

Coleoptera (Insecta) from Ashgabat City and Köýtendag Nature Reserve, with nine first records for Turkmenistan

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Abstract: A list of 60 species group taxa of 15 families of the order Coleoptera collected at Ashgabat City and in Lebap Province (Turkmenistan) is presented. Nine species are reported for the first time for the country: *Bembidion aeneum* Germar, 1823, *Chlaenius extensus* Mannerheim, 1825, *Gyrinus distinctus* Aubé, 1838, *Bisnius piochardi* (Fauvel, 1875), *Gabrius hissaricus* Schillhammer, 2003, *Quedius novus* Eppelsheim, 1892, *Thinodromus behnei* Gildekenov, 2000, *Trichophya pilicornis* (Gyllenhal, 1810) and *Galeruca jucunda* (Faldermann, 1836).

Keywords: Coleoptera, Turkmenistan, new records, first records

Introduction

We give a list of beetles collected from two regions of Turkmenistan in May 2015. The first site is the Botanic Gardens in the Ashgabat City and the second one is the Köýtendag Nature Reserve, Köýtendag Mts., south-eastern Turkmenistan. All material was collected by Prof. Pavel Stoev from the National Museum of Natural History, Bulgarian Academy of Sciences, Sofia, during a Rapid Environmental Assessment survey carried out by an international team of zoologists in the Köýtendag Mts.

The new faunistic information is presented concerning the recent data for the distribution of the Palaearctic beetles (see the sources in part “Material and methods”), thus previous faunistic studies in the region are not considered.

Material and methods

The present study is based on the identification of 245 specimens belonging to 15 families of the order Coleoptera. The arrangement of the families and statuses of the taxa follow the recent editions of the catalogues of the Palaearctic Coleoptera (volumes 4–8, Löbl & Smetana, 2007–2013 and volumes 1 and 3, Löbl & Löbl, 2016–2017). The names of authors who identified the species are given with their shortened first name and full surname at each family (in the part “List of taxa”).

Description of the localities

- № 01: Ashgabat City, Botanic Gardens, 37.954N 58.346E, under stones, leaf litter, dense, mostly dry mixed forest, 22.V.2015.



Figures 1–2 (photos courtesy of Pavel Stoev). Locality № 07: the passage Gyrkgyz dere, a collecting site for *Chlaenius ex-tensus*, *Quedius novus*, *Q. scintillans* and *Cyphogenia aurita aurita*.



Figure 3 (photo courtesy of Pavel Stoev). Locality № 10: the canyon Umbar dere, a collecting site for three species first reported from Turkmenistan: *Chlaenius extensus*, *Quedius novus*, and *Galeruca jucunda*.

- № 02: Lebap Province, Köýtendag District, Köýtendag Town, 37.508N 65.993E, in close proximity to the river, dry, under stones, 24.V.2015.
- № 03: Lebap Province, Köýtendag District, approx. 10 km from Köýtendag Town towards Garklyk Village, desert, in close proximity to the road, dry, 24.V.2015.
- № 04: Lebap Province, Köýtendag District, Gursahun Magdanly Village (= Svintsovoy rudnik), around Kaptarhana Cave (Pigeon Cave), 37.828N 66.410E, grassland, 24.V.2015.
- № 05: Lebap Province, Köýtendag District, Bazardepe Village, Köýtendag Nature Reserve Headquarter, 37.762N 66.369E, grassland, 24.V.2015.
- № 06: Lebap Province, Köýtendag District, Köýtendag Mts., from Köyten Village towards Gyrkgyz dere, some 8–9 km from, close to the road, approx. 950 m a.s.l., under stones, 25.V.2015.
- № 07: Lebap Province, Köýtendag District, Köýtendag Mts., Gyrkgyz dere, along the track, 37.936N 66.595E, under stones, 25.V.2015 (Figs 1–2).
- № 08: Lebap Province, Köýtendag District, Köýtendag Mts., Gyrkgyz dere, Kyrkgyz grotto, 37.938N 66.584E, humid, 25.V.2015.
- № 09: Lebap Province, Köýtendag District, Köýtendag Mts., Hojapil Village, around the Dinosaurs tracks Site, 37.941N 66.627E, under stones, 25.V.2015.
- № 10: Lebap Province, Köýtendag District, Köýtendag Mts., Hojapil Village, Umbar dere (the canyon with the waterfall), along the track, 37.936N 66.653E, under stones, 25.V.2015 (Fig. 3).
- № 11: Lebap Province, Köýtendag District, Köýtendag Mts., Hojapil Village, Bash Bulak 2 source, collected from the source and around it, 37.940N 66.554E, 25.V.2015.
- № 12: Lebap Province, Köýtendag District, Köýtendag Mts., Daray dere, track from the water tank to the source, 37.781N 66.452E, under stones, 26.V.2015.
- № 13: Lebap Province, Köýtendag District, Köýtendag Mts., Daray dere, disused mine galleries close to the source, 37.778N 66.465E, 26.V.2015.



Figures 4–5 (photos courtesy of Pavel Stoev). Localities № 5, № 15 and № 19: grasslands surrounding the Kōýtendag Nature Reserve Headquarter, a collecting site for some widely distributed species, such as *Apotomus rufithorax*, *Syntomus fuscomaculatus*, *Hybosorus illigeri*, *Augyles turanicus*, *Cheirodes brevicollis*, *Gonocephalum rusticum*, *G. setulosum setulosum*, *Chaetocnema hortensis*, and *Sharpia rubida*.

- № 14: Lebap Province, Köýtendag District, Köýtendag Mts., Garlyk Village, Gap Gotan Cave, 37.642N 66.408E, collected mostly in the artificial mine gallery, 27.V.2015.
- № 15: Lebap Province, Köýtendag District, Bazardepe Village, Köýtendag Nature Reserve Headquarter, 37.762N 66.369E, attracted by light at night, 27–28.V.2015.
- № 16: Lebap Province, Köýtendag District, Köýtendag Mts., Garlyk Village, around Gulshirin Cave (= Geofizicheskaya), on shrubs, grass and under stones, 37.673N 66.395E, 28.V.2015.
- № 17: Lebap Province, Köýtendag District, Köýtendag Mts., Garlyk Village, Suuv Oyuk Sinkhole (the sinkhole with the blind loaches), around the sinkhole and in the water, 37.597N 66.406E, 29.V.2015.
- № 18: Lebap Province, Köýtendag District, Köýtendag Mts., Garlyk Village, Khashim Oyuk Cave, 37.642N 66.383E, dry, collected mostly in the entrance hall, 29.V.2015.
- № 19: Lebap Province, Köýtendag District, Bazardepe Village, Köýtendag Nature Reserve Headquarter, 37.762N 66.369E, attracted by light at night, 29.V.2015.
- № 20: Lebap Province, Köýtendag District, Gursun Magdanly Village (= Svintsovoy rudnik), disused mine gallery “Kette-Kamov”, 37.862N 66.489E, humid, 30.V.2015.
- № 21: Lebap Province, Köýtendag District, Bazardepe Village, Köýtendag Nature Reserve Headquarter, near Sauk Kamar Cave, 37.758N 66.348E, 30.V.2015.

Note: Entries № 5, № 15 and № 19 refer to the same locality (Figs 4–5), but to different dates and collecting methods.

Abbreviations for specimen depositories

CHF	Hans Fery collection, Berlin, Germany (property of the Naturhistorisches Museum Wien, Vienna, Austria)
DKCP	David Král collection, Prague, Czech Republic (deposited in NMPC)
HNHM	Hungarian Natural History Museum, Budapest, Hungary (Ottó Merkl)
NMNHS	National Museum of Natural History, Sofia, Bulgaria (Borislav Guéorguiev)
NMPC	Prague National Museum, Prague, Czech Republic (Jiří Hájek)

SCH Michael Schülke collection, Berlin, Germany (property of the Museum für Naturkunde, Berlin, Germany)

ZKDC Zbyněk Kejval collection, Domažlice, Czech Republic

List of the taxa

Family Carabidae (det. B. Guéorguiev)

Acinopus (Acinopus) laevigatus Ménériés, 1832. Material examined: № 06 (1 ♀, NMNHS). Distribution: Balkan Peninsula (Croatia, Bulgaria, Greece), Romania, Moldova, Ukraine, southern part of European Russia, Transcaucasia (Armenia, Azerbaijan), northern Levant (Turkey, Israel), Iran, Iraq, Central Asia (from Turkmenistan and Kazakhstan to Gansu, Xizang and northernmost parts of Pakistan and India).

Apotomus rufithorax Pecchioli, 1837. Material examined: № 15 (2 ♂♂, 1 ♀, NMNHS). Distribution: Mediterranean region (southern Europe, north-western Africa, Levant), Transcaucasia (Armenia, Azerbaijan), Iran, Iraq, Turkmenistan, Uzbekistan, Afghanistan.

Asaphidion transcasicum (Semenov, 1889). Material examined: № 10 (1 ♂, NMNHS). Distribution: Bulgaria, Georgia, Azerbaijan, Iran, Central Asia (from Turkmenistan to Xinjiang), eastern Siberia.

Bembidion (Ocyturanus) dyscheres Netolitzky, 1943. Material examined: № 14 (2 ♂♂, 1 ♀, NMNHS). Distribution: Iran, Central Asia (from Turkmenistan to Tajikistan and Pakistan).

Bembidion (Peryphus) obscurellum turanicum Csiki, 1928. Material examined: № 10 (1 ♀, NMNHS). Distribution: Turkey, Iran, Central Asia (from Turkmenistan to Mongolia and Kashmir), eastern Siberia, northern China.

Bembidion (Philochthus) aeneum athalassicum De Monte, 1953. Material examined: № 15 (1 ♂, 3 ♀♀, NMNHS). Distribution: Ukraine, Azerbaijan, Uzbekistan (Neri & Gudenzi, 2013). Notes: The record from the Köýtendag Nature Reserve is the first one of the halobiont *B. aeneum* (s.l.) Germar, 1823 from Turkmenistan. According to Paolo Neri (pers. comm.),

the ssp. *athalassicum* occurs in environments with clays containing high percentage of NaCl.

Broscus punctatus (Dejean, 1828). Material examined: № 01 (1 ♂, NMNHS). Distribution: southern Levant (Egypt, Sinai), Middle East (Iran, Iraq, Arabian Peninsula), Central Asia (Uzbekistan, Kyrgyzstan, Tajikistan, Afghanistan), Nepal, northern India, south China.

Calathus (Neocalathus) ambiguus ambiguus (Paykull, 1790). Material examined: № 10 (2 ♂♂, 6 ♀♀, NMNHS). Distribution: Europe, western Siberia, Transcaucasia, northern Levant (Turkey, Syria, Israel), Iran, Central Asia (from Turkmenistan and Kazakhstan to Afghanistan).

Calosoma (Caminaria) maderae dsungaricum Gebler, 1833. Material examined: № 01 (1 ♀, NMNHS). Distribution: eastern Mediterranean region (Greece, Turkey, Cyprus, Syria), Romania, Ukraine, southern part of European Russia, Caucasus, Transcaucasia (Armenia, Azerbaijan), Middle East (Iran, Iraq, Kuwait), Central Asia (from Turkmenistan and Kazakhstan to Mongolia, Gansu, Xizang and Pakistan).

Chlaenius (Chlaeniellus) extensus Mannerheim, 1825. Material examined: № 07 (1 ♀, NMNHS); № 10 (1 ♀, NMNHS; Fig. 6). Distribution: Iran, Uzbekistan, Kyrgyzstan, Tajikistan, southern Siberia. Recently, Schnitter (2016) reported “*Chlaenius (Chlaeniellus)* near *extensus*” as a new taxon for Mongolia. Notes: First record from Turkmenistan. Mandl (1983) stated that this species and *Chl. vestitus* (Paykull, 1790) are morphologically very similar and differ only in body size. The same author (ibid.) suggested that the former could be a subspecies of the latter. This needs verification because both species co-occur in Iran and Kopet Dagh (a mountain range situated in north-eastern Iran and south-western Turkmenistan; ibid.; Azadbakhsh & Nozari, 2015). These territories, as well as the south part of Kazakhstan are perhaps the areas where these two taxa interbreed.

Cymindis (Paracymindis) asiabadense kryzhanovskii Emetz, 1972. Material examined: № 14 (5 ♂♂, 1 ♀, NMNHS). Distribution: Turkmenistan, Tajikistan.

Eremosphodrus (Rugisphodrus) dvorshaki Casale & Vereschagina, 1986. Material examined: № 14 (1 ♂,

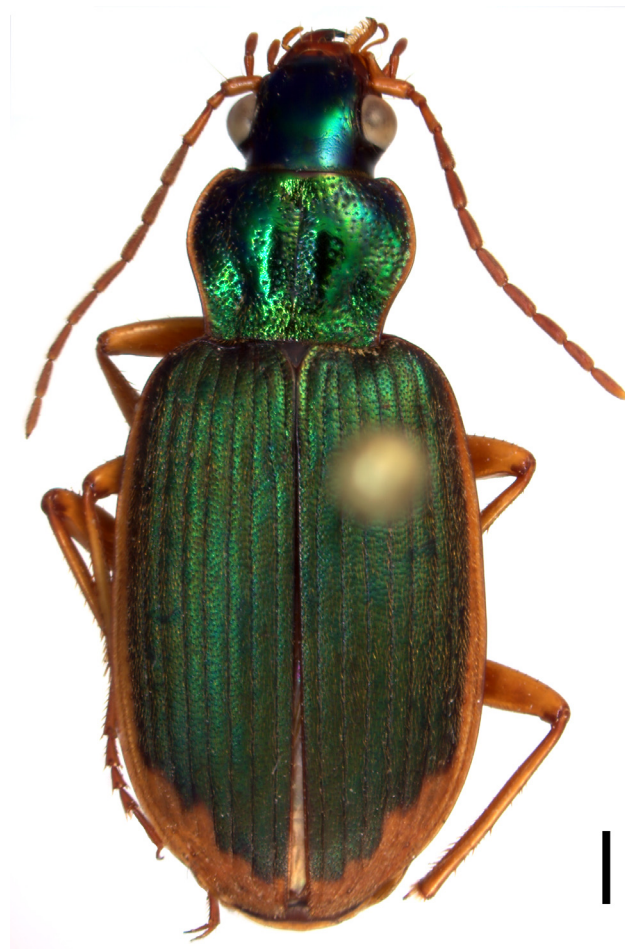


Figure 6. *Chlaenius extensus*. Scale line = 1 mm.

1 ♀, NMNHS). Distribution: Kazakhstan, Kyrgyzstan, Uzbekistan, Turkmenistan.

Parophonus (Ophonomimus) interstitialis (Reitter, 1889). Material examined: № 15 (1 ♀, NMNHS). Distribution: Armenia, Iran, Iraq, Central Asia (from Kazakhstan and Turkmenistan to Pakistan).

Poecilus (Ancholeus) dissors (Tschitschérine, 1893). Material examined: № 15 (1 ♂, NMNHS). Distribution: Turkmenistan, Kyrgyzstan, Afghanistan.

Syntomus fuscomaculatus Motschulsky, 1844. Material examined: № 15 (2 ♀♀, NMNHS); № 21 (1 ♀, NMNHS). Distribution: Mediterranean region, southern part of European Russia, Caucasus, Transcaucasia, Levant, Middle East (Iran, Iraq, Arabian Peninsula), Central Asia (from Turkmenistan and Kazakhstan to Mongolia and Pakistan), Bhutan, India.

Trechus (Trechus) quadristriatus (Schrank, 1781). Material examined: № 10 (1 ♂, 2 ♀♀, NMNHS). Distribution: Europe, north-western Africa, Caucasus, Transcaucasia, Levant, Middle East, Central Asia (from Turkmenistan to Xinjiang).

Family Gyrinidae (det. H. Fery)

Gyrinus (Gyrinus) distinctus Aubé, 1838. Material examined: № 11 (1 ♂, 1 ♀, CHF; 2 ♂♂, NMNHS). Distribution: Europe (except for the northern parts); in Africa: Egypt, Libya and parts of the Afrotropical Region; in Asia: northern Levant (Turkey, Cyprus, Syria, Lebanon), Middle East (Iran, Iraq, United Arab Emirates), Central Asia (Kazakhstan, Uzbekistan, Kyrgyzstan, Mongolia, Afghanistan), China (northern and western regions), Kashmir. Notes: First record from Turkmenistan.

Family Dytiscidae (det. H. Fery)

Hydaticus (Prodaticus) cf. pictus (Sharp, 1882). Material examined: № 17 (2 ♂♂, CHF; 1 ♂, 1 ♀, NMNHS). Distribution: Syria, Middle East (Iran, Iraq, Arabian Peninsula), Central Asia (Kazakhstan and Turkmenistan to Pakistan) (Temreshev, 2015).

Hydroporus planus (Fabricius, 1782). Material examined: № 11 (1 ♀, NMNHS). Distribution: Europe, Morocco, Algeria, Turkey, Lebanon, Iran, Iraq, Turkmenistan, Kazakhstan, Kirgizstan, western Siberia.

Nebrioporus airumilus (Kolenati, 1845). Material examined: № 11 (1 ♂, 1 ♀, CHF; 1 ♂, 2 ♀♀, NMNHS). Distribution: Poland, Ukraine, southern part of Russia, Caucasus, Transcaucasia, Turkey, Israel, Iran, Central Asia (Kazakhstan and Turkmenistan to Mongolia and Pakistan), eastern Siberia, large parts of China, Kashmir, northern India.

Family Staphylinidae (det. M. Schülke)

Achenium quadriceps Eppelsheim, 1889. Material examined: № 15 (7 specimens, NMNHS, 3 specimens SCH); № 19 (1 specimen, SCH). Distribution: southern Russia, Caucasus and Transcaucasia (Armenia, Azerbaijan), Iran, Middle Asia (Afghanistan,

Kyrgyzstan, Kazakhstan, Turkmenistan, Tajikistan, Uzbekistan, China: Xinjian Uygur Zizhiqu) (Assing, 2010).

Bisnius piochardi (Fauvel, 1875). Material examined: № 01 (1 ♂, SCH). Distribution: from east Turkey to Israel, Syria and Iran (Schülke & Smetana, 2015). Notes: First record from Turkmenistan. The collected specimen was compared with a male from eastern Turkey.

Gabrius hissaricus Schillhammer, 2003. Material examined: № 13 (2 ♂♂, NMNHS, 1 ♂, SCH); № 20 (1 ♂, SCH). Distribution: Tajikistan, Turkey (?). Notes: First record from Turkmenistan. The species was described from the Gissar range in Tajikistan. It was later recorded from Erzincan province of Turkey by Özgen & Khachikov (2013). Since a highly similar species, *Gabrius armeniacus* Coiffait, 1966, has been recorded from Armenia, this record requires confirmation.

Quedius (Raphirus) novus Eppelsheim, 1892. Material examined: № 07 (1 specimen, NMNHS); № 08 (1 specimen, SCH); № 10 (3 specimens, NMNHS, 2 specimens SCH); № 13 (1 specimen, SCH). Distribution: recorded from Tajikistan and Uzbekistan (Schülke & Smetana, 2015). Notes: First record from Turkmenistan.

Quedius (Raphirus) scintillans (Gravenhorst, 1806). Material examined: № 07 (1 specimen, SCH). Distribution: western Palaearctic, from North Africa across Europe to the Middle East (Iran, Israel, Lebanon, Syria, Turkey) and Middle Asia (Afghanistan, Turkmenistan, Uzbekistan) (Schülke & Smetana, 2015).

Sepedophilus rufulus (Hochhuth, 1849). Material examined: № 13 (2 specimens, NMNHS, 1 specimen SCH); № 14 (6 specimens, NMNHS, 4 specimens SCH). Distribution: whole Caucasus and Transcaucasia (Russia, Georgia, Azerbaijan, Armenia, north-eastern Turkey), Middle East (Iran, Iraq), Middle Asia (Afghanistan, Turkmenistan, Uzbekistan), northern Pakistan, India (Kashmir) (Schülke & Smetana, 2015).

Thinodromus behnei Gildenkov, 2000. Material examined: № 14 (1 specimen, NMNHS, 1 specimen SCH). Distribution: western part of Tajikistan (Gissar Alai

and Zarafshan Mountain ranges) (Gildenkov, 2001). Notes: First record from Turkmenistan.

Trichophya pilicornis (Gyllenhal, 1810). Material examined: № 13 (2 specimens, NMNHS, 1 specimen SCH). Distribution: whole Palaearctic region (Canary Islands and Spain in the west to east Siberia and the Russian Far East), also adventive in the Nearctic region (Schülke & Smetana, 2015). Records from the eastern part of the Palaearctic and from the Himalaya (Uttarakhand, Himachal Pradesh) require confirmation. The species lives in leaf litter and under bark. It has also been reported from old mines, where it was probably transported with pit wood. Notes: First record from Turkmenistan.

Family Hybosoridae (det. D. Král & B. Guéorguiev)

Hybosorus illigeri Reiche, 1853. Material examined: № 15 (1 ♀, NMNHS). Distribution: Subcosmopolitan (species with an extremely wide distribution, extending from south parts of Europe to India and South Africa including Madagascar; it has been also introduced to large parts of the Nearctic and Neotropical Regions. Widely distributed in Turkmenistan (Nikolajev, 1987).

Family Scarabaeidae (det. D. Král)

Phaeodoretus comptus (Ménétriés, 1849). Material examined: № 15 (2 specimens, DKCP; 2 specimens, NMNHS); № 19 (1 specimen, NMNHS). Distribution: known from whole Middle Asia, Azerbaijan, Iran and Afghanistan. Widely distributed in Turkmenistan (Nikolajev, 1987).

Pleurophorus apicipennis Reitter, 1892. Material examined: № 15 (1 specimen, DKCP; 9 specimens, NMNHS). Distribution: widely distributed in western Asia (from Turkey and Turkmenistan in the west to the Xinjiang in China in the east).

Family Heteroceridae (det. B. Guéorguiev)

Augyles turanicus (Reitter, 1887). Material examined: № 19 (1 ♀, NMNHS; Fig. 7). Distribution: Algeria, Georgia, Levant (Turkey, Syria, Israel), Middle East



Figure 7. *Augyles turanicus*, a typical shore beetle. Scale line = 1 mm.

(Iraq, Iran, Saudi Arabia, United Arab Emirates), Kazakhstan, Turkmenistan, Uzbekistan (Mascagni et al., 2016). Extensive bibliographical data about Turanian species were represented by Sazhnev (2017).

Family Elateridae (det. T. Németh)

Aeoloides figuratus (Germar, 1844). Material examined: № 15 (1 specimen, NMNHS); № 19 (1 specimen, HNHM; 3 specimens, NMNHS). Distribution: Caucasus, Transcaucasia, Arabian Peninsula, Central Asia to Pakistan.

Agriotes (Agriotes) meticulosus Candèze, 1863. Material examined: № 15 (2 specimens, NMNHS). Distribution: Caucasus, Transcaucasia, Arabian Peninsula, Iran to Pakistan.

Family Ptinidae (det. B. Guéorguiev)

Niptus hololeucus (Faldermann, 1835). Material examined: № 14 (29 specimens, NMNHS). Distribution: Cosmopolitan.



Figure 8. *Dichillus seminitidus*, a typical nocturnal beetle. Scale line = 1 mm.

Family Coccinellidae (det. O. Merkl & B. Guéorguiev)

Coccinella (Coccinella) septempunctata Linnaeus, 1758. Material examined: № 02 (1 specimen, NMNHS); № 09 (1 specimen, NMNHS); № 12 (1 specimen, NMNHS). Distribution: whole Palaearctic region (south to northern Vietnam); deliberately introduced to North America.

Family Tenebrionidae (det. O. Merkl)

Adesmia (Adesmia) planidorsis Reitter, 1916. Material examined: № 16 (1 specimen, NMNHS); № 17 (1 specimen, NMNHS). Distribution: Tajikistan, Turk-

menistan, Uzbekistan (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Cheirodes (Pseudanemia) brevicollis (Wollaston, 1864). Material examined: № 15 (1 specimen, NMNHS). Distribution: Mediterranean region (southern Europe, Canary Islands, North Africa, Turkey, Levant), Transcaucasia (Armenia, Azerbaijan), Middle East (Iran, Iraq, Arabian Peninsula), Central Asia (from Turkmenistan to Mongolia, Xinjiang and Pakistan), Sahelian and Saharan parts of Africa (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Cyphogenia (Cyphogenia) aurita aurita (Pallas, 1781). Material examined: № 07 (1 specimen, NMNHS). Distribution: southern part of European Russia, Afghanistan, Iran, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan, China (Xinjiang) (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Dailognatha nasuta (Ménétriés, 1849). Material examined: № 04 (1 specimen, HNHM); № 05 (1 specimen, NMNHS); № 16 (1 specimen, NMNHS). Distribution: Afghanistan, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Dichillus (Dichillus) seminitidus Solsky, 1881. Material examined: № 15 (1 specimen, NMNHS; Fig. 8). Distribution: Afghanistan, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Gonocephalum (Gonocephalum) rusticum (A. G. Olivier, 1811). Material examined: № 05 (1 specimen, NMNHS); № 15 (5 specimens, NMNHS). Distribution: Mediterranean region (southern Europe, Canary Islands, North Africa, Turkey, Levant), Transcaucasia (Armenia, Azerbaijan), Middle East (Iran, Iraq, Arabian Peninsula), Central Asia (from Turkmenistan to Mongolia and China) (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Gonocephalum (Gonocephalum) setulosum setulosum (Faldermann, 1837). Material examined: № 15 (1 specimen, NMNHS). Distribution: Mediterranean region (southern Europe, Canary Islands, North Africa, Turkey, Levant), southern part of European Russia, Caucasus, Transcaucasia, Middle East (Iran, Iraq, Arabian Peninsula), Central Asia (from Turkmenistan

to Afghanistan), Sahelian and Saharan parts of Africa (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Leptodes (Paraleptodes) terminassianae G. Medvedev, 1970. Material examined: № 18 (11 fragmented specimens NMNHS, 1 fragmented specimen, HNHM). Distribution: Turkmenistan, Uzbekistan (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Neopachypterus serrulatus (Reitter, 1904). Material examined: № 12 (1 specimen, NMNHS). Distribution: Afghanistan, Armenia, Azerbaijan, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Pimeliocnema gebieni Reitter, 1909. Material examined: № 16 (1 specimen, NMNHS). Distribution: Tajikistan, Turkmenistan, Uzbekistan (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Pimelipachys laevicollis laevicollis (Reitter, 1893). Material examined: № 04 (1 specimen, HNHM; 2 specimens, NMNHS). Distribution: Kazakhstan, Turkmenistan (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Omophlus sp. Material examined: № 09 (1 specimen, NMNHS).

Opatroides punctulatus parvulus (Faldermann, 1837). Material examined: № 15 (2 specimens, NMNHS). Distribution: Afghanistan, Armenia, Azerbaijan, Iran, Tajikistan, Turkmenistan, Turkey, Pakistan, Uzbekistan, western India (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Thriptera longipilis Reitter, 1895. Material examined: № 03 (1 specimen, NMNHS); № 04 (1 specimen, NMNHS). Distribution: Afghanistan, Tajikistan, Turkmenistan (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Zophosis (Oculosis) punctata punctata Brullé, 1832. Material examined: № 09 (1 specimen, NMNHS). Distribution: Mediterranean region (southern Europe, North Africa, Turkey, Levant), Transcaucasia (Armenia, Azerbaijan), Middle East (Iran, Iraq, Arabian Peninsula), Central Asia (from Turkmenistan to Xinjiang and Pakistan) (Löbl et al., 2008; Medvedev & Nepesova, 1985).

Family Meloidae (det. D. Szalóki)

Ctenopus sinuatipennis (Fairmaire, 1892). Material examined: № 17 (1 specimen, HNHM). Distribution: Turkmenistan, Uzbekistan, China (Xinjiang).

Family Anthicidae (det. Z. Kejval)

Cordicomus margelanicus (Pic, 1893). Material examined: № 15 (1 ♂, 1 ♀, NMNHS; 1 ♂, 1 ♀, ZKDC). Distribution: Ukraine, southern Russia, Turkey, Syria, Azerbaijan, Iran, Iraq, Central Asia (from Turkmenistan to Mongolia and Afghanistan) (Chandler et al., 2008). Notes: In the Palaeartic catalogue (Chandler et al. 2008), the species is listed under *Cordicollis* Marseul, 1879 but is to be treated as *Cordicomus* Pic, 1894 (ICZN 2016, Opinion 2377).

Cyclodinus reitteri (Pic, 1892). Material examined: № 15 (5 ♂♂, 4 ♀♀, NMNHS; 5 ♂♂, 3 ♀♀, ZKDC); № 19 (8 ♂♂, 4 ♀♀, NMNHS; 2 ♂♂, 2 ♀♀, ZKDC). Distribution: southern Russia, Azerbaijan, Syria, Turkmenistan, Uzbekistan, Afghanistan (Chandler et al., 2008).

Family Chrysomelidae (det. B. Guéorguiev)

Chaetocnema (Chaetocnema) hortensis (Geoffroy, 1785). Material examined: № 19 (1 ♀, NMNHS). Distribution: Europe, Macaronesia (Azores, Madeira), Morocco, Tunisia, Levant, Georgia, Azerbaijan, Middle East (Iran, Iraq, Arabian Peninsula), Central Asia (from Turkmenistan to Mongolia), eastern Siberia, Russian Far East, China (Jiangsu).

Galeruca (Galeruca) jucunda (Faldermann, 1837). Material examined: № 10 (1 ♂, NMNHS; Fig. 9). Distribution: Europe (excluding the northern and eastern parts), Caucasus, southern Siberia, Turkey, Azerbaijan, Syria, N Iran, Afghanistan, Mongolia, China (Inner Mongolia, Xizang) (Beenen, 2010; Mirzaei & Nozari, 2016). Notes: First record from Turkmenistan.

Family Curculionidae (det. V. Szénási)

Corigetus sp. Material examined: № 09 (1 specimen, NMNHS).



Figure 9. *Galeruca jucunda*. Scale line = 1 mm.

Hypera (Hypera) postica (Gyllenhal, 1813). Material examined: № 10 (2 specimens, NMNHS). Distribution: whole Europe (including Caucasus and Transcaucasia), North Africa, Turkey to Xinjiang; accidentally introduced to Japan and North America.

Phacephorus nebulosus (Fåhraeus, 1840). Material examined: № 10 (1 specimen, HNHM); № 15 (3 specimens, HNHM; 2 specimens, NMNHS). Distribution: southern part of European Russia, Ukraine, Central Asia to China and eastern Siberia.

Sharpia rubida (Rosenhauer, 1856). Material examined: № 15 (3 specimens, NMNHS); № 19 (2 specimens, NMNHS). Distribution: Mediterranean region (southern Europe, North Africa, Levant), Transcaucasia (Armenia, Azerbaijan), Central Asia (from Turkmenistan, Uzbekistan).

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