

Checklist of ground beetles (Coleoptera: Carabidae) in the middle of Iraq

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ABSTRACT

An update checklist of the ground beetles in the middle of Iraq is presented. This investigation was conducted from October 2020 till September 2021 and revealed 42 species belonging to 32 genera, 17 tribes and 13 subfamilies of Carabidae. In the present checklist, synonyms, locations and global distributions were provided.

Keywords: Carabidae, Checklist, Coleoptera, Ground beetles, Iraq.

Article type: Research Article.

INTRODUCTION

The family Carabidae is a name derived from the Greek name karabos, meaning “horned beetle”, where the Latin name Carabus was used by Carolus Linnaeus, in his famous book, *Systema Naturae* 1758, where they are called ground beetles or carabes or carabids as common names. Ground beetles are predatory insects. This family includes 24 subfamilies, 110 tribes, and more than 40,000 species dating back to 1927 genera described worldwide (Erwin 1985; Laroche & Larivière 2007). Whereas GBIF (2021) in update information reached 41,552 species around the world. Cicindelinae is one of very important group which contain 108 genera (Moravec 2010). The species of this family inhabit mainly Tropical regions (Afrotropical, Neotropical, Oriental and tropical part of Australia), and distributions of some species extend into the Holarctic region, with highest variety in the southern part of Palearctic region (Hackel & Farkac 2013). Carabidae live on the ground, and mainly prey on the ground and soil invertebrates as well as on soil insects including larvae, wireworms, ants, aphids and snails. Also, the members of ground beetles can be found under rocks and stones, in logs and grass (Shibuya *et al.* 2014). Carabid fauna of Iraq is still not well studied, especially that of middle of Iraq regions. Derwesh (1965) listed 60 species in Iraq, then Kaddou (1967) added 13 species, also Swailem *et al.* (1974) added 3 species to this guild. Furthermore, Abdul Rassoul (1976) recorded 12 species, and Al-Ali (1999) reported one species in his investigation, in addition to taxa listed in the newest catalogue by Lobl & Smetana (2003) and Bousquet (2012). Recently, Ramzi (2014) studied 18 species with one species registered as a new record for fauna of Iraq. On the other hand, Al-Ibadi (2021) studied 41 species, three of them were recorded for the first time. The goals of the current checklist is to provide updates credible information for future taxonomic and faunistic studies.

MATERIALS AND METHODS

In this study, the specimens were collected in various localities in the middle of Iraq: Saladin, Wasit, Diyala, Karbala, Najaf, Babylon, Baghdad and Al-Anbar Provinces, for the period from October 2020 to September 2021. The specimens were collected using different methods, such as hand picking, light trap and plastic pitfall trap which is one of the most common methods for collecting these beetles (Skvarla *et al.* 2014). Taxonomic position and scientific names of species were identified by authors using original descriptions, available keys, such as those

by Ross (1948), Ali (1966), Lindroth (1974), Liebherr (1991), Arnett & Thomas (2001), Matalin & Chikatunov (2016), and catalogues such as those by Lobl & Smetana (2003) and Bousquet (2012).

RESULTS AND DISCUSSION

A total of 42 Carabid species in 32 genera belonging to 17 tribes and 13 subfamilies were collected from different fields and grasslands in the middle of Iraq. The genera and species belonged to subfamilies and tribes are given in alphabetical order in the following list:

(1) Subfamily Anthiinae Bonelli, 1813

Tribe Anthiini Bonelli, 1813

Genus *Anthia* Weber, 1801

Synonyms: *Anthiana* Ranfinesque, 1815

Calanthia Obst, 1901

Chilanthia Obst, 1901

Odontathia Obst, 1901

Pachymorpha Hope, 1838

Termophilum Basilewsky, 1950

Thermophila Hope, 1838

Thoracolobus Gistel, 1857

Anthia duodecimguttata Bonelli, 1813

Synonyms: *Termophilum duodecimguttata* (Bonelli, 1813)

Thermophilum duodecimguttata (Bonelli, 1813)

World distribution: United Arab Emirates, Kuwait, Iran, Oman, Jordan, Qatar, Saudi Arabia, Yemen, Egypt (Johnson & Cora, 2018), Iraq (Derwesh, 1963).

Local distribution: Wasit Province: Kut; 2 specimens, 15. iii. 2021.

Collecting method: Pitfall trap.

(2) Subfamily Brachininae Bonelli, 1810

Tribe Brachinini Bonelli, 1810

Genus *Brachinus* Weber, 1801

Synonyms: *Aploa* Hope, 1833

Aploas Desmarest, 1851

Aptinomimus Alluaud, 1935

Brachinoaptinus Lucnik, 1926

Brachynaptinus Csiki, 1933

Brachynidius Reitter, 1919

Brachynolomus Reitter, 1919

Brachinus bayardi Dejean, 1831

Synonyms: *Brachinus biguttatus* Chaudoir, 1842

Brachinus bisignifer A. Costa, 1882

Brachinus guttula Chaudoir, 1842

World distribution: Greece (Ueda 2021), Italy, Uzbekistan, Iran (Sliker *et al.* 2021), Syria, Lebanon and Iraq (Derwesh, 1963).

Local distribution: Diyala Province: Baqubah; 2 specimens, 15. vii. 2021.

Collecting method: Pitfall trap and Hand picking.

Brachinus ejaculans Fischer von Waldheim, 1828

Synonyms: *Brachinus costulatus* Motschulsky, 1844

Brachinus dubius Ballion, 1871

Brachinus graecus Dejean, 1813

Brachinus kozak Ilhin, 1923

Brachinus turcomanus Ilhin, 1923

World distribution: Caucasus, Afghanistan, Iran, Jordan, Syria, Lebanon, Sinai Peninsula of Egypt (Gueorguiev & Gueorguiev 1995) and Iraq (Kaddou 1967).

Local distribution: Diyala Province: Baqubah; 2 specimens, 4. vii. 2021.

Collecting method: pitfall trap and Hand picking.

(3) Subfamily Broscinae Hope, 1838

Tribe Broscini Hope, 1838

Genus *Broscus* Panzer, 1813

Synonyms: *Broschus* Stephens, 1827

Cephalates Gray, 1832

Cephalotes Bonelli, 1810

Cephalotes Dejean, 1828

Nepalobroscus Habu, 1973

Pseudocupes Voet, 1778

Pseudocupis Voet, 1769

Broscus punctatus Dejean, 1828

Synonyms: *Broscus batesi* Semenov, 1891

Broscus davidianus Fairmaire, 1889

Broscus limatus Ballion, 1871

Broscus nepalensis (Hope, 1831)

Percus nepalensis Hope, 1831

Percus punctatus Dejean, 1828

World distribution: Turkey, Russia (Kesdek 2010), Egypt, Afghanistan, Nepal, Saudi Arabia, Yemen (Lobl & Smetana 2003) and Iraq (Derwesh 1965)

Local distribution: Karbala Province: Al-Bubiyat; 10 specimens, 11. x. 2020; and Najaf Province, 15 specimens, 22. viii. 2021.

Collecting method: Hand picking.

(4) Subfamily Carabinae Latreille, 1802

Tribe carabini Latreille, 1802

Genus *Calosoma* Weber, 1801

Synonyms: *Acalosoma* Lafer, 1990

Acamegonia Lapouge, 1929

Acampalita Lapouge, 1929

Acarabomimus Vacher de Lapouge, 1930

Aulacopterum Gehin, 1885

Calosoma auropunctatum (Herbst, 1784)

Synonyms: *Carabus auropunctatum* Herbst, 1784

Campalita auropunctata (Herbst, 1784)

World distribution: Ukraine, Balkan, Peninsula, Sweden, Estonia, Russia (Lindroth 1949) Caucasus, Germany, Poland (Huruk 2002), Kazakhstan, Himalaya, Mongolia, China, Canada, UAS (Burgess & Collins 1917), Arab Emirates, Qatar, Saudi Arabia, Yemen, Egypt, Iran and Iraq (Derwesh 1965) .

Local distribution: Al-Anbar Province: Al- Fallujah City; 3 specimens, 25. vii. 2021.

Collecting method: Pitfall trap and hand picking.

Calosoma imbricatum Klug, 1832

Synonym: *Caminara imbricatum* Klug, 1832

World distribution: Djibouti, Sudan, Chad (Britton 1948), United Arab Emirates, Qatar, Saudi Arabia, Yemen, Egypt, Iran (Felix 2009) and Iraq (Kaddou 1967).

Local distribution: Diyala Province: Baqubah; 9 specimens, 15. vii. 2021, Babylon Province: Hillah; 10 specimens, 1. x. 2020; Baghdad Province: Taji; 10 specimens, 2. vi. 2021 and Al-Anbar Province: Al- Fallujah City; 9 specimens, 2. vii. 2021.

Collecting method: Pitfall trap and hand picking.

(5) Subfamily Cicindelinae Latreille, 1802

Tribe Cicindelini Latreille, 1802

Genus *Cicindela* Linnaeus, 1758

Synonyms: *Ambalia* Jeannel, 1946

Ancylia Rivalier, 1961

Austrocicindela Rivalier, 1963

Bostrichophorus Thomson, 1892

Bostrichophorus Fleutiaux, 1892

Callichroa Agassiz, 1846

Calochroma Motschoulsky, 1862

Cicindela littoralis Fabricius, 1787

Synonyms: *Calomera littoralis* (Fabricius, 1787)

Lophyridia littoralis (Fabricius, 1787)

World distribution: India, Turkey, Morocco, Egypt, Iraq, Saudi Arabia, Syria and Jordan (Lobl and Smetana, 2003).

Local distribution: Diyala Province: Baqubah; 5 specimens, 15. vii. 2021.

Collecting method: Pitfall trap.

Genus *Cylindera* Westwood, 1831

Synonyms: *Apterodela* Rivalier, 1950

Cicindina Adam & Merkl, 1986

Cicindosa Motschoulsky, 1864

Conidera Rivalier, 1961

Cylindella Jacobson, 1924

Cylinderina Rivalier, 1961

Cylindrodera Bedel, 1879

Cylindera arenaria (Fuessli, 1775)

Synonyms: *Cicindela arenaria* Fuessli, 1775

Cicindella litterata Sulzer, 1776

Cicindina arenaria (Fuessli, 1775)

Eugrapha arenaria (Fuessli, 1775)

Taenidia arenaria (Fuessli, 1775)

World distribution: Croatia, Switzerland, Italy (Kierdorf-Traut 2005), Germany, France, Albania, Russia, Myanmar, Ukraine and Hungary (Ueda 2021).

Local distribution: Diyala Province: Baqubah; 9 specimens, 15. vii. 2021.

Collecting method: Pitfall trap.

Genus *Lophyra* Motschulsky, 1860

Synonyms: *Bothrylopyga* Rivalier, 1958

Cahetostyla Ganglbauer, 1892

Eriolophyra Rivalier, 1948

Juengeria Mandl, 1973

Lophyrina Cassola, 1978

Lophyra hilariola Bates, 1874

Synonym: *Cicindela hilariola* Bates, 1874

World distribution: India, Turkey, Syria, Iran and Iraq (Lobl & Smetana, 2003).

Local distribution: Diyala Province: Baqubah; 8 specimens, 15.vii. 2021.

Collecting method: Pitfall trap.

Genus *Myriochila* Motschulsky, 1858

Myriochila melancholica (Fabricius, 1798)

Synonyms: *Cicindela melancholica* Fabricius, 1798

World distribution: Angola, Chad, Congo, Nigeria, Cyprus, India, Egypt, United Arab Emirates, Jordan Tunisia, Algeria, Libya, Syria, Iran (Abdel-Dayem *et al.* 2017) and Iraq (Derwesh 1965) .

Local distribution: Diyala Province: Baqubah; 12 specimens, 6. iv. 2021; Baghdad Province: Abu Ghraib; 6 specimens, 25. x. 2020 and 6 specimens, 15. Vii. 2021.

Collecting method: Pitfall trap.

Tribe Megacephalini Laporte, 1834

Genus *Grammognatha* Motschulsky, 1850

Grammognatha euphratica (Dejean, 1822)

Synonym: *Megacephala euphratica* Dejean, 1822

World distribution: Greece, Spain, Cyprus, Angola, Egypt, Libya, Morocco, Tunisia, India, Jordan, Oman, Yemen, Syria, Turkey (Lobl & Smetana, 2003) and Iraq (Derwesh, 1965)

Local distribution: Baghdad Province: Taji; 4 specimens, 2. vi. 2021 and Wasit Province: Al-Suwaira; 8 specimens, 7. v. 2021.

Collecting method: Pitfall trap and light trap.

(6) Subfamily Callistinae Laporte, 1834

Tribe Chlaeniini Brulle, 1834

Genus *Chlaenius* Bonelli, 1810

Synonyms: *Achlaenius* Mandl, 1992

Agostenus Motschoulsky, 1850

Aeacus de la Ferte-Senectere, 1851

Afrochlaenius Basilewsky, 1965

Agreuter Lepeletier & Serville, 1828

Agrochlaenius Basilewsky & Grundmann, 1954

Agrochlaenius Lucnik, 1933

Chlaenius festivus (Panzer, 1796)

Synonyms: *Carabus festivus* Panzer, 1796

Carabus zonatus Panzer, 1796

Chlaenius caspicus Motschulsky, 1850

Chlaenius fischeri Krynicki, 1829

Chlaenius imitates Reitter, 1895

Chlaenius pseudocaspocus Gridelli, 1925

World distribution: Caucasus, Turkey, Iran, Lebanon, Syria (Gueorguiev & Gueorguiev 1995) and Iraq (Derwesh, 1965).

Local distribution: Baghdad Province: Abu Ghraib; 10 specimens, 25. iii. 2021; Al-Anbar Province: Al- Fallujah City, 15 specimens, 25. vii. 2021.

Collecting method: Light trap and hand picking.

Chlaenius nigricornis (Fabricius, 1787)

Synonyms: *Agostenus nigricornis* (Fabricius, 1787)

Carabus nigricornis Fabricius, 1787

Carabus geoffroae Brahm, 1790
Carabus nitidulus Thunberg, 1784
Carabus upsaliensis Gmelin, 1790
Chlaeniellus nigricornis (Fabricius, 1787)

World distribution: Caucasus, Siberia, Macedonia, Syria (Gueorguiev & Gueorguiev 1995) and Iraq (Al-Ibadi 2021).

Local distribution: Baghdad Province: Abu Ghraib, 6 specimens, 21. iii. 2021; Al-Anbar Province: Al- Fallujah City; 5 specimens, 25. vii. 2021.

Collecting method: Light trap and hand picking.

Chlaenius lucasii Peyron, 1858

Synonyms: *Chlaenius irakensis* Jedlicka, 1959
Chlaenius mesopotamicus (Mandl, 1979)
Pseudochlaeniellus mesopotamicus Mandl, 1979

World distribution: Turkey and Iraq (Ramzi 2014).

Local distribution: Baghdad Province: Abu Ghraib; 1 specimens, 21. iii. 2021; Al-Anbar Province: Al- Fallujah City; 2 specimens, 25. vii. 2021.

Collecting method: Light trap and hand picking.

Chlaenius puncticollis Dejean, 1826

Synonyms: *Chlaenius jedlickai* Mandl, 1991
Chlaenius panjabensis Kirschenhofer, 1998

World distribution: India, Afghanistan, Nepal, Pakistan (Anichtchenko & Kirschenhofer 2017), Iran and Iraq (Azadbakhsh & Nozari 2015).

Local distribution: Al-Anbar Province: Saqlawia; 1 specimens, 4. vi. 2021.

Collecting method: Light trap and hand picking.

Chlaenius circumscriptus (Duftschmid, 1812)

Synonyms: *Carabus circumscriptus* Duftschmid, 1812
Chlaeniellus circumscriptus (Duftschmid, 1812)
Chlaenius africanus Kuntzen, 1919
Chlaenius berevicollis (Chaudoir, 1843)
Chlaenius capensis (Gory, 1833)
Chlaenius cicatricosus (Motschulsky, 1865)

World distribution: Albania, Armenia, Bulgaria, France, Russia, Turkey, Jordan, Tunisia, Egypt, Anatolia, Iran, Kazakhstan, China (Kabak & Liang 2021) and Iraq (Derwesh, 1965)

Local distribution: Wasit Province: Al-Suwaira; 4 specimens, 4. vii. 2021.

Collecting method: Light trap and hand picking.

(7) Subfamily Harpalinae Bonelli, 1810

Tribe Dryptini Bonelli, 1810

Genus *Drypta* Latreille, 1797

Synonyms: *Deserida* Basilewsky, 1960
Deyptella Jeannel, 1949
Goniofryta Jeannel, 1949

Drypta lineola W.S. MacLeay, 1825

Synonyms: *Desera lineola* (W.S. MacLeay, 1825)

World distribution: Japan, Malaysia, China, India, Sri Lanka, Myanmar, Malaysia, Thailand, Cambodia, Vietnam, Indonesia (Jithmon & Sabu 2021) and Iraq (Derwesh 1965)

Local distribution: Baghdad Province: Abu Ghraib; 1 specimens, 15. iv. 2021.

Collecting method: Hand picking.

Tribe Harpalini Bonelli, 1810

Genus *Acinopus* Dejean, 1821

Acinopus picipes (Olivier, 1795)

Synonyms: *Scarites picipes* Olivier, 1795

Acinopus chobauti Puel, 1926

Acinopus emarginatus Chaudior, 1842

Acinopus impunctatus Puel, 1926

Acinopus minutes Brulle, 1832

World distribution: Bulgaria, Turkey (Surgut & Varh 2018), Japan, Malaysia, China, India, Saudi Arabia, Jordan, Yemen, Libya, Egypt (Wrase & Kataev 2016) and Iraq (Derwesh, 1965).

Local distribution: Baghdad Province: Taji; 12 specimens, 2. vi. 2021; Al-Anbar Province: Al-Fallujah City; 7 specimens, 25. vii. 2021.

Collecting method: hand picking.

Genus *Anisodactylus* Dejean, 1829

Synonyms: *Anadaptus* Casey, 1914

Anisodactylius Schum, 1852

Anisodactylus Laporte, 1835

Aplocentroides Ball & Bousquet, 2000

Aplocentrus Leconte, 1847

Cephalogyna Casey, 1918

Gynandrotarsus Ferte-Senectere, 1841

Anisodactylus binotatus (Fabricius, 1787)

Synonyms: *Anisodactylus brevicollis* Chaudoir, 1844

Anisodactylus espinassei Puel, 1931

Anisodactylus matheyi Puel, 1931

Anisodactylus spurcaticornis Dejean, 1829

Carabus binotatus Fabricius, 1787

World distribution: Australia, Afghanistan, Albania, Algeria, Armenia, Azerbaijan, Bahrain, Belarus, Caucasus, Croatia, Cyprus, Denmark, Germany, Greece, Kazakhstan, Kyrgyzstan, New Zealand, Morocco, Netherlands, North Africa, Norway, Poland, Portugal, Romania, Russia, Serbia, Siberia, Slovakia, Slovenia, Syria, Spain, Sweden, Switzerland, Tajikistan, Turkey (Gokturk & Celik 2017) and Iraq (Wrase 2009).

Local distribution: Baghdad Province: Abu Ghraib; 2 specimens, 15. iv. 2021.

Collecting method: Hand picking.

Genus *Daptus* Fischer von Waldheim, 1832

Daptus vittatus Fischer von Waldheim, 1832

Synonyms: *Daptus chinensis* Jedlicka, 1939

Daptus kominecki Bielz, 1851

Daptus labiatus Motschulsky, 1849

Daptus vittiger (Germar, 1823)

Ditonus vittiger Germar, 1823

World distribution: Korea, China, Afghanistan, Armenia, Portugal, Russia, Bulgaria, Cyprus, France, Croatia, Italy, Georgia, Greece, Kazakhstan, Libya, Morocco, Algeria, Tunisia, Egypt, Syria, Turkey, Iran (Chio *et al.* 2016) and Iraq (Derwesh 1965).

Local distribution: Baghdad Province: Abu Ghraib; 3 specimens, 15. iv. 2021.

Collecting method: Hand picking.

Genus *Anomalacantha* Loeblich & Tappan, 1961

Synonyms: *Heteracantha* Brulle, 1835

Heteracantha depressa Brulle, 1835

World distribution: Algeria, Morocco, Saudi Arabia, United Arab Emirates, Egypt, Jordan, Libya, Syria, Iran (Dajoz 1985) and Iraq (Derwesh 1965).

Local distribution: Baghdad Province: Abu Ghraib; 6 specimens, 7. x. 2020; Karbala Province: Al-Bubiyat; 4 specimens, 11. vi. 2021.

Collecting method: Pitfall trap and hand picking.

Genus *Harpalus* Latreille, 1802

Synonyms: *Acardystua* Reitter, 1908

Actephilus Stephens, 1833

Actephilus Reitter, 1900

Actephilus Agassiz, 1846

Amblystus Moschoulsky, 1864

Anisochirus Jeannel, 1946

Artabas Gozis, 1882

Harpalus griseus (Panzer, 1796)

Synonyms: *Carabus griseus* Panzer, 1796

Carabus bicolor Marsham, 1802

Pseudoophonus griseus (Panzer, 1796)

Harpalus reichei Desbrochers des Loges, 1866

Harpalus xinjiangensis Huang & HU & Sun, 1994

Ophonus griseus (Panzer, 1796)

World distribution: China, Austria, France, Portugal, Japan, Russia, Azerbaijan, Armenia, Uzbekistan, Kazakhstan, Turkmenistan, Tajikistan, Vietnam, Ukraine (Ghahari *et al.* 2009), Taiwan, Algeria, Egypt, Morocco, Tunisia, Iran and Iraq (Ghahari 2018).

Local distribution: Baghdad province: Abu Ghraib; 2 specimens, 21. iii. 2021 and 1 specimens, 15. vi. 2021; Wasit Province: Al-Suwaira; 2 specimens, 4. vii. 2021; Najaf; 1 specimens, 1. viii. 2021 and Karbala Province: Al-Bubiyat; 1 specimens, 11. vi. 2021.

Collecting method: Pitfall trap and hand picking.

Harpalus rufipes (DeGeer, 1774)

Synonyms: *Carabus rufipes* DeGeer, 1774

Carabus fuscus Gmelin, 1790

Carabus nigrosericeus Goeze, 1777

Carabus pubescens Muller, 1776

Carabus pulverulentus Rossi, 1790

Carabus ruficornis Fabricius, 1775

Pseudoophonus rufipes DeGeer, 1774

World distribution: UK, Austria, Japan, Algeria, Morocco, Tunisia, Turkey, Iran (Ghahari *et al.* 2009) and Iraq (Derwesh 1965).

Local distribution: Baghdad Province: Abu Ghraib; 10 specimens, 21. iii. and 4 specimens, 2. vi. 2021; Wasit Province: Al-Suwaira; 6 specimens, 4. vii. 2021; Najaf Province; 1 specimens, 1. viii. 2021 and Karbala Province: Al-Bubiyat; 4 specimens, 11. vi. 2021.

Collecting method: Pitfall trap and hand picking.

Genus *Stenolophus* Dejean, 1821

Synonyms: *Agonoderus* Hope, 1838

Agonoderus Dejean, 1829

Amphibia Perroud & Montrouzier, 1864

Astenolophus Habu, 1973

Egadroma Motschulsky, 1855

Stenolophus teutonius (Schrank, 1781)

Synonyms: *Acupalpus teutonius* Schrank, 1781

Carabus teutonius Schrank, 1781

Carabus vaporariorum Fabricius, 1787

Stenolophus aegaeus Muller, 1921

Stenolophus anglicaus Schiodte, 1861

World distribution: UK, Pakistan, Finland, Sweden and Denmark (Clayhills 2020); Jordan and Iraq (Derwesh 1965).

Local distribution: Baghdad Province: Taji; 2 specimens, 2. vi. 2021.

Collecting method: Hand picking.

Tribe Sphodrini Laporte, 1834

Genus *Sphodrus* Clairville, 1806

Sphodrus leucophthalmus (Linnaeus, 1758)

Synonyms: *Carabus leucophthalmus* Linnaeus, 1758

Carabus obsoletus Rossi, 1790

Carabus planus Fabricius, 1792

Carabus springier Paykull, 1790

Sphodrus armeniacus Villa, 1844

World distribution: Macedonia, Caucasus, India, Canary Islands, Turkey, Iran (Ghahari *et al.* 2009) and Iraq (Kaddou 1967).

Local distribution: Baghdad province: Taji; 9 specimens, 6. iv. 2021.

Collecting method: Pitfall trap and hand picking.

(8) Subfamily Lebiinae Bonelli, 1810

Tribe Lebiini Bonelli, 1810

Genus *Cymindis* Latreille, 1805

Synonyms: *Anomaeus* Fischer von Waldheim, 1821

Arrhaeus Motschulsky, 1864

Assadeva Mandl, 1973

Baicalotarus Emetz, 1974

Berus Motschoulsky, 1864

Chaetotarus Reitter, 1923

Cimyndis Oken, 1815

Cymindis andreae Menetries, 1832

Synonyms: *Cymindis georgica* Reitter, 1923

Cymindis imperialis Zoubkoff, 1837

World distribution: Armenia, Afghanistan, Azerbaijan, Cyprus, Georgia, Kazakhstan, Pakistan, Russia, Turkey, Saudi Arabia, Lebanon, Egypt, Yemen, Iran (Namaghi *et al.* 2010) and Iraq (Kaddou 1967).

Local distribution: Baghdad Province: Hay Al-Hussain, 3 specimens, 22. v. 2021.

Collecting method: Hand picking.

Genus *Graphipterus* Latreille, 1802

Synonyms: *Graphiptera* Hope, 1838

Graphipterus Agassiz, 1846

Stagonopterus Chaudoir, 1870

Graphipterus minutus Latrille & Dejean, 1824

World distribution: Syria, East and South Jordan, Kuwait, north Saudi Arabia, Iraq and Iran (Renan *et al.* 2018).

Local distribution: Saladin Province: Balad; 9 specimens, 15. ix. 2020 and Baghdad Province: Taji; 12 specimens, 2. vi. 2021.

Collecting method: Hand picking.

Genus *Glycia* Chaudoir, 1842

Synonym: *Neotarus* Reitter, 1884

Glycia spencei (Gistel, 1840)

Synonyms: *Cymindis spencei* Gistel, 1840

Cymindis ornate Klug, 1832

Glycia karelini Motschulsky, 1844

Glycia krueperi (Reitter, 1884)

Neotarus Krueperi Reitter, 1884

World distribution: Pakistan, Socotra Island (Hajek & Bezdek 2012), Argentina, Spain, Afghanistan, India, Egypt, Tunisia, Yemen, Bahrain, Saudi Arabia and Iraq (Lobl & Smetana, 2003).

Local distribution: Baghdad Province: Abu Ghraib; 1 specimens, 6. iv. 2021.

Collecting method: Hand picking.

Genus *Microlestes* Schmidt-Goebel, 1846

Synonyms: *Blechrus* Motschulsky, 1847

Bomius LeConte, 1851

Microlesthes Antoine, 1941

Microlestes plagiatus (Duftschmid, 1812)

Synonyms: *Blechrus plagiatus* (Duftschmid, 1812)

Dromius lineellus Fischer von Waldheim, 1828

Dromius plagiatus (Duftschmid, 1812)

Lebia plagiata Duftschmid, 1812

Microlestes lineellus (Fischer von Waldheim, 1828)

World distribution: Australia, Czech, Hungary, Italy, Poland, Portugal, Slovakia, Russia, Afghanistan, Kazakhstan, Turkey, India, Iraq (Lobl & Smetana 2003).

Local distribution: Al-Anbar Province: Al- Fallujah City; 1 specimens, 25. vii. 2021 and Baghdad Province: Abu Ghraib; 1 specimens, 21. iii. 2021; Al Shurtah Al rabaa; 1 specimens, 1. ix. 2021.

Collecting method: hand picking and light traps.

(9) Subfamily Platyninae Bonelli, 1810

Tribe Platynini Bonelli, 1810

Genus *Calathus* Bonelli, 1810

Synonyms: *Amphigynus* Haliday, 1841

Bedelinus Ragusa, 1885

Bedelius Ganglbauer, 1892
Bedelius Jacobson, 1892
Calathrus Bonelli, 1810
Fuscoalathus Negre, 1969

Calathus fuscipes (Goeze, 1777)

Synonyms: *Carabus fuscipes* Goeze, 1777

World distribution: Africa, Middle Asia, Europe, North America, Russia, Caucasia, Turkey, Iran (Ghahari *et al.* 2009) and Iraq (Derwesh 1965).

Local distribution: Al-Anbar province: Al- Fallujah City; 5 specimens, 25. vii. and 3 specimens, 5. viii. 2021; Baghdad Province: Abu Ghraib; 3 specimens, 21. iii. 2021; Wasit Province: Al-Suwaira; 2 specimens, 7. v. and 2 specimens, 4. vii. 2021.

Collecting method: Hand picking.

Calathus cinctus Motschulsky, 1850

Synonyms: *Calathus erythroderus* Gemminger & Harold, 1868

Calathus mollis Gemminger & Harold, 1868

Calathus ruficollis Cottes, 1868

World distribution: Croatia, Wales, Ireland, The Netherlands, Belgium, Germany, Poland, Russia, France, Spain, Italy, Malta, Hungary, Romania, Bulgaria, Albania, Greece, Cyprus, Turkey, Ukraine, Caucasus, Iran, Syria, Morocco (Aukema 1995) and Iraq (Abdul Rassoul 1976).

Local distribution: Wasit Province: Al-Suwaira; 1 specimen, 7.v. 2021.

Collecting method: Hand picking.

Genus *Orthotrichus* Peyron, 1856

Synonyms: *Kalchtacha* Morvan, 2002

Metagonum Jeannel, 1948

Trichotarsus Motschulsky, 1864

Trichotarus Motschulsky, 1865

Orthotrichus cymindoides (Dejean, 1831)

Synonyms: *Anchomenus cymindoides* Dejean, 1831

Metagonum cymindoides (Dejean, 1831)

World distribution: Afghanistan, China, India, Syria, Egypt (Abdel-Dayem *et al.* 2017) and Iraq (Abdul-Rassoul 1976).

Local distribution: Wasit Province: Al-Suwaira; 4 specimens, 4. vii. 2021 and Diyala Province: Buhriz; 3 specimens, 6. iv. 2021.

Collecting method: Hand picking.

(10) Subfamily Pterostichinae Bonelli, 1810

Tribe Pterostichini Bonelli, 1810

Genus *Poecilus* Bonelli, 1810

Synonyms: *Americobius* Lucnik, 1915

Ancholeus Chaudoir, 1876

Angoleus Villa & Villa, 1833

Atimus Peringuey, 1896

Carenostylus Chaudoir, 1838

Coelipus Lucnik, 1915

Poecilus wollastoni (Wollaston, 1854)

Synonyms: *Angoleus wollastoni* (Wollaston, 1854)

Atimus crenatostratus Peringuey, 1896

Feronia wollastoni (Wollaston, 1854)

Omaseus wollastoni Wollaston, 1854

World distribution: Spain, Portugal, Chile, Egypt, Saudi Arabia, Kuwait, Yemen, Algeria, Libya, Morocco, Tunisia and Iraq (Lobl & Smetana 2003).

Local distribution: Baghdad province: Abu Ghraib; 6 specimens, 4. iv. 2021.

Collecting method: Pitfall trap and hand picking.

Tribe Zabринi Bonelli, 1810

Genus *Amara* Stephens, 1827

Amara aenea (DeGeer, 1774)

Synonyms: *Amara devincta* Casey, 1918

Amara luciae Antoine, 1945

Amara maculipes Grimmer, 1841

Amara palanda Jedlicka, 1957

Carabus aeneus DeGeer, 1774

World distribution: Albania, Argentina, Australia, Estonia, Finland, France, Germany, Greece, Canada, USA, Georgia, Caucasia, Russia, India, Jordan, Kuwait, Iran (Lobl & Smetana 2003) and Iraq (Abdul-Rassoul 1976).

Local distribution: Baghdad Province: Ghazaliya; 25 specimens, 15. iii. 2021 and Abu Ghraib; 17 specimens, 21. iii. 2021 and Wasit Province: Al-Suwaira; 8 specimens, 7. v. 2021.

Collecting method: Hand picking.

(11) **Subfamily Scaritinae** Bonelli, 1810

Tribe Scaritini Bonelli, 1810

Genus *Distichus* Motschulsky, 1858

Distichus planus (Bonelli, 1813)

Synonyms: *Distichus biskrensis* (Puel, 1938)

Distichus nitidus (Dejean, 1831)

Scarites planus Bonelli, 1813

Scarites biskrensis Puel, 1938

Scarites nitidus Dejean, 1831

World distribution: Azerbaijan, Kazakhstan, France, Germany, Italy, Madagascar, Portugal, Spain, Turkey, Iran, Syria, Saudi Arabia, Egypt, Tunisia, Morocco (Lobl & Smetana, 2003) and Iraq (Derwesh 1965).

Local distribution: Al-Anbar Province: Al- Fallujah City; 1 specimens, 25. vii. 2021; Wasit Province: Al-Suwaira; 1 specimens, 7. v. 2021 and Baghdad Province: Abu Ghraib; 4 specimens, 15. iii. 2021.

Collecting method: Pitfall trap and hand picking.

Genus *Scarites* Fabricius, 1775

Synonyms: *Adialampus* De Gozis, 1882

Broscomorphus Motschoulsky, 1858

Dischistus Portevin, 1929

Glyptomorphus Motschoulsky, 1858

Harpalitea Motschoulsky, 1858

Lophogenius Motschoulsky, 1858

Scarites eurytus Fischer von Waldheim, 1828

World distribution: Germany, Italy, Spain, Turkey, Russia, Armenia, Egypt, Libya, Morocco, Tunisia, India, Kazakhstan, Turkmenistan, Uzbekistan, Syria and Iraq (Lobl & Smetana 2003).

Local distribution: Al-Anbar province: Al- Fallujah City; 2 specimens, 25. vii. 2021 and Baghdad Province: Abu Ghraib; 2 specimens, 21. iii. and 2 specimens, 15. v. 2021.

Collecting method: Pitfall trap.

Scarites subcylindricus Chaudoir, 1843

Synonyms: *Parallelomorphus subcylindricus* (Chaudoir, 1843)

Scarites longipennis Chaudoir, 1855

World distribution: Germany, Spain, Turkey, Afghanistan, Kazakhstan, Uzbekistan, Pakistan, Turkmenistan, Iran, India, Cyprus, Algeria, Egypt, Libya, Tunisia, Iraq, Saudi Arabia, Syria and Yemen (Lobl & Smetana 2003).
Local distribution: Al-Anbar Province: Al- Fallujah City; 7 specimens, 25. vii. 2021 and Baghdad Province: Abu Ghraib; 5 specimens, 21.iii. and 5 specimens, 15. v. 2021.
Collecting method: Pitfall trap and hand picking.

(12) Subfamily Siagoninae Bonelli, 1810

Tribe Siagonini Bonelli, 1810

Genus *Siagona* Latreille, 1804

Synonyms: *Siagonella* Lecordier, 1977
Siagonus Illiger, 1807

Siagona europaea Dejean, 1826

World distribution: Afghanistan, Kazakhstan, Ukraine, Spain, Italy, Caucasia, Russia, Turkey, Iran, India, Libya, Tunisia, Morocco, Syria, Senegal, Sudan (Lobl & Smetana 2003) and Iraq (Derwesh 1965).

Local distribution: Baghdad Province: Abu Ghraib; 2 specimens, 7. v. 2021 and Al Shurtah Al rabaa; 3 specimens, 15. v. 2021.

Collecting method: Hand picking.

(13) Subfamily Trechinae Bonelli, 1810

Tribe Bembidiini Bonelli, 1810

Genus *Bembidion* Latreille, 1802

Synonyms: *Ananotaphus* Netolitzky, 1931
Actedium Mitschoulsky, 1864
Antiperyphanes Jeannel, 1962
Antiperyphus Jeannel, 1962
Archaeophilochthus Ortuno & Arillo, 2010
Argrobracteon Netolitzky, 1942
Bembecidium Agassiz, 1847

Bembidion ambiguum Dejean, 1831

Synonyms: *Bembidium ambigua* Dejean, 1831
Bembidion bifoveolatum Rambur, 1838
Bembidion Hesperus Crotch, 1867
Bembidion mauritanicum Lucas, 1846
Bembidion palumboi Ragusa, 1887
Bembidion variabile Walzl, 1835

World distribution: USA, Russia, Spain, Finland, France, Hungary, Ireland, Italy, Portugal, Scotland, Egypt, Jordan, Syria, Iran (Abdel-Dayem 1998) and Iraq (Kaddou 1967)

Local distribution: Baghdad province: Ghazaliya; 10 specimens, 15. iii. 2021 and 5 specimens, 21. iv. 2021; Wasit Province: Al-Suwaira; 15 specimens, 7. v. 2021.

Collecting method: Hand picking.

Genus *Elaphropus* Motschulsky, 1839

Synonyms: *Amaurotachys* Jeannel, 1946
Barytachys Ghaudoir, 1868
Physotachys Jeannel, 1946
Tachyforceps Netolitzky, 1936
Trepanotachys Alluaud, 1933

Elaphropus fumicatus (Motschulsky, 1851)

Synonyms: *Tachys fumicatus* Motschulsky, 1851

Bembidium emarginatum Nietner, 1858
Bembidium scydmaenoides Nietner, 1858
Elaphropus emarginatus (Nietner, 1858)
Elaphropus fumigatoides (Minowa, 1932)
Elaphropus germinates (Schaum, 1860)
Elaphropus scydmaenoides (Nietner, 1858)

World distribution: Egypt, India, South Korea, Japan, China (Jong - Cheol 1998).

Local distribution: Al-Anbar Province: Al-Fallujah City; 2 specimens, 25. vii. 2021 and Baghdad Province: Abu Ghraib; 2 specimens, 2. x. 2021.

Collecting method: Light trap.

Elaphropus lucasii (Jacquelin du Val, 1852)

Synonyms: *Bembidium lucasii* Jacquelin du Val, 1852

Bembidion guttigerum Reiche & Saulcy, 1855

Bembidium meetallicum Peyron, 1858

Elaphropus copticus (Apetz, 1854)

Elaphropus guttiger (Reiche & Saulcy, 1855)

World distribution: Cyprus, Portugal, Spain, Sudan, Tunisia, Syria, Turkey, Tunisia, Yemen, Algeria, Egypt, Iran, Italy, Lebanon and Morocco (Fagerstrom 2021).

Local distribution: Al-Anbar Province: Al- Fallujah City; 2 specimens, 25. vii. and Baghdad Province: Abu Ghraib; 2 specimens, 5. v. 2021.

Collecting method: Light trap.

Genus *Tachys* Dejean, 1821

Synonyms: *Brachytachys* Basilewsky, 1953

Isotachys Casey, 1918

Merotachys Basilewsky, 1965

Microtachys Casey, 1918

Tachys Stephens, 1828

Tachylopha Motschoulsky, 1862

Tachys micros (Fischer von Waldheim, 1828)

Synonyms: *Bembidium gregarium* Chaudoir, 1846

Dromius micros Fischer von Waldheim, 1828

Eotachys micros (Fischer von Waldheim, 1828)

Paratachys micros (Fischer von Waldheim, 1828)

Tachys caspius Kolenati, 1845

World distribution: Argentina, Australia, France, Germany, Georgia, Hungary, Italy, South Korea, Ukraine, Albania, Spain, Turkey, Egypt, Morocco, Tunisia, Afghanistan, Japan, Kazakhstan, Uzbekistan, Iran (Lobl & Smetana 2003).

Local distribution: Al-Anbar Province: Al-Fallujah City; 1 specimens, 25. vii. 2021 and Baghdad Province: Abu Ghraib; 2 specimens, 5. v. 2021.

Collecting method: Light trap.

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