X.

***Tillodenops plagiatus* (Fairmaire, 1892)**

World distribution. **Africa:** KE, MR, SD, SN, SO, TZ. **Asia:** AE, IR, OM, SA, YE. The distribution is updated from Gerstmeier (2010)

General distribution. AFR_SAR.

Local distribution. AS, BA, JZ, MD, MK (Menier 1986).

Collecting month and method. Very rare species, which was collected by LT during IV and X.

***Wittmeridecus mediozonatus* (Fairmaire, 1892)**

World distribution. **Africa:** DJ. **Asia:** AE, IL, OM, SA, SY, YE. **Europe:** ES, IT. **North Africa:** DZ, EG, LY, MA. The distribution is updated from Gerstmeier (2010)

General distribution. AFR_PAL_SAR.

Local distribution. AS, MD, MK, RI (Menier 1986).

Collecting month and method. A frequent species. The adults were collected by VC on branches of *A. ehrenbergiana* and by LT through IV-X.

Subfamily: Korynetinae***Necrobia rufipes* (De Geer, 1775)**

World distribution. **Asia:** AE, AZ, CN, IN, IR, JP, MN, OM, RU, SA, TJ, TR. **Europe:** AM, AT, BE, BY, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LI, LT, LV, NL, PT, RO, RU, SE, SI, SK. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. COS (Gerstmeier 2010)

Local distribution. BA (El-Hawagry et al. 2013), EP, MK, RI (Menier 1986).

Collecting month and method. Frequent species, which was collected by VC on branches of *L. shawii* and by LT during IV-VIII and X.

Melyridae

Subfamily: Dasytinae

Danacea sp.

Collecting month and method. Frequent species. The specimens were collected by BV, SW and PT on branches/under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by HP and LT during II-V and XII.

Subfamily: Malachinae

Colotes javeti Du Val, 1852

World distribution. Europe: ES, FR, IT, PT. **North Africa:** DZ, EG, MA, TN. New to Arabian Peninsula.

General distribution. PAL_SAR.

Collecting month and method. A frequent species. The beetles were collected by BV, SW, VC and PT on branches/under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by HP during II-VI and IX.

Malachius sp.1

Collecting month and method. A common species. The adults were collected by BV, SW, VC and PT on branches/under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by HP and LT through V-IX.

Malachius sp.2

Collecting month and method. A rare species. It was collected by BV on branches of *A. gerrardii* and *Z. nummularia*, by PT under canopies of *A. ehrenbergiana* and *C. procera*; and by HP in III-IV and IX.

Cryptophagidae**Subfamily: Cryptophaginae*****Cryptophagus acutangulus* Gyllenhal, 1827**

World distribution. **Africa:** sub-saharan Africa. **Asia:** AF, AZ, CN, EG (Sinai), IR, JP, KG, KP, KZ, PK, RU, SA, TJ, TM, UZ. **Europe:** AT, BA, BE, BY, CH, CZ, DE, DK, EE, FI, FR, GB, GE, GR, HU, IE, IS, IT, LT, LV, NL, NO, PL, RO, RS, RU, SE, SI, SK, UA. **North Africa:** EG, MA. **North America:** CA, MX, US.

General distribution. COS (Otero 2013).

Local distribution. EP (Johnson 1989), RI (Al Dhafer et al. 2016).

Collecting month and method. Frequent species. The adults were collected by BV on branches and PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by LT during I-III, V, VIII and XI-XII.

Subfamily: Atomariinae***Atomaria fuscata* (Schönherr, 1808)**

World distribution. **Asia:** AZ, CN, IL, JP, RU. **Europe:** AM, AT, BA, BE, BY, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IT, LI, LT, LV, NL, NO, PL, RO, RU, SE, SI, SK, UA. **North America:** CA. New to Arabian Peninsula.

General distribution. NAR_PAL_SAR_SJP.

Collecting month and method. Very rare species that was collected by LT in X.

Phalacridae**Subfamily: Phalacrinae*****Olibrosoma testacea* Tournier, 1889**

World distribution. **Asia:** AE (Švec 2010b), JO, SA. **Europe:** ES. **North Africa:** DZ, EG, MA, TN.

General distribution. SAR.

Local distribution. RI (Al Dhafer et al. 2016).

Collecting month and method. Afrequent species. The adults were collected by PT under canopy of *A. ehrenbergiana*, and by LT during IV-X.

Laemophloeidae

Subfamily: Laemophloeinae

Placonotus testaceus (Fabricius, 1787)

World distribution. **Asia:** AZ, BT, CN, IN, JP, KG, KZ, RU, TW, UZ. **Australia:** AU. **Europe:** AM, BE, CH, CZ, DE, DK, ES, FR, GE, IT, PL, PT, SK. **North Africa:** DZ, TN. New to Arabian Peninsula.

General distribution. SCO.

Collecting month and method. Very rare species that was collected by LT during VIII and XI.

Nitidulidae

Subfamily: Carpophilinae

Carpophilus hemipterus (Linnaeus, 1758)

World distribution. **Africa:** MR, ZA. **Asia:** AE, AZ, CN, IL, IN, IQ, IR, JO, JP, LB, SA, TM, TR, TW. **Europe:** AL, AT, BA, BE, BY, CH, CZ, DE, DK, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LV, MD, MT, NL, PL, PT, SE, SK. **North Africa:** DZ, EG, ES (Canary Islands), LY, PT (Madeira Archipelago), TN. **North America:** GT, MX, NI, PA, US.

General distribution. COS (Jelinek 1979).

Local distribution. EP, MK, RI (Beccari 1971, Jelinek 1979 1988).

Collecting month and method. Rare species. The adult beetles were collected by PT under canopy of *R. stricta*, and by HP and LT during IV-V and XI.

Subfamily: Nitidulinae

Nitidula eremita Audisio, 1990

World distribution. **Asia:** AE, IL, IQ, IR, SA. **North Africa:** DZ, EG, LY, TN.

General distribution. SAR.

Local distribution. EP, RI, (Jelinek 1979 1988).

Collecting month and method. Frequent species that was collected by PT under canopy of *L. shawii* during I, and by LT during III and X-XII.

Subfamily: Cybocephalinae

Cybocephalus rufifrons flaviceps Reitter, 1874

World distribution. **Asia:** IQ, IR, SA, TR. **North Africa:** DZ, EG, MA, TN.

General distribution. SAR.

Local distribution. MK (Endrödy-Younga 1979), RI (Beccari 1971).

Collecting month and method. A common species. The specimens were collected by BV, SW and VC on branches of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by MT through II, V-IX and XII.

Coccinellidae

Subfamily: Coccinellinae

Bulaea lividula bocandei Mulsant, 1850

World distribution. **Africa:** ER. **Asia:** AE, IL, IQ, IR, JO, PK, SA, SY, YE. **North Africa:** DZ, EG, MA.

General distribution. AFR_SAR.

Local distribution. EP (Fürsch 1979).

Collecting month and method. Very rare species that was collected by BV on branches of *Z. nummularia* in VIII.

Coccinella septempunctata Linnaeus, 1758

World distribution. **Africa:** ZA. **Asia:** AF, AZ, BT, CN, CY, EG (Sinai), IL, IN, IQ, IR, JO, JP, KG, KP, KR, KW, KZ, LB, MN, NP, PK, RU, SA, SY, TJ, TM, TR, TW, UZ. **Europe:** AD, AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IT, LI, LT, LU, LV, MD, MK, NL, NO, PL, PT, RO, RS, RU, SE, SI, SK, UA. **North Africa:** PT (Madeira Archipelago). **North America:** CA, US.

General distribution. SCO.

Local distribution. RI (Fürsch 1979).

Collecting month and method. Very rare species, which was collected by SW during IV.

Coccinella undecimpunctata menetriesi Mulsant, 1850

World distribution. **Asia:** AE, AF, CN, EG (Sinai), IL, IN, IQ, IR, JO, KG, KW, KZ, MN, PK, RU, SA, SY, TR. **Europe:** GR, IT, PT, RU. **North Africa:** DZ, EG, LY, TN.

General distribution. PAL_ORR_SAR_SJP.

Local distribution. RI (Fürsch 1979).

Collecting month and method. A frequent species. The adult beetles were collected by BV, SW, VC and PT on branches/under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia* during I-IV and XI.

***Diomus rubidus* (Motschulsky, 1837)**

World distribution. **Asia:** IL, IQ, IR, LB, SA, SY, YE. **Europe:** AM, FR, GR, HR, IT.

North Africa: DZ, EG, LY, MA, TN.

General distribution. PAL_SAR.

Local distribution. RI (Fürsch 1979).

Collecting month and method. Frequent species. The specimens were collected by BV and SW on branches and PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, and *R. stricta* through I-VII.

***Hippodamia variegata* (Goeze, 1777)**

World distribution. **Africa:** SZ, ZA. **Asia:** AE, AF, AZ, BT, CN, EG (Sinai), IL, IN, IQ, IR, JO, KG, KP, KR, KZ, LB, MN, NP, PK, RU, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AD, AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IT, LI, LT, LU, LV, MD, MK, NL, PL, PT, RO, RS, RU, SE, SI, SK, UA. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN. **North America:** US.

General distribution. COS.

Local distribution. BA (El-Hawagry et al. 2013), JZ (Beccari 1971), RI (Talhouk 1982; Al Dhafer et al. 2016).

Collecting month and method. Frequent species. The specimens were collected by BV, SW, VC and PT on branches/ under canopies of *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by LT and MT in I and III-IV.

***Hyperaspis vinciguerrae* Capra, 1929**

World distribution. **Africa:** GM, SN. **Asia:** AE (Raimundo et al. 2007), SA, YE.

North Africa: LY.

General distribution. AFR_SAR.

Local distribution. RI (Talhouk 1982)

Collecting month and method. Rare species that was collected by BV, SW and VC on branches of *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and MT during V-VIII.

***Nephus arcuatus* Kapur, 1959**

World distribution. Africa: TG. **Asia:** AE (Raimundo et al. 2007), IR, SA, YE.

General distribution. AFR_SAR.

Local distribution. AS (Fürsch 1979).

Collecting month and method. Very rare species, which was collected by VC on branches of *Z. nummularia* in VII.

***Nephus levaillanti* (Mulsant, 1850)**

World distribution. Africa: ZA. **Asia:** AF, CN, IL, IN, IR, JO, JP, LB, PK, RU, SA, TW, YE. **Europe:** GR, IT. **North Africa:** EG.

General distribution. AFR_ORR_PAL_SAR_SJP.

Local distribution. RI (Al Dhafer et al. 2016).

Collecting month and method. Very rare species. The specimens were collected by BV on branches of *A. gerrardii* and *Z. nummularia*; and by PT under canopies of *A. ehrenbergiana* and *A. gerrardii* during IV and VII.

***Nephus wittmeri* Fürsch, 1979**

World distribution. Asia: SA, YE.

General distribution. SAR.

Local distribution. RI (Fürsch 1979).

Collecting month and method. Rare species. The adults were collected by BV on branches of *A. ehrenbergiana*, *A. gerrardii* and *Z. nummularia*; by PT under canopy of *A. ehrenbergiana*; and by VC on branches of *R. stricta* during II-V and XII.

***Parexochomus pubescens* (Küster, 1848)**

World distribution. Africa: Africa. **Asia:** AE (Raimundo et al. 2007), AF, IL, IN, IQ, IR, SA, SY, YE. **Europe:** ES, FR, GR, IT. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. AFR_ORR_PAL_SAR

Local distribution. AS, RI (Fürsch 1979).

Collecting month and method. Common beetles that were collected by BV and VC on branches of *A. ehrenbergiana*, *A. gerrardii*, *C. procera* and *L. shawii* throughout the year except in VI and VIII.

***Scymnus luxorensis* Fürsch, 1989**

World distribution. Asia: SA. North Africa: EG.

General distribution. SAR.

Local distribution. RI (Fürsch 1989).

Collecting month and method. Very rare species that was collected by SW on branches of *R. stricta* during XII.

***Scymnus nubilus* Mulsant, 1850**

World distribution. Africa: KE, SZ, UG. Asia: AE (Raimundo et al. 2007), AF, BD, IL, IN, IQ, IR, JO, JP, KW, LB, NP, OM, PK, SA, SY, TR, TW, YE. Australia: AU. Europe: ES, GR, IT, PT. North Africa: EG, ES (Canary Islands), PT (Madeira Archipelago).

General distribution. SCO.

Local distribution. AS (Fürsch 1979; Raimundo et al 2006); RI (Al Dhafer et al. 2016).

Collecting month and method. A rare species, which was collected by PT under canopy of *L. shawii*, and by LT and MT during V and VII-VIII.

***Scymnus subvillosus* (Goeze, 1777)**

World distribution. Africa: ZA. Asia: AE, AF, AZ, CY, EG (Sinai), IL, IQ, IR, JO, KG, KW, KZ, LB, PK, QA, SA, SY, TJ, TR, UZ, YE. Europe: AD, AL, AM, AT, BA, BG, CH, CZ, DE, ES, FR, GE, GR, HR, HU, IT, MK, PT, RO, RS, RU, SI, SK, UA. North Africa: DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN.

General distribution. AFR_PAL_SAR.

Local distribution. AS, RI (Fürsch 1979).

Collecting month and method. Common species. The adults were collected by BV, SW, VC and PT on branches/under canopies of *A. ebrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia* throughout the year except in X.

***Scymnus syriacus* (Marseul, 1868)**

World distribution. Asia: CY, EG (Sinai), IL, IQ, IR, JO, LB, SA, SY. North Africa: EG.

General distribution. SAR.

Local distribution. BA (El-Hawagry et al. 2013), EP (Fürsch 1989).

Collecting month and method. A common species that was collected by BV, SW and VC on branches of *A. ebrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by HP during II-VII and X-XII.

***Scymnus yemenensis* (Kapur, 1959)**

World distribution. **Asia:** AE (Raimundo et al. 2007), OM, SA, YE.

General distribution. SAR.

Local distribution. AS, RI (Fürsch 1979).

Collecting month and method. A rare species that was collected by BV on branches of *A. ehrenbergiana*, by SW and VC on branches of *C. procera*, and by LT during IV and X.

Mycetophagidae**Subfamily: Mycetophaginae*****Typhaea stercorea* (Linnaeus, 1758)**

World distribution. **Africa:** GM, MR, ZA. **Asia:** AE, AF, AZ, BT, CN, CY, EG (Sinai), IL, IQ, IR, JO, JP, KG, KR, KZ, MN, NP, PK, RU, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AD, AL, AM, AT, BA, BE, BG, BY, CH, CZ, DE, DK, EE, ES, FI, FO, FR, GB, GE, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MD, MK, MT, NL, NO, PL, PT, RO, RS, RU, SE, SI, SK, UA. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN. **South America:** CL.

General distribution. COS.

Local distribution. BA (El-Hawagry et al. 2013).

Collecting month and method. Very rare species. The adults were collected by LT during V.

Tenebrionidae**Subfamily: Lagriinae*****Centorus csikii bagdadensis* (Reitter, 1920)**

World distribution. **Asia:** CY, IL, IQ, JO, SA, YE.

General distribution. SAR.

Local distribution. EP, RI (Kaszab 1979).

Collecting month and method. Common beetles that were collected by PT under the canopies *A. ehrenbergiana*, *A. gerrardii* and *Z. nummularia*; and by LT throughout the year except in XI.

Subfamily: Pimeliinae

***Adelostoma subtile* Reitter, 1900**

World distribution. Asia: IL, IR, JO, SA, SY, TR.

General distribution. PAL_SAR.

Local distribution. MD, NJ, RI (Kaszab 1981 1982).

Collecting month and method. A frequent species. The adults were collected by PT under the canopies *A. ehrenbergiana*, *A. gerrardii*, *R. stricta* and *Z. nummularia*; and by HP through II, IV-V, and VII-X.

***Adesmia cancellata* (Klug, 1830)**

World distribution. Asia: AE, BH, EG (Sinai), IL, IR, IQ, JO, KW, OM, PK, SA, SY, YE. The distribution is updated from Schawaller (2010).

General distribution. SAR.

Local distribution. AS, BA, EP, JZ, MD, MK, NJ, RI (Kaszab 1979 1981 1982; El-Hawagry et al. 2013).

Collecting month and method. Very rare species. It was collected by PT under canopy of *A. ehrenbergiana* and *L. shawii* in III and V.

***Akis spinosa* (Linnaeus, 1764)**

World distribution. North Africa: EG. New to Arabian Peninsula,

General distribution. SAR.

Collecting month and method. Very rare species that was collected by PT under canopy of *L. shawii* during VII.

***Akis subtricrostata* Redtenbacher, 1850**

World distribution. Asia: AE (Schawaller 2010), IQ, IR, SY. New to KSA.

General distribution. SAR.

Collecting month and method. Very rare species, which was collected by LT in IX.

***Ammogiton sonyae* Kaszab, 1979**

World distribution. Asia: SA.

General distribution. END.

Local distribution. EP, RI (Kaszab 1979 1981 1982).

Collecting month and method. Very rare species that was collected by HP during II.

Apentanodes arabicus* (Kirchsberg, 1877)*World distribution. Asia:** AE, OM, SA.**General distribution.** SAR.**Local distribution.** AS, EP, HA, MD, MK, QS, RI, (Kaszab 1979 1981 1982).**Collecting month and method.** Common beetles that were collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by HP and LT through I-VI.***Boromorphus saudicus* Schawaller, Al Dhafer & Fadl, 2013****World distribution. Asia:** SA (Schawaller et al. 2013).**General distribution.** END.**Local distribution.** RI (Schawaller et al. 2013).**Collecting month and method.** A rare beetle. The adults were collected by PT under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii* and *Z. nummularia*; and by HP during II-IV.***Cyphostethe ferruginea* (Marseul, 1867)****World distribution. Asia:** AE, IL, SA. **North Africa:** DZ, LY, TN.**General distribution.** SAR.**Local distribution.** AS, RI (Kaszab 1981).**Collecting month and method.** Very rare species that was collected by PT under canopy of *C. procera* in X.***Cyphostethe wittmeri* Kaszab, 1979****World distribution. Asia:** AE, SA.**General distribution.** SAR.**Local distribution.** EP, HA, MK, RI (Kaszab 1979 1981 1982).**Collecting month and method.** A rare species. The specimens were collected by LT through V-IX.***Erodus glabratus* Solier, 1834****World distribution. Asia:** EG (Sinai), SA. **North Africa:** EG.**General distribution.** SAR.**Local distribution.** AS, EP, HA, JF, JZ, MD, MK, QS, TB, (Kaszab 1979 1981 1982).**Collecting month and method.** Very rare species that was collected by LT in IV.

***Erodius octocostatus* Peyerimhoff, 1907**

World distribution. Asia: EG (Sinai), IQ, JO, SA. **North Africa:** EG.

General distribution. SAR.

Local distribution. ES, NJ (Kaszab 1981).

Collecting month and method. Very rare species. The beetles were collected by HP during II and XII.

***Erodius servillei* Solier, 1834**

World distribution. Asia: AF, IQ, IR, SA, SY.

General distribution. SAR.

Local distribution. MK, QS, RI (Kaszab 1979 1981)

Collecting month and method. Very rare species that was collected by PT under canopy of *R. stricta* through III.

***Mesostena angustata* (Fabricius, 1775)**

World distribution. Africa: ER, NG, SD. **Asia:** EG (Sinai), IL, IQ, IR, JO, LB, SA (Al Dhafer et al. 2016), SY. **North Africa:** DZ, EG, LY, TN.

General distribution. AFR_SAR.

Local distribution. RI (Al Dhafer et al. 2016).

Collecting month and method. Very rare species. The specimens were collected by PT under canopy of *A. gerrardii* through V; and by HP in V and XII.

***Mesostena puncticollis* Solier, 1835**

World distribution. Africa: SD, SO. **Asia:** AE, EG (Sinai), IL, IQ, IR, JO, SA, SY, TM, YE. **Europe:** AM. **North Africa:** EG.

General distribution. AFR_PAL_SAR.

Local distribution. AS, EP, HA, MD, MK, NJ, QS, RI, TB (Kaszab 1979 1981 1982).

Collecting month and method. An abundant species. The adults of this beetle were collected by HP, LT and PT all over the year except in XI.

***Oxycara saudarabica* Kaszab, 1979**

World distribution. Asia: AE, SA.

General distribution. SAR.

Local distribution. EP, RI (Kaszab 1979 1981 1982).

Collecting month and method. Common species that was collected by HP, LT and PT throughout the year.

***Paraplatyope arabica arabica* (Blair, 1931)**

World distribution. Asia: AE, KW, SA.

General distribution. SAR.

Local distribution. EP, MK, RI (Kaszab 1979 1982).

Collecting month and method. Very rare species that was collected by LT during III.

***Pimelia arabica* (Klug, 1830)**

World distribution. Asia: AE, BH, IL, IQ, JO, KW, OM, PK, SA, SY, YE. **North Africa:** EG.

General distribution. SAR.

Local distribution. AS, BA, EP, HA, MD, MK, RI (Kaszab 1979 1982)

Collecting month and method. A rare species. The beetles were collected by HP and PT in X-XII.

***Pimelia longula* Kwieton, 1981**

World distribution. Asia: BH, SA.

General distribution. SAR.

Local distribution. EP, MD, RI, TB (Kaszab 1979 1982).

Collecting month and method. Very rare species that was collected by HP during I.

***Prionothea coronata ovalis* Ancey, 1881**

World distribution. Asia: AE, BH, IQ, IR, SA, YE.

General distribution. SAR.

Local distribution. AS, EP, HA, MD, MK, QS, RI (Kaszab 1979 1982).

Collecting month and method. A rare species. This beetle was collected by HP, LT and PT during II, IV, VI and X.

***Thriptera kraatzi* Haag-Rutenberg, 1876**

World distribution. Asia: AE, EG (Sinai), IN, IR, JO, OM, PK, SA, YE. **North Africa:** AG.

General distribution. ORR_SAR.

Local distribution. AS, BA, MK, RI (Kaszab 1979 1982; El-Hawagry et al. 2013).

Collecting month and method. A frequent species. The specimens were collected by HP and PT during III-VI and VIII.

Trachyderma philistina Reiche & Saulcy, 1857

World distribution. **Asia:** AE, BH, CY, EG (Sinai), IL, IQ, IR, JO, OM, SA, SY, TR, YE. **Europe:** GR. **North Africa:** EG. According to the Palaearctic catalogue *Trachyderma philistina* occurs east of the Arabian Peninsula also in Iran and in the ORR region (Löbl et al. 2008). However, the known distribution of species indicates its absence from Afghanistan, Pakistan, and India. The only record available from western India apparently is by Kaszab (1982). This record is a misidentification and Kaszab (1982) did not specifically mention this species from Afghanistan (W. Schawaller, personal communication, February 29 2016).

General distribution. PAL_SAR.

Local distribution. EP, HA, MK, NJ, QS, RI, TB (Kaszab 1979 1982)

Collecting month and method. Rare species that was collected by HP and PT through III-VI, X and XII.

Trichosphaena arabica Kaszab, 1961

World distribution. **Asia:** AE, OM, SA, YE.

General distribution. SAR.

Local distribution. HA, JZ, MK, NJ, QS, RI (Kaszab 1979 1981 1982).

Collecting month and method. A frequent species. The adults of this species were collected by BV on branches of *A. ehrenbergiana* and *Z. nummularia*, and by HP during IV and VII-IX.

Zophosis punctata Brullé, 1832

World distribution. **Asia:** AF, AZ, CN, CY, EG (Sinai), IL, IQ, IR, JO, KZ, LB, PK, SA, SY, TJ, TM, TR, UZ. **Europe:** AL, AM, ES, GR, IT. **North Africa:** DZ, LY, MA, TN.

General distribution. PAL_SAR_SJP.

Local distribution. MK, QS (Kaszab 1981 1982), RI (Al Dhafer et al. 2016)

Collecting month and method. Frequent species. The adults were collected by HP and PT through II-IV and VI-X.

Subfamily: Tenebrioninae***Alphitobius laevigatus* (Fabricius, 1781)**

World distribution. **Africa:** GH. **Asia:** AE, AF, BH, BT, CN, CY, IN, IQ, IR, JP, KZ, RU, SA, TW, YE. **Europe:** AM, BE, CH, DE, ES, GB, GR, HU, IT, LU, MT, NL, PL, PT, RU, SK, UA. **North Africa:** EG, ES (Canary Islands), LY, PT (Madeira Archipelago), TN. **North America:** MX, US.

General distribution. COS (Schawaller 2010).

Local distribution. EP, MD, MK, RI (Kaszab 1979 1982).

Collecting month and method. Very rare species that was collected by LT during X.

***Blaps kollari* Seidlitz, 1893**

World distribution. **Asia:** AE, IQ, JO, OM, SA, YE. **North Africa:** EG.

General distribution. SAR.

Local distribution. AS, BA, EP, HA, MD, MK, QS, RI (Kaszab 1979 1981 1982; El-Hawagry et al. 2013).

Collecting month and method. A frequent species. The adult beetles were collected by HP, LT and PT during I-II, V-VI and X-XII.

***Cheirodes brevicollis* (Wollaston, 1864)**

World distribution. **Africa:** SO. **Asia:** AE, AF, BH, CN, EG (Sinai), IL, IQ, IR, JO, KZ, MN, OM, PK, SA, TM, UZ, YE. **Europe:** ES, IT, MT. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. AFR_PAL_SAR_SJP.

Local distribution. AS, EP, HA, JZ, MD, MK, RI (Kaszab 1979 1982). It is reported as *Anemia brevicollis* (Wollaston 1864) from BA (El-Hawagry et al. 2013).

Collecting month and method. Common species. The specimens were collected by LT and PT through IV-X.

***Cheirodes pilosus* (Tournier, 1868)**

World distribution. **Africa:** SD, TD. **Asia:** AE (Schawaller 2010), EG (Sinai), IL, OM, SA, YE. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. AFR_SAR.

Local distribution. EP, HA, MD, MK, QS, RI (Kaszab 1979 1982).

Collecting month and method. A rare species. The adults were collected by BV and SW on branches of *L. shawii* and *C. procera*, respectively during VII; and by LT in V-VI.

***Cheirodes sardous* (Gené, 1839)**

World distribution. **Asia:** AE, AZ, CY, EG (Sinai), IL, IQ, IR, JO, SA, TR. **Australia:** AU. **Europe:** AM, ES, FR, GR, IT, PT. **North Africa:** EG, ES (Canary Isalands), LY, MA, TN.

General distribution. AUS_PAL_SAR.

Local distribution. AS, EP, HA, MD, MK, NJ, RI, TB (Kaszab 1979 1982).

Collecting month and method. Very rare species that was collected by LT during VII.

***Gonocephalum prolixum* (Erichson, 1843)**

World distribution. **Africa:** ZA. **Asia:** AE, CY, IR, SA, SY. **Europe:** ES, IT. **North Africa:** DZ, EG, ES (Canary Isalands), LY, MA, TN.

General distribution. AFR_PAL_SAR.

Local distribution. AS, MD, MK (Kaszab 1979 1982), RI (Al Dhafer et al. 2016).

Collecting month and method. An abundant species. The beetles were collected by HP, LT and PT throughout the year.

***Gonocephalum rusticum* (Olivier, 1811)**

World distribution. **Asia:** AF, AZ, CN, EG (Sinai), IL, IQ, IR, KZ, MN, OM, RU, SA, TJ, TM, TR, UZ. **Europe:** AL, AM, ES, FR, GR, HR, IT, MT, MK, PT, RU, UA. **North Africa:** EG, ES (Canary Isalands), LY, MA, PT (Madeira Archipelago), TN.

General distribution. PAL_SAR_SJP.

Local distribution. AS, EP, MK, RI (Kaszab 1979 1982).

Collecting month and method. Common species that was collected by HP, LT and PT all over the year.

***Gonocephalum setulosum* (Faldermann, 1837)**

World distribution. **Africa:** ZA. **Asia:** AE (Schawaller 2010), AF, CN, CY, EG (Sinai), IL, IQ, IR, KZ, LB, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AM, ES, GR, IT, MT, RU. **North Africa:** EG, ES (Canary Isalands), LY, MA, TN.

General distribution. AFR_PAL_SAR_SJP.

Local distribution. EP, HA, MD, MK, QS, RI, TB (Kaszab 1979 1982).

Collecting month and method. Common species that was collected by HP, LT and PT through II, IV-X and XII.

***Gonocephalum soricinum* (Reiche & Saulcy, 1857)**

World distribution. Africa: ET. **Asia:** AE (Schawaller 2010), AF, EG (Sinai), IL, IR, JO, PK, SA, SY, YE.

General distribution. AFR_SAR.

Local distribution. AS, BA, HA, MK, NJ, RI (Kaszab 1979 1982).

Collecting month and method. Rare species that was collected by HP, LT and PT in I, V and IX-X.

***Opatroides vicinus* (Fairmaire, 1896)**

World distribution. Asia: AE, AF, BH, IN, IR, KW, NP, OM, PK, SA, YE.

General distribution. ORR_SAR.

Local distribution. RI (Kaszab 1979 1982).

Collecting month and method. Abundant species. The specimens of this species were collected by BV on branches of *A. gerrardii* in IV; and by HP, LT and PT throughout the year except in IX and XI.

***Palorus ficicola* (Wollaston, 1867)**

World distribution. Africa: CV, GM. **Asia:** AE (Schawaller 2010), LK, PK, SA. **North Africa:** DZ, EG, LY, MA.

General distribution. AFR_ORR_SAR.

Local distribution. MK (Kaszab 1979 1982).

Collecting month and method. Very rare species, which was collected by LT during VIII.

***Praeugena gagatina* (Mäklin, 1863)**

World distribution. Africa: DJ, ER, ET, SD, SN, SO, TD. **Asia:** AE (Schawaller 2010), SA, YE.

General distribution. AFR_SAR.

Local distribution. AS, JZ, MD, MK, RI (Kaszab 1979 1982).

Collecting month and method. Rare species. The adults were collected by PT under canopy of *L. shawii* during V; and y LT in IV-V.

***Prodilamus fausti major* Kaszab, 1982**

World distribution. Asia: SA.

General distribution. END.

Local distribution. MD, QS (Kaszab 1982).

Collecting month and method. Very rare species that was collected by HP during XII.

***Sclerum carinatum* Baudi 1875**

World distribution. Asia: AF, AZ, CY, IQ, IR, SA, SY, TJ, TM, TR, UZ.

General distribution. PAL_SAR.

Local distribution. RI (Kaszab 1979).

Collecting month and method. Rare species that was collected by HP and LT during II-III, VII and IX.

***Sclerum orientale* (Fabricius, 1775)**

World distribution. Africa: SD. **Asia:** IL, JO, SA, SI, YE. **North Africa:** EG.

General distribution. AFR_SAR.

Local distribution. RI (Kaszab 1979 1982).

Collecting month and method. A common species. The adult beetles were collected by BV on branches of *A. ehrenbergiana* during X; and by HP and PT all over the year except in VI and IX.

***Sclerum sulcatum* Baudi, 1876**

World distribution. Asia: SA. **North Africa:** EG.

General distribution. SAR.

Local distribution. HA, MK, RI (Kaszab 1979 1982; Johnson 1989).

Collecting month and method. A frequent species. The specimens were collected by HP, LT and PT during I-VII, X and XII.

Subfamily: Alluculinae

***Cornucistela serrata* Campbell, 1980**

World distribution. Asia: SA.

General distribution. END.

Local distribution. RI (Campbell 1980).

Collecting month and method. Rare species that was collected by LT during V-VI and VIII-X.

***Cteniopus pallidus* (Küster, 1850)**

World distribution. Asia: CY, IQ, SY, TR. New to Arabian Peninsula.

General distribution. SAR.

Collecting month and method. Very rare species that was collected by SW during IV.

***Hymenalia denticulata* (Muche, 1982)**

World distribution. Asia: AE, OM, SA.

General distribution. SAR.

Local distribution. AS, BA, MD, MK (Muche 1982).

Collecting month and method. Frequent species. The adults were collected by LT during IV-VI, IX and XI.

***Mycetocharina bahukalatensis* Novak, 2008**

World distribution. Asia: IR. New to Arabian Peninsula

General distribution. SAR.

Collecting month and method. A frequent species that was collected by LT in IV-X.

***Mycetocharina braaschi* Muche, 1982**

World distribution. Asia: AE, SA.

General distribution. SAR.

Local distribution. MK, RI (Muche 1982).

Collecting month and method. Common species. The specimens were collected by LT in IV-VI and X.

Oedemeridae**Subfamily: Oedemerinae*****Alloxantha talhouki* Švihla, 1984**

World distribution. Asia: AE, IR, OM, SA.

General distribution. SAR.

Local distribution. EP (Švihla 1984).

Collecting month and method. Very rare species. The specimens were collected by LT during V-VI.

Meloidae

Subfamily: Meloinae

***Lydomorphus angusticollis suturellus* (Haag-Rutenberg, 1880)**

World distribution. Asia: AE, IR, OM, PK, SA, YE.

General distribution. SAR.

Local distribution. EP, MD, MK, RI, (Kaszab 1983, Schneider 1991).

Collecting month and method. Very rare species that was collected by LT through IV.

***Lydomorphus brittoni* (Kaszab 1953)**

World distribution. Asia: AE, IQ, OM, SA.

General distribution. SAR.

Local distribution. EP, MD, MK, QS, RI, (Kaszab 1983, Schneider 1991).

Collecting month and method. Frequent species, which was collected by LT during IV.

***Lydomorphus palaestinus* (Kirsch, 1871)**

World distribution. Asia: EG (Sinai), IL, JO, SA. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. SAR.

Local distribution. AS, EP, RI (Kaszab 1983, Schneider 1991).

Collecting month and method. Very rare species that was collected by LT during III.

Subfamily: Nemognathinae

***Zonitoschema rubricolor* Pic, 1924**

World distribution. Africa: CD. **Asia:** AE (Batelka and Geisthardt 2009), IL, SA.

General distribution. AFR_SAR.

Local distribution. BA, RI (Kaszab 1983, Schneider 1991; El-Hawagry et al. 2013).

Collecting month and method. Very rare species. The adults were collected by LT in VI.

Anthicidae**Subfamily: Anthicinae*****Anthelephila caeruleipennis* (Laferte-Senectere, 1847)**

World distribution. Africa: ET, ZA. **Asia:** AE, EG (Sinai), IL, IQ, IR, JO, LB, OM, PK, SA, SY, YE. **Europe:** ES, IT. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. AFR_SAR.

Local distribution. AS, BA, JZ, MD, MK, QS (Uhmann 1998; El-Hawagry et al. 2013).

Collecting month and method. Very rare species that was collected by LT during IV and VI.

***Anthelephila multiformis* Kejval, 2002**

World distribution. Asia: AE (Telnov 2007), IR, OM, PK. New to KSA.

General distribution. SAR.

Collecting month and method. Rare species. The specimens of this species were collected by BV, SW, VC and PT on branches/under canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by LT through IV-VI.

***Anthicus crinitus* Laferte-Senectere, 1849**

World distribution. Africa: CF, GM, KE, MR, NA, SL, SN, SZ, TD, ZA. **Asia:** AE, AF, AZ, CN, CY, EG (Sinai), IL, IN, IQ, IR, JO, JP, KW, NP, OM, PK, SA, SY, TH, TR, TW, UZ, YE. **Europe:** AL, AM, BG, GR, MT, PT, RU. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN. **North America:** CU, DO, PR. **South America:** VE.

General distribution. COS.

Local distribution. AS, MK, QS, (Uhmann 1998), BA (El-Hawagry et al. 2013), RI (Al Dhafer et al. 2016).

Collecting month and method. Rare species. The adults were collected by PT under canopies of *A. ehrenbergiana*; and by LT during V-VII and IX-X.

***Anthicus tristis* Schmidt, 1842**

World distribution. Asia: AF, AZ, CY, IL, IQ, IR, JO, KZ, LB, SA, SY, TJ, TM, TR, UZ, YE. **Europe:** AM, BG, ES, FR, GE, GR, HR, IT, MT, RO, RU, SE, SK, UA. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. PAL_SAR.

Local distribution. RI (Uhmann 1992).

Collecting month and method. Very rare species that was collected by LT in IX.

Endomia lefebvrei (LaFerté-Sénectère, 1849)

World distribution. **Africa:** GM, TD. **Asia:** AE, AF, CY, EG (Sinai), IL, IQ, IR, JO, OM, QA, SA, TM, TR, YE. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. AFR_PAL_SAR.

Local distribution. BA (El-Hawagry et al. 2013), JZ, MK (Uhmann 1998), RI (Al Dhafer et al. 2016).

Collecting month and method. A rare species. The beetles were collected by PT under canopies of *A. gerrardii*, *C. procera* and *R. stricta*; and by LT during IV-VI.

Omonadus floralis (Linnaeus 1758)

World distribution. **Africa:** CM, MR, SN, ZA. **Asia:** AE (Telnov 2007), AF, AZ, BT, CN, CY, EG (Sinai), IL, IN, IR, JO, JP, LB, MN, NP, OM, PK, RU, SA, SY, TM, TR. **Australia:** PG. **Europe:** AL, AR, AT, BA, BE, BG, BY, CH, DE, DK, EE, ES, FI, FR, GB, GE, GR, HR, HU, IE, IT, LI, LT, LV, MD, MK, MT, NL, NO, PL, PT, RO, RS, RU, SE, SK, TR, UA. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN. **North America:** CA, US.

General distribution. COS (Uhmann 1998, Telnov 2007).

Local distribution. BA, MK (Uhmann 1998), RI (Alqarni et al. 2015; Al Dhafer et al. 2016).

Collecting month and method. Very rare species that was collected by PT under canopies of *Z. nummularia*, and by LT during V-VI.

Subfamily: Notoxinae

Mecynotarsus bison (Olivier, 1811)

World distribution. **Africa:** CG, CI, CV, ET, SD, SO, TD, TZ. **Asia:** AE, CY, EG (Sinai), IL, IQ, IR, LB, SA, TR, YE. **Europe:** GR. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. AFR_PAL_SAR.

Local distribution. EP, JZ, MD, MK, NB, RI, TB (Uhmann 1998).

Collecting month and method. Very rare species that was collected by PT under canopy of *R. stricta* in IV.

Scraptiidae**Subfamily: Anaspidinae*****Pentaria arabica* Pankow, 1981**

World distribution. Asia: SA.

General distribution. END.

Local distribution. AS (Pankow 1981).

Collecting month and method. A frequent species. It was collected by BV and PT on branches/under canopy of *A. ehrenbergiana*, and by LT and MT through IV-V, VII and X.

***Pentaria* sp.**

Collecting month and method. Rare species. The specimens were collected by BV on branches of *Z. nummularia* in V, by PT under canopy of *L. shawii* in V, and by LT during V-VII and IX.

Cerambycidae**Subfamily: Prioninae*****Polyarthron philbyi* Villiers, 1968**

World distribution. Asia: SA.

General distribution. END.

Local distribution. RI (Holzschuh 1993).

Collecting month and method. Very rare species. It was collected by HP during IX.

Subfamily: Lamiinae***Apomecyna lameerei* (Pic, 1895)**

World distribution. Africa: MR. **Asia:** AE, IL, IQ, IR, PK, SA. **North Africa:** EG.

General distribution. AFR_SAR.

Local distribution. MD, MK, RI (Holzschuh and Téocchi 1991).

Collecting month and method. Rare species. The adults were collected by HP and LT during IV-V, X-XI.

Chrysomelidae**Subfamily: Bruchinae*****Bruchidius centromaculatus* (Allard, 1868)**

World distribution. **Africa:** BF, CD, MR, SD, SN. **Asia:** IL, SA, YE. **North Africa:** EG.

General distribution. AFR_SAR.

Local distribution. AS (Anton 1994), RI (Al Dhafer et al. 2016).

Collecting month and method. Common species, which was collected by BV, SW and VC on branches of *A. ebrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*, and by HP, LT and PT throughout the year.

***Careydon acaciae* (Gyllenhal, 1833)**

World distribution. **Africa:** AO, BF, CD, CM, ET, KE, MR, MZ, NA, NE, NG, RW, SD, SN, SO, SZ, TD, TZ, ZA. **Asia:** IR, JO, SA, YE. **Europe:** ES, HU. **North Africa:** EG.

General distribution. AFR_SAR.

Local distribution. AS, MK (Decelle 1979), RI (Al Dhafer et al. 2016)

Collecting month and method. Common species. The specimens were collected by PT under the canopies of *A. ebrenbergiana*, *A. gerrardii*, *C. procera* and *L. shawii*; and by SW on branches of *C. procera* and *R. stricta*; and by HP, LT and MT throughout the year.

***Spermophagus sericeus* (Geoffroy, 1785)**

World distribution. **Asia:** AF, AZ, CN, CY, IL, IQ, IR, JO, KG, KZ, LB, MN, SA, SY, TJ, TM, TR, UZ. **Europe:** AL, AM, AT, BA, BE, BG, CH, CZ, DE, DK, ES, FI, FR, GB, GE, GR, HR, HU, IT, LU, MK, MT, NL, PL, PT, RO, RS, RU, SE, SI, SK, UA. **North Africa:** DZ, MA, TN.

General distribution. PAL_SAR_SJP.

Local distribution. RI (Anton 1994).

Collecting month and method. Very rare that species was collected by SW on branches of *C. procera* during VIII.

Subfamily: Chrysomelinae***Colaphellus apicalis* (Ménétriés, 1849)**

World distribution. **Asia:** AF, IL, IR, KG, KZ, SY, TM, TR, UZ. New to Arabian Peninsula.

General distribution. PAL_SAR.

Collecting month and method. Very rare species. It was collected by PT under the canopy of *R. stricta* during II.

Subfamily: Galerucinae

Phyllotreta lativittata Kutschera, 1860

World distribution. Asia: AF, AZ, CN, CY, IL, IQ, IR, JO, KG, KZ, LB, OM, RU, SA (Al Dhafer et al. 2016), SY, TJ, TR, TM, UZ. **Europe:** AM, GR, IT, MT.

General distribution. PAL_SAR_SJP.

Local distribution. RI (Al Dhafer et al. 2016).

Collecting month and method. Common species. The adult beetles were collected by BV, SW, VC and PT on branches/under the canopies of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia*; and by LT and MT throughout the year.

Psylliodes peyerimhoffi Heikertinger, 1916

World distribution. Asia: AE, EG (Sinai), SA.

General distribution. SAR.

Local distribution. RI (Doguet 1979; Medvedev 1996).

Collecting month and method. Very rare species that was collected by LT during IV.

Subfamily: Cryptocephalinae

Aetheomorpha seminigra pumilio (Lacordaire 1848)

World distribution. Africa: ET, SD. **Asia:** AF, JO, OM, SA, YE. **North Africa:** EG.

General distribution. AFR_SAR.

Local distribution. AS, BA, JZ, MK (Medvedev 1993 1996; El-Hawagry et al. 2013).

Collecting month and method. Very rare species, which was collected by BV on branches of *A. gerrardii* during V.

Subfamily: Eumolpinae

Macrocoma lefevrei (Baly, 1878)

World distribution. Asia: IR, OM, SA. **North Africa:** EG.

General distribution. SAR.

Local distribution. MK (Medvedev 1996).

Collecting month and method. Very rare species. It was collected by LT during IV.

Brentidae

Subfamily: Apioninae

Aplemonus arabicus (Wagner, 1909)

World distribution. **Africa:** MW, ZA. **Asia:** AE (Magnano et al. 2009), IR, OM, QA (Magnano et al. 2009), SA (Al Dhafer et al. 2016). **North Africa:** EG.

General distribution. AFR_SAR.

Local distribution. RI (Al Dhafer et al. 2016)

Collecting month and method. Common species. The beetles of this species were collected by BV, SW and VC on branches of *A. ehrenbergiana*, *A. gerrardii*, *L. shawii* and *Z. nummularia*; by PT under canopies of *C. procera*; and by LT throughout the year.

Subfamily: Nanophyinae

Allomalía quadrivirgata (A. Costa, 1863)

World distribution. **Asia:** AZ, CY, IL, KZ, SA (Abdel-Dayem et al. 2015), SY, UZ. **Europe:** BG, ES, FR, GE, GR, HR, HU, IT, UA. **North Africa:** DZ, EG, LY, MA, TN.

General distribution. PAL_SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Very rare species that was collected by BV on branches of *Z. nummularia* in IV.

Curculionidae

Subfamily: Curculioninae

Assuanensius discoidalis (Tournier, 1873)

World distribution. **Africa:** TD. **Asia:** IL, SA (Abdel-Dayem et al. 2015). **North Africa:** DZ, EG, LY, MA.

General distribution. AFR_SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Common species. The specimens were collected by BV on branches of *A. ehrenbergiana* in III-V.

***Assuanensius erectesetosus* (Peyerimhoff, 1948)**

World distribution. Africa: TD. Asia: IL, SA (Abdel-Dayem et al. 2015). North Africa: EG, LY, MA.

General distribution. AFR_SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Very rare species. The beetles were collected by BV on branches of *A. ehrenbergiana*, *A. gerrardii*, *C. procera*, *L. shawii*, *R. stricta* and *Z. nummularia* during I-VII and IX; by PT under canopies of *C. procera* and *R. stricta* in III; and by HP and SW in II and III respectively.

***Assuanensius peyerimhoffi* (Hoffmann, 1963)**

World distribution. Africa: TD. Asia: SA (Abdel-Dayem et al. 2015). North Africa: DZ, LY.

General distribution. AFR_SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. A frequent species. The specimens were collected by BV on branches of *A. ehrenbergiana*, *A. gerrardii* and *Z. nummularia* during I-III, V, VIII, and IX-XII.

***Mecinus longulus* (Desbrochers des Loges, 1893)**

World distribution. Asia: IL, SA (Abdel-Dayem et al. 2015). North Africa: DZ, EG, LY, TN.

General distribution. SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Very rare species that was collected by BV on branches of *L. shawii* and by PT under canopy of *C. stricta* during III.

***Pachytychius cognatus* Caldara, 2000**

World distribution. Africa: AO, DJ, SD, SN. Asia: SA, YE.

General distribution. AFR_SAR.

Local distribution. JZ (Caldara 2000).

Collecting month and method. Very rare species, which was collected by PT under canopy of *C. stricta* in XII.

***Pseudorchestes letourneuxi* (Pic, 1901)**

World distribution. Africa: SD. Asia: SA (Abdel-Dayem et al. 2015), TR. North Africa: DZ, EG, LY, MA, TN.

General distribution. AFR_SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Very rare species that was collected by PT under canopy of *Z. nummularia* during IV.

***Sharpia sabulicola* Colonnelli, 2009**

World distribution. Asia: AE (Magnano et al. 2009), SA (Abdel-Dayem et al. 2015).

General distribution. SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Very rare species and its adult was collected by LT during IV.

***Sharpia soluta* Faust, 1885**

World distribution. Asia: AE (Magnano et al. 2009), AZ, CY, SA (Abdel-Dayem et al. 2015), TM, UZ. Europe: RO.

General distribution. PAL_SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Rare species. It was collected by PT under canopies of *A. ehrenbergiana*, *C. procera*, *R. stricta*, and *Z. nummularia* during III-IV, X and XII; also collected by LT during V.

***Sphincticraerus bruleriei* (Desbrochers des Loges, 1873)**

World distribution. Asia: IL, SA (Abdel-Dayem et al. 2015). North Africa: EG.

General distribution. SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. A rare species. The adult beetles were collected by BV on branches of *Z. nummularia* during II and V; and by LT through X.

***Tychius banfi* Caldara & Fremuth, 1992**

World distribution. Asia: IQ, IR, JO, SA, TR. North Africa: EG.

General distribution. PAL_SAR.

Local distribution. EP, RI (Caldara 1993).

Collecting month and method. Rare species. Its adult was collected by BV on branches of *A. ehrenbergiana*, *A. gerrardii* and *Z. nummularia* through XII; by PT under canopy of *A. ehrenbergiana* in XI; and by LT and MT during V and VII respectively.

Tychius mozabitus Pic, 1898

World distribution. Asia: EG (Sinai), IQ, IR, JO, SA. **North Africa:** DZ, EG, LY, TN.

General distribution. SAR.

Local distribution. MD, RI (Caldara 1993).

Collecting month and method. Very rare species that was collected by PT under canopy of *C. procers* in II.

Tychius vicinus Roudier, 1954

World distribution. Asia: AE (Magnano et al. 2009), SA, YE. **North Africa:** DZ, EG.

General distribution. SAR.

Local distribution. AS, RI (Caldara 1993).

Collecting month and method. A frequent species. The adults were collected by BV, SW and VC on branches of *A. gerrardii*, *R. stricta* and *Z. nummularia* during III-V; and by PT under canopy of *A. ehrenbergiana* during I-VI and XII.

Subfamily: Entiminae

Mylocerus sp.

Collecting month and method. A rare species. It was collected by PT under canopies of *R. stricta* and *Z. nummularia* during I-II; and by HP and LT in I, IV and XII.

Tanymecus musculus Fähræus, 1840

World distribution. Asia: IL, IQ, SA (Abdel-Dayem et al. 2015), SY. **North Africa:** EG.

General distribution. SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Very rare species that was collected by LT in I, IV and XII.

Subfamily: Hyperinae***Brachypera isabellina* (Boheman, 1834)**

World distribution. **Asia:** AE (Magnano et al. 2009), IL, IQ, IR, JO, KW, QA, SA, SY, TR. **Europe:** IT (Sicilia). **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, PT (Madeira Archipelago), TN.

General distribution. SAR.

Local distribution. Heyden (1913) just mentioned Arabia without any further detail about locality. Abdel-Dayem et al. (2015) have been confirmed the occurrence of the species in KSA: RI.

Collecting month and method. A rare species. The beetles were collected by PT under canopies of *C. procera*, *R. stricta* and *Z. nummularia* during II, VIII and XII.

***Hypera brunnipennis* (Boheman, 1834)**

World distribution. **Asia:** IL, IR, LB, SA (Abdel-Dayem et al. 2015). **North Africa:** EG. **North America:** US.

General distribution. NAR_SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Very rare species that was collected by LT during IV.

Subfamily: Lixinae***Hypolixus pica* (Fabricius, 1798)**

World distribution. **Africa:** CG, ET, NE, SN, TD, TG. **Asia:** AE, CY, ID, IQ, IR, JO, PK, SA (Abdel-Dayem et al. 2015), SY, TR, YE (Socotra). **Europe:** FR. **North Africa:** EG.

General distribution. AFR_PAL_SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Very rare species that was collected by BV on branches of *A. ehrenbergiana* in XI.

***Larinus elegans* Desbrochers des Loges, 1897**

World distribution. **Asia:** SA. **North Africa:** DZ, EG, LY, MA.

General distribution. SAR.

Local distribution. There is no available information.

Collecting month and method. Very rare species. The adult of this species was collected by BV on branches of *Z. nummularia* through V.

***Lixus ?subfarinosus* Desbrochers des Loges, 1893**

World distribution. Asia: AE, IQ, SA (Abdel-Dayem et al. 2015), TR, YE. **North Africa:** EG, TN.

General distribution. SAR.

Local distribution. RI (Abdel-Dayem et al. 2015).

Collecting month and method. Very rare species that was collected by HP in IV.

***Pycnodactylopsis tomentosa* (Fåhraeus, 1842)**

World distribution. Africa: ET, MR, SD, TD. **Asia:** EG (Sinai), IL, IN, IQ, IR, JO, PK, SA, YE. **North Africa:** DZ, EG, ES (Canary Islands), LY, MA, TN.

General distribution. AFR_ORR_SAR.

Local distribution. RI (Shalaby 1961, Beccari 1971).

Collecting month and method. Very rare species that was collected by HP in II.

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References

- Abdel-Dayem MS, Colonnelli E, Fadl HH, Al Dhafer HM (2015) New records of Curculionoidea (Coleoptera) from the Kingdom of Saudi Arabia. The Coleopterists Bulletin 69(4): 639–644. doi: <http://dx.doi.org/10.1649/0010-065X-69.4.639>
- Abdel-Dayem MS, Kondratieff BC, Fadl HH, Al Dhafer HM (2016) Dung beetle (Coleoptera, Scarabaeidae) abundance and diversity at nature preserve within hyper-arid ecosystem of Arabian Peninsula. Annals of the Entomological Society of America 109(2). <https://doi.org/10.1093/aesa/sav154>

- Ahrens D (2000) Sericinae (Coleoptera: Scarabaeoidea: Melolonthidae) of Arabia. *Fauna of Arabia* 18: 177–210.
- Al Dhafer HM, Abdel-Dayem MS, Aldryhim YN, Fadl HH, El-Torkey AM, Elgharbawy AA, Setyaningrum H (2016) Diversity and composition of ground-dwelling beetle assemblages (Insecta: Coleoptera) in Rawdhat Khorim National Park, Kingdom of Saudi Arabia. *Journal of Arid Environments* 127: 187–191. <http://dx.doi.org/10.1016/j.jaridenv.2015.11.007>
- Al Dhafer HM, Platia G (2013) Contribution to the knowledge of the genus *Dicronychus* (Coleoptera: Elateridae) from the Kingdom of Saudi Arabia. *Zootaxa* 3734(1): 15–22. <https://doi.org/10.11646/zootaxa.3734.1.2>
- Alfarhan AH (2001) A floristic account on Raudhat Khuraim Central Province Saudi Arabia. *Saudi Journal of Biological Sciences* 8: 80–103.
- Alqarni AS, Awad AM, Raweh HSA, Owayss AA (2015) Pollination ecology of *Acacia gerrardii* Benth. (Fabaceae: Mimosoideae) under extremely hot-dry conditions. *Saudi Journal of Biological Sciences*. <http://dx.doi.org/10.1016/j.sjbs.2015.09.019>
- Al-Ahmadi AZ, Salem MM (1999) Entomofauna of Saudi Arabia, General survey of insects reported in the Kingdom of Saudi Arabia. Part I: Checklist of insects. King Saud University, Academic publishing and press, Riyadh, Saudi Arabia, 240 pp.
- Al-Farraj MM, Alfarhan A, Al-Yemeni M (1997) Ecological studies on Rawdhat system in Saudi Arabia I- Rawdhat Khorim. *Pakistan Journal of Botany* 29: 75–88.
- Al-Nafie AH (2007) The effect of off-road driving on the plant cover of natural recreational areas in Central of Saudi Arabia. *Saudi Journal of Biological Sciences* 14: 53–72.
- Al-Qarawi AA (2011) Vegetation analysis in the Rawdhat Om Al-Khefas, Central Saudi Arabia. *Australian Journal of Basic and Applied Sciences* 5(12): 3264–3269.
- Anton K-W (1994) The Bruchidae (Coleoptera) of Saudi Arabia, with description of two new species. *Fauna of Saudi Arabia* 14: 97–104.
- Bale JS, Masters GJ, Hodkinson ID, Awmack C, Bezemer TM, Brown VK, Butterfield J, Buse A, Coulson JC, Farrar J, Good JE (2002) Herbivory in global climate change research: direct effects of rising temperature on insect herbivores. *Global Change Biology* 8(1): 1–16. <https://doi.org/10.1046/j.1365-2486.2002.00451.x>
- Balkenohl M (1994) The Subfamily Scaritinae Bonelli, 1809 (Coleoptera: Carabidae) from Arabia. *Fauna of Saudi Arabia* 14: 59–70.
- Ball G, Shpeley D (2005) Taxonomic review of the Tribe Melaenini (Coleoptera: Carabidae), with observations on morphological, ecological and chorological evolution. *Zootaxa* 1099: 1–120.
- Balthasar V (1972) Coleopteraous Nordostafrika, Scarabaeoidea: Scarabaeidae und Aphidiidae. *Notulae Entomologicae* 52: 18–32.
- Basilewsky P (1979) Insect of Saudi Arabia, Coleoptera: Fam. Carabidae. *Fauna of Saudi Arabia* 1: 141–146.
- Batelka J, Geisthardt M (2009) Order Coleoptera, family Meloidae. *Arthropod fauna of the UAE* 2: 187–206.
- Beccari F (1971) Contribuzione alla conoscenza dell' entomofauna dell' Arabia Saudita. Primo elenco di insetti acari e nematode. *Rivista di Agricoltura Subtropicale et Tropicale* 65: 243–258.

- Besuchet C (1981) Insects of Saudi Arabia. Coleoptera: Fam. Pselaphidae. Fauna of Saudi Arabia 3: 243–250.
- Besuchet C, Cuccodoro G (2011) Order Coleoptera, family Staphylinidae, Subfamily Pselaphinae. Arthropod fauna of the UAE 4: 151–167.
- Bílý S (1979) Insects of Saudi Arabia, Coleoptera: Fam. Buprestidae. Fauna of Saudi Arabia 1: 215–222.
- Bílý S (1980) Insects of Saudi Arabia, Coleoptera: Fam. Buprestidae (Part 2). Fauna of Saudi Arabia 2: 119–121.
- Bílý S (1982) Insects of Saudi Arabia, Coleoptera: Fam. Buprestidae (Part 3). Fauna of Saudi Arabia 4: 111–115.
- Bílý S (1985) Coleoptera: Fam. Buprestidae of Saudi Arabia (Part 4). Fauna of Saudi Arabia 7: 160–164.
- Bouchard P, Bousquet Y, Davies AE, Alonso-Zarazaga MA, Lawrence JF, Lyal CHC, Newton AF, Reid CAM, Schmitt M, Ślipiński A, Smith ABT (2011) Family-group names in Coleoptera (Insecta). Zookeys 88: 1–972. <https://doi.org/10.3897/zookeys.88.807>
- Brancucci M (1979) Insects of Saudi Arabia, Coleoptera: Fam. Haliplidae, Dytscidae, Gyrinidae. Fauna of Saudi Arabia 1: 156–161.
- Brancucci M (1984) Insects of Saudi Arabia, Coleoptera: Fam. Haliplidae, Noteridae, Dytscidae, Gyrinidae (Part 4). Fauna of Saudi Arabia 6: 229–242.
- Britton EB (1948) Coleoptera: Cicindelidae and Carabidae from Southern Arabia. Expedition to South-west Arabia 1937–8 (Vol. 1). British Museum of Natural History, London, 87–125.
- Caldara R (1993) The Subfamily Tychiinae (Coleoptera: Curculionidae) from Saudi Arabia. Fauna of Saudi Arabia 13: 137–143.
- Caldara R (2000) Revisione dei *Pachytychius* delle Regioni Afrotropicale e Orientale (Coleoptera, Curculionidae). Memorie della Società Entomologica Italiana 78(1): 131–166.
- Campbell JM (1980) Insects of Saudi Arabia, Coleoptera: Fam. Alleculidae. Fauna of Saudi Arabia 2: 133–136.
- Cassola F and Schneider W. (1997) Tiger Beetles (Coleoptera: Cicindelidae) from the Saudi Arabian Gulf coast. Fauna of Saudi Arabia 16: 247–253.
- Chassain J (1979) Insects of Saudi Arabia, Coleoptera: Fam. Elateridae. Fauna of Saudi Arabia 1: 193–211.
- Chassain J (1983) Insect of Saudi Arabia, Coleoptera: Fam. Elateridae (2nd Part). Fauna of Saudi Arabia 5: 129–143.
- Cobos A (1963) Cuatro Buprestidos nuevos de Oriente Medio (Coleoptera). FOS, Revista Española de Entomología 39: 357–365.
- Damoiseau R (1979) Insects of Saudi Arabia, Coleoptera: Fam. Bostrichidae. Fauna of Saudi Arabia 1: 249–250.
- Decelle J (1979) Insects of Saudi Arabia, Coleoptera: Fam. Bruchidae. Fauna of Saudi Arabia 1: 318–330.
- Doguet S (1979) Insects of Saudi Arabia, Coleoptera: Fam. Chrysomelidae, Subfam. Halticinae. Fauna of Saudi Arabia 1: 308–316.

- El-Hawagry MS, Khalil MW, Sharaf MR, Fadl HH, Aldawood AS (2013) A preliminary study on the insect fauna of Al-Baha Province, Saudi Arabia, with descriptions of two new species. *ZooKeys* 274: 1–88. <https://doi.org/10.3897/zookeys.274.4529>
- Emden FJ v (1954) The 3rd Danish expedition to Central Asia. Zoological results 13. Carabidae (Insecta) from Afghanistan (exclusive of Cicindelinae). *Vidensk Medd fra Dansk naturh Foren* 116: 175–188.
- Endrődi S (1980) Insects of Saudi Arabia, Coleoptera: Fam. Scarabaeidae, Subf. Dynastinae. *Fauna of Saudi Arabia* 2: 157–158.
- Endrődy-Younga S (1979) Insects of Saudi Arabia, Coleoptera: Fam. Cybocephalidae. *Fauna of Saudi Arabia* 1: 228–231.
- Felix RFFL (2009) Order Coleoptera, family Carabidae. *Arthropod fauna of the UAE* 2: 66–141.
- Fürsch H (1979) Insects of Saudi Arabia, Coleoptera: Fam. Coccinellidae. *Fauna of Saudi Arabia* 1: 235–248.
- Fürsch H (1989) The Arabian species of the *Scymnus (Pullus) guimeti*-group (Coleoptera, Coccinellidae). *Fauna of Saudi Arabia* 10: 113–122.
- Geistharde M (2010) Order Coleoptera, Family Bostrichidae. *Arthropod fauna of the UAE* 3: 204–225.
- Gerstmeier R (2010) Order Coleoptera, Family Cleridae. *Arthropod fauna of the UAE* 3: 226–239.
- Hájek J and M. Brancucci. (2011) Order Coleoptera, family Dytiscidae. *Arthropod fauna of the UAE* 4: 126–143.
- Hammond PM (1992) Species inventory. In: Groombridge B (Ed.) *Global Biodiversity, Status of the Earth's Living Resources*. Chapman and Hall, London, 17–39. https://doi.org/10.1007/978-94-011-2282-5_4
- Háva J (2003) World Catalogue of the Dermestidae (Coleoptera). *Studie a Zprávy Oblastního Muzea Praha-východ v Brandýse nad Labem a Staré Boleslavi Supplementum* 1: 1–196.
- Háva J (2009) Order Coleoptera, family Dermestidae. *Arthropod fauna of the UAE* 2: 164–173.
- Háva J (2013) Second contribution to knowledge of Dermestidae (Coleoptera: Bostrichoidea) from the United Arab Emirates. *Studies and Reports, Taxonomical Series* 9(1): 51–60.
- Heinertz R (1979) Insect of Saudi Arabia, Coleoptera: Fam. Carabidae. *Fauna of Saudi Arabia* 1: 140.
- Heyden L (1913) Die Coleopteren-Ausbeute des Dr. Ernst Hartert aus der Centralen West-Sahara (1912) *Novitates Zoologicae* 20:85–108.
- Hieke F (1993) Die Untergattung *Harpalodema* Reitter, 1888, von *Amara* Bon. sowie über *Amara*-Arten anderer Subgenera. (Coleoptera, Carabidae). *Deutsche Entomologische Zeitschrift* 40(1): 1–160. <https://doi.org/10.1002/mmnd.19930400102>
- Holt BG, Lessard JP, Borregaard MK, Fritz SA, Araújo MB, Dimitrov D, Fabre P-H, Graham CH, Graves GR, Jønsson KA, Nogués-Bravo D, Wang Z, Whittaker RJ, Fjeldsá J, Rahbek C (2013) An update of Wallace's zoogeographic regions of the world. *Science* 339(6115): 74–78. <https://doi.org/10.1126/science.1228282>
- Holzschuh C (1993) Cerambycidae (Coleoptera) of Saudi Arabia: Part II, Prioninae and Cerambycinae. *Fauna of Saudi Arabia* 13: 110–129.

- Holzschuh, C & Téocchi P (1991) Cerambycidae (Coleoptera) of Saudi Arabia: Part I, Lamiinae. Fauna of Saudi Arabia 12: 295–311.
- Huffaker CB, Gutierrez AP (1999) Ecological Entomology. John Wiley & Sons, Canada, 2nd edition, 756 pp.
- Hunt T, Bergsten J, Levkanicova Z, Papadopoulou A, John OS, Wild R, Hammond PM, Ahrens D, Balke M, Caterino MS, Gómez-Zurita J, Ribera I, Barraclough TG, Bocakova M, Bocak L, Vogler AP et al. (2007) “A Comprehensive Phylogeny of Beetles Reveals the Evolutionary Origins of a Superradiation”. Science 318(5858): 1913–1916. <https://doi.org/10.1126/science.1146954>
- Jelinek J (1979) Insect of Saudi Arabia. Coleoptera: Fam. Nitidulidae. Fauna of Saudi Arabia 1: 223–227.
- Jelinek J (1988) Coleoptera: Nitidulidae of Saudi Arabia (Part 2). Fauna of Saudi Arabia 9: 42–51.
- Johnson C (1989) Tenebrionidae (Coleoptera) collected in the Eastern Province of Saudi Arabia. Fauna of Saudi Arabia 10: 123–133.
- Kanaar P (2007) Order Coleoptera, family Histeridae. Arthropod fauna of the UAE 1: 170–193.
- Kaszab Z (1979) Insects of Saudi Arabia, Coleoptera: Fam. Tenebrionidae. Fauna of Saudi Arabia 1: 257–288.
- Kaszab Z (1981) Insects of Saudi Arabia. Coleoptera: Fam. Tenebrionidae (Part 2). Fauna of Saudi Arabia, 3: 276–401.
- Kaszab Z (1982) Insect of Saudi Arabia, Coleoptera: Fam. Tenebrionidae (Part 2). Fauna of Saudi Arabia 4: 124–243.
- Kaszab Z (1983) Insect of Saudi Arabia. Coleoptera: Fam. Meloidae. A synopsis of The Arabian Meloidae. Fauna of Saudi Arabia 5: 144–204.
- Kerremans C (1913) Monnographie des buprestides – Tome.VI *Sphenoptera* (pars). A. Breuer, Bruxelles, 97–595.
- Král D and Batelka J (2015) Order Coleoptera, superfamily Scarabaeoidea. Arthropod fauna of the UAE, 6. [In press]
- Kryzhanovskij O (1979) Insect of Saudi Arabia. Coleoptera: Fam. Histeridae. Fauna of Saudi Arabia 1: 184–185.
- Kuijten PJ (1980) Insects of Saudi Arabia, Coleoptera: Fam. Scarabaeidae. Subfam. Hybosorinae. Fauna of Saudi Arabia 2: 155–156.
- Lackner T (2014) Revision of the genus *Reichardtiolus* Kryzhanovskij, 1959 (Coleoptera, Histeridae, Sapriniinae). ZooKeys 379: 1–27. <https://doi.org/10.3897/zookeys.379.6457>
- Löbl I, Merkl O, Ando K, Bouchard P, Lillig M, Masomuto K, Schawaller W (2008) Family Tenebrionidae Latreille, 1802. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera, Tenebrionoidea, Volume 5. Apollo Books, Stenstrup, 105–352.
- Magnano LE, Colonelli, Caldara R (2009) Order Coleoptera, superfamily Curculionoidea. Arthropod fauna of the UAE 2: 216–266.
- Mascagni A (2009) Order Coleoptera, family Heteroceridae. Arthropod fauna of the UAE 2: 154–158.
- Mateu J (1979) Insect of Saudi Arabia, Coleoptera: Fam. Carabidae, Subfam. Lebiinae. Fauna of Saudi Arabia 1: 147–155.

- Mateu J (1986) Lebiinae and Brachininae of Saudi Arabia (Coleoptera: Carabidae). *Lebiinae. Fauna of Saudi Arabia* 8: 198–218.
- Mazur S (1994) Histeridae (Coleoptera) of the Arabian Peninsula. *Fauna of Saudi Arabia* 14: 71–76.
- Medvedev L (1993) Further records of Clytrinae (Coleoptera: Chrysomelidae) from Arabia. *Fauna of Saudi Arabia* 13: 131–136.
- Medvedev L (1996) The Chrysomelidae of Arabia. *Fauna of Saudi Arabia* 15: 211–263.
- Menier JJ (1986) Coleoptera: Fam. Cleridae of Saudi Arabia (Part 2). *Fauna of Saudi Arabia* 8: 219–232.
- Mroczkowski M (1979) Insect of Saudi Arabia, Coleoptera: Fam. Dermestidae. *Fauna of Saudi Arabia* 1: 212–214.
- Mroczkowski M (1980) Insect of Saudi Arabia, Coleoptera: Fam. Dermestidae, Part 2, Description of three new species. *Fauna of Saudi Arabia* 2: 124–126.
- Muche WH (1982) Insect of Saudi Arabia, Coleoptera: Fam. Alleculidae. *Fauna of Saudi Arabia* 4: 116–123.
- Otero JC (2013) Cryptophaginae (Coleoptera) de la Región Paleártica Occidental. *Coleopterological Monographs* (Vol. 4). European Association of Coleopterology, Barcelona, 295 pp.
- Pankow W (1981) Insect of Saudi Arabia, Coleoptera: Fam. Mordellidae and Scaptiidae, Subfam. Anaspidinae. *Fauna of Saudi Arabia* 3: 273–275.
- Paulian R (1980) Insects of Saudi Arabia, Coleoptera: Fam. Scarabaeidae (1^{re} contribution). *Fauna of Saudi Arabia* 2: 141–154.
- Penati F, Vienna P (2006) An updated catalogue of the Histeridae (Insecta: Coleoptera) of the Arabian Peninsula, with biogeographical remarks. *Zootaxa* 1157: 1–74.
- Pittino R (1984) Insects of Saudi Arabia. Coleoptera Scarabaeoidea: A Revision of the Family Aphodiidae. *Fauna of Saudi Arabia*, 6: 267–360.
- Platia G (2007) Order Coleoptera, family Elateridae. *Arthropod fauna of the UAE* 1: 194–210.
- Platia G (2012) Description of ten new species of click beetles from the Palearctic region with new distributional records (Coleoptera, Elateridae). *Boletín de la Sociedad Entomológica Aragonesa (SEA)* 50: 199–207.
- Platia G and Schimmel R (1997) Click-beetles (Coleoptera: Elateridae) from the Sultanate of Oman with additional new species and records from neighbouring regions. *Fauna of Saudi Arabia* 16: 291–318.
- Raimundo AC, Fürsch H, van Harten A (2007) Order Coleoptera, family Elateridae. *Arthropod fauna of the UAE* 1: 217–239.
- Rosenzweig ML (1995) *Species Diversity in Space and Time*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511623387>
- Sabatinelli G, Pontuale G (1998) Melolonthinae and Pachydeminae of Arabia (Coleoptera: Scarabaeoidea: Melolonthidae). *Fauna of Arabia* 17: 107–146.
- Schatzmayer A (1936) Risultati scientifici della spedizione entomologica di S.A.S. il Principe Alessandro della Torre e Tasso in Egitto e nella penisola del Sinai. XII. Catalogo agionato dei Carabidi finora noti d'Egitto e del Sinai. *Pubblicazioni del Museo entomologico Pietro Rossi* 14(1): 1–114.

- Schawaller W (2010) Order Coleoptera, family Tenebrionidae (with exception of the subfamily Alleculinae). Arthropod fauna of the UAE 3: 253–278.
- Schawaller W, Al Dhafer HM, Fadl HH (2013) *Boromorphus saudicus* sp. n., a new record of the genus from the Arabian Peninsula (Tenebrionidae: Pimeliinae: Boromorphini), Zoology in the Middle East 59(2): 148–151. <https://doi.org/10.1080/09397140.2013.810878>
- Schneider W (1991) New records of Meloidae (Insecta: Coleoptera) from Arabia with Description of a new species. Fauna of Saudi Arabia 12: 273–288.
- Shalaby F (1961) A preliminary survey of the insect fauna of Saudi Arabia. Bull. Soc. ent. Egypte 45: 211–228.
- Sharaf MR, Abdel-Dayem MS, Al Dhafer HM, Aldawood AS (2013) The ants (Hymenoptera: Formicidae) of Rawdhat Khorim Nature Preserve, Saudi Arabia, with description of a new species of the genus *Tetramorium* Mayr. Zootaxa 3709(6): 565–580. <https://doi.org/10.11646/zootaxa.3709.6.6>
- Stack C (2015) Beetles: Biodiversity, Ecology and Role in the Environment. Nova Science Pub Incorporated, New York, 250 pp.
- Švec Z (2010a) Coleoptera, family Leiodidae. Arthropod fauna of the UAE 3: 195–203.
- Švec Z (2010b) Order Coleoptera, family Phalacridae. Arthropod fauna of the UAE 3: 249–252.
- Švihla V (1984) Insect of Saudi Arabia, Coleoptera: Fam. Oedemeridae (Part 2). Fauna of Saudi Arabia 6: 260–266.
- Tag El-din S, Assaeed A and Al-Sheick A (1994) Distribution of range plant communities as influenced by edaphic factors in Raudhat Khuraim. Egyptian Journal of Applied Sciences 9: 69–82.
- Talhok AS (1982) Applied Zoology in Saudi Arabia. A note on the entomophagous fauna of Saudi Arabia. Fauna of Saudi Arabia 4: 525–531.
- Telnov D (2007) Order Coleoptera, family Elateridae. Arthropod fauna of the UAE 1: 270–292.
- Toskina I (1998) Rare and new Anobiidae (Coleoptera) from the Arabian Peninsula. Fauna of Arabia 17: 51–91.
- Uhmann G (1992) Die Anthicidae der Iberischen Halbinsel (Coleoptera, Anthicidae). Mitteilungen der Münchner Entomologischen Gesellschaft 82: 87–180.
- Uhmann G (1998) Anthicidae (Insecta: Coleoptera) from Saudi Arabia with the description of a new species. Fauna of Arabia 17: 93–105.
- Vesey-Fizberald DF (1957) The vegetation of Central and Eastern Arabia. Journal of Ecology 45: 779–798. <https://doi.org/10.2307/2256957>
- Wittmer W (1979) Insects of Saudi Arabia, Coleoptera: Fam. Malachiidae, Dasytidae, Karu-miidae. Fauna of Saudi Arabia 1: 186–192.
- Ziani S, Gudenzi I (2012) Commenti sulla sistematica generica degli Scarabaeini del bacino del Mediterraneo con una chiave dicotomica per il loro riconoscimento (Insecta Coleoptera Scarabaeidae: Scarabaeinae). Romagna Quad. Studi Nat. Romagna 36: 115–158.