

Linzer biol. Beitr.	35/2	1147-1157	19.12.2003
---------------------	------	-----------	------------

Contribution to the Knowledge of Carabidae Fauna of Turkey Part 1: Harpalini (Coleoptera, Carabidae, Harpalinae)

M. KESDEK & E. YILDIRIM

A b s t r a c t : This study is based upon material collected from different localities of Turkey between 1968-2002. In this study, 28 species and subspecies belonged to seven genera in the tribe Harpalini. *Harpalus axius subcylindricus* DEJEAN is a new recorded for the Turkish fauna. Distribution of species in the research area, other parts of the Turkey and world is included.

K e y w o r d s : Coleoptera, Carabidae, Harpalinae, Harpalini, Turkey.

Introduction

Anatolia, the Asiatic part of Turkey, is a mountainous mass averaging about 1000 meters in height. It has several climatically distinct regions. The topographic and climatic structure give to the country the opportunity of hosts a rich and diverse fauna and flora.

Carabids, or ground beetles, from a very large family of about 1.500 genera and 28.000 species (BOOTH et al. 1990). They are very variable in shape and colour, but can usually be recognized by the positions of the antennal cleaner and antennal insertions, and by the large metatrochanter. Adult carabids generally live on the ground, although some climb vegetation in search of their prey, and others live in trees. They are usually nocturnal, hiding in leaf litter, or under logs, stones, ect. During the day, but many brightly coloured species are diurnal. They are usually predators on a wide range of in vertebrates, but may be omnivorous or seed feeders. They larvae are active and terrestrial, not usually living in borrows, and occur in the same habitats as adults. They are mostly predacious, but some are phytophagous, omnivorous, or ectoparasitic, although they are usually more host specific than their adults. Both adult and larval carabids can be important general predators of invertebrate pests in agricultural systems.

GANGLBAUER (1905), CSIKI (1932), JUNK (1950), ÖNCÜER (1991), KATAEV (1993), KATAEV & WRASE (1995), HURKA (1996), TAGLIANTI & CASALE (1999) and TAGLIANTI & ZAPPAROLI (1999) recorded and described several new species and subspecies from Turkey.

All taxa and provinces of the collected specimens are given in alphabetical order in the following list.

Results

In this study, 28 species and subspecies of seven genera belonged to Harpalini tribe of Carabidae were reported in Turkey.

Genus *Cryptophonus* BRANDMAYR & ZETTO BRANDMAYR 1981

Cryptophonus litigiousus DEJEAN 1829

Distribution in Turkey: Mediterranean region (TAGLIANTI & CASALE 1999).

Distribution in the world: Mediterranean countries (TAGLIANTI & CASALE 1999).

Material examined: Erzurum: University field, 1850 m, 14.IV.1998, 1♀; 17.IV.2000, 6♀, 11♂; 29.IV.2000, 2♀, 1♂; 23.IV.2000, 5♀, 4♂; Nenehatun, 1800 m, 21.IV.2002, 1♂; Ilica, Atlıkonak, 1900 m, 11.VI.2000, 1♀, 2♂; Rizekent, 1900 m, 16.VI.1998, 1♂; Horasan, 1800 m, 4.VI.2000, 6♂; Şenkaya, Sindran, 1750 m, 26.IX.2000, 1♂. Kars: Sankamış, Karakurt, 1900 m, 02.V.2000, 4♀, 6♂; 26.IX.2000, 5♀, 7♂; 18.IV.2002, 3♀, 3♂.

Genus *Harpalus* LATREILLE 1802

Harpalus affinis (SHRANK 1781)

Synonym: *Harpalus proteus* PAYKULL 1790; *H. azureus* PANZER 1801; *H. confusus* DEJEAN 1829; *H. confusus* ab. *viridulus* FOURCROY 1785; *H. vulgaris* DE GEER 1774; *H. aeneus* FABRICIUS 1792 (JUNK 1950, HURKA 1996); *Harpalus weiratheri* G. MULLER 1931 (TAGLIANTI & CASALE 1999).

Distribution in Turkey: Anatolia (no locality) (TAGLIANTI & ZAPPAROLI 1999).

Distribution in the world: Europe, Siberian (Mexico) (JUNK 1950); Asia Minor, Caucasus, Near East, Iran, Central Asia, Kazakhstan, Mongolia, Siberia up to Chita and Yakutia in the east (GUEORGUIEV & GUEORGUIEV 1995); North America, Czech and Slovak Republics (HURKA 1996); Asiatic-European (TAGLIANTI & CASALE 1999).

Material examined: Ardahan: 20.V.1972, 3♀, 2♂. Artvin: 02.VII.1996, 1♀. Kars: Selim, 24.VIII.1992, 4♀, 1♂. Trabzon: Kadırğa, 13.VIII.1993, 1♂.

Harpalus attenuatus (STEPHENS 1828)

Synonym: *Harpalus consentaneus*; *H. maxillosus* DEJEAN 1829; *H. picilabris* STEPHENS 1832; *H. hespericus* ROSH. 1856; *H. intermedius* DESBR. 1865; *H. arenicola* WESMAEL 1872; *H. latitibia* REY 1886 (JUNK 1950).

Distribution in the Turkey: Anatolia (no locality) (TAGLIANTI & CASALE 1999).

Distribution in the world: Central and South Europe, Asia Minor, Caucasus, North Africa, Mediterranean countries, Madeira (JUNK 1950, GUEORGUIEV & GUEORGUIEV 1995, TAGLIANTI & CASALE 1999).

Material examined: Bingöl: Solhan, 2121 m, Buğlan Pass, 24.VI.2000, 1♀, 1♂.
Erzurum: Karagöbek, 28.VI.2000, 1♂. Sinop: Kadi, 12.VII.1998, 1♂.

***Harpalus axioides* KATAEV 1991**

Distribution in the Turkey: Anatolia (no locality) (TAGLIANTI & CASALE 1999)

Distribution in the world: Anatolia (TAGLIANTI & CASALE 1999).

Material examined: Erzurum: Horasan, 04.VI.2000, 1♀, 1♂; University field, 17.IV.2000, 1♂; 11.V.2000, 1♂; Şenkaya, Çatalema, 2200 m, 1♀.

***Harpalus axius subcylindricus* DEJEAN 1842**

Synonym: *Harpalus axius avarus* SCH. 1930; *H. axius amoriformis* MOTSCH. 1844; *H. pumilis* DEJ. 1829 nec STURM 1818 (JUNK 1950).

Distribution in the Turkey: New for the Turkish fauna.

Distribution in the world: Middle Europe, Balkan Peninsula, Armenia and Palaearctic Region (JUNK 1950); North Spain, Czech and Slovak Republics (HURKA 1996); Middle Asia (TAGLIANTI & CASALE 1999).

Material examined: Erzurum: University field, 1850 m, 14.IV.1998, 1♂; 23.IV.2000, 1♀.

***Harpalus calceatus* DUFTSCHMID 1812**

Synonym: *Harapalus nonsignatus* KRYNICKI 1832; *H. calcitratus* MOTSCHULSKY 1844; *H. itoshimonus* HABU 1954 (KRYZHANOVSKIJ et al. 1995).

Distribution in the Turkey: Anatolia (no locality) (TAGLIANTI & CASALE 1999).

Distribution in the world: Ukrainian, Transcarpathia, Middle of Russian Plain, Moldova, Montane Crimea, Ciscaucasia (Western and Eastern), Caucasus Minor, Uplands of Armenia (KRYZHANOVSKIJ et al. 1995).

Material examined: Erzurum: University field, 29.IV.2000, 1♂. Isparta: Çandır, 10.VIII.1996, 1♀.

***Harpalus distinguendus* DUFTSCHMID 1812**

Synonym: *Harpalus psittaceus* FOURCRAY 1785; *H. chlorizans* TORRE 1877; *H. brunneus* TORRE 1877; *H. vireni* SCHILSKY & DEUTSCHE 1888; *H. psittacinus* REITT 1900; *H. psittacinus* ab. *coeruleus* SCHILSKY 1888; *H. coeruleus* REITT 1908; *H. melas* KUHNT 1912 (JUNK 1950).

Distribution in the Turkey: Turkey (no locality) (CSIKI 1932; TAGLIANTI & CASALE 1999).

Distribution in The world: Europe, Middle Mediterranean Countries, Madeira, Azarbaïdžhan, Caucasus and Middle Asia (JUNK 1950); Korea, North-West and North-East China, Iran, Afghanistan, Kazakhstan, South Russia, Russia, North-West Africa and Siberian (KATAEV 1989, 1993); Far East (West Mongolia, North-West China), Czech and Slovak Republics (HURKA 1996); Palaearctic Region (TAGLIANTI & CASALE 1999).

Material examined: Ankara: Şereflikoçhisar, 10.VII.1993, 1♂; Antalya: Serik, 04.VII.1996, 1♀. Erzurum: University field, 1850 m, 14.IV.1998, 1♀, 2♂♂; 08.VI.1968, 1♂, 1♀; 14.IV.1998, 1♀, 2♂♂; 11.V.2000, 1♀, 1♂; 12.IV.2000, 2♀♀, 1♂; Nenehatun, 1800 m, 21.IV.2002, 1♂; Çat, 1800 m, 12.IV.2002, 1♀, 1♂; İspir, 07.VI.1980, 1♂; Oltu, Subatik, 1350 m, 28.III.2002, 1♀, 3♂♂; Pasinler, 1800 m, 02.VII.1985, 1♂; Tortum, 1150 m, 20.VI.1968, 2♀♀, 1♂; 09.V.1974, 1♂; 16.X.1979, 4♂♂; 17.X.1979, 1♂. Trabzon: Esiroğlu, 02.VII.1992, 1♀, 1♂.

***Harpalus fuscicornis* MENETRIES 1832**

Synonym: *Harpalus subvirens* CHAUD. 1846; *H. cyanellus* KRAOTA 1874; *H. cynellus* ab. *setaneus* REITT. 1900 (TAGLIANTI & CASALE 1999).

Distribution in the Turkey: Anatolia (no locality) (HURKA 1996).

Distribution in the world: Middle and South Europe, Middle Mediterranean Countries (JUNK 1950); North-West Africa, South of Middle Europe, Austria and East of Middle Asia (HURKA 1996); Middle Asia (TAGLIANTI & CASALE 1999).

Material examined: Artvin: Yusufeli, İşhan, 05.V.1978, 1♀, 2♂♂. Denizli: Çal, Gömce, 30.VI.1997, 1♂. Erzurum: University field, 1850 m, 20.VII.1970, 1♂; 20.IV.2000, 4♀♀, 2♂♂.

***Harpalus fuscipalpis* STURM 1818**

Synonym: *Harpalus constrictus* DUFT. 1812; *H. unicolor* MOTSCH. 1844; *H. castilianus* VUILLEFORAY 1866; *H. brunneus* TORRE 1877; *H. brunneus vittatus* GEBLER 1833; *H. brunneus semicastaneus* REITT 1900; *H. brunneus costaneipes* SCH. 1926 (JUNK 1950).

Distribution in the Turkey: Anatolia (no locality) (TAGLIANTI & CASALE 1999).

Distribution in the world: Siberian, Caucasus, Middle and South Europe, Mediterranean Countries, Turkistan, Mongolia (JUNK 1950); East Tibet, Middle Europe, Siberian and Slovak Republic (HURKA 1996); Palaearctic Region (TAGLIANTI & CASALE 1999).

Material examined: Artvin: Yusufeli, İşhan, 05.V.1978, 1♀, 1♂. Erzurum: University field, 1850 m, 17.IV.2000, 1♂. Konya: Güneysınır, Örenboyalı, 28.V.2002, 2♀♀, 3♂♂.

***Harpalus quadratus* CHADOIR 1846**

Synonym: *Harpalus quadratus* TSCHITSCHERINE 1897 (TAGLIANTI & CASALE 1999).

Distribution in the Turkey: Kars, Ardahan (ÖNCÜER 1991).

Distribution in the world: Armenia, Caucasian (TAGLIANTI & CASALE 1999).

Material examined: Ardahan: 20.VI.1972, 2♀♀, 3♂♂.

***Harpalus raddei* TSCHITSCHERINE 1897**

Synonym: *Harpalus raddei erivanus* REITT. 1900 (TAGLIANTI & CASALE 1999).

Distribution in the Turkey: Sivas (ÖNCÜER 1991).

Distribution in the world: Caucasus (JUNK 1950); Turkey (ÖNCÜER 1991); Europe (TAGLIANTI & CASALE 1999).

Material examined: Ardahan: 20.VI.1972, 2 ♀♀, 5 ♂♂. Denizli: Çal, Gömce, 30.VI.1997, 1 ♀, 1 ♂. Elazığ: Temur, 04.VII.1992, 1 ♂. Erzurum: University field, 1850 m, 14.IV.1998, 1 ♀; 22.IV.2002, 1 ♀; 23.IV.2000, 1 ♂; 11.V.2000, 1 ♀; 24.IV.2002, 2 ♀♀, 3 ♂♂; Esendere, 1900 m, 1 ♀; Hamamderesi, 1750 m, 20.VII.1997, 2 ♀♀, 2 ♂♂; Horasan, 1800 m, 4.VI.2000, 1 ♀; Ilıca, 1750 m, 05.IX.1992, 1 ♀; Oltu, 1750 m, 25.VI.1971, 1 ♀; Olur, Yeşilbağlar, 24.X.2002, 1 ♂; Pasinler, 1800 m, 06.IV.1968, 1 ♀; 09.IV.1968, 1 ♀; 13.VI.1968, 1 ♀, 3 ♂♂; 20.VI.1968, 3 ♀♀, 3 ♂♂; 11.VII.1979, 1 ♀; 16.X.1979, 1 ♀, 3 ♂♂; 02.VII.1984, 1 ♂; Tortum, 1150 m, 5.V.1974, 1 ♀, 2 ♂♂; Şenkaya, Ormanlı, 1800 m, 20.V.1994, 1 ♀; Sındıran, 2100 m, 26.IX.2000, 1 ♀; Uzundere, 1050 m, 04.III.2002, 1 ♂. Gümüşhane: 01.X.1992, 1 ♀, 2 ♂♂. Kars: 09.X.1992, 1 ♀, 4 ♂♂; Sankamuş, 02.V.2000, 1 ♂; Karakurt, 1550 m, 18.IV.2002, 2 ♀♀, 4 ♂♂.

Harpalus rubripes DUFTSCHMID 1812

Synonym: *Harpalus fulvipes* DUFT. 1812; *H. azureus* STURM 1818; *H. glaberellus* STURM 1818; *H. azurescens* GYLL. 1827; *H. chloropierus* STEPH. 1928; *H. nobilitatus* FALDERM. 1835; *H. amoenus* HEER 1838; *H. truncatus* ROSH. 1842; *H. subtruncatus* SCHAUF 1916; *H. subtruncatus* ab. *niger* J. FRIV. 1889; *H. subtruncatus* ab. *nigrocoeruleus* STEPH. 1828; *H. sobrinus* DEJ. 1829; *H. alpestris* REDT. 1849 (JUNK 1950).

Distribution in the Turkey: Turkey (no locality) (CSIKI 1932, JUNK 1950).

Distribution in the world: Europe, Anatolia, Syria, Caucasus, Siberia and China (JUNK 1950); Iberian Peninsula, North America, Czech and Slovak Republics (HURKA 1996); Asia and Europe (TAGLIANTI & CASALE 1999).

Material examined: Ardahan: 20.VI.1972, 1 ♂. Erzurum: University field, 1850 m, 29.IV.2000, 1 ♀; Horasan, 1600 m, 04.VI.2000, 1 ♂; Ilıca, Atikonak, 1800m, 11.VI.2000, 3 ♀♀, 2 ♂♂; Oltu, Sarsaz, 1450 m, 28.V.1997, 3 ♀♀, 2 ♂♂; Şenkaya, Sındıran, 2100 m, 26.IX.2000, 1 ♀; Tortum, Söğütlü, 1650 m, 04.VI.1998, 1 ♀. Kars: Sankamuş, Karakurt, 1550 m, 26.IX.2000, 1 ♀.

Harpalus serripes QUENSEL 1806

Synonym: *Harpalus fuscipalpis* STEPHENS 1828; *H. stygius* STEPHENS 1832; *H. tenebrosus* STEPHENS 1832; *H. convexus* FAIRM-LABOULB. 1854; *H. nigripes* TORRE 1877, *H. picipes* TORRE 1877; *H. picipes* ab. *suchalybaeus* REITT. 1900; *H. picipes affinis* BALLION 1878 (JUNK 1950).

Distribution in the Turkey: Kayseri (GANGLBAUER 1905).

Distribution in the world: Middle and South America, North Africa, Caucasus, Turkistan, Dalmatian (JUNK 1950); Caucasus, Middle Asia, Czech and Slovak Republics (HURKA 1996); Palaearctic Region (TAGLIANTI & CASALE 1999).

Material examined: Amasya: 03.VIII.1993, 1 ♀. Ankara: Şereflikoçhisar, 10.VIII.1983, 1 ♀, 4 ♂♂. Erzincan: 22.VI.1980, 1 ♂. Erzurum: University field, 1850 m, 22.V.1996, 2 ♀♀; 09.VI.1996, 1 ♂; 23.IV.2000, 1 ♀; Horasan, 1800 m, 04.VI.2000, 1 ♂; Oltu, Subatık, 1300 m, 28.III.2002, 2 ♀♀, 1 ♂; Pasinler, 1800 m, 02.VII.1983, 2 ♀♀, 8 ♂♂; Tortum, Söğütlü, 1450 m, 18.VIII.1969, 1 ♂; 10.IV.1973, 1 ♂; 1850 m, 01.VI.1983, 1 ♀, 1 ♂; 11.VI.1983, 2 ♂♂; 04.VI.1998, 1 ♀, 1 ♂; Uzundere, 1050 m, 12.V.1996, 1 ♀, 1 ♂. Kars: Kağızman, 30.IV.1980, 2 ♀♀; Sankamuş, Karakurt, 1550 m, 02.V.2000, 1 ♀; Sarız, 03.VIII.1990, 1 ♂. Konya: Güneysınır, Gürağaç, 1020 m, 02.III.2002, 1 ♀. Muğla: 12.VIII.1979, 1 ♂.

Harpalus smaragdinus DUFTSCHMID 1812

Synonym: *Harpalus petifii* DUFT. 1812; *H. perplexus* GYLL. 1827; *H. coffer* STEPHENS 1828; *H. discoides* KAF. 1837; *H. compromus* MOTSH. 1844 (JUNK 1950).

Distribution in the Turkey: Turkey (no locality) (CSIKI 1932).

Distribution in the world: West Asia (JUNK 1950); Czech and Slovak Republics (HURKA 1996); Asia, Europe (TAGLIANTI & CASALE 1999).

Material examined: Ardahan: 20.V.1972, 1♀. Artvin: Şavşat, 07.IX.1995, 1♀; Veli, 08.VII.1998, 1♂. Erzurum: University field, 1850 m, 27.VIII.1996, 1♀; 14.VII.1996, 1♀; İspir, 1900 m, 07.VI.1980, 3♀♀, 9♂♂; Oltu, 1750 m, 18.IV.1972, 1♀, 2♂♂; Subatık, 1300 m, 28.III.2002, 2♂♂; Tortum, 1150 m, 1♂, 05.V.1996.

Genus *Harpalophonus* GANGLBAUER 189

***Harpalophonus circumpunctatus* CHAUDOIR 1892**

Synonym: *Harpalus (Lasioharpalus) anatolicus* TSCHITSCHERINE 1898 (TAGLIANTI & CASALE 1999).

Distribution in the Turkey: North-East Anatolia (KATAEV 1993); Turkey (no locality) (TAGLIANTI & CASALE 1999).

Distribution in the world: Middle and South-East Europe, South-West Palaearctic Region (KATAEV 1984); Central Europe (TAGLIANTI & CASALE 1999).

Material examined: Erzurum: University field, 1850 m, 29.IV.2000, 2♀♀, 2♂♂; Çat, 1800 m, 26.IX.2000, 1♀, 1♂; 28.III.2002, 1♀; Şenkaya, Çatalelma, 1750 m, 26.IX.2000, 1♂; Tortum, 1150 m, 10.IV.1972, 1♀, 1♂.

Genus *Ophonus* DEJEAN 1821

***Ophonus ardosiacus* (LUTSHNIK 1922)**

Synonym: *Ophonus stictus* HIEKE & WRASE 1988 (GUEORGUIEV & GUEORGUIEV 1995); *O. obscurus* DEJEAN 1829; *O. rotundicollis* (FAIRMAIRE et al. 1854); *O. quadricollis* (SCHAUBERGER 1926); *O. pseudoquadricollis* (SCHAUBERGER 1932); *O. wautieri* DAVID et al. 1964; *O. stictus* FREUDE 1774 (KRYZHANOVSKIJ et al. 1995).

Distribution in the Turkey: North-East Anatolia (TAGLIANTI & CASALE 1999).

Distribution in the world: Azores, Madeira, North Africa, European portion of the Mediterranean Subregion, Asia Minor, West, South and Central Europe, Czech and Slovak Republics (GUEORGUIEV & GUEORGUIEV 1995, HURKA 1996); Europe, Mediterranean (TAGLIANTI & CASALE 1999).

Material examined: Çankırı: Eskipazar, 16.IX.1984, 1♀. Erzurum: Uzundere, Yayla, 2120 m, 17.V.2003, 4♀♀, 2♂♂. İğdir: Melekli, 24.VIII.1997, 1♂.

***Ophonus azureus* (FABRICIUS 1775)**

Synonym: *Ophonus koniensis* SCHAUBERGER 1927; *O. chlorophonus* PANZER 1801; *O. cyanescens* D. TORRE 1889; *O. chlorescens* D. TORRE 1877; *O. chlorescens bohemicus* ROUBAL 1917; *O. chlorescens ruficrus* MENETR. 1832; *O. chlorescens agnatus* CHAUD 1846; *O. chlorescens acracyanus* CHAUD 1927; *O. chlorescens cyaneus* BALLION 1878; *O. chlorescens similis* DEJ. 1829; *O. chlorescens supremus* SCHAUBERGER 1926 (JUNK 1950).

Distribution in the Turkey: Turkey (no locality) (CSIKI 1932, JUNK 1950).

Distribution in the world: Middle and South Europe, Asia, Turki-

stan, Italy, Spain, Hungary, Armenia, Azerbaidzhan, Turkmenia (JUNK 1950); North-West Africa, West of Middle Asia, Czech and Slovak Republics (HURKA 1996); Central Asia, Europe, Mediterranean Countries (TAGLIANTI & CASALE 1999).

Material examined: Bayburt: Kop Pass, 07.X.2001, 2♂♂, 3♀♀. Erzurum: Karagöbek, 1950 m, 28.VI.2000, 3♀♀, 10♂♂; Horasan, 1800 m, 04.VI.2000, 3♀♀, 1♂; Ilıca, Atlikonak, 1900 m, 11.VI.2000, 1♀, 1♂. Sinop: Kadi, 12.VII.1997, 1♂. Trabzon: Maçka, 17.VII.1996, 1♀.

Ophonus convexicollis MENETRIES 1837

Synonym: *Ophonus annulatus* CHAUD. 1837; *O. pleuralis* REITT. 1887; *O. karbi* SCHAUBERGER 1927 (JUNK 1950).

Distribution in the Turkey: Turkey (no locality) (CSIKI 1932, JUNK 1950).

Distribution in the world: Caucasus, Armenia, Azerbaidzhan, Georgia, and Syria (JUNK 1950); Europe (TAGLIANTI & CASALE 1999).

Material examined: Erzurum: University field, 1850 m, 14.V.1998, 1♂; Tortum, Söğütü, 1650 m, 04.VI.1998, 1♀.

Ophonus oblongus (SCHAUM 1858)

Synonym: *Ophonus langloisi* PEYRAN 1858; *O. carteroides* ZURCHER 1911; *O. cilicicus* CSIKI 1932 (TAGLIANTI & CASALE 1999).

Distribution in the Turkey: İçel (ÖNCÜER 1991); Anatolia (no locality) (TAGLIANTI & CASALE 1999).

Distribution in the world: Anatolia (TAGLIANTI & CASALE 1999).

Material examined: Mus: 11.VII.1996, 1♂. Sinop: Kadi, 12.VII.1997, 1♀.

Ophonus rufibarbis (FABRICIUS 1792)

Synonym: *Ophonus subpunctatus* STEPHANS 1828 (JUNK 1950).

Distribution in the Turkey: Anatolia (no locality) (TAGLIANTI & CASALE 1999).

Distribution in the world: North Africa, East of Middle Asia, Czech and Slovak Republics (HURKA 1996), Europe, Mediterranean Countries (TAGLIANTI & CASALE 1999).

Material examined: Erzurum: Hamamderesi, 20. IV. 2003, 2♀♀; Pasinler, 1800 m, 02. VII. 1983, 1♂. Kars: Sankamış, Karakurt, 15. VIII. 2002, 2♀♀.

Ophonus sabulicola PANZER 1796

Synonym: *Ophonus azureus* OL. 1795; *O. oblitus* DUFT. 1812; *O. coelestinus* MOTSCH. 1850; *O. coeruleus* D. TORRE 1877; *O. atrovirens* D. TORRE 1877; *O. atrovirens hispanicus* SCHAUBERGER 1926; *O. atrovirens ponticus* SCH. 1817; *O. atrovirens columbinus* GERMER 1817; *O. atrovirens calabrus* SCH. 1900; *O. atrovirens inaequalis* REITT. 1900 (JUNK 1950).

Distribution in the Turkey: Turkey (no locality) (CSIKI 1932, JUNK 1950).

Distribution in the world: Middle Europe, Caucasus, Siberia, Spain,

South France, Romania, North of Italy, Balkan Peninsula (JUNK 1950); Iberian Peninsula, West and Central Europe, North of Middle East, Middle Asia (HURKA 1996); Europe (TAGLIANTI & CASALE 1999).

Material examined: Erzurum: Ilca, Athikonak, 1800 m, 11.VI.2000, 1♂, 1♀. Sinop: Kadi, 12.VII.1997, 2♂♂, 1♀.

***Ophonus subquadratus* DEJEAN 1829**

Synonym: *Ophonus cordicollis* DEJ. 1829; *Ophonus cordicollis meridionalis* DEJ. 1829 (JUNK 1950).

Distribution in the Turkey: İzmir (ÖNCÜER 1991).

Distribution in the world: Turkey (CSIKI 1932); South Europe, Crimea, Italy, Dalmachia (JUNK 1950); Mediterranean Countries (TAGLIANTI & CASALE 1999).

Material examined: Antalya: Alanya, 31.VII.1997, 1♀. Erzurum: Uzundere, 16.X.2002, 1♀; University field, 1850 m, 15.VII.1997, 1♂; Ilca, Atlikonak, 1900 m, 11.VI.2000, 1♀.

Genus *Parophonus* GANGLBAUER 1892

***Parophonus dia* (REITTER 1900)**

Synonym: *Ophonus dia* GUEORGUIEV 1992 (GUEORGUIEV & GUEORGUIEV 1995).

Distribution in the Turkey: Anatolia (no locality) (TAGLIANTI & CASALE 1999).

Distribution in the world: Anatolia (TAGLIANTI & CASALE 1999); Bulgaria, Asia Minor, Near East (GUEORGUIEV & GUEORGUIEV 1995).

Material examined: Erzurum: Totum, Aksukapı, 16.IV.2002. Osmaniye: Kadirli, Kabayar, 16.VIII.1997, 1♂.

Genus *Pseudoophonus* MOTSCHULSKY 1844

***Pseudoophonus griseus* (PANZER 1797)**

Synonym: *Pseudoophonus bicolor* MARSH. 1802; *P. reichei*, DESBR. 1866 (JUNK 1950); *Harpalus griseus* APFELBECK 1904; *Ophonus griseus* NODELKOV 1909; *Pseudoophonus griseus* NIKOLOVA 1968 (GUEORGUIEV & GUEORGUIEV 1995).

Distribution in the Turkey: North-West Anatolia (TAGLIANTI & CASALE 1999).

Distribution in the world: Palaearctic Region, Greece, (JUNK 1950, TAGLIANTI & CASALE 1999); Europe, North-West Africa, Azores, Asia (from Asia Minor to Korea, Sakhalin and Japan, also Near East and Central Asia) (GUEORGUIEV & GUEORGUIEV 1995); South Kuril Island and Japan, Czech and Slovak Republics (HURKA 1996).

Material examined: Adana: Kozan, 03.IX.1995, 1♀, 4♂♂. Antalya: Manavgat, 10.VIII.1996, 1♀. Çankır: Eskipazarı, 16.IX.1984, 2♀♀, 1♂. Erzurum: 08.VII.1992, 1♀, 1♂. İğdir: 20.IX.1997, 1♂; 19.VI.1998, 1♂. Isparta: Çandır, Yazılıkanyan, 03.VIII.1996, 1♀. İçel: Erdemli, 02.VII.1992, 2♀♀. Malatya: Karakavak, 15.VI.1985, 1♂; 09.VIII.1994, 1♀, 2♂♂. Osmaniye: Kadirli, Kabayar, 17.VII.1997, 1♂. Samsun: Çarşamba, 29.VIII.1995, 1♀. Sinop: Kadi, 12.VII.1992, 1♂.

***Pseudoophonus rufipes* DE GEER 1774**

Synonym: *Harpalus pubescens* MÜLLER 1776; *Pseudoophonus rufitarsis* FABRICIUS 1775; *P. fuscus* GMEL. 1790; *P. pulverulentus* ROSSI 1790; *P. sericeus* FOURSCROY 1785; *P. sagowskii* LUTSHNIK 1909; *P. sagowskii cribripennis* CHAUD. 1842 (JUNK 1950, TAGLIANTI & CASALE 1999).

Distribution in the Turkey: Northeast Anatolia (KATAEV & WRASE 1995).

Distribution in the world: Palearctic Region (JUNK 1950, TAGLIANTI & CASALE 1999); North America, Czech and Slovak Republics (HURKA 1996).

Material examined: Adana: Kozan, Boztepe, 14.VII.1993, 2 ♀♀, 1 ♂. Antalya: 05.VII.1984, ♂; Turunçova, 11.VIII.1995, 2 ♀♀. Ardahan: 22.V.1977, 3 ♀♀, 8 ♂♂. Artvin: Arhavi, 02.IX.1994, 2 ♀♀, 3 ♂♂; Şavşat, 05.IX.1997, 3 ♀♀. Bartın: 20.VII.1998, 1 ♀. Bingöl: Solhan, 25.VI.2000, 1 ♀. Bursa: Yenişehir, 19.VII.1984, 1 ♂, 1 ♀. Çankırı: Eskipazar, 16.IX.1984, 3 ♀♀, 5 ♂♂. Diyarbakır: 05.V.1985, 1 ♀. Erzincan: 22.VII.1980, 1 ♂. Erzurum: University field, 1850 m, 05.V.1996, 2 ♂♂; 03.VII.1996, 1 ♀; 04.VII.1996, 1 ♂, 1 ♀; 05.VII.1996, 1 ♀; 14.VII.1996, 2 ♂♂; 15.VII.1996, 1 ♀; 20.VII.1996, 1 ♀; 22.VII.1996, 1 ♂; 26.VII.1996, 1 ♂, 1 ♀; 09.IX.1998, 2 ♀♀, 1 ♂; 14.IX.1998, 1 ♂; 29.V.2000, 1 ♀, 4 ♂♂; Kombina, 1800 m, 05.IX.1988, 1 ♀, 1 ♂; Oltu, Subatık, 1300 m, 28.III.2002, 1 ♂; Pasinler, 1800 m, 08.VII.1981, 1 ♂; 2.VII.1983, 1 ♀, 2 ♂♂. Giresun: 20.VIII.1995, 2 ♀♀, 1 ♂. Gümüşhane: Torul, 21.X.1994, 1 ♂. Iğdır: 19.VII.1998, 1 ♂. Isparta: Çandır, Yazlıkanyan, 13.VIII.1996, 1 ♀, 1 ♂. İçel: Erdemli, Doğulu, 12.VII.1995, 1 ♀. İzmir: Seferihisar, 21.VII.1998, 2 ♀♀. Kahramanmaraş: Elbistan, 30.VII.1988, 4 ♀♀, 2 ♂♂. Karaman: Sudurağı, 18.VII.1994, 2 ♀♀. Kars: Sankamış, 29.V.1972, 1 ♂. Konya: Çumra, 07.VII.1998, 1 ♀, 4 ♂♂; Güneysınır, Gurağaç, 1050m, 01.VII.2000, 1 ♂. Kütahya: 22.VII.1993, 3 ♀♀, 11 ♂♂; Tavşanlı, 10.IX.1994, 1 ♀. Malatya: 22.V.1976, 4 ♂♂; Alişar, 07.VII.1994, 1 ♀, 2 ♂♂. Muğla: 02.VIII.1983, 1 ♀, 1 ♂; Datça, 06.VII.1997, 3 ♀♀, 1 ♂. Tokat: 15.VII.1983, 1 ♂; 15.VII.1983, 1 ♂. Trabzon: Esiroğlu, 03.VII.1992, 1 ♀, 1 ♂; Kadirga, 13.VIII.1993, 1 ♀, 3 ♂♂; Şalpazarı, 19.IV.1998, 1 ♀, 2 ♂♂; Vakfikebir, 01.IX.1995, 1 ♂. Osmaniye: Kadirli, Kabayar, 16.VII.1997, 2 ♀♀, 8 ♂♂. Yalova: 26.VII.1993, 1 ♀, 1 ♂.

Stenolophus* DEJEAN 1821**Stenolophus discophorus* FISCHER VON WALDHEIM 1823**

Synonym: *Stenolophus discophorus* ab. *flaviusculus* MOTSCH. 1864; *S. unicolor* PAULINO 1876; *S. unicolor* ab. *paulino* HEYD. 1891; *S. nigricollis* PULINO 1876; *S. nigricollis* ab. *trintatus* PUEL 1923 (JUNK 1950).

Distribution in the Turkey: Anatolia (no locality) (JUNK 1950, TAGLIANTI & CASALE 1999).

Distribution in the world: Hungary, Middle Europe, Mediterranean Countries, Anatolia, Armenia, Azarbaïdžhan, Georgia (JUNK 1950); South and Middle Europe, East of Middle Asia, Czech Republic (HURKA 1996, TAGLIANTI & CASALE 1999).

Material examined: Erzurum: Horasan, 1800 m, 26. IX. 2000, 1 ♂.

***Stenolophus persicus* MANNERHEIM 1844**

Distribution in the Turkey: Turkey (no locality) (HURKA 1996, TAGLIANTI & CASALE 1999).

Distribution in the world: Turkey (no locality) (HURKA 1996, TAGLIANTI & CASALE 1999).

Material examined: Erzurum: University field, 1850 m, 15.VII.1997, 1 ♀. Trabzon: Arşin, Gölcük, 23.IV.1997, 2 ♀.

***Stenolophus teutonius* (SCHRANK 1781)**

Synonym: *Stenolophus teutonius pseudoabdominalis* MUCHE 1965; *S. teutonius hirticornis* MUCCHE 1965 (GUEORGUIEV & GUEORGUIEV 1995).

Distribution in the Turkey: South-East Anatolia (TAGLIANTI & CASALE 1999).

Distribution in the world: Central and South Europe, Asia Minor, Transcaspia, North Africa, Azores, Canary Island, Madeira (GUEORGUIEV & GUEORGUIEV 1995); Czech and Slovak Republics (HURKA 1996)

Material examined: Antalya: Kumluca, 02.VIII.1993, 1 ♀. Trabzon: Arsin, Gölcük, 23.IV.1997, 1 ♂.

Acknowledgement

The authors wish to thank Mr. Claude Jeanne (France) for determining the reference material.

References

- BOOTH R.G., COX M. L. & R.B. MADGE (1990): Iie Guides to Insects of Importance to Man, 3. Coleoptera. — International Institute of Entomology, pp 384.
- CSIKI E. (1932): Carabidae: Harpalinae VI. — Coleopterorum Catalogus, Ed. S. Schenkling, Pars 121é Junk Publ., 1592.
- GANGLBAUER L. (1905): Coleoptera. In: A. Penther und E. Zederbauer(Edr.), Ergebnisse einer naturwissenschaftlichen Reise zum Erdschias-Dagh (Kleinasien). — Ann. k.k. naturhistor. Hofmus. Wien 20 (2-3): 246-290.
- GUEORGUIEV V.B. & B.V. GUEORGIEV (1995): Catalogue of the ground-beetles of Bulgaria (Coleoptera: Carabidae). — Pensoft, 180-203, Sofia, Bulgaria.
- HURKA K. (1996): Carabidae of the Czech and Slovak Republics. — Print Centrum, a. s., Zlin, pp 565.
- JUNK W. (1950): Coleopterorum Catalogus. — Nos. 1-168 and New series in 24 nos, Berlin and The Hague. 1910-1939.
- KATAEV B.M. (1984): Obzor zezelic podroda *Harpalophonus* GANGLB. (Coleoptera, Carabidae, rod *Harpalus* LATR.). — Entomol. Obozr. 63: 518-532.
- KATAEV B.M. (1989): New data on Carabid beetles of the genera *Pangus* and *Harpalus* (Coleoptera, Carabidae) of Mongolia with revision of some Palaearctic species groups. Insects of Mongolia 10: 188-278.
- KATAEV B.M. (1993): Zuzelicy gruppy *oblitus* roda *Harpalus* LATR., (Col: Carabidae). (Carabids of *oblitus* group of the genus *Harpalus* LATR.). — Entomol. Obozr. 72: 65-95.
- KATAEV B.M. & D.W. WRASE (1995): Three new and little-known Palaearctic Species of the Genus *Harpalus* LATR. (Coleoptera, Carabidae). — Linzer biol. Beitr. 27/1: 319-330.
- KRYZHANOVSKIJ O.L., BELOUSOV I.A., KABAK I.I., KATAEV B.M., MAKAROV K.V. & V.G. SHILENKOV (1995): A Checklist of the Ground-Beetles of Russia and Adjacent Lands (Insecta, Coleoptera, Carabidae). Pensoft, 180-203, Sofia, Bulgaria.
- ÖNCÜER C. (1991): A Catalogue of the Parasites and Predators of Insect Pest of Turkey (Pub. I.). — Ege University Agriculture Faculty, Bornova-İzmi, pp 354.

TAGLIANTI A.V. & A. CASALE (1999): Caraboid beetles (excl. Cicindelidae) of Anatolia, and their biogeographical significance (Coleoptera, Carabidae). — In: *Biogeographia Lavori della Societa Italiana Di Biogeografia. Nouva Serie* 20: 277-400.

TAGLIANTI A.V. & M. ZAPPAROLI (1999): Il contributo italiano alle ricerche faunistiche in Anatolia. — *Biogeographia, Lav. Soc. Ital. Biogeogr.* 20: 7- 30.

Addresses of the authors: Mr. Memiş KESDEK and Prof. Dr. Erol YILDIRIM
Atatürk University, Faculty of Agriculture
Department of Plant Protection
TR-25240 Erzurum, Turkey
E-Mail: mekesdek@hotmail.com
E-Mail: yildirimerol@hotmail.com

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Linzer biologische Beiträge](#)

Jahr/Year: 2003

Band/Volume: [0035_2](#)

Autor(en)/Author(s): Kesdek Memis, Yildirim Erol

Artikel/Article: [Contribution to the Knowledge of Carabidae Fauna of Turkey Part 1: Harpalini \(Coleoptera, Carabidae, Harpalinae\) 1147-1157](#)