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Wasps of the family Vespidae (Hymenoptera) of the Crimean Peninsula

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Abstract

The review of 89 species in 31 genera is given based on 10,500 examined collection specimens of vespid wasps. Main literature reports from Crimea, examined material, and description of general distribution are given for each species. Lectotypes of *Lionotus nigricornis* MORAWITZ, 1885 and *Microdynerus bifidus* MORAWITZ, 1885 are designated. A male of *Paragymnomerus signaticollis tauricus* KOSTYLEV, 1940 is described. Taxonomic status of *Eumenes crimensis* BLÜTHGEN, 1938 and *Katamenes tauricus* DE SAUSSURE, 1855 is considered to be doubtful.

Key words: potter wasps, mason wasps, social wasps, fauna, Crimea, Russia, Eastern Europe.

Zusammenfassung

Basierend auf der Untersuchung von 10.500 Exemplaren aus verschiedenen wissenschaftlichen Sammlungen umfasst die Fauna der Faltenwespen (Vespidae) der Krim 89 Arten aus 31 Gattungen. Für jede Art werden die relevanten Literaturangaben zum Vorkommen auf der Krim, das untersuchte Material und eine Beschreibung der Gesamtverbreitung angegeben. Lektotypen von *Lionotus nigricornis* MORAWITZ, 1885 und von *Microdynerus bifidus* MORAWITZ, 1885 werden designiert. Das Männchen von *Paragymnomerus signaticollis tauricus* KOSTYLEV, 1940 wird beschrieben. Der taxonomische Status von *Eumenes crimensis* BLÜTHGEN, 1938 und *Katamenes tauricus* DE SAUSSURE, 1855 ist unklar.

Резюме

На основании 10 500 изученных коллекционных экземпляров дан обзор 89 видов из 31 рода семейства Vespidae. Для каждого вида приводятся основные указания из Крыма в литературе, изученный материал и информация об общем распространении. Обозначены лектотипы *Lionotus nigricornis* MORAWITZ, 1885 и *Microdynerus bifidus* MORAWITZ, 1885. Описан самец *Paragymnomerus signaticollis tauricus* KOSTYLEV, 1940. Таксономический статус *Eumenes crimensis* BLÜTHGEN, 1938 и *Katamenes tauricus* DE SAUSSURE, 1855 представляется сомнительным.

Introduction

The history of the studying of vespid wasps in Crimea has lasted for more than 200 years. The first period of this studying (the beginning and the middle of the 19th century) was the description of separate species. The first described vespid species from Crimea was *Pterocheilus pallasii* KLUG, 1805, which is currently accepted as *Onychopterocheilus pallasii* (KLUG, 1805). This species was described based on a specimen collected by P.S. PALLAS who investigated the Crimean Peninsula in 1793-1810. The second species of vespid wasps, *Eumenes tauricus* DE SAUSSURE, 1855 was described from Crimea only after 50 years; it is currently accepted as *Katamenes tauricus* (DE SAUSSURE, 1855). The second period (the end of the 19th century) was related to work of F.F. MORAWITZ. He reported 13 species of vespid wasps in the fauna of Crimea (MORAWITZ 1855, 1895), three of them were described by him as new ones (two are accepted today and one is a synonym). The third period (first half of 20th century) was related to work of G.A. KOSTYLEV. He reported 32 species and two additional intraspecific taxa (KOSTYLEV 1928, 1935, 1940), four of them are described as new ones (two are accepted today and two are synonyms). At that time one additional subspecies, *Eumenes dubius crimensis* BLÜTHGEN, 1938 was also described from Crimea. Additionally, three species of *Odynerus* s. l. were reported for Crimea by BIAŁYNICKI-BIRULA (1926). The data published by F.F. MORAWITZ and G.A. KOSTYLEV were summarized later by POPOV (1958). The fourth important period was related to work of N.V. KURZENKO who reported 54 species and one additional subspecies (KURZENKO 1977a,b, 1978, 1981; TOBIAS & KURZENKO 1978).

The fifth period of the studying of vespid wasps in Crimea is the modern investigations (the beginning of the 21st century). AMOLIN (2003) reported 57 species for Crimea at that time and IVANOV et al. (2004) reported 50 species for Eastern Crimea. Then FATERYGA (2010) reported 76 species for Crimea; nine species previously reported by other authors were excluded in that paper and eight ones were added to the Crimean fauna. All papers listed above dealt only with solitary vespid wasps (subfamilies Masarinae and Eumeninae) while social ones (subfamilies Polistinae and Vespinae) were not studied properly. Only POPOV (1958) reported two species of social wasps for Crimea. The first completed list of social wasps was published for the Yalta Reserve (FATERYGA 2002); it included nine species of ten known in Crimea today, the tenth one was added some later (IVANOV & FATERYGA 2003).

Unfortunately, most of the papers published on vespid fauna of Crimea did not contain the data on voucher material, and several species were misidentified in them. The exception are several modern papers dedicated to the fauna of separate territories of Crimea, especially protected ones such are Nature Reserves and the National Park (FATERYGA 2006, 2012; FATERYGA & FILATOV 2006; FATERYGA & IVANOV 2009; FATERYGA & ZHIDKOV 2012). However, they are also quite out of date today due to a large amount of a newly collected material. The purpose of the present investigation is a critical review of vespid wasps of the Crimean Peninsula with reference to collection material and literature reports.

Material and methods

Vespid specimens collected in Crimea were examined in the collections of the Taurida Academy of the V.I. VERNADSKY Crimean Federal University, Simferopol, Russia [CFUS] (former V.I. VERNADSKY Taurida National University), Zoological Institute of the Russian Academy of Sciences, Saint Petersburg, Russia [ZIN], Zoological Museum of the M.V. LOMONOSOV Moscow State University, Moscow, Russia [ZMMU], I.I. SCHMALHAUSEN Institute of Zoology of the National Academy of Sciences of Ukraine, Kiev, Ukraine [IZAN], Kharkov Entomological Society, Kharkov, Ukraine [KHEO], Odessa State Zoo, Odessa, Ukraine [OSZ], Taras SHEVCHENKO National University of Kiev, Kiev, Ukraine [KNU], and private collections of S.A. MOSYAKIN, Simferopol, Russia [SMS], D.V. PUZANOV, Yevpatoriya, Russia [DPYE], and A.V. AMOLIN, Donetsk, Ukraine [AAD]. Several specimens were also examined in some other collections which are given in the text without abbreviation. The total number of examined specimens of vespid wasps collected in Crimea was 10,500; the wasps were collected in all habitat zones of the Crimean Peninsula (Fig. 1).

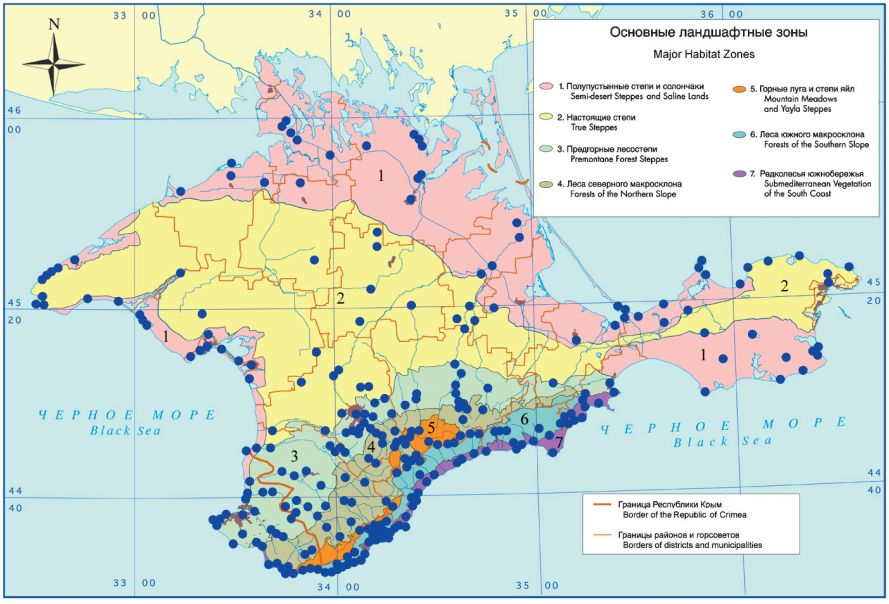

Fig. 1: Points where examined specimens of vespid wasps were collected in Crimea. (The background map was modified from: BIODIVERSITY SUPPORT PROGRAM 1999).

The description of each species has three sections: literature reports of this species from Crimea (including descriptions as new taxa) in main faunistic papers (omitting most papers on bionomics of separate species as well as some duplicate data), examined material, and description of general distribution; some remarks are also added as fourth section in several species. Complete label data (with information on dates and collectors) are given only for the rarest species in the Crimean fauna due to the large amount of the studied material; only localities and total number of collected specimens are given for

most species (with 25 and more collected specimens). The general distribution of species is given according mainly to KURZENKO (1978, 1995, 2012), CARPENTER (1996), CARPENTER & KOJIMA (1997), and GUSENLEITNER (2013a,b) with some additions according to FATERYGA (2017).

The abbreviations of the collectors are as follows: AF, A. FATERYGA; DP, D. PUZANOV; GK, G. KOSTYLEV; SI, S. IVANOV; SM, S. MOSYAKIN; VL, V. LAVRENYUK; VZ, V. ZHIDKOV. The abbreviations of the regions of Russia (in distribution sections) are as follows: EP, European part (without North Caucasus and Crimea); NC, North Caucasus; CR, Crimea; UR, Ural; WS, Western Siberia; ES, Eastern Siberia; FE, Far East.

List of the species of Vespidae from the Crimean Peninsula

Subfamily Masarinae

Celonites tauricus KOSTYLEV, 1935

Celonites abbreviatus (VILLERS): KOSTYLEV 1928: 399 (Karadag); IVANOV & LAVRENYUK 1997: 40 (South Coast); IVANOV & FATERYGA 2003: 114 (Karadag, Mt. Echkidag); IVANOV et al. 2004: 308 (Karadag, Lisya Bay). These records belong to *C. tauricus*.

Celonites abbreviatus tauricus KOSTYLEV 1935: 108 ("Crimea"), neotype (designated by MAUSS et al. 2016: 36), ♀, "Lisya Bay" [Upper Austrian State Museum, Linz, Austria].

Celonites abbreviatus tauricus KOSTYLEV: POPOV 1958: 108 (Karadag); FATERYGA & IVANOV 2009: 67 (Karadag, Lisya Bay); IVANOV & FATERYGA 2009a: 354 (numerous localities); IVANOV & FATERYGA 2009b: 31 (Simferopol); FATERYGA & IVANOV 2010: 182 (numerous localities); IVANOV et al. 2015: 299 (Karadag, Lisya Bay).

Celonites tauricus KOSTYLEV: MAUSS et al. 2016: 36-37 (numerous localities); FATERYGA & IVANOV 2016: 242 (Cape Ayya).

Material examined: Neotype: Feodosiya: Lisya Bay, 16.VI 2010, 1♀, AF [Upper Austrian State Museum, Linz, Austria]. Additional material: 12♀♀, 3♂♂ [CFUS], 1♀, 1♂ [ZIN], 3♀♀, 1♂ [IZAN], 1♀, 1♂ [KHEO], 1♂ [SMS], 1♀, 1♂ [DPYE], 1♀, 1♂ [AAD], 4♀♀, 5♂♂ [private collection of V. MAUSS, Michelfeld, Germany]. Republic of Crimea: Simferopol: Mar'ino; Yalta: Zori Ukrainy (currently Zori Rossii), Sovetskoye; Alushta; Sudak: Veseloye, Cape Meganom; Feodosiya: Lisya Bay, Karadag. Sevastopol: Cape Ayya.

Distribution: Russia (CR), S Europe (Greece), Armenia, Azerbaijan, Turkey, Cyprus, Syria, Iran.

Subfamily Eumeninae

Alastor (*Alastor*) *mocsaryi* (ANDRÉ, 1884)

Alastor atropos LEPELETIER: KOSTYLEV 1928: 407 (Karadag, Otuzy valley). This record belongs to *A. mocsaryi*.

Alastor bieglebeni GIORDANI SOIKA: KURZENKO 1978: 235 (Crimea); TOBIAS & KURZENKO 1978: 161 (Crimea); KURZENKO 1981: 97 (Crimea); IVANOV et al. 2004: 309 (Karadag, Lisya Bay, Sudak); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea).

Alastor biegelebeni GIORDANI SOIKA: AMOLIN 2003: 5 (Crimea).

Alastor beiglebeni GIORDANI SOIKA: FATERYGA 2012a: 109 (Nikita, Mys Martyan Reserve).

Alastor mocsaryi (ANDRÉ): FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut).

Material examined: 182♀♀, 80♂♂ [CFUS], 5♀♀, 2♂♂ [ZIN], 26♀♀, 4♂♂ [ZMMU], 22♀♀, 1♂ [IZAN], 2♀♀ [KHEO], 8♀♀, 4♂♂ [OSZ], 1♀ [KNU], 1♀, 2♂♂ [SMS], 2♀♀, 1♂ [DPYE], 2♀♀, 1♂ [AAD], 1♀ [State Natural History Museum of V.N. Karazin Kharkov National University, Kharkov, Ukraine]. Republic of Crimea: Chernomorskoye distr.: Kipchak, Belyaus; Saki distr.: Pribrezhnoye; Yevpatoriya: Mirnyy; Yevpatoriya – Simferopol; Bakhchisaray distr.: Rechnoye, Furmanovka; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Dubki, Urozhaynoye, Dobroye, Krasnolesye; Belogorsk distr.: Karasevka, 3-5 km S Karasevka, Krasnoselovka; Kirovskoye distr.: Staryy Krym; Yalta: Mukhalatka (currently Oliva), Parkovoye, Katsiveli, Zori Ukrainy (currently Zori Rossii), Limeneiz (currently Goluboy Zaliv), Simeiz, Cape Aytodor, Yalta, Gruzport, Nikita, Mys Martyan Reserve, Artek; Alushta: Mt. Demerdzhi, Rybachye, Kanaka valley; Sudak: Cape Bashennyy (5 km W Morskoye), Sudak; Feodosiya: Mt. Echkidag – Shchebetovka, Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Karadag, Barakol Lake, Feodosiya; Lenino distr.: Kamenskoye – Solyanoye, 3.5 km SE Zavetnoye, Opuk Reserve. Sevastopol: Sevastopol, Inkerman, Khersones, Cape Ayya, Laspi Bay, Batiliman.

Distribution: Russia (EP, NC, CR), W, E and S Europe, Caucasus, Turkey, Syria, Lebanon.

Allodynerus delphinalis (GIRAUD, 1866)

Odynerus novellus MORAWITZ: KOSTYLEV 1928: 404 (Otuzy valley).

Allodynerus delphinalis (GIRAUD): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 309 (Karadag, Veseloye); FATERYGA 2006: 292 (Cape Kazantip); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 11♀♀, 12♂♂ [CFUS], 5♀♀, 1♂ [ZMMU], 2♀♀, 1♂ [KHEO], 1♀ [OSZ], 1♀, 2♂♂ [DPYE]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Donuzlav Lake; Razdolnoye distr.: Portovoye; Saki distr.: Popovka – Shtormovoye; Yevpatoriya: Mirnyy; Simferopol; Simferopol distr.: Gvardeyskoye, Krasnolesye; Sovetskiy distr.: Zavetnoye; Sudak: Veseloye; Feodosiya: Otuzy (currently Shchebetovka) valley, Lisya Bay, Karadag, Barakol Lake; Lenino distr.: Cape Kazantip, Zolotoye, Opuk Reserve.

Distribution: Russia (EP, NC, CR, UR, WS, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Lebanon, Iran, Central Asia, Kazakhstan, China, Korea, Japan.

Allodynerus floricola (DE SAUSSURE, 1853)

Allodynerus floricola (DE SAUSSURE): KURZENKO 1978: 273 (Crimea); TOBIAS & KURZENKO 1978: 172 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 309 (Lisya Bay); FATERYGA & IVANOV 2009: 67 (Lisya Bay); IVANOV & FATERYGA 2009b: 31 (Simferopol); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: Republic of Crimea: Chernomorskoye distr.: Tarkhankut, 22.VI 2003, 1♀, DP; Simferopol: Simferopol, 26.VII 2003, 1♀, AF, Mar'ino, 8.VI 2009, 3♀♀, AF [CFUS]; Simferopol distr.: Perevalnoye, 9.VI 1975, 1♀, A. ZHELOKHOVTSEV [ZMMU]; Alushta: Crimean Reserve, 6.VII 1936, 1♀, HEPTNER [ZMMU]; Feodosiya: Lisya Bay, 21.VI 2003, 1♀, SI [AAD]. Sevastopol: Sevastopol, 12.VI 1912, 1♀, V. PLIGINSKIJ [ZIN], Khersones, 29.VI, 5.VII, 8.VII 1912, 10.VI, 25.VI 1913, 22.VI 2014, 5♀♀, V. PLIGINSKIJ [ZIN, ZMMU], Lyubimovka – airport Belbek, 24.VII 2016, 1♀, SI, Cape Ayya, 7.VII 2004, 1♀, AF, Laspi Bay, 13.VII 2004, 1♀, AF [CFUS].

Distribution: Russia (CR), W, E and S Europe, N Africa, Armenia, Turkey, Cyprus, Jordan.

Allodynerus rossii (LEPELETIER, 1841)

Odynerus rossii LEPELETIER: KOSTYLEV 1928: 404 (Karadag).

Allodynerus rossii (LEPELETIER): KURZENKO 1978: 274 (Crimea); TOBIAS & KURZENKO 1978: 172 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 309 (Karadag, Sudak); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 109 (Mys Martyan Reserve).

Material examined: 34♀♀, 26♂♂ [CFUS], 1♂ [ZIN], 15♀♀, 4♂♂ [ZMMU], 1♀ [IZAN], 3♀♀ [OSZ], 2♀♀ [SMS], 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Bol. Kastel; Simferopol distr.: Krasnolesye; Belogorsk distr.: Karasevka, Krasnoselovka; South Coast: Karakau (currently unknown) – Yayla; Yalta: Zori Ukrainy (currently Zori Rossii), Mys Martyan Reserve; Alushta: Vinogradnoye, Rybachye, Privetnoye; Sudak; Feodosiya: Otuzy (currently Shchebetovka), Kurortnoye, Karadag, Mt. Tepeoba.

Distribution: Russia (EP, NC, CR, ES), W, E and S Europe, N Africa, Caucasus, Turkey, Iran, Turkmenistan.

Ancistrocerus antilope (PANZER, 1798)

Ancistrocerus antilope (PANZER): IVANOV & LAVRENYUK 1997: 40 (Kerch Peninsula); AMOLIN 2003: 5 (Crimea); FATERYGA 2005: 315 (Yalta Reserve); FATERYGA & IVANOV 2005: 299 (Crimea); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 78 (Crimea).

Material examined: 30♀♀, 14♂♂ [CFUS], 1♀ [ZIN], 5♀♀, 2♂♂ [SMS], 3♀♀, 3♂♂ [DPYE]. Republic of Crimea: Yevpatoriya; Bakhchisaray distr.: Bol. Kanyon Kryma Canyon, cordon Zelenyy Gay; Simferopol distr.: Opushki, Kizilkoba, Krasnolesye, Kazarma Buzinova (6 km SW Krasnolesye); Belogorsk distr.: Karasevka; Yalta: Mt. Lapata, Uchkosh Canyon; Alushta: Mt. Chatyrdag, Vinogradnoye; Feodosiya: Karadag; Kerch.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, Caucasus, Turkey, Afghanistan, Kyrgyzstan, Kazakhstan, Mongolia, China, Japan, N America, India.

Ancistrocerus auctus (FABRICIUS, 1793)

Ancistrocerus auctus (FABRICIUS): KURZENKO 1978: 280 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 309 (Karadag, Sudak); FATERYGA & IVANOV 2005: 299 (Crimea); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Nikita, Mys Martyan Reserve); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 67♀♀, 91♂♂ [CFUS], 5♀♀, 3♂♂ [ZIN], 14♀♀, 15♂♂ [ZMMU], 4♀♀, 12♂♂ [IZAN], 2♂♂ [KHEO], 1♀, 7♂♂ [OSZ], 6♀♀, 2♂♂ [DPYE], 1♀, 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak; Yevpatoriya: Mirnyy, Zaozernoye, Yevpatoriya; Bakhchisaray distr.: Rechnoye; Simferopol; Simferopol distr.: Gvardeyskoye, Pionerskoye; Belogorsk distr.: Belaya Skala, Karasevka; Yalta: Zori Ukrainy (currently Zori Rossii), Cape Aytodor, Yalta, Sovetskoye, Gruzport, Nikita, Mys Martyan Reserve; Alushta: Alushta, Rybachye, Kanaka valley, Chiginitra valley; Sudak; Feodosiya: Otuzy (currently Shchebetovka), Otuzy valley, Karadag, Feodosiya; Lenino distr.: Zolotoye, Kurortnoye, Opuk Reserve; Kerch. Sevastopol: Sevastopol, Inkerman, Kazachya Bay, Cape Ayya, Laspi Bay, Batiliman, Orlovka.

Distribution: Russia (EP, NC, CR), W, E and S Europe, Caucasus, Turkey, Syria, Jordan, Israel, Iraq, Iran, Central Asia, Kazakhstan.

Ancistrocerus gazella (PANZER, 1798)

Odynerus parietum (LINNAEUS): KOSTYLEV 1928: 400 (Otuzy valley, Karadag). This record belongs to *A. gazella*.

Ancistrocerus parietum (LINNAEUS): POPOV 1958: 108 (Eastern Crimea). This record belongs to *A. gazella*.

Ancistrocerus claripennis THOMSON: TOBIAS & KURZENKO 1978: 168 (Crimea). This record belongs to *A. gazella*.

Ancistrocerus gazella (PANZER): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 310 (Karadag, Sudak); FATERYGA 2005: 315 (Yalta Reserve); FATERYGA & IVANOV 2005: 299 (Crimea); FATERYGA 2006: 292 (Cape Kazantip); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Mys Martyan Reserve); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 121♀♀, 103♂♂ [CFUS], 22♀♀, 18♂♂ [ZIN], 28♀♀, 24♂♂ [ZMMU], 16♀♀, 38♂♂ [IZAN], 9♀♀, 8♂♂ [KHEO], 11♀♀, 4♂♂ [OSZ], 10♀♀, 1♂ [SMS], 11♀♀, 10♂♂ [DPYE], 2♀♀, 4♂♂ [AAD]. Republic of Crimea: Crimea (without details); Chernomorskoye distr.: Tarkhankut, Kipchak, Kipchak – Dzhangul, Bol. Kastel, Dzhangul, Donuzlav Lake; Razdolnoye distr.: Portovoye; Krasnoperekopsk distr.: Pochetnoye, Tavricheskoye; Pervomayskoye distr.: Pravda; Dzhankoy distr.: 1-2 km NE Pridorozhnoye, 3 km NE Pridorozhnoye, 2 km E Solenoye Ozero; Saki distr.: Popovka, Popovka – Shtormovoye; Yevpatoriya: Mirnyy, Yevpatoriya; Nizhnegorskiy distr.: Kostochkovka, Peny, Listvennoye, Nizhnegorskiy; Bakhchisaray distr.: Tabachnoye, Bakhchisaray, Kuybyshevo, cordon Zelenyy Gay; Simferopol; Simferopol distr.: Simferopol distr. (without details), Urozhaynoye, Gvardeyskoye, Pionerskoye, Perevalnoye, Ayan, Krasnolesye; Belogorsk distr.: 3 km N Krymskaya Roza, Belaya Skala, Karasevka, 5 km N Karasevka, Krinichnoye; Kirovskoye distr.: Staryy Krym; Yalta: Foros, Cape Aytodor, Yalta, Mt. Lapata, Uchkosh Canyon, Gruzport, Nikita, Mys Martyan Reserve, Artek; Alushta: Mt. Chatyrdag, Sotera, Rybachye, Kanaka valley, Privetnoye, Chiginitra valley; Sudak: riv. Voron, Sudak; Feodosiya: Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Kurortnoye, Karadag, Barakol Lake, Feodosiya; Lenino distr.: Cape Kazantip, Novootradnoye, Zolotoye, Kirovo, Cape Chauda, Kurortnoye, Osoviny, Yakovenkovo, Opuk Reserve; Kerch. Sevastopol: Sevastopol, Inkerman, Khersones, Kazachya Bay, Cape Khersones, Cape Ayya, Laspi Bay, Rodnikovskoye, Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, NC, CR), W, E, N and S Europe, N Africa, Caucasus, Turkey, Cyprus, Israel, Iran, Afghanistan, ?Pakistan, N America (introduced), New Zealand (introduced).

Ancistrocerus nigricornis (CURTIS, 1826)

Ancistrocerus nigricornis (CURTIS): KURZENKO 1977b: 568 (Crimea); IVANOV & LAVRENYUK 1997: 40 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 310 (Karadag, Sudak, Sotera); FATERYGA 2005: 315 (Yalta Reserve); FATERYGA & IVANOV 2005: 299 (Crimea); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Nikita, Mys Martyan Reserve).

Material examined: 192♀♀, 12♂♂ [CFUS], 1♂ [ZIN], 16♀♀, 16♂♂ [ZMMU], 1♀ [KHEO], 22♀♀, 3♂♂ [OSZ], 14♀♀, 4♂♂ [SMS], 3♀♀ [DPYE], 2♀♀, 4♂♂ [AAD]. Republic of Crimea: Crimea (without details); Razdolnoye distr.: Kropotkino; Bakhchisaray distr.: Rechnoye, Kuybyshevo, Mt. Bakla, cordon Zelenyy Gay; Simferopol; Simferopol – Yalta; Simferopol distr.: Fontany, Trudovoye, Gvardeyskoye, Pionerskoye, Opushki, Kizilkoba, Perevalnoye, Ayan, Krasnolesye, Sosnovka (Privolnoye); Belogorsk distr.: Karasevka, 3-5 km S Karasevka, riv. Karasu, Krasnoselovka; Yalta: Parkovoye, Zori Ukrainy (currently Zori Rossii), Mt. Aypetri, Yalta, Yaltinskaya Yayla, Mt. Lapata, Uchkosh Canyon, Sovetskoye, Gruzport,

Nikita, Mys Martyan Reserve, riv. Avunda, Gurzuf; Alushta: Mt. Ayudag, Partenit, Vinogradnoye, Mt. Chatyrdag, Crimean Reserve, cordon Dubrava, Alushta, Angarskiy Pass, Luchistoye, Mt. Demerdzhi, Sotera, Rybachye, Kanaka valley, 6 km N Privetnoye, Mt. Karabi; Sudak: Veseloye, Sudak, Mt. Tarakhtash; Feodosiya: Shchebetovka, Lisya Bay, Karadag. Sevastopol: Uzundzha Canyon.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Turkey, Iran, Central Asia, Kazakhstan, Mongolia, China, Japan, India.

Ancistrocerus oviventris (WESMAEL, 1836)

Ancistrocerus oviventris (WESMAEL): FATERYGA & IVANOV 2005: 299 (Mys Martyan Reserve, Mt. Chatyrdag); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Mys Martyan Reserve).

Material examined: Republic of Crimea: Bakhchisaray distr.: Bol. Kanyon Kryma Canyon, 4.VI 2007, 1♀, DP [DPYE]; Yalta: Mt. Aypetri, 1.VII 2000, 1♀, Yu. BUDASHKIN [CFUS], 6.VII 2006, 9.VII 2008, 5♀♀, 1♂, DP [CFUS, DPYE], 8.VII 2008, 1♂, SI, Mt. Lapata, 17.VII 2005, 1♀, AF [CFUS], Mys Martyan Reserve, 23.V 1979, 2♀♀, M. EIDELBERG [CFUS, OSZ]; Alushta: Mt. Chatyrdag, 3.VIII 2004, 20.VII 2005, 17.VII 2007, 3♀♀, AF [CFUS, AAD], Kanaka valley, 2.VI 2013, 2♀♀, AF; Feodosiya: Karadag, 6.V, 14.V 2013, 20.V 2014, 4♂♂, AF. Sevastopol: Balaklava – Ayazma valley, 30.IV 2016, 2♀♀, AF [CFUS].

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia, China, Korea, Japan.

Ancistrocerus parietinus (LINNAEUS, 1761)

Odynerus parietinus (LINNAEUS): KOSTYLEV 1928: 400 (Karadag).

Ancistrocerus parietinus (LINNAEUS): POPOV 1958: 108 (Eastern Crimea); IVANOV et al. 2004: 310 (Lisya Bay, Karadag); FATERYGA & IVANOV 2005: 299 (Crimea); FATERYGA & IVANOV 2009: 67 (Karadag, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Mys Martyan Reserve).

Material examined: 29♀♀, 23♂♂ [CFUS], 2♀♀, 1♂ [ZIN], 5♀♀ [ZMMU], 2♀♀ [OSZ], 1♀ [KNU], 2♀♀ [DPYE]. Republic of Crimea: Bakhchisaray distr.: Bakhchisaray, Kuybyshevo, Nauchnyy; Simferopol: Kirpichnoye; Simferopol distr.: Lozovoye, Pionerskoye, Krasnolesye; Yalta: Katsiveli, Mt. Lapata, Mys Martyan Reserve; Alushta: Partenit, Vinogradnoye, Mt. Chatyrdag, Angarskiy Pass; Sudak: Sudak, Mt. Tarakhtash; Feodosiya: Lisya Bay, Karadag. Sevastopol: Sevastopol, Verkhnesadovoye.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Iran, Kazakhstan, Mongolia, Korea, Japan.

Ancistrocerus parietum (LINNAEUS, 1758)

Ancistrocerus parietum (LINNAEUS): AMOLIN 2003: 5 (Crimea); FATERYGA & IVANOV 2005: 299 (Crimea); FATERYGA 2010: 78 (Crimea).

Material examined: 5♀♀, 3♂♂ [CFUS], 3♀♀, 3♂♂ [ZIN], 1♀, 4♂♂ [IZAN], 6♀♀, 1♂ [OSZ], 2♂♂ [SMS], 1♀ [DPYE]. Republic of Crimea: Saki distr.: Lenok (Velikoye); Yevpatoriya; Simferopol; Belogorsk distr.: Belogorsk, Karasevka; Yalta: Yalta, Uchkosh Canyon; Alushta: Rybachye; Sudak. Sevastopol: Sevastopol, Inkerman, Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, ?Iran, Central Asia, Kazakhstan, Mongolia, China, Korea, N America (introduced).

Ancistrocerus trifasciatus (MÜLLER, 1776)

Ancistrocerus trifasciatus (MÜLLER): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 310 (Karadag); FATERYGA 2005: 315 (Yalta Reserve); FATERYGA & IVANOV 2005: 299 (Crimea); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 78 (Crimea).

Material examined: 15♀♀, 9♂♂ [CFUS], 3♀♀ [ZMMU], 1♀ [IZAN], 1♀ [OSZ], 3♀♀, 1♂ [SMS], 2♀♀ [DPYE], 1♂ [AAD]. Republic of Crimea: Simferopol; Simferopol distr.: Pionerskoye, Krasnolesye, riv. Suat; Belogorsk distr.: Belaya Skala, Karasevka; Yalta: Mt. Aypetri, Mt. Lapata; Alushta: Rybachye; Feodosiya: Karadag.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, Caucasus, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China, Korea, Japan.

Antepipona deflenda (S. SAUNDERS, 1853)

Odynerus parvulus LEPELETIER: KOSTYLEV 1928: 403 (Yenishary Bay, Otuzy valley, Karadag).

Antepipona deflenda (S. SAUNDERS): KURZENKO 1978: 265 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 310 (Karadag, Lisya Bay); FATERYGA 2006: 292 (Cape Kazantip); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Mys Martyan Reserve); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 159♀♀, 40♂♂ [CFUS], 14♀♀, 16♂♂ [ZIN], 113♀♀, 13♂♂ [ZMMU], 1♀, 2♂♂ [IZAN], 9♀♀, 2♂♂ [KHEO], 2♀♀, 2♂♂ [OSZ], 11♀♀ [DPYE], 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Kipchak – Bol. Kastel, Bol. Kastel, Okunevka, Donuzlav Lake; Razdolnoye distr.: Portovoye; Krasnoperekopsk distr.: Tavricheskoye; Saki distr.: Lenok (Velikoye), Novofedorovka; Yevpatoriya: Yevpatoriya, Moynaki Lake; Bakhchisaray distr.: riv. Alma, Rechnoye, Kuybyshevo; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Mt. Tashdzhargan, Urozhaynoye, Gvardeyskoye; Belogorsk distr.: 3 km N Krymskaya Roza, Belaya Skala; Sovetskiy distr.: Zavetnoye; Yalta: Zori Ukrainy (currently Zori Rossii), Simeiz, Gruzport, Mys Martyan Reserve; Alushta: Alushta, Rybachye, Privetnoye; Sudak; Feodosiya: Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Kurortnoye, Karadag, Yenishary (Tikhaya) Bay, Feodosiya; Lenino distr.: Cape Kazantip, Cape Chauda, Uvarovo, 10 km N Uvarovo, Kurortnoye, 3.5 km SE Zavetnoye, Opuk Reserve. Sevastopol: Sevastopol, Khersones, Inkerman, Cape Ayya, Laspi Bay, 5 km W Verkhnesadovoye.

Distribution: Russia (EP, NC, CR, UR), W, E and S Europe, N Africa, Caucasus, Turkey, Cyprus, Jordan, Lebanon, Israel, Iraq, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China.

Antepipona nigricornis (MORAWITZ, 1885)

Lionotus nigricornis MORAWITZ 1885: 160-161, lectotype (KURZENKO, designated here), ♀, "Balaklawa" [ZIN].

Odynerus nigricornis (MORAWITZ): MORAWITZ 1895: 461 (Balaklava); KOSTYLEV 1928: 404 (Tukluk).

Allodynerus nigricornis (MORAWITZ): KURZENKO 1978: 274 (Crimea); TOBIAS & KURZENKO 1978: 172 (Crimea); FATERYGA & IVANOV 2009: 67 (Karadag, Lisya Bay); FATERYGA 2010: 77 (Crimea).

Material examined: Lectotype: Sevastopol: Balaklava, 1♀. Paralectotypes: "Tauria", 1♀. Sevastopol: Balaklava, 3♀♀, 1♂ [ZIN]. Additional material: Republic of Crimea: Sudak, 12.VI 1980, 1♀, VL; Feodosiya: Lisya Bay, 13.VI 2007, 12.VI, 18.VI 2010, 15.VI, 17.VI 2011, 15.V 2013, 22.V 2014, 11♀♀, 2♂♂, AF [CFUS], Karadag, 1.VII 1928, 1♀, GK [ZMMU]. Sevastopol: Sevastopol, 7.VI 1901, 1♀, V. PLIGINSKIJ [ZIN].

Distribution: Russia (CR), W and S Europe, Turkey, Turkmenistan.

Remarks: KURZENKO (1978: 274) designated a lectotype of *L. nigricornis* (Fig. 2A) in his thesis manuscript but did not publish it.

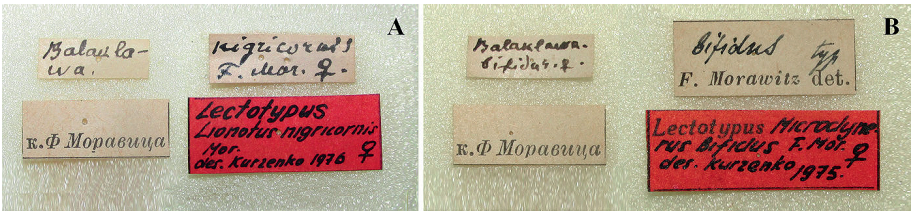

Fig. 2: Labels of lectotypes designated in the present publication: A, *Lionotus nigricornis* MORAWITZ; B, *Microdynerus bifidus* MORAWITZ.

Antepipona orbitalis ballioni (MORAWITZ, 1867)

Odynerus ballioni MORAWITZ: KOSTYLEV 1928: 404 (Karadag, Tukluk, Otuzy valley).

Antepipona orbitalis ballioni (MORAWITZ): KURZENKO 1978: 265 (Crimea); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea).

Antepipona orbitalis (HERRICH-SCHÄFFER): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 311 (Karadag, Lisya Bay). These records belong to *A. orbitalis ballioni*.

Material examined: 36♀♀, 33♂♂ [CFUS], 2♀♀ [ZIN], 13♀♀, 6♂♂ [ZMMU], 1♀ [KHEO]. Republic of Crimea: Krasnoperekopsk distr.: Tavricheskoye; Simferopol; Sudak; Feodosiya: Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Karadag, Mt. Tepeoba; Lenino distr.: Opuk Reserve. Sevastopol: Cape Lukull.

Distribution: Russia (EP, NC, CR, UR, WS, ES), E Europe (Ukraine), Caucasus, Turkey, Kazakhstan, Mongolia.

Brachyodynerus magnificus (MORAWITZ, 1867)

Brachyodynerus magnificus (MORAWITZ): AMOLIN 2003: 5 (Crimea); IVANOV & FATERYGA 2003: 114 (Kropotkino); FATERYGA 2010: 78 (Crimea).

Material examined: Republic of Crimea: Razdolnoye distr.: Kropotkino, VI-VIII, 12.IX 1971, 2♀♀, SI, Portovoye, 9.IX 2012, 1♂, VZ; Feodosiya: Barakol Lake, 28.VII, 29.VII, 30.VII, 31.VIII 2014, 2♀♀, 9♂♂, Yu. BUDASHKIN, 13.VIII, 6.IX 2014, 20.VI 2015, 11.VIII, 17.VIII 2016, 7♂♂, AF, 26.VIII 2014, 1♂, SI; Lenino distr.: L'vovo, 28.V 2013, 1♂, Yu. BUDASHKIN [CFUS], Zavetnoye, 4.VIII 1972, 1♀ SHCHEGLENKO [OSZ].

Distribution: Russia (EP, NC, CR), E Europe (Romania), Armenia, Azerbaijan, Turkey, Turkmenistan, Kazakhstan.

Brachyodynerus quadrimaculatus (ANDRÉ, 1884)

Odynerus quadrimaculatus ANDRÉ: KOSTYLEV 1928: 403 (Karadag).

Brachyodynerus quadrimaculatus (ANDRÉ): KURZENKO 1978: 257 (Crimea); TOBIAS & KURZENKO 1978: 170 (Crimea); KURZENKO 1981: 104 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV & FATERYGA 2003: 114 (Lisya Bay, Karadag); IVANOV et al. 2004: 311 (Karadag, Lisya Bay); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea).

Material examined: 68♀♀, 15♂♂ [CFUS], 1♀ [ZIN], 48♀♀ [ZMMU], 2♀♀ [DPYE], 1♀ [AAD]. Republic of Crimea: Sudak; Feodosiya: Mt. Echkidag, Otuzy (currently Shchebetovka), Lisya Bay, Kurortnoye, Karadag, Barakol Lake.

Distribution: Russia (EP, CR), S Europe (Greece), Azerbaijan, Turkey.

Delta unguiculatum (VILLERS, 1789)

Eumenes unguiculatus (VILLERS): MORAWITZ 1895: 416 (Balaklava).
Delta unguiculatum unguiculatum (VILLERS): KURZENKO 1978: 299 (Crimea).
Delta unguiculatum (VILLERS): TOBIAS & KURZENKO 1978: 161 (Crimea); FATERYGA 2010: 78 (Crimea).
Delta unguiculata (VILLERS): KURZENKO 1981: 111 (Crimea).

Material examined: Republic of Crimea: Kerch, 1♀, A. KIRITCHENKO [ZIN].

Distribution: Russia (NC, CR), W, E and S Europe, N Africa, Caucasus, Turkey, Cyprus, Syria, Lebanon, Israel, Saudi Arabia, Iran, Central Asia.

Discoelius dufourii LEPELETIER, 1841

Discoelius dufourii LEPELETIER: AMOLIN 2003: 5 (Crimea); IVANOV & FATERYGA 2003: 114 (Simferopol, Krasnolesye); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 77 (Crimea).

Material examined: 16♀♀, 15♂♂ [CFUS], 2♀♀, 1♂ [ZMMU], 1♀ [IZAN], 8♀♀, 9♂♂ [SMS], 1♀ [DPYE], 2♀♀ [AAD]. Republic of Crimea: Saki distr.: Suvorovskoye; Yevpatoriya; Simferopol; Simferopol distr.: Lozovoye, Pionerskoye, Krasnolesye, Kazarma Buzinova (6 km SW Krasnolesye); Belogorsk distr.: Karasevka, 3-5 km S Karasevka, Krasnoselovka; Alushta: Rybachye; Sudak; Feodosiya: Karadag. Sevastopol: Verkhnesadovoye.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, Caucasus, Turkey, Iran, Kazakhstan, Mongolia, China, Korea.

Discoelius zonalis (PANZER, 1801)

Discoelius zonalis (PANZER): AMOLIN 2003: 5 (Crimea); IVANOV & FATERYGA 2003: 114 (Simferopol, Suvorovskoye); FATERYGA et al. 2007: 157 (Krasnolesye); FATERYGA & IVANOV 2010: 186 (numerous localities); FATERYGA 2010: 77 (Crimea).

Material examined: Republic of Crimea: Saki distr.: Suvorovskoye, 10.VII, 14.VII, 23.VII 2000, 7♂♂, SM [SMS]; Yevpatoriya, 25.VIII 2006, 1♀, DP [DPYE]; Simferopol, 13.VII, 20.VIII 1999, 7.VII 2001, 2♀♀, 1♂, SM [SMS]; Simferopol distr.: Ayan, 12.V 2009, 1♂, AF, Krasnolesye, 9.VIII 2007, 12.V 2009, 1♀, 2♂♂, AF, 17.V 2001, 28.IV 2012, 21.IV, 28.IV-4.V 2013, 1♀, 4♂♂, VZ; Kerch, 22.VII, 14.VIII 1998, 2♀♀, M. GORDIYENKO [CFUS].

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, Caucasus, Turkey, Iran, Mongolia, China, Korea, Japan.

Eumenes (*Eumenes*) *coarctatus* (LINNAEUS, 1758)

Eumenes coarctatus (LINNAEUS): KOSTYLEV 1928: 399 (Eastern Crimea). This record belongs to several species of *Eumenes*.
Eumenes coarctatus (LINNAEUS): KURZENKO 1977b: 576 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 311 (numerous localities); FATERYGA et al. 2007: 149 (Krasnolesye).
Eumenes lunulatus FABRICIUS: AMOLIN 2003: 5 (Crimea).

Eumenes coarctatus lunulatus FABRICIUS: FATERYGA 2006: 292 (Cape Kazantip); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Nikita, Mys Martyan Reserve); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 287♀♀, 302♂♂ [CFUS], 24♀♀, 22♂♂ [ZIN], 19♀♀, 53♂♂ [ZMMU], 26♀♀, 29♂♂ [IZAN], 11♀♀, 10♂♂ [KHEO], 9♀♀, 10♂♂ [OSZ], 5♀♀, 19♂♂ [KNU], 2♀♀, 1♂ [SMS], 16♀♀, 4♂♂ [DPYE], 2♀♀, 8♂♂ [AAD]. Republic of Crimea: Crimea (without details); Chernomorskoye distr.: Tarkhankut, Kipchak, Kipchak – Dzhangul, Bol. Kastel, Dzhangul, Atlesh, Belyaus, Donuzlav Lake; Razdolnoye distr.: Portovoye; Krasnoperekopsk distr.: Tavricheskoye, Voinka; Pervomayskoye distr.: Voykovo, Pravda; Dzhankoy distr.: 15 km N Pridorozhnoye, Solenoye Ozero; Saki distr.: Novofedorovka, Pribrezhnoye; Yevpatoriya: Mirnyy, Zaozernoye, Yevpatoriya; Krasnogvardeyskoye distr.: Rovnoye; Bakhchisaray distr.: Peschanoye, Rechnoye, Topoli – Priyatnoye Svidaniye, Kuybyshevo, Golubinka, Bol. Kanyon Kryma Canyon, Mt. Bakla, riv. Alma, Schastlivoye; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Kamyshinka, Fontany, Mt. Tashdzhargan, Chistenkaya, Urozhaynoye, Gvardeyskoye, Pionerskoye, Perevalnoye, Ayan, Krasnolesye; Belogorsk distr.: Belogorsk distr. (without details), Belaya Skala, Karasevka, Krasnoselovka; Sovetskiy distr.: Zavetnoye; Yalta: Mukhalatka (currently Oliva), Kikeneiz (currently Opolznevoye), Zori Ukrainy (currently Zori Rossii), Katsiveli, Simeiz, Goluboy Zaliv, Alupka, Koreiz, Gaspra, Cape Aytodor, Yalta, Mt. Lapata, Sovetskoye, Gruzport, Nikita, Mys Martyan Reserve, Artek; Alushta: Vinogradnoye, Mt. Chatyrdag, Crimean Reserve, Alushta, Angarskiy Pass, Mt. Demerdzhi, Rybachye, Kanaka valley, Privetnoye, 6 km N Privetnoye; Sudak: Veseloye, Sudak; Feodosiya: Kiziltash valley, Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Kurortnoye, Karadag, Yenishary (Tikhaya) Bay, Barakol Lake, Mt. Uzunsyrt, Feodosiya; Lenino distr.: Arabat Spit, Kamenskoye, Kamenskoye – Solyanoye, L'vovo, Cape Kazantip, Zolotoye, Kurortnoye, Osoviny, Cape Chauda, Maryevka, Naberezhnoye, Zavetnoye, 3.5 km SE Zavetnoye, Yakovenkovo, Opuk Reserve; Kerch. Sevastopol: Sevastopol, Inkerman, Khersones, Streletskaya Bay, Cape Fiolent, Cape Ayya, Laspi Bay, Orlovka, Lyubimovka – airport Belbek, Alsu (currently Morozovka), Belbek (currently Verkhnesadovoye), 5 km W Verkhnesadovoye.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China, Japan.

Eumenes (*Eumenes*) *coronatus* (PANZER, 1799)

Eumenes coronatus coronatus (PANZER): GUSENLEITNER 1972: 85 (Crimea).

Eumenes coronatus (PANZER): KURZENKO 1977b: 576 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 311 (Karadag, Lisya Bay, Sudak, riv. Shelen); FATERYGA 2005: 316 (Yalta Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Nikita, Mys Martyan Reserve).

Material examined: 216♀♀, 181♂♂ [CFUS], 2♀♀ [ZIN], 3♀♀, 8♂♂ [ZMMU], 1♀ [IZAN], 3♀♀, 1♂ [KHEO], 3♀♀, 8♂♂ [OSZ], 1♀, 1♂ [KNU], 1♀, 1♂ [DPYE], 6♂♂ [SMS], 2♀♀ [AAD]. Republic of Crimea: Bakhchisaray distr.: Mt. Cherdakly-Bair, Kuybyshevo, 1.5 km E Sokolinoye, Shelkovichnoye, cordon Zelenyy Gay; Simferopol; Simferopol distr.: Simferopol distr. (without details), Pionerskoye, Perevalnoye, Ayan, Krasnolesye, Mt. Pakhkalkaya; Belogorsk distr.: Alekseyevka, Belogorsk, Karasevka, Kaliston Pass; Yalta: Parkovoye, Katsiveli, Zori Ukrainy (currently Zori Rossii), Simeiz, Alupka, Mt. Aypetri, Cape Aytodor, Yalta, Mt. Lapata, Uchkosh Canyon, Sovetskoye, Gruzport, Nikita, Mys Martyan Reserve, Artek; Alushta: Vinogradnoye, Mt. Chatyrdag, Crimean Reserve, cordon Dubrava, Alushta, Angarskiy Pass, Mt. Demerdzhi, Chiginitra valley; Sudak: riv. Shelen, Sudak; Feodosiya: Mt. Echkidag, Kiziltash valley – Shchebetovka, Shchebetovka, Lisya Bay, Karadag, Feodosiya; Lenino distr.: Marfovka. Sevastopol: Kazachya Bay, Cape Ayya, Laspi Bay, riv. Chernaya, Rodnikovskoye, Morozovka.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, Caucasus, Turkey, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China, Korea, Japan.

Eumenes (*Eumenes*) *crimensis* BLÜTHGEN, 1938

Eumenes dubius crimensis BLÜTHGEN 1938: 468, holotype, ♀, "Jalta" [must be in Swiss Federal Institute of Technology, Zurich, Switzerland].

Eumenes dubius crimensis BLÜTHGEN: GUSENLEITNER 1972: 107 (Crimea); KURZENKO 1978: 294 (Crimea).

Material examined: Paratypes: Yalta, 1♂ [Swiss Federal Institute of Technology, Zurich, Switzerland].

Distribution: Russia (CR), Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Remarks: GUSENLEITNER (2013a: 27) raised this taxon to a separate species, *E. crimensis* and synonymized it with *E. sareptanus scabrosus* GUSENLEITNER, 1972. However, he had not seen the holotype of *E. dubius crimensis* (J. GUSENLEITNER, in litt.). The present location of the holotype is unknown; there is only the male paratype in the collection in Zurich (R. EASTWOOD, in litt.). The male was studied by photographs which were kindly made by M. GREEFF; it really has much more coarse sculpture of the mesoscutum and more yellow coloration of the body than *E. dubius* generally has. However, *E. dubius* is a very polymorphic species, and some specimens from Crimea have sculpture and coloration quite similar with ones of the paratype of *E. dubius crimensis*. There is a probability that *E. crimensis* could be a synonym of *E. dubius*. By the other hand, specimens of "*E. crimensis*" from Kazakhstan and Turkmenistan studied in the collection of the Federal Scientific Center of the East Asia Terrestrial Biodiversity

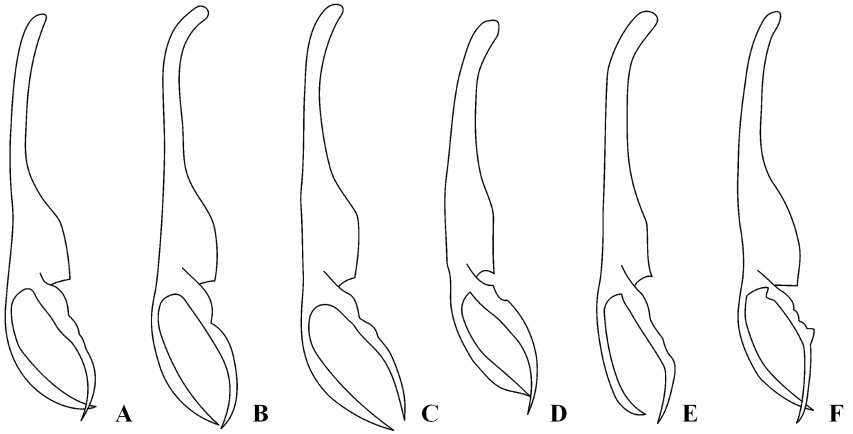

Fig. 3: Aedeagi of *Eumenes dubius* DE SAUSSURE, *E. crimensis* BLÜTHGEN, and *E. sareptanus* ANDRÉ, laterally: A, *E. dubius* (typical), Crimea (Yalta); B, *E. dubius* (typical), Crimea (Feodosiya: Lisya Bay); C, *E. dubius* with coarse sculpture of mesoscutum (intermediate between typical *E. dubius* and typical *E. crimensis*), Crimea (Yalta: Gruzport); D, "*E. crimensis*", Turkmenistan (Kugitangtau: Kugitang); E, "*E. crimensis*", Kazakhstan (70 km SSW Ayagoz); F, *E. sareptanus*, Russia (Volgograd Prov.: 6 km SW Kamyshin).

of the Far East Branch of the Russian Academy of Sciences, Vladivostok, Russia, clearly differ from *E. dubius* (as well as from *E. sareptanus*) not only by sculpture and coloration but also by the structure of the aedeagus (Fig. 3). If *E. crimensis* is a synonym of *E. dubius*, the species known as "*E. crimensis*" in Iran, Central Asia, and Kazakhstan must be named *E. scabrosus* GUSENLEITNER, 1972. To solve this problem the type material of *E. dubius crimensis* must be studied more carefully (not by photographs). If the female holotype of *E. dubius crimensis* is really lost, the male paratype can be designated as a neotype and then studied morphologically to check whether it is identical with *E. dubius* or with "*E. crimensis*" from Asiatic countries.

Eumenes (*Eumenes*) *dubius* DE SAUSSURE, 1852

Eumenes dubius dubius DE SAUSSURE: KURZENKO 1978: 294 (Crimea).

Eumenes dubius DE SAUSSURE: TOBIAS & KURZENKO 1978: 160 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 311 (numerous localities); FATERYGA 2006: 292 (Cape Kazantip); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Nikita); FATERYGA & ZHIDKOV 2012: 84 (Tarkhankut).

Material examined: 256♀♀, 155♂♂ [CFUS], 17♀♀, 3♂♂ [ZIN], 70♀♀, 55♂♂ [ZMMU], 6♀♀, 12♂♂ [IZAN], 10♀♀, 3♂♂ [KHEO], 25♀♀, 5♂♂ [OSZ], 5♂♂ [KNU], 1♂ [SMS], 6♀♀, 5♂♂ [DPYE], 9♀♀, 4♂♂ [AAD], 1♀, 1♂ [Federal Scientific Center of the East Asia Terrestrial Biodiversity of the Far East Branch of the Russian Academy of Sciences, Vladivostok, Russia]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Kipchak – Bol. Kastel, Bol. Kastel, Ternovaya valley (Mal. Kastel), Dzhangul, Atlesh, Belyaus, Donuzlav Lake; Razdolnoye distr.: Portovoye; Pervomayskoye distr.: Voykovo; Dzhankoy distr.: Pridorozhnoye, Solenoye Ozero, 2 km E Solenoye Ozero; Saki distr.: Novofedorovka, Pribrezhnoye; Yevpatoriya: Mirnyy; Bakhchisaray distr.: Rechnoye, Furmanovka, Kuybyshevo; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Zalesye, Gvardeyskoye, Pionerskoye, Krasnolesye; Belogorsk distr.: Karasevka, Golovanovka; Yalta: Foros, Mukhalatka (currently Oliva), Beregovoye (currently Kastropol), Parkovoye, Kikeneiz (currently Opolznevoye), Zori Ukrainy (currently Zori Rossii), Alupka, Koreiz, Mt. Aypetri, Cape Aytodor, Yalta, Gruzport, Nikita; Alushta: Rybachye, Kanaka valley, Zelenogorye; Sudak: riv. Shelen, Veseloye, Mt. Karauloba, Novyy Svet, Sudak; Feodosiya: Mt. Echkidag, Kiziltash valley – Shchebetovka, Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Kurortnoye, Karadag, Yenishary (Tikhaya) Bay, Barakol Lake, Mt. Uzunsyrt, Mt. Tepeoba, Feodosiya; Lenino distr.: Arabat Spit, Cape Kazantip, Kurortnoye, Zolotoye, 7 km E Zolotoye, Osoviny, 10 km N Uvarovo, Marfovka, 3.5 km SE Zavetnoye, Opuk Reserve. Sevastopol: Sevastopol, Inkerman, Khersones, Streletskaya Bay, Cape Khersones, Cape Ayya, Laspi Bay, Cape Sarych, riv. Chernaya.

Distribution: Russia (NC, CR), W, E and S Europe, N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Lebanon, Israel, Iraq, Iran, Turkmenistan, Tajikistan, Kazakhstan, S America (introduced).

Eumenes (*Eumenes*) *mediterraneus* KRIECHBAUMER, 1879

Eumenes mediterraneus KRIECHBAUMER: TOBIAS & KURZENKO 1978: 160 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 311 (Karadag, Lisya Bay, Kurortnoye); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Nikita).

Material examined: 19♀♀, 37♂♂ [CFUS], 1♂ [ZMMU], 1♀, 12♂♂ [IZAN], 2♀♀, 1♂ [OSZ], 1♀, 3♂♂ [KNU], 3♀♀ [DPYE]. Republic of Crimea: Chernomorskoye distr.: Chernomorskoye; Razdolnoye distr.: Kropotkino, Portovoye; Krasnoperekopsk distr.: Tavricheskoye; Saki distr.: Novofedorovka; Yevpatoriya: Mirnyy, Zaozernoye; Nizhnegorskiy

distr.: Listvennoye; Simferopol; Simferopol distr.: Fontany; Yalta: Zori Ukrainy (currently Zori Rossii), Koreiz, Cape Aytodor, Yalta, Gruzport, Nikita; Alushta: Alushta, Rybachye; Feodosiya: Lisya Bay, Kurortnoye, Karadag, Feodosiya; Lenino distr.: Opuk Reserve. Sevastopol: Sevastopol, Streletskaya Bay.

Distribution: Russia (EP, NC, CR), W, E and S Europe, N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Lebanon, Israel, Saudi Arabia, Yemen, UAE, Oman, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China, Korea, Tahiti (introduced).

Eumenes (*Eumenes*) *papillarius* (CHRIST, 1791)

Eumenes papillarius papillarius (CHRIST): GUSENLEITNER 1972: 89 (Crimea).

Eumenes papillarius (CHRIST): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 312 (Karadag, Lisya Bay); FATERYGA 2005: 316 (Yalta Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Nikita, Mys Martyan Reserve).

Material examined: 72♀♀, 83♂♂ [CFUS], 1♀, 3♂♂ [ZIN], 31♀♀, 32♂♂ [ZMMU], 7♀♀, 17♂♂ [IZAN], 6♀♀, 4♂♂ [OSZ], 2♀♀ [KNU], 1♀, 2♂♂ [SMS], 5♀♀, 1♂ [DPYE], 2♀♀, 3♂♂ [AAD]. Republic of Crimea: Dzhankoy distr.: 2 km E Solenoye Ozero; Yevpatoriya: Zaozernoye, Yevpatoriya; Krasnogvardeyskoye distr.: Oktyabrskoye; Bakhchisaray distr.: Kuybyshevo; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Simferopol distr. (without details), Partizanskoye Reservoir, Gvardeyskoye, Krasnolesye; Belogorsk distr.: Belaya Skala, Karasevka; Kirovskoye distr.: Staryy Krym; South Coast: Karakau (currently unknown) – Yayla; Yalta: Zori Ukrainy (currently Zori Rossii), Koreiz, Cape Aytodor, Yalta, Mt. Lapata, Uchkosh Canyon, Nikita, Mys Martyan Reserve, Artek; Alushta: Vinogradnoye, Rybachye, Kanaka valley; Sudak; Feodosiya: Mt. Echkidag, Kiziltash valley, Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Karadag, Feodosiya; Lenino distr.: Bondarenkovo, Opuk Reserve. Sevastopol: Cape Ayya, Laspi Bay, Lyubimovka, Alsu (currently Morozovka), Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, NC, CR, UR), W, E, N and S Europe, Caucasus, Turkey, Syria, Lebanon, Israel, Iran, Pakistan, Central Asia, Kazakhstan, Mongolia.

Eumenes (*Eumenes*) *pomiformis* (FABRICIUS, 1781)

Eumenes pomiformis pomiformis (FABRICIUS): GUSENLEITNER 1972: 100 (Crimea).

Eumenes pomiformis (FABRICIUS): KURZENKO 1978: 297 (Crimea); TOBIAS & KURZENKO 1978: 160 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 312 (numerous localities); FATERYGA 2006: 292 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 110 (Nikita, Mys Martyan Reserve).

Eumenes subpomiformis BLÜTHGEN: IVANOV & LAVRENYUK 1997: 40 (South Coast). This record belongs to *E. pomiformis*.

Material examined: 102♀♀, 95♂♂ [CFUS], 15♀♀, 6♂♂ [ZIN], 35♀♀, 24♂♂ [ZMMU], 7♀♀, 18♂♂ [IZAN], 2♂♂ [KHEO], 3♀♀, 5♂♂ [OSZ], 4♂♂ [KNU], 1♀, 1♂ [SMS], 1♀, 1♂ [DPYE], 3♀♀, 12♂♂ [AAD]. Republic of Crimea: Crimea (without details); Yevpatoriya; Bakhchisaray distr.: Rechnoye, Kuybyshevo; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Partizanskoye Reservoir, Lozovoye, Pionerskoye, Kizilkoba, Ayan, Krasnolesye; Belogorsk distr.: Karasevka, Krinichnoye; Kirovskoye distr.: Staryy Krym; South Coast: Karakau (currently unknown) – Yayla; Yalta: Mukhalatka (currently Oliva), Parkovoye, Zori Ukrainy (currently Zori Rossii), Alupka, Cape Aytodor, Yalta, Mt. Lapata, Uchkosh Canyon, Gruzport, Nikita, Mys Martyan Reserve; Alushta: Mt. Ayudag, Mt. Chatyrdag, Rybachye, Kanaka valley, 6 km N Privetnoye; Sudak: riv. Shelen, Veseloye, Mt. Karauloba, Novyy Svet, Sudak;

Feodosiya: Mt. Echkidag, Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Kurortnoye, Karadag, Tikhaya Bay, Feodosiya; Lenino distr.: Cape Kazantip, 7 km E Zolotoye, Kurortnoye, Opuk Reserve. Sevastopol: Sevastopol, Khersones, Streletskaya Bay, Cape Ayya, Laspi Bay, Batiliman, Belbek (currently Verkhnesadovoye), 5 km W Verkhnesadovoye.

Distribution: Russia (EP, NC, CR, UR), W, E and S Europe, N Africa, Caucasus, Turkey, Lebanon, UAE, Central Asia, Kazakhstan, China, Korea.

Eumenes (*Eumenes*) *punctaticlypeus* GIORDANI SOIKA, 1943

Eumenes kostylevi KURZENKO: KURZENKO 1978: 295 (Crimea); TOBIAS & KURZENKO 1978: 161 (Crimea).

Eumenes punctaticlypeus GIORDANI SOIKA: FATERYGA et al. 2007: 149 (Krasnolesye).

Eumenes punctaticlypeus kostylevi KURZENKO: FATERYGA & MATUSHKINA 2010: 379-380 (numerous localities); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 78 (Crimea).

Material examined: Republic of Crimea: Simferopol distr.: vicinity of Chistenkaya, 18.VIII 2015, 1♀, VZ [CFUS], Pionerskoye, 4.VII 1976, 1♂, A. ZHELOKHOVTSEV [ZMMU], Ayan, 17.V 2005, 1♀, AF, Krasnolesye, 29.VII 2007, 1♂, AF, V 2012, 1♂, VZ; Belogorsk distr.: Karasevka, 2.VI 1980, 1♂, VL [CFUS]; Kirovskoye distr.: Staryy Krym, 28.V 1905, 1♀, A. KIRITCHENKO; Yalta: vicinity of Alupka, 30.VI 1899, 1♀, N. KUZNETSOV [ZIN]; Sudak, 14.VII 1980, 1♀, 1♂, VL; Feodosiya: Karadag, 2.VI, 3.VI 2007, 3♀♀, 1♂, N. MATUSHKINA, 14.V 2013, 30.VI 2014, 2♀♀, AF [CFUS], Feodosiya, VIII 1922, 1♀, ARNOLDI [ZIN].

Distribution: Russia (CR, WS), W, E and S Europe, Turkey, Iran, Central Asia, Kazakhstan.

Eumenes (*Eumenes*) *sareptanus* ANDRÉ, 1884

Eumenes sareptanus ANDRÉ: KURZENKO 1978: 297 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 312 (numerous localities); FATERYGA 2006: 292 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 68 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA & ZHIDKOV 2012: 84 (Tarkhankut).

Material examined: 91♀♀, 62♂♂ [CFUS], 9♀♀, 2♂♂ [ZIN], 1♀, 1♂ [ZMMU], 6♀♀, 3♂♂ [KHEO], 1♀, 1♂ [OSZ], 1♀ [KNU], 12♀♀, 5♂♂ [DPYE], 2♀♀, 3♂♂ [AAD]. Republic of Crimea: Crimea (without details); Chernomorskoye distr.: Tarkhankut, Kipchak, Kipchak – Bol. Kastel, Bol. Kastel, Belyaus, Donuzlav Lake; Razdolnoye distr.: Portovoye; Krasnoperekopsk distr.: Tavricheskoye; Pervomayskoye distr.: Voykovo; Dzhankoy distr.: Solenoye Ozero, 5 km E Yasnopolyanskoye; Saki; Saki distr.: Shtormovoye; Yevpatoriya; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Skvortsovo, Fontany, Chistenkaya, Urozhaynoye, Gvardeyskoye; Belogorsk distr.: Belaya Skala, Karasevka; Yalta; Alushta: Sotera; Feodosiya: Otuzy (currently Shchebetovka) valley, Lisya Bay, Karadag, Barakol Lake, Mt. Uzunsyrt, Feodosiya; Lenino distr.: L'vovo, Arabat Spit, Kamenskoye, Kamenskoye – Solyanoye, Cape Kazantip, Zolotoye, 7 km E Zolotoye, Kurortnoye, Kirovo, Mt. Dzhautepe, Cape Chauda, Uvarovo, 10 km N Uvarovo, Zavetnoye, 3.5 km SE Zavetnoye, Opuk Reserve. Sevastopol: Sevastopol, Laspi Bay, Orlovka, Cape Lukull.

Distribution: Russia (EP, NC, CR, UR), W, E and S Europe, Caucasus, Turkey, Central Asia, Kazakhstan.

Eumenes (*Eumenes*) *tripunctatus* (CHRIST, 1791)

Eumenes tripunctatus (CHRIST): IVANOV & LAVRENYUK 1997: 40 (Kerch Peninsula); AMOLIN 2003: 5 (Crimea); FATERYGA & IVANOV 2010: 189 (Dzhankoy, Solyanoye); FATERYGA 2010: 78 (Crimea).

Material examined: Republic of Crimea: Dzhankoy, 8.VIII 1990, 1♀ [KHEO]; Lenino distr.: Arabat Spit, 11.VIII 2016, 1♂, SI, Kamenskoye – Solyanoye, 25.VI, 11.VIII, 28.VIII 2016, 1♀, 2♂♂, AF [CFUS], Solyanoye, 3.VII 1972, 1♀, SHCHEGLENKO [OSZ].

Distribution: Russia (EP, NC, CR, UR), E Europe (Ukraine), Iran, Turkmenistan, Kazakhstan, Mongolia, China.

Euodynerus (*Euodynerus*) *dantici* (ROSSI, 1790)

Odynerus Dantici (ROSSI): MORAWITZ 1895: 482 (Yalta).

Odynerus dantici (ROSSI): KOSTYLEV 1928: 405 (Yenishary Bay, Otuzy valley, Novyy Svet, Karadag); POPOV 1958: 108 (Eastern Crimea).

Euodynerus dantici dantici (ROSSI): KURZENKO 1977b: 565 (Crimea); KURZENKO 1978: 250 (Crimea).

Euodynerus dantici (ROSSI): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 312 (Karadag, Lisya Bay, Mt. Karauloba); FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA 2012a: 109 (Nikita, Mys Martyan Reserve); FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut).

Material examined: 111♀♀, 62♂♂ [CFUS], 8♀♀, 5♂♂ [ZIN], 4♀♀, 4♂♂ [ZMMU], 1♂ [IZAN], 8♀♀ [KHEO], 1♂ [OSZ], 2♂♂ [SMS], 14♀♀ [DPYE], 2♀♀, 3♂♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Dzhangul, Atlesh, Chernomorskoye, Belyaus, Donuzlav Lake; Razdolnoye distr.: Kropotkino, Portovoye; Dzhankoy distr.: Solenoye Ozero; Saki; Saki distr.: Novofedorovka; Yevpatoriya: Mirnyy, Yevpatoriya, Moynaki Lake; Bakhchisaray distr.: Vilino; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Mt. Tashdzhargan, Urozhaynoye, Gvardeyskoye, Ayan; Yalta: Mukhalatka (currently Oliva), Zori Ukrainy (currently Zori Rossii), Katsiveli, Cape Aytodor, Yalta, Gruzport, Nikita, Mys Martyan Reserve; Alushta: Angarskiy Pass; Sudak: Veseloye, Novyy Svet, Sudak; Feodosiya: Mt. Echkidag, Otuzy (currently Shchebetovka), Lisya Bay, Karadag, Yenishary (Tikhaya) Bay, Feodosiya; Lenino distr.: Arabat Spit, Kamenskoye, Cape Kazantip, Cape Chauda, Zolotoye, 7 km E Zolotoye, Kurortnoye, Yakovenkovo, Opuk Reserve. Sevastopol: Sevastopol, Khersones, Cape Fiolent, Cape Ayya.

Distribution: Russia (EP, NC, CR, UR, ES, FE), W, E and S Europe, N Africa, Caucasus, Turkey, Syria, Jordan, Lebanon, ?Israel, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China, Korea, Japan, Taiwan, SE Asia.

Euodynerus (*Euodynerus*) *disconotatus* (LICHTENSTEIN, 1884)

Euodynerus disconotatus (LICHTENSTEIN): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 312 (Karadag, Mt. Karauloba); FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA 2012a: 109 (Mys Martyan Reserve); FATERYGA & ZHIDKOV 2012: 82-83 (Tarkhankut).

Material examined: 86♀♀, 70♂♂ [CFUS], 10♂♂ [ZIN], 9♀♀, 2♂♂ [ZMMU], 2♀♀ [IZAN], 7♀♀, 2♂♂ [KHEO], 3♂♂ [OSZ], 6♀♀, 2♂♂ [DPYE], 1♀, 5♂♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Kipchak – Bol. Kastel, Bol. Kastel, Dzhangul, Belyaus; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Urozhaynoye, Gvardeyskoye; Belogorsk distr.: Krymskaya Roza; Yalta: Yalta, Gruzport, Mys Martyan Reserve; Alushta: Rybachye; Sudak: riv. Shelen, Mt. Karauloba, Novyy Svet, Sudak; Feodosiya:

Mt. Echkidag, Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Karadag, Mt. Tepeoba; Lenino distr.: Kamenskoye – Solyanoye, Cape Kazantip, Zolotoye, 7 km E Zolotoye, Kurortnoye, Opuk Reserve. Sevastopol: Sevastopol, Khersones, Cape Ayya, Laspi Bay, Cape Lukull.

Distribution: Russia (CR), W, E and S Europe, Caucasus, Turkey, Cyprus, Jordan, Saudi Arabia, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan.

Euodynerus (*Euodynerus*) *fastidiosus* (DE SAUSSURE, 1853)

Euodynerus fastidiosus (DE SAUSSURE): KURZENKO 1977b: 565 (Crimea); KURZENKO 1978: 251 (Crimea); FATERYGA 2006: 292 (Cape Kazantip); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea).

Euodynerus macedonicus BLÜTHGEN: KURZENKO 1977b: 566 (Crimea). This record belongs to *E. fastidiosus*.

Material examined: 24♀♀, 11♂♂ [CFUS], 1♀ [ZIN], 11♀♀, 10♂♂ [ZMMU], 1♂ [DPYE]. Republic of Crimea: Chernomorskoye distr.: Bol. Kastel, Mal. Kastel, Atlesh; Dzhankoy distr.: Solenoye Ozero; Yevpatoriya: Sasyk Lake; Yalta: Mukhalatka (currently Oliva), Zori Ukrainy (currently Zori Rossii), Gruzport; Sudak: Mt. Karauloba, Novyy Svet, Sudak; Feodosiya: Otuzy (currently Shchebetovka) valley, Lisya Bay, Karadag, Yenishary (Tikhaya) Bay; Lenino distr.: Arabat Spit, Cape Kazantip, Opuk Reserve. Sevastopol: Cape Lukull.

Distribution: Russia (EP, NC, CR), W and S Europe, N Africa, Caucasus, Turkey, Syria, Lebanon, Oman, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, China.

Euodynerus (*Euodynerus*) *velutinus* BLÜTHGEN, 1951

Odynerus curictensis (BLÜTHGEN): KOSTYLEV 1940: 31 (Karadag, Simferopol). This record belongs to *E. velutinus*.

Euodynerus curictensis BLÜTHGEN: POPOV 1958: 108 (Eastern Crimea). This record belongs to *E. velutinus*.

Euodynerus velutinus BLÜTHGEN: KURZENKO 1978: 252 (Crimea); KURZENKO 1981: 102 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 313 (Karadag, riv. Shelen); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 22♀♀, 5♂♂ [CFUS], 1♀, 1♂ [ZIN], 2♀♀, 1♂ [ZMMU], 1♀ [OSZ], 1♂ [SMS], 4♀♀ [DPYE]. Republic of Crimea: Chernomorskoye distr.: Kipchak; Yevpatoriya; Simferopol; Yalta: Parkovoye, Alupka; Alushta: Pushkino; Sudak: riv. Shelen, Veseloye, Cape Meganom; Feodosiya: Mt. Echkidag, Otuzy (currently Shchebetovka), Lisya Bay, Karadag. Sevastopol: Sevastopol, Cape Ayya.

Distribution: Russia (CR), S Europe (Greece), Caucasus, Turkey.

Euodynerus (*Pareuodynerus*) *notatus* (JURINE, 1807)

Euodynerus notatus (JURINE): FATERYGA 2010: 77 (Crimea).

Material examined: Republic of Crimea: Alushta: Crimean Reserve, 6.VII 1936, 1♀, HEPTNER [ZMMU].

Distribution: Russia (EP, NC, CR, UR, WS, ES, ?FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Iran, Kazakhstan, Mongolia, ?China.

Euodynerus (*Pareuodynerus*) *posticus* (HERRICH-SCHÄFFER, 1841)

Euodynerus posticus posticus (HERRICH-SCHÄFFER): KURZENKO 1978: 254 (Crimea).

Euodynerus posticus (HERRICH-SCHÄFFER): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 312 (Lisya Bay, Karadag); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA 2012a: 109 (Nikita).

Material examined: 33♀♀, 38♂♂ [CFUS], 1♀, 4♂♂ [ZIN], 5♀♀ [ZMMU], 1♂ [OSZ], 1♂ [KNU], 4♂♂ [SMS], 1♀, 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Kipchak, Bol. Kastel, Donuzlav Lake; Nizhnegorskiy distr.: Drofino; Bakhchisaray distr.: Vilino, Rechnoye; Simferopol; Simferopol distr.: Gvardeyskoye, Kizilkoba; Yalta: Yalta, Sovetskoye, Nikita; Alushta: Rybachye, Privetnoye; Sudak; Feodosiya: Kiziltash valley – Shchebetovka, Otuzy (currently Shchebetovka), Lisya Bay, Karadag, Barakol Lake. Sevastopol: Sevastopol, Verkhnesadovoye.

Distribution: Russia (EP, NC, CR), W, E and S Europe, N Africa, Caucasus, Turkey, Israel, Iran.

Euodynerus (*Pareuodynerus*) *quadrifasciatus* (FABRICIUS, 1793)

Euodynerus quadrifasciatus (FABRICIUS): FATERYGA 2005: 315 (Yalta Reserve); FATERYGA 2010: 77 (Crimea).

Material examined: 15♀♀, 8♂♂ [CFUS], 2♂♂ [ZIN], 1♂ [ZMMU], 1♀ [DPYE]. Republic of Crimea: Saki distr.: Velikoye; Bakhchisaray distr.: Bol. Kanyon Kryma Canyon, Nauchnyy; Simferopol distr.: Urozhaynoye; Belogorsk distr.: Karasevka; Yalta: Mt. Lapata; Alushta: Vinogradnoye, Mt. Kazukaya, Crimean Reserve, Mt. Demerdzhi. Sevastopol: Sevastopol.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Kazakhstan, Mongolia, China, Korea, Japan.

Eustenancistrocerus (*Parastenancistrocerus*) *amadanensis* (DE SAUSSURE, 1855)

Odynerus transitorius MORAWITZ: KOSTYLEV 1928: 400 (Yenishary Bay, Otuzy valley, Karadag).

Stenancistrocerus transitorius (MORAWITZ): POPOV 1958: 108 (Eastern Crimea).

Eustenancistrocerus transitorius (MORAWITZ): KURZENKO 1978: 275 (Crimea); KURZENKO 1981: 109 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 313 (Karadag, Lisya Bay, Veseloye, Sotera).

Eustenancistrocerus amadanensis transitorius (MORAWITZ): FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay).

Eustenancistrocerus amadanensis (DE SAUSSURE): FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 139♀♀, 72♂♂ [CFUS], 1♂ [ZIN], 73♀♀, 28♂♂ [ZMMU], 2♀♀, 5♂♂ [IZAN], 2♀♀, 1♂ [OSZ], 7♀♀, 1♂ [DPYE], 2♀♀, 2♂♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Kipchak – Bol. Kastel, Bol. Kastel, Atlesh, Belyaus; Krasnoperekopsk distr.: sovkhoz Geroi Sivasha (Ishun'); Pervomayskoye distr.: Pravda; Saki distr.: Pribrezhnoye; Dzhankoy distr.: Solenoye Ozero; Nizhnegorskiy distr.: sovkhoz Primorye (Izobilnoye); Bakhchisaray distr.: Furmanovka; Simferopol; Simferopol distr.: Skvortsovo; Belogorsk distr.: Belogorsk; Kirovskoye distr.: 5 km W L'vovo; Alushta: Sotera, Rybachye, Kanaka valley; Sudak: Veseloye, Novyy Svet, Sudak; Feodosiya: Mt. Echkidag, Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Kurortnoye, Karadag, Koktebel, Barakol Lake, Yenishary (Tikhaya) Bay, Mt. Tepeoba, Feodosiya; Lenino distr.: L'vovo, Cape Kazantip, Cape Chauda, Opuk Reserve. Sevastopol: Inkerman, Kazachya Bay, Cape Ayya, Laspi Bay, Cape Lukull.

Distribution: Russia (EP, NC, CR), E and S Europe, N Africa, Caucasus, Turkey, Cyprus, Syria, Israel, Saudi Arabia, Iraq, Iran, Pakistan, Central Asia, Kazakhstan.

Gymnomerus laevipes (SHUCKARD, 1837)

Hoplomerus laevipes (SHUCKARD): BIAŁYNICKI-BIRULA 1926: 904 (Simferopol, Inkerman).

Gymnomerus laevipes laevipes (SHUCKARD): KURZENKO 1977a: 679 (Southern Crimea); KURZENKO 1978: 215 (Southern Crimea).

Gymnomerus laevipes (SHUCKARD): AMOLIN 2003: 5 (Crimea); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut).

Material examined: 71♀♀, 29♂♂ [CFUS], 1♀, 1♂ [ZIN], 6♀♀, 6♂♂ [OSZ], 5♀♀ [SMS], 1♂ [DPYE], 2♀♀, 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Kipchak; Bakhchisaray distr.: Mashino, Mt. Bakla, Kuybyshevo, cordon Zelenyy Gay; Simferopol: Simferopol, Mar'ino, Dzhensafu (currently Simferopol Reservoir); Simferopol distr.: Gvardeyskoye, Dobroye, Perevalnoye, Ayan, Krasnolesye; Belogorsk distr.: Belogorsk, Karasevka, Golovanovka; Yalta; Alushta: Rybachye; Feodosiya: Kiziltash valley – Shchebetovka, Lisya Bay. Sevastopol: Sevastopol.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Iran, Kazakhstan, Mongolia.

Hemipterochilus bembeciformis (MORAWITZ, 1867)

Pterochilus bembeciformis (MORAWITZ): MORAWITZ 1895: 428 (riv. Alma).

Hoplomerus tinniens (SCOPOLI): BIAŁYNICKI-BIRULA 1926: 900 (Kerch, Simferopol). This record belongs to *H. bembeciformis*.

Hemipterochilus bembeciformis (MORAWITZ): KURZENKO 1978: 224 (Crimea); KURZENKO 1981: 96 (Crimea); AMOLIN 2003: 5 (Crimea); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut).

Material examined: 48♀♀, 75♂♂ [CFUS], 2♀♀, 3♂♂ [ZIN], 1♀, 1♂ [IZAN], 1♀, 2♂♂ [OSZ], 1♀ [SMS], 11♀, 10♂♂ [DPYE], 1♂ [AAD]. Republic of Crimea: Crimea (without details); Chernomorskoye distr.: Tarkhankut, Kipchak, Kipchak – Bol. Kastel, Bol. Kastel, Ternovaya valley (Mal. Kastel), Belyaus, Donuzlav Lake; Dzhankoy distr.: 2 km E Solenoye Ozero; Saki distr.: Suvorovskoye; Yevpatoriya; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Urozhaynoye – Molochnoye; Yalta; Feodosiya: Lisya Bay; Lenino distr.: Lenino distr. (without details), L'vovo, Cape Kazantip, Uvarovo, 7 km E Zolotoye, Zavetnoye, Opuk Reserve. Sevastopol: Sevastopol, Cape Lukull.

Distribution: Russia (EP, NC, CR, UR), W, E and S Europe, Caucasus, Turkey, Central Asia, Kazakhstan.

Katamenes dimidiatus (BRULLÉ, 1832)

Eumenes arbustorum HERRICH-SCHÄFFER: KOSTYLEV 1928: 399 (Yenishary Bay). This record belongs to *K. dimidiatus*.

Katamenes sesquicinctus sesquicinctus (LICHTENSTEIN): KURZENKO 1977b: 580 (Crimea). This record belongs to *K. dimidiatus*.

Katamenes sesquicinctus (LICHTENSTEIN): KURZENKO 1978: 301 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 313 (Karadag); FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 68 (Karadag). These records belong to *K. dimidiatus*.

Katamenes dimidiatus (BRULLÉ): IVANOV et al. 2009: 42 (Simferopol); FATERYGA 2010: 78 (Crimea); FATERYGA & ZHIDKOV 2012: 84 (Tarkhankut); FATERYGA & IVANOV 2016: 242-243 (Sevastopol, Khersones).

Material examined: 18♀♀, 29♂♂ [CFUS], 12♀♀, 2♂♂ [ZIN], 3♀♀, 1♂ [ZMMU], 7♀♀, 2♂♂ [KHEO], 8♀♀ [DPYE], 1♀, 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Kipchak – Bol. Kastel, Bol. Kastel, Ternovaya valley (Mal. Kastel), Belyaus, Donuzlav Lake; Razdolnoye distr.: Portovoye; Saki distr.: Pribrezhnoye; Yevpatoriya: Zaozernoye; Krasnogvardeyskoye distr.: 2.5 km W Krasnyy Partizan; Simferopol: Simferopol, Chumakarka; Simferopol distr.: Urozhaynoye; Feodosiya: Karadag, Yenishary (Tikhaya) Bay; Lenino distr.: L'vovo, Kamenskoye – Solyanoye, Cape Kazantip, Zolotoye, Osoviny, Zavetnoye, Opuk Reserve; Kerch. Sevastopol: Sevastopol, Khersones.

Distribution: Russia (EP, CR, UR), E and S Europe, Caucasus, Turkey, Cyprus, Syria, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China.

Katamenes flavigularis (BLÜTHGEN, 1951)

Eumenes arbustorum var. *tabidus* EVERSMANN: KOSTYLEV 1928: 399 (Karadag, Otuzy valley). This record belongs to *K. flavigularis*.

Katamenes flavigularis (BLÜTHGEN): KURZENKO 1978: 301 (Crimea); IVANOV et al. 2004: 313 (Karadag, Lisya Bay, Sudak); FATERYGA 2005: 316 (Yalta Reserve); FATERYGA & IVANOV 2009: 68 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA 2012a: 111 (Mys Martyan Reserve).

Katamenes arbustorum (PANZER): TOBIAS & KURZENKO 1978: 161 (Crimea); IVANOV & LAVRENYUK 1997: 40 (Crimea); AMOLIN 2003: 5 (Crimea). These records belong to *K. flavigularis*.

Material examined: 38♀♀, 56♂♂ [CFUS], 6♀♀ [ZIN], 15♀♀, 13♂♂ [ZMMU], 2♀♀, 1♂ [IZAN], 1♀ [KHEO], 2♂♂ [SMS], 4♀♀ [DPYE], 1♀, 1♂ [AAD]. Republic of Crimea: Bakhchisaray distr.: cordon Zelenyy Gay; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Kizilkoba, Ayan, Krasnolesye, Mt. Pakhkalkaya; Belogorsk distr.: Karasevka; Yalta: Zori Ukrainy (currently Zori Rossii), Katsiveli, Mt. Koshka, Simeiz, Alupka, Mt. Aypetri, Yalta, Yaltinskaya Yayla, Mt. Lapata, Sovetskoye, Gruzport, Mys Martyan Reserve; Alushta: Mt. Chatyrdag, Mt. Demerdzhi, Rybachye, Kanaka valley; Sudak: Sudak, Cape Meganom; Feodosiya: Mt. Echkidag, Kiziltash valley – Otuzy (currently Shchebetovka), Otuzy, Otuzy valley, Lisya Bay, Karadag, Yenishary (Tikhaya) Bay, Mt. Tepeoba, Feodosiya. Sevastopol: Sevastopol, Cape Khersones, Cape Ayya, Laspi Bay, Orlovka.

Distribution: Russia (NC, CR), E and S Europe, ?Caucasus, Turkey, Syria, Lebanon, Iran, Afghanistan, Tajikistan.

Katamenes tauricus (DE SAUSSURE, 1855)

Eumenes tauricus DE SAUSSURE 1855: 137 ("Crimée"), syntypes must be in Museo Regionale di Scienze Naturali, Turin, Italy.

Material examined: No specimens were examined. The record from Crimea is based on DE SAUSSURE (1855).

Distribution: Russia (CR, ES), Iran, Afghanistan, Kyrgyzstan, Kazakhstan, Mongolia, China, India.

Remarks: VAN DER VECHT & FISCHER (1972: 143) synonymized *E. tauricus* described from Crimea and *E. latipes* SICKMANN, 1894 described from Tientsin (currently Tianjin, China) under *K. sesquicinctus* (LICHTENSTEIN, 1796) described from India. The name *Eumenes sesquicinctus* LICHTENSTEIN, 1796 was suppressed by the plenary powers of the ICZN (1995), and *K. tauricus* became the accepted name for this taxon. However, there is a probability that *K. tauricus* could actually be a junior synonym of *K. dimidiatus*, not *K. sesquicinctus*. By the other hand, specimens of "*K. tauricus*" (=*K. sesquicinctus*) from Mongolia studied in CFUS, ZIN, and ZMMU

clearly belong to another species and differ from *K. dimidiatus* by the coloration and by the structure of male genitalia (see drawings of volsellae of *K. dimidiatus* and *K. sesquicinctus* in GIORDANI SOIKA 1958: 64). If *K. tauricus* is a synonym of *K. dimidiatus*, the species known as "*K. tauricus*" in Asiatic countries must be named *K. latipes* (SICKMANN, 1894). To solve this problem the type material of *E. tauricus* must be studied in Turin.

Leptochilus (*Lionotulus*) *alpestris* (DE SAUSSURE, 1855)

Microdynerus alpestris (DE SAUSSURE): MORAWITZ 1895: 485 (Yalta); KOSTYLEV 1928: 406 (Otuzy valley, Yenishary Bay).

Leptochilus alpestris (DE SAUSSURE): TOBIAS & KURZENKO 1978: 166 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 313 (Karadag, Lisya Bay); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut).

Material examined: 32♀♀, 31♂♂ [CFUS], 1♂ [ZIN], 3♀♀, 1♂ [ZMMU], 1♂ [IZAN], 2♂♂ [KHEO], 3♀♀, 2♂♂ [OSZ], 4♂♂ [SMS], 1♀, 3♂♂ [DPYE], 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Bol. Kastel, Belyaus; Yevpatoriya: Zaozernoye; Bakhchisaray distr.: Rechnoye; Simferopol: Mar'ino; Simferopol distr.: Kamyshinka, Pionerskoye, Ayan, Krasnolesye; Belogorsk distr.: Karasevka, 3-5 km S Karasevka, Krinichnoye; Yalta: Zori Ukrainy (currently Zori Rossii), Cape Aytodor; Sudak: Sudak, Cape Meganom; Feodosiya: Mt. Echkidag, Otuzy (currently Shchebetovka) valley, Lisya Bay, Karadag, Yenishary (Tikhaya) Bay, Feodosiya; Lenino distr.: Kamenskoye – Solyanoye, 7 km E Zolotoye, Kurortnoye, Opuk Reserve. Sevastopol: Sevastopol, Inkerman, riv. Chernaya.

Distribution: Russia (EP, NC, CR), W, E and S Europe, N Africa, Caucasus, Turkey, Jordan, Turkmenistan.

Leptochilus (*Lionotulus*) *membranaceus* (MORAWITZ, 1867)

Microdynerus membranaceus (MORAWITZ): KOSTYLEV 1928: 406 (Otuzy valley, Karadag, Yenishary Bay).

Leptochilus membranaceus (MORAWITZ): KURZENKO 1978: 241 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 314 (Karadag); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut).

Material examined: 33♀♀, 28♂♂ [CFUS], 3♀♀, 1♂ [ZIN], 37♀♀, 4♂♂ [ZMMU], 2♂♂ [IZAN], 5♀♀, 1♂ [KHEO], 1♀, 1♂ [OSZ], 1♀ [DPYE], 5♀♀, 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Kipchak, Bol. Kastel, Atlesh, Belyaus; Razdolnoye distr.: Kropotkino; Dzhankoy distr.: Pridorozhnoye; Saki distr.: Novofedorovka; Yevpatoriya; Simferopol: Mar'ino; Simferopol distr.: Kamyshinka, Gvardeyskoye, Dobroye; Belogorsk distr.: Karasevka; Yalta: Cape Aytodor; Alushta: Rybachye; Sudak; Feodosiya: Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Kurortnoye, Karadag, Barakol Lake, Feodosiya; Lenino distr.: Lenino, Karalary Steppe, Tobechikskoye Lake, Opuk Reserve. Sevastopol: Streletskaya Bay.

Distribution: Russia (EP, NC, CR), E and S Europe, Caucasus, Turkey, Israel, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Leptochilus (*Neoleptochilus*) *regulus* (DE SAUSSURE, 1855)

Microdynerus wuczeticzi KOSTYLEV 1928: 406, holotype, ♀, "Novyi Svet" [ZMMU]. Synonymy in VAN DER VECHT & FISCHER 1972: 52.

Microdynerus wuczeticzi KOSTYLEV: POPOV 1958: 108 (Eastern Crimea).

Leptochilus regulus (DE SAUSSURE): KURZENKO 1978: 243 (Crimea); TOBIAS & KURZENKO 1978: 165 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV & FATERYGA 2003: 114 (Kamyshinka, Belaya Skala); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley); IVANOV & FATERYGA 2009b: 31 (Simferopol); FATERYGA 2010: 77 (Crimea).

Material examined: Holotype of *M. wuczeticzi*: Sudak: Novyy Svet, 13.VII 1918, 1♀, V. WUCZETICZ. Paratypes of *M. wuczeticzi*: Feodosiya: Karadag, 27.VII 1927, 2♀♀, GK [ZMMU]. Additional material: 9♀♀, 10♂♂ [CFUS], 1♀, 1♂ [ZIN], 1♀ [ZMMU]. Republic of Crimea: Chernomorskoye distr.: Belyaus; Simferopol: Mar'ino; Simferopol distr.: Kamyshinka; Belogorsk distr.: Belaya Skala; Yalta: Zori Ukrainy (currently Zori Rossii); Sudak: Mt. Karauloba, Sudak, Cape Meganom; Feodosiya: Mt. Echkidag, Karadag. Sevastopol: Sevastopol.

Distribution: Russia (NC, CR), W, E and S Europe, N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Iran.

Microdynerus (*Alastorynerus*) *microdynerus* (DALLA TORRE, 1889)

Alastorynerus microdynerus (DALLA TORRE): KURZENKO 1981: 97 (Crimea); AMOLIN 2003: 5 (Crimea); FATERYGA & FILATOV 2006: 118 (Opuk Reserve); IVANOV & FATERYGA 2009b: 31 (Simferopol); FATERYGA 2010: 77 (Crimea).

Microdynerus microdynerus (DALLA TORRE): IVANOV & FATERYGA 2003: 114 (Kamyshinka, Rechnoye).

Material examined: Republic of Crimea: Yevpatoriya: Zaozernoye, 4.VI, 6.VI 2005, 3♀♀, DP [CFUS, DPYE]; Bakhchisaray distr.: Rechnoye, 7.VI 1980, 1♂, P. SHCHERBATENKO; Simferopol: Mar'ino, 13.VI 2008, 1♀, AF; Simferopol distr.: Kamyshinka, 15.VII 1976, 1♀, SI, Dubki, 14.VI 1976, 1♂, SI, Gvardeyskoye, 19.V 2007, 1♂, SI [CFUS]; Lenino distr.: Opuk Reserve, 26-29.V 2005, 2♀♀, 1♂, M. FILATOV [KHEO]. Sevastopol: Sevastopol, 26.VI 1976, 1♀, L. ZIMINA [ZMMU].

Distribution: Russia (EP, CR), E and S Europe, Caucasus, Turkey, Jordan, Iran, Tajikistan, Kazakhstan.

Microdynerus (*Microdynerus*) *longicollis* MORAWITZ, 1895

Microdynerus longicollis MORAWITZ 1895: 486, holotype, ♀, "Aidanil" [ZIN].

Microdynerus longicollis MORAWITZ: KURZENKO 1978: 245 (Crimea); TOBIAS & KURZENKO 1978: 166 (Crimea); KURZENKO 1981: 101 (Crimea); FATERYGA & AMOLIN 2006: 548 (Rybachye, Ayan); FATERYGA 2010: 77 (Crimea); FATERYGA 2012a: 109 (Aydanil).

Material examined: Holotype: Yalta: Aydanil, 1♀ [ZIN]. Additional material: Republic of Crimea: Simferopol distr.: Ayan, 24.V 2003, 15.VI 2004, 7.VI 2009, 2♀♀, 3♂♂, SI [CFUS], 5.VI, 28.VI 2005, 11.VI 2006, 7.VI, 20.VI 2009, 6♀♀, 10♂♂, AF [CFUS, DPYE], Krasnolesye, V 2012, 1♂, VZ; Belogorsk distr.: Karasevka, 17.VII 1980, 1♀, VL [CFUS]; Alushta: Rybachye, 5.VI 2002, 1♀, M. FILATOV [AAD].

Distribution: Russia (EP, NC, CR), W, E and S Europe, Turkey, Turkmenistan.

Microdynerus (*Microdynerus*) *mirandus* (GIORDANI SOIKA, 1947)

Microdynerus sp.: IVANOV et al. 2004: 315 (Karadag). This record belongs to *M. mirandus*.

Microdynerus mirandus (GIORDANI SOIKA): FATERYGA & AMOLIN 2006: 548 (Sudak, Karadag); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 77 (Crimea).

Material examined: Republic of Crimea: Alushta: Rybachye, 10.VIII 1993, 1♀, M. NESTEROV [IZAN]; Sudak, 12.VII, 14.VII 1980, 4♀♀, VL [CFUS, OSZ]; Feodosiya: Karadag, 6.VII 1982, 1♂, L. ZIMINA [ZMMU], 15.VII 2001, 2♀♀, SI, 25.VI 2013, 1♂, AF [CFUS].

Distribution: Russia (CR), E and S Europe, Turkey.

Microdynerus (*Microdynerus*) *nugdunensis* (DE SAUSSURE, 1855)

Microdynerus nugdunensis (DE SAUSSURE): MORAWITZ 1895: 486 (Balaklava); KURZENKO 1978: 245 (Crimea); TOBIAS & KURZENKO 1978: 166 (Crimea); KURZENKO 1981: 101 (Crimea); FATERYGA 2010: 77 (Crimea).

Material examined: Sevastopol: Balaklava, 1♀ [ZIN].

Distribution: Russia (EP, NC, CR), W, E and S Europe, Azerbaijan, Turkey.

Microdynerus (*Microdynerus*) *timidus* (DE SAUSSURE, 1856)

Microdynerus timidus (HERRICH-SCHÄFFER): FATERYGA & AMOLIN 2006: 548 (Sudak).

Microdynerus timidus (DE SAUSSURE): IVANOV & FATERYGA 2009b: 31 (Simferopol); FATERYGA 2010: 77 (Crimea).

Material examined: Republic of Crimea: Simferopol: Simferopol, 22.VI 2008, 1♀, SI, Mar'ino, 13.VI 2008, 1♂, SI, 14.VI 2008, 8.VI 2009, 9.VI 2010, 1♀, 11♂♂, AF; Sudak, 7.VII 2005, 2♀♀, AF [CFUS].

Distribution: Russia (CR), W, E, N and S Europe, N Africa.

Microdynerus (*Pseudomicrodynerus*) *parvulus* (HERRICH-SCHÄFFER, 1838)

Microdynerus bifidus MORAWITZ 1885: 177-178, lectotype (KURZENKO, designated here), ♀, "Balaklawa" [ZIN]. Synonymy in VAN DER VECHT & FISCHER 1972: 37.

Microdynerus bifidus MORAWITZ: MORAWITZ 1895: 487 (Balaklava); KOSTYLEV 1928: 405 (Karadag).

Microdynerus parvulus (HERRICH-SCHÄFFER): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 315 (Karadag); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 77 (Crimea).

Material examined: Lectotype of *M. bifidus*: Sevastopol: Balaklava, 1♀. Paralectotype of *M. bifidus*: Sevastopol: Balaklava, 1♀ [ZIN]. Additional material: 6♀♀, 14♂♂ [CFUS], 2♀♀ [ZMMU], 1♂ [IZAN], 2♀♀, 1♂ [OSZ], 2♀♀ [SMS], 1♀ [DPYE]. Republic of Crimea: Dzhankoy distr.: 15 km N Pridorozhnoye; Yevpatoriya: Mirnyy, Zaozernoye; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Storozhevoye, Pionerskoye, Perevalnoye, Ayan, Krasnolesye; Belogorsk distr.: Karasevka; Alushta: Privetnoye; Feodosiya: Karadag.

Distribution: Russia (EP, NC, CR, UR, WS), W, E and S Europe, Caucasus, Turkey, Iran, Uzbekistan, Kazakhstan.

Remarks: KURZENKO (1978: 244) designated a lectotype of *M. bifidus* (Fig. 2B) in his thesis manuscript but did not publish it.

Odynerus (*Odynerus*) *femoratus* DE SAUSSURE, 1856

Odynerus femoratus DE SAUSSURE: IVANOV & LAVRENYUK 1997: 40 (Kerch Peninsula); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 315 (Karadag); FATERYGA et al. 2007: 157 (Krasnolesye); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 77 (Crimea).

Material examined: 19♀♀, 23♂♂ [CFUS], 2♀♀ [IZAN], 1♂ [OSZ], 1♂ [DPYE], 1♂ [AAD]. Republic of Crimea: Bakhchisaray distr.: Kuybyshevo; Simferopol distr.: Chaykovskoye, Krasnolesye; Feodosiya: Lisya Bay, Karadag; Lenino distr.: Cape Chauda, Zavetnoye, Tobechikskoye Lake, Opuk Reserve.

Distribution: Russia (EP, NC, CR, ES), W, E and S Europe, Caucasus, Turkey, Syria, Israel, Iran.

Odynerus (*Odynerus*) *melanocephalus* (GMELIN, 1790)

Hoplomerus melanocephalus (LINNAEUS): KOSTYLEV 1928: 399 (Karadag).

Odynerus melanocephalus melanocephalus (GMELIN): KURZENKO 1977a: 687 (Crimea); KURZENKO 1978: 217 (Crimea).

Odynerus melanocephalus (GMELIN): AMOLIN 2003: 5 (Crimea); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut).

Material examined: 6♀♀, 2♂♂ [CFUS], 4♀♀, 10♂♂ [ZIN], 2♀♀ [ZMMU], 2♀♀ [IZAN], 1♂ [KHEO], 1♀ [SMS], 3♀♀ [DPYE]. Republic of Crimea: Crimea (without details); Chernomorskoye distr.: Tarkhankut, Kipchak; Dzhankoy; Dzhankoy distr.: Solenoye Ozero, 3 km NE Pridorozhnoye, Tselinnoye; Yevpatoriya: Zaozernoye, Yevpatoriya; Simferopol; Simferopol distr.: Dobroye; Feodosiya: Lisya Bay, Karadag; Lenino distr.: L'vovo, Cape Chauda; Kerch. Sevastopol: Inkerman, Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, NC, CR, UR, WS), W, E, N and S Europe, Caucasus, Turkey, Cyprus, Syria, Jordan, Israel, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan.

Odynerus (*Spinicoxa*) *albopictus calcaratus* (MORAWITZ, 1885)

Hoplomerus sp.: KOSTYLEV 1928: 399 (Karadag). This record belongs to *O. albopictus calcaratus*.

Odynerus albopictus calcaratus (MORAWITZ): KURZENKO 1977a: 688 (Crimea); KURZENKO 1978: 219 (Crimea); IVANOV et al. 2004: 315 (Karadag, Lisya Bay, Sudak); FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA 2012a: 109 (Mys Martyan Reserve).

Odynerus calcaratus (MORAWITZ): TOBIAS & KURZENKO 1978: 163 (Crimea).

Odynerus albopictus DE SAUSSURE: AMOLIN 2003: 5 (Crimea). This record belongs to *O. albopictus calcaratus*.

Material examined: 66♀♀, 29♂♂ [CFUS], 1♀ [ZIN], 6♀♀ [ZMMU], 1♂ [IZAN], 3♂♂ [KHEO], 6♀♀ [OSZ], 1♀ [DPYE], 2♂♂ [AAD]. Republic of Crimea: Bakhchisaray distr.: Rechnoye, Shelkovichnoye, cordon Zelenyy Gay; Yalta: Yalta, Gruzport, Mys Martyan Reserve; Alushta: Crimean Reserve, Vinogradnoye, Rybachye, Kanaka valley; Sudak: Sudak, Mt. Tarakhtash; Feodosiya: Otuzy (currently Shchebetovka) valley, Lisya Bay, Karadag, Feodosiya; Lenino distr.: Cape Kazantip.

Distribution: Russia (CR), E and S Europe, ?N Africa, Caucasus, Turkey, Syria, Jordan, Israel, Iraq, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Odynerus (*Spinicoxa*) *simillimus* MORAWITZ, 1867

Odynerus simillimus MORAWITZ: KURZENKO 1977a: 689 (Crimea); KURZENKO 1978: 221 (Crimea); FATERYGA 2010: 77 (Crimea).

Material examined: Republic of Crimea: Yevpatoriya, 1♂, V. YAKOVLEV [ZIN].

Distribution: Russia (EP, NC, CR, UR, WS, ES), W and E Europe, Caucasus, Turkey, Israel, Turkmenistan, Kazakhstan, Mongolia.

Onychopterocheilus (*Onychopterocheilus*) *pallasii* (KLUG, 1805)

Pterocheilus Pallasii KLUG 1805: 150-153, holotype, ♀, "Krim" [destroyed (VAN DER VECHT & FISCHER 1972: 29)].

Pterocheilus pallasii KLUG: IVANOV & LAVRENYUK 1997: 40 (Tarkhankut).

Onychopterocheilus pallasii (KLUG): IVANOV & FATERYGA 2003: 114 (Tarkhankut); FATERYGA & IVANOV 2010: 188 (Yevpatoriya, Tarkhankut); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut).

Material examined: Republic of Crimea: Chernomorskoye distr.: Tarkhankut, 23.VI 1989, 1♂, SI [CFUS]; Yevpatoriya, 1♀ [ZIN], 4.VII 1949, 1♀, I. MALTSEV [OSZ].

Distribution: Russia (EP, NC, CR, UR, WS), E Europe, Turkey, Kazakhstan, Mongolia.

Paragymnomerus signaticollis tauricus (KOSTYLEV, 1940)

Odynerus signaticollis tauricus KOSTYLEV 1940: 39, holotype, ♀, "Tauria, Karadag" [ZMMU].

Haplomerus signaticollis tauricus (KOSTYLEV): POPOV 1958: 108 (Karadag).

Paragymnomerus signaticollis tauricus (KOSTYLEV): KURZENKO 1977a: 681 (Southern Crimea); KURZENKO 1978: 214 (Southern Crimea); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut).

Paragymnomerus signaticollis (MORAWITZ): KURZENKO 1981: 95 (South Coast). This record belongs to *P. signaticollis tauricus*.

Material examined: Holotype: Feodosiya: Karadag, 13.VII 1928, 1♀, GK. Paratypes: Feodosiya: Karadag, 29.VI, 4.VII 1928, 2♀♀, GK [ZMMU]. Additional material: Republic of Crimea: Chernomorskoye distr.: Kipchak, 20.VI 2008, 1♀, AF, 17.VI 2015, 1♂, VZ, Kipchak – Bol. Kastel, 16.VI 2015, 1♂, VZ, Bol. Kastel, 4.VII 2014, 11.VI 2015, 2♀♀, VZ, 12.VII, 13.VII, 14.VII 2014, 22.VII 2015, 4.VI, 29.VI 2016, 5♀♀, 2♂♂, AF [CFUS], 12-15.VII 2014, 4♀♀, DP [DPYE]. Sevastopol: Cape Lukull, 7.VII 2015, 2♀♀, AF [CFUS].

Distribution: Russia (CR), E Europe (Ukraine), Turkey.

Remarks: A male of *P. signaticollis tauricus* was not previously described. It differs from *P. s. signaticollis* (MORAWITZ, 1888) only by the coloration: black; the following are weakly yellowish white: mandibles except lateral margins and teeth, labrum, clypeus, small spot on frons directly upper clypeus (absent in one specimen), spot on frons upper antennal foveae, two streaks along inner margins of lower parts of eyes, two spots on occiput at dorso-lateral corner of head, scapus frontally, broad anterior band on pronotum narrowed or interrupted medially, two spots on dorsal meseplsterna, tegulae except small reddish-brown spots, two lateral spots on scutellum, two small lateral spots on postscutellum (absent in one specimen), middle and fore coxae ventrally, distal 2/3-3/4 parts of fore femorae and distal 1/2-2/3 parts of middle femorae ventrally, narrow posterior band on tergum I slightly extending over its lateral margins, narrow posterior band on tergum II largely extending over its lateral margins, narrow posterior bands on terga III-VI not extended laterally, narrow posterior bands on sterna II and VI, and lateral posterior streaks on sterna III-V; weakly reddish brown are: small spots on tegulae, small distal parts of fore and middle femorae dorsally, small distal parts of hind femorae dorsally and ventrally, and entire tibiae and tarsi. All structures of the body including the genitalia are like in nominative subspecies (Fig. 4).

Fig. 4: Male of *Paragymnomerus signaticollis tauricus* (KOSTYLEV): A, general view, dorsally; B, head, frontally; C, genitalia, dorsally.

Paravespa (*Paravespa*) *rex* (VON SCHULTHESS, 1924)

Hoplomerus rex (VON SCHULTHESS & FRIESE): KOSTYLEV 1928: 399 (Tukluk).

Haplomerus rex (VON SCHULTHESS & FRIESE): POPOV 1958: 108 (Eastern Crimea).

Paravespa rex (VON SCHULTHESS): KURZENKO 1977a: 678 (vicinity of Sudak, Karadag); KURZENKO 1978: 212 (vicinity of Sudak, Karadag); KURZENKO 1981: 95 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV & FATERYGA 2003: 115 (Lisya Bay); IVANOV et al. 2004: 315 (Lisya Bay); FATERYGA & IVANOV 2009: 67 (Karadag, Lisya Bay); FATERYGA & IVANOV 2010: 187 (Tukluk, Karadag, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA & IVANOV 2013: 591 (Tukluk, Karadag, Lisya Bay, Mt. Echkidag); IVANOV et al. 2015: 299 (Karadag, Lisya Bay, Mt. Echkidag).

Material examined: Republic of Crimea: Sudak: Tukluk (currently Bogatovka), 3.VII 1922, 1♀, V. WUCZETICZ [ZMMU]; Feodosiya: Mt. Echkidag, 20.VI 2009, 1♂, K. SHORENKO, Lisya Bay, 13.VI 1995, 1♀, 3♂♂, SI, 13.VI 2007, 26.VI 2009, 12.VI 2010, 15.VI, 16.VI, 17-19.VI, 24.VI, 2.VII 2011, 1.VI, 7-27.VI 2012, 9.VI 2013, 23.IV 2014, 4♀♀, 10♂♂, AF, 5.VI 2008, 1♂, A. DZHAPAROV [CFUS], Karadag, 4.VII 1928, 1♂, GK [ZMMU].

Distribution: Russia (CR), Turkey, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.

Parodontodynerus ephippium (KLUG, 1817)

Odynerus ephippium GERMAIN: KOSTYLEV 1928: 404 (Yenishary Bay, Karadag).

Parodontodynerus ephippium (KLUG): KURZENKO 1978: 258 (Crimea); TOBIAS & KURZENKO 1978: 172 (Crimea); KURZENKO 1981: 103 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 316 (Karadag, Lisya Bay, Veseloye, Gromovka); FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 54♀♀, 14♂♂ [CFUS], 1♂ [ZIN], 38♀♀, 6♂♂ [ZMMU], 1♀, 4♂♂ [IZAN], 5♀♀, 1♂ [KHEO], 1♀, 2♂♂ [OSZ], 2♀♀ [DPYE], 1♀, 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Bol. Kastel, Donuzlav Lake; Saki distr.: Novofedorovka; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Gvardeyskoye; Yalta: Parkovoye, Katsiveli, Cape Aytodor, Yalta, Gruzport, Artek; Alushta: Alushta, Rybachye; Sudak: Gromovka, Veseloye, Sudak; Feodosiya: Mt. Echkidag, Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Karadag, Yenishary (Tikhaya) Bay, Mt. Tepeoba, Feodosiya; Lenino distr.: Cape Kazantip, Zolotoye, Kurortnoye, Yakovenkovo, Opuk Reserve. Sevastopol: Sevastopol, Inkerman, Laspi Bay.

Distribution: Russia (EP, NC, CR), W, E and S Europe, Caucasus, Turkey, Lebanon, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Pseudepipona (*Deuterepipona*) *superba* (MORAWITZ, 1867)

Pseudepipona superba (MORAWITZ): KURZENKO 1978: 270 (Crimea); TOBIAS & KURZENKO 1978: 171 (Crimea); FATERYGA 2010: 78 (Crimea).

Material examined: Republic of Crimea: South Coast: Karakau (currently unknown) – Yayla, 1864, 1♂, WIDHALM [ZIN].

Distribution: Russia (EP, CR), ?Azerbaijan.

Pseudepipona (*Pseudepipona*) *augusta* (MORAWITZ, 1867)

Odynerus augustus MORAWITZ: MORAWITZ 1895: 468 (Yalta); KOSTYLEV 1928: 404 (Tukluk).

Pseudepipona augusta (MORAWITZ): KURZENKO 1977b: 562 (Crimea); KURZENKO 1978: 267 (Crimea); IVANOV & LAVRENYUK 1997: 40 (Kerch Peninsula); AMOLIN 2003: 5 (Crimea); FATERYGA 2010: 78 (Crimea).

Material examined: Republic of Crimea: Krasnoperekopsk, 17.IX 1971, 1♀, SM [CFUS]; Sudak: Tukluk (currently Bogatovka), 3.VII 1922, 1♀, V. WUCZETICZ [ZMMU]; Lenino distr.: Azovskoye, 4.VIII 1978, 1♀, M. EIDELBERG [OSZ]; Kerch, 1♂, A. KIRITCHENKO [ZIN].

Distribution: Russia (EP, NC, CR, UR, WS, ES), E Europe, Caucasus, Turkey, Kazakhstan, Mongolia, China.

Pseudepipona (*Pseudepipona*) *beckeri* (MORAWITZ, 1867)

Odynerus falsus KOSTYLEV: KOSTYLEV 1928: 405 (Yenishary Bay, Karadag). This record belongs to *P. beckeri*.

Pseudepipona beckeri (MORAWITZ): KURZENKO 1978: 267 (Crimea); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea).

Pseudepipona lativentris (DE SAUSSURE): TOBIAS & KURZENKO 1978: 172 (Crimea); IVANOV & LAVRENYUK 1997: 40 (Tarkhankut); AMOLIN 2003: 5 (Crimea). These records belong to *P. beckeri*.

Material examined: 29♀♀, 19♂♂ [CFUS], 10♀♀, 4♂♂ [ZIN], 14♀♀, 2♂♂ [ZMMU], 4♂♂ [OSZ], 1♂ [SMS], 1♀, 3♂♂ [DPYE], 2♀♀, 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Bol. Kastel; Razdolnoye distr.: Steregushcheye, Kropotkino, Portovoye; Krasnoperekopsk distr.: Tavricheskoye, sovkhoz Geroi Sivasha (Ishun'); Traktovoye (currently unknown, there are two "Traktovoye" in Crimea); Pervomayskoye distr.: Pravda; Dzhankoy distr.: Solenoye Ozero, 2 km E Solenoye Ozero; Saki; Yevpatoriya; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Druzhnoye; Feodosiya: Otuzy (currently Shchebetovka), Lisya Bay, Karadag, Barakol Lake, Yenishary (Tikhaya) Bay; Lenino distr.: L'vovo, Arabat Spit, Uvarovo, 10 km N Uvarovo, Mysovoye, Cape Chauda, Kurortnoye, Zavetnoye. Sevastopol: Sevastopol, Inkerman, Khersones, Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, CR), Kazakhstan.

Pseudepipona (*Pseudepipona*) *herrichii* (DE SAUSSURE, 1856)

Odynerus Herrichi DE SAUSSURE: MORAWITZ 1895: 471 (Alma valley).

Odynerus herrichi DE SAUSSURE: KOSTYLEV 1928: 405 (Otuzy valley).

Pseudepipona herrichi (DE SAUSSURE): POPOV 1958: 108 (Eastern Crimea).

Pseudepipona herrichii (DE SAUSSURE): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 316 (Gromovka); FATERYGA & IVANOV 2009: 67 (Otuzy valley, Lisya Bay); FATERYGA 2010: 78 (Crimea); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 66♀♀, 8♂♂ [CFUS], 16♀♀, 2♂♂ [ZIN], 2♂♂ [OSZ], 1♀ [SMS], 19♀♀ [DPYE]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Bol. Kastel; Nizhnegorskiy distr.: Peny; Simferopol; Sudak: Gromovka, Sudak; Feodosiya: Lisya Bay; Lenino distr.: Cape Chauda. Sevastopol: Khersones, Kazachya Bay, Cape Lukull.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E and S Europe, N Africa, Caucasus, Turkey, Syria, Central Asia, Kazakhstan, Mongolia, China, N America.

Pterocheilus (*Pterocheilus*) *phaleratus* (PANZER, 1797)

Pterocheilus phaleratus (PANZER): IVANOV & FATERYGA 2003: 115 (vicinity of Simferopol); FATERYGA 2010: 77 (Crimea).

Material examined: Republic of Crimea: vicinity of Simferopol, 1.VI 1977, 1♂, SI [CFUS]; Kirovskoye distr.: Staryy Krym, 9.VII 1904, 1♂, D. GLAZUNOV [ZIN].

Distribution: Russia (EP, CR, UR), W, E, N and S Europe, Georgia, Azerbaijan, Turkey, Kazakhstan, Mongolia.

Stenodynerus bluethgeni VAN DER VECHT, 1971

Odynerus dentisquama THOMSON: KOSTYLEV 1928: 404 (Otuzy valley). This record belongs to *S. bluethgeni*.

Stenodynerus bluethgeni VAN DER VECHT: IVANOV et al. 2004: 316 (Karadag); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley); FATERYGA 2010: 77 (Crimea); FATERYGA 2012a: 109 (Mys Martyan Reserve).

Stenodynerus sp.: FATERYGA 2010: 77 (Crimea). This record belongs to *S. bluethgeni*.

Material examined: 38♀♀, 15♂♂ [CFUS], 2♂♂ [ZIN], 2♀♀, 2♂♂ [ZMMU], 1♂ [IZAN], 1♀ [KHEO], 2♀♀, 1♂ [OSZ], 1♂ [SMS], 6♀♀ [DPYE], 1♀ [AAD]. Republic of Crimea: Chernomorskoye distr.: Kipchak, Dzhangul, Belyaus; Razdolnoye distr.: Ruch'i; Dzhankoy distr.: 1-2 km NE Pridorozhnoye; Saki distr.: Pribrezhnoye; Yevpatoriya: Zaozernoye, Yevpatoriya, Moynaki Lake, 3 km SE Yevpatoriya; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Fontany, Urozhaynoye, Gvardeyskoye, Krasnolesye; Belogorsk distr.: Bogatoye, Karasevka, 3-5 km S Karasevka; Sovetskiy distr.: Zavetnoye; Yalta: Mys Martyan Reserve; Alushta: Zelenogorye; Feodosiya: Otuzy (currently Shchebetovka) valley, Karadag; Lenino distr.: Karalary

Steppe, Osoviny, Opuk Reserve; Kerch. Sevastopol: Inkerman, Morozovka, 5 km W Verkhnesadovoye.

Distribution: Russia (EP, NC, CR, UR, ES), W, E and S Europe, Caucasus, Turkey, Iran, Turkmenistan, Kazakhstan, China.

Stenodynerus chevrieranus (DE SAUSSURE, 1855)

Odynerus germanicus DE SAUSSURE: MORAWITZ 1895: 464 (Yalta); KOSTYLEV 1928: 404 (Karadag, Otuzy valley). These records belong to *S. chevrieranus*.

Odynerus germanicus var. *ponticus* KOSTYLEV 1928: 404, ♀ ("Karadag", "Otuzy Tal"), syntypes in ZMMU. Synonymy in VAN DER VECHT & FISCHER 1972: 65.

Stenodynerus chevrieranus (DE SAUSSURE): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 316 (Karadag, Sudak, Sotera); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley); FATERYGA 2010: 77 (Crimea); FATERYGA 2012a: 109 (Nikita, Mys Martyan Reserve).

Stenodynerus xanthomelas (HERRICH-SCHÄFFER): FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley). This record belongs to *S. chevrieranus*.

Material examined: Syntypes of *O. germanicus ponticus*: Feodosiya: Otuzy (currently Shchebetovka) valley, 4.VIII 1927, 1♀, GK, Karadag, 2.IX 1918, 1♀, V. KARAVAJEV [ZMMU]. Additional material: 47♀♀, 23♂♂ [CFUS], 1♂ [ZIN], 11♀♀, 2♂♂ [ZMMU], 7♀♀, 3♂♂ [IZAN], 1♂ [KHEO], 3♀♀, 5♂♂ [OSZ], 2♀♀, 5♂♂ [SMS], 5♀♀ [DPYE], 2♀♀, 1♂ [AAD]. Republic of Crimea: Yevpatoriya; Bakhchisaray distr.: Kuybyshevo; Simferopol; Simferopol distr.: Partizanskoye Reservoir, Krasnaya Zor'ka, Pionerskoye, Dobroye, Ayan, Krasnolesye; Belogorsk distr.: Krinichnoye, Karasevka; Kirovskoye distr.: Staryy Krym; Yalta: Cape Aytodor, Yalta, Nikita, Mys Martyan Reserve; Alushta: Vinogradnoye, Sotera, Rybachye, Privetnoye, Zelenogorye; Sudak; Feodosiya: Shchebetovka, Kurortnoye, Karadag, Feodosiya. Sevastopol: Inkerman, Lyubimovka, Morozovka.

Distribution: Russia (EP, NC, CR, UR), W, E and S Europe, Caucasus, Turkey, Iran, Central Asia, Kazakhstan.

Stenodynerus fastidiosissimus difficilis (MORAWITZ, 1867)

Odynerus difficilis MORAWITZ: KOSTYLEV 1928: 404 (Karadag).

Stenodynerus difficilis (MORAWITZ): KURZENKO 1978: 260 (Crimea).

Stenodynerus fastidiosissimus (DE SAUSSURE): AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 316 (Karadag). These records belong to *S. fastidiosissimus difficilis*.

Stenodynerus fastidiosissimus difficilis (MORAWITZ): FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 22♀♀, 12♂♂ [CFUS], 1♀, 1♂ [ZIN], 18♀♀, 4♂♂ [ZMMU], 1♀ [KHEO], 1♂ [OSZ], 1♂ [SMS], 3♀♀, 3♂♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak, Bol. Kastel; Pervomayskoye distr.: Voykovo; Yevpatoriya: Moynaki Lake; Bakhchisaray distr.: Cherkez-Kermen (Krepkoye), Rechnoye; Simferopol distr.: Gvardeyskoye; Belogorsk distr.: 3 km N Krymskaya Roza; Yalta: Beregovoye (currently Kastropol); Feodosiya: Otuzy (currently Shchebetovka), Lisya Bay, Karadag, Barakol Lake, Yenishary (Tikhaya) Bay, Feodosiya; Lenino distr.: Cape Chauda, Opuk Reserve. Sevastopol: Alsu (currently Morozovka), 5 km W Verkhnesadovoye.

Distribution: Russia (EP, NC, CR, UR), E and S Europe, Caucasus, Turkey, Iran, Central Asia, Kazakhstan.

Stenodynerus orenburgensis (ANDRÉ, 1884)

Stenodynerus orenburgensis (ANDRÉ): KURZENKO 1977b: 557 (Crimea); TOBIAS & KURZENKO 1978: 178 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 317 (Karadag); FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Karadag); FATERYGA 2010: 77 (Crimea).

Material examined: 14♀♀, 12♂♂ [CFUS], 1♀ [ZIN], 1♂ [ZMMU], 1♀ [KHEO], 1♀ [OSZ], 2♀♀, 1♂ [DPYE], 1♂ [AAD]. Republic of Crimea: Crimea (without details); Razdolnoye distr.: Portovoye; Pervomayskoye distr.: Pravda; Krasnogvardeyskoye distr.: Kalinino; Simferopol; Simferopol distr.: Urozhaynoye, Gvardeyskoye, Pionerskoye; Alushta: Mt. Karabi; Feodosiya: Karadag; Lenino distr.: L'vovo, Cape Kazantip, Cape Chauda, Opuk Reserve.

Distribution: Russia (EP, NC, CR, UR, WS, ES), W, E, N and S Europe, Caucasus, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China.

Stenodynerus steckianus (VON SCHULTHESS, 1897)

Stenodynerus teutonicus (BLÜTHGEN): KURZENKO 1978: 263 (Crimea).

Stenodynerus steckianus (VON SCHULTHESS): AMOLIN 2003: 5 (Crimea); FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 83 (Tarkhankut).

Material examined: 10♀♀, 8♂♂ [CFUS], 1♂ [KHEO], 1♀, 2♂♂ [OSZ], 1♀, 1♂ [SMS], 1♂ [AAD]. Republic of Crimea: Chernomorskoye distr.: Kipchak, Dzhangul; Pervomayskoye distr.: Voykovo; Simferopol; Simferopol distr.: Urozhaynoye, Gvardeyskoye; Belogorsk distr.: Karasevka; Alushta: Mt. Chatyrdag, Mt. Karabi; Feodosiya: Lisya Bay, Feodosiya; Lenino distr.: Cape Kazantip, Cape Chauda, Opuk Reserve.

Distribution: Russia (EP, NC, CR, UR), W, E and S Europe, Azerbaijan, Turkey, Kazakhstan.

Stenodynerus xanthomelas (HERRICH-SCHÄFFER, 1839)

Stenodynerus xanthomelas (HERRICH-SCHÄFFER): AMOLIN 2003: 5 (Crimea); FATERYGA et al. 2007: 157 (Krasnolesye); FATERYGA 2010: 77 (Crimea).

Material examined: 7♀♀, 6♂♂ [CFUS], 4♀♀, 2♂♂ [ZMMU], 1♀, 1♂ [OSZ], 3♀♀, 2♂♂ [SMS]. Republic of Crimea: Simferopol; Simferopol distr.: Pionerskoye, Krasnolesye; Alushta: Mt. Chatyrdag, Mt. Karabi, 6 km N Privetnoye.

Distribution: Russia (EP, NC, CR, WS), W, E and S Europe, Caucasus, Turkey, Iran, China.

Symmorphus (*Symmorphus*) *bifasciatus* (LINNAEUS, 1761)

Symmorphus bifasciatus (LINNAEUS): AMOLIN 2003: 5 (Crimea); FATERYGA 2010: 78 (Crimea).

Material examined: 10♀♀, 1♂ [CFUS], 1♀ [ZIN], 3♀♀, 1♂ [OSZ], 13♀♀, 3♂♂ [SMS]. Republic of Crimea: Crimea (without details); Simferopol; Simferopol distr.: Krasnolesye; Belogorsk distr.: Karasevka, riv. Karasu; Alushta: Mt. Karabi. Sevastopol: Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia, China, Korea, Japan.

Symmorphus (*Symmorphus*) *crassicornis* (PANZER, 1798)

Symmorphus crassicornis (PANZER): MORAWITZ 1895: 488 (Alma valley); CUMMING 1989: 42 (Chatyrdag, Perevalnoye); AMOLIN 2003: 5 (Crimea); FATERYGA 2010: 78 (Crimea); FATERYGA 2012b: 148 (Tankovoye).

Material examined: Republic of Crimea: Bakhchisaray distr.: Tankovoye, 11.VI 2011, 5♀♀, AF [CFUS]; Simferopol, 15.VI 1924, 1♂ [ZIN], 20.V 1985, 2♂♂, SI [CFUS], 12.VII 1999, 1♀, SM [SMS]; Simferopol distr.: Perevalnoye, 1.VII 1976, 3♂♂, L. ZIMINA [ZMMU]; Belogorsk distr.: Karasevka, 16.VII 1981, 1♀, SM [SMS].

Distribution: Russia (EP, NC, CR, UR, WS, ES), W, E, N and S Europe, Caucasus, Turkey, Iran, Central Asia, Kazakhstan, Mongolia, ?China, India.

Symmorphus (*Symmorphus*) *debilitatus* (DE SAUSSURE, 1855)

Symmorphus connexus (CURTIS): KURZENKO 1977b: 574 (Crimea); KURZENKO 1978: 287 (Crimea). These records belong to *S. debilitatus*.

Symmorphus debilitatus (DE SAUSSURE): KURZENKO 1978: 288 (Crimea); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA 2010: 78 (Crimea).

Material examined: 39♀♀, 6♂♂ [CFUS], 1♀ [ZIN], 4♂♂ [ZMMU], 8♀♀ [OSZ]. Republic of Crimea: Simferopol distr.: Ayan, Krasnolesye; Belogorsk distr.: Karasevka; Yalta: Mt. Lapata; Alushta: Mt. Chatyrdag, Crimean Reserve. Sevastopol: Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, NC, CR), W, E, N and S Europe, Turkey.

Symmorphus (*Symmorphus*) *gracilis* (BRULLÉ, 1832)

Symmorphus gracilis (BRULLÉ): CUMMING 1989: 91 (Pionerskoye); IVANOV & LAVRENYUK 1997: 40 (Crimea); AMOLIN 2003: 5 (Crimea); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA 2010: 78 (Crimea).

Material examined: 52♀♀, 32♂♂ [CFUS], 1♀ [ZIN], 1♂ [ZMMU], 1♀, 2♂♂ [OSZ], 5♀♀, 1♂ [SMS]. Republic of Crimea: Crimea (without details); Simferopol: Simferopol, Mar'ino; Simferopol distr.: Pionerskoye, Ayan, Krasnolesye, Mt. Gapka; Belogorsk distr.: Belogorsk, Karasevka, 3-5 km S Karasevka; Yalta: Yalta, Mt. Lapata; Alushta: Mt. Chatyrdag.

Distribution: Russia (EP, NC, CR), W, E, N and S Europe, Caucasus, Turkey, Syria, Lebanon, Israel, Iran, Turkmenistan, Tajikistan, Kazakhstan.

Symmorphus (*Symmorphus*) *murarius* (LINNAEUS, 1758)

Symmorphus murarius (LINNAEUS): FATERYGA 2012b: 148 (Tankovoye).

Material examined: Republic of Crimea: Bakhchisaray distr.: Tankovoye, 11.VI 2011, 4♀♀, AF [CFUS].

Distribution: Russia (EP, NC, CR, UR, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Iran, Central Asia, Kazakhstan, Korea.

Syneuodynerus egregius (HERRICH-SCHÄFFER, 1839)

Odynerus egregius HERRICH-SCHÄFFER: MORAWITZ 1895: 477 (Yalta, Sudak); KOSTYLEV 1928: 404 (Otuzy valley, Karadag).

Syneuodynerus egregius egregius (HERRICH-SCHÄFFER): KURZENKO 1978: 246 (Crimea).

Syneuodynerus egregius (HERRICH-SCHÄFFER): KURZENKO 1981: 101 (Crimea); AMOLIN 2003: 5 (Crimea); IVANOV et al. 2004: 317 (numerous localities); FATERYGA & IVANOV 2009: 67 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2010: 77 (Crimea); FATERYGA 2012a: 109 (Mys Martyan Reserve).

Material examined: 84♀♀, 54♂♂ [CFUS], 1♀, 7♂♂ [ZIN], 35♀♀, 12♂♂ [ZMMU], 2♀♀ [IZAN], 2♀♀ [OSZ], 1♀ [SMS], 1♀ [DPYE], 1♀ [AAD]. Republic of Crimea: Chernomorskoye distr.: Kipchak, Bol. Kastel, Belyaus; Yevpatoriya: Mirnyy; Bakhchisaray distr.: riv. Alma, Rechnoye; Simferopol: Mar'ino; Simferopol distr.: Urozhaynoye; Belogorsk distr.: Karasevka, Belaya Skala; Yalta: Parkovoye, Zori Ukrainy (currently Zori Rossii), Alupka, Yalta, Vasilyevka, Gruzport, Mys Martyan Reserve; Alushta: Rybachye, Kanaka valley, Privetnoye; Sudak: riv. Shelen, Veseloye, Sudak, Cape Meganom; Feodosiya: Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay, Karadag, Tikhaya Bay. Sevastopol: Mt. Sapun, Cape Ayya, Cape Lukull.

Distribution: Russia (NC, CR), W, E and S Europe, N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Israel, Iran, Turkmenistan.

Tropidodynerus (*Tropidodynerus*) *interruptus* (BRULLÉ, 1832)

Hoplomerus mandibularis MORAWITZ: BIAŁYNICKI-BIRULA 1926: 905 (Khersones, Kerch); KOSTYLEV 1928: 399 (Otuzy valley); POPOV 1958: 108 (Eastern Crimea).

Tropidodynerus interruptus (BRULLÉ): KURZENKO 1977a: 678 (Southern Crimea); KURZENKO 1978: 212 (Southern Crimea); KURZENKO 1981: 95 (Southern Crimea); AMOLIN 2003: 5 (Crimea); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA & IVANOV 2009: 67 (Otuzy valley); IVANOV et al. 2009: 42 (Simferopol); FATERYGA 2010: 77 (Crimea); FATERYGA & ZHIDKOV 2012: 82 (Tarkhankut); FATERYGA & IVANOV 2016: 243 (Sevastopol, Khersones).

Material examined: 27♀♀, 5♂♂ [CFUS], 4♀♀, 3♂♂ [ZIN], 1♀, 1♂ [ZMMU], 1♀ [IZAN], 1♀, 1♂ [OSZ], 11♀ [DPYE], 1♀ [AAD]. Republic of Crimea: Chernomorskoye distr.: Tarkhankut, Kipchak; Bakhchisaray distr.: Bakhchisaray, riv. Alma; Simferopol; Feodosiya: Otuzy (currently Shchebetovka), Otuzy valley, Lisya Bay; Lenino distr.: Cape Chauda, Zolotoye, Zavetnoye, Opuk Reserve; Kerch. Sevastopol: Sevastopol, Khersones.

Distribution: Russia (EP, NC, CR), W, E and S Europe, Armenia, Azerbaijan, Turkey, Kazakhstan.

Subfamily Polistinae

Polistes (*Polistes*) *dominula* (CHRIST, 1791)

Polistes gallicus (LINNAEUS): POPOV 1958: 108 (Crimean Mountains); FATERYGA 2002: 260 (Yalta Reserve). These records belong to *P. dominula*.

Polistes dominulus (CHRIST): FATERYGA 2005: 316 (Yalta Reserve); FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 68 (Karadag, Otuzy valley, Lisya Bay).

Polistes dominula (CHRIST): FATERYGA 2012a: 111 (Nikita, Mys Martyan Reserve); FATERYGA & ZHIDKOV 2012: 84 (Tarkhankut).

Material examined: 326♀♀, 65♂♂ [CFUS], 238♀♀, 65♂♂ [ZIN], 2♀♀, 3♂♂ [KHEO], 14♀♀, 8♂♂ [OSZ], 2♂♂ [KNU], 1♀ [SMS], 1♀ [DPYE]. Republic of Crimea: Crimea (without details); Chernomorskoye distr.: Tarkhankut, Kipchak, Bol. Kastel, Atlesh, Belyaus, Donuzlav Lake; Razdolnoye distr.: Portovoye, Ruch'i; Krasnoperekopsk distr.: Tavricheskoye; Pervomayskoye distr.: Voykovo; Dzhankoy distr.: Solenoye Ozero; Saki distr.: Pribrezhnoye; Yevpatoriya: Mirnyy, Yevpatoriya; Krasnogvardeyskoye distr.: Annovka (currently Kommunary); Nizhnegorskiy distr.: Prirechnoye, Lyubimovka, sovkhoz Primorye (Izobilnoye), Listvennoye;

Bakhchisaray distr.: Kuybyshevo, riv. Alma; Simferopol: Simferopol, Bitak (currently Prigorodnoye), Mar'ino; Simferopol distr.: Zalesye, Urozhaynoye, Gvardeyskoye, Mazanka, Druzhnoye, Kizilkoba, Tavel (currently Krasnolesye), riv. Angara, Taushan-Bazar (currently Privolnoye); Belogorsk distr.: Belogorsk, Vishennoye, Krinichnoye, Karasevka, Krasnoselovka, Neyzats (currently Krasnogorskoye); South Coast: Karakau (currently unknown) – Yayla; Yalta: Mukhalatka (currently Oliva), Parkovoye, Kikeneiz (currently Opolznevoye), Zori Ukrainy (currently Zori Rossii), Katsiveli, Limeneiz (currently Goluboy Zaliv), Alupka, Mt. Aypetri, Koreiz, Gaspra, Mt. Mogabi, Yalta, Yaltinskaya Yayla, Mt. Lapata, Uchkosh Canyon, Sovetskoye, Gruzport, Magarach, Sosnyak, Nikita, Mys Martyan Reserve; Alushta: Mt. Kastel, Vinogradnoye, Mt. Chatyrdag, Crimean Reserve, Alushta, Angarskiy Pass, Mt. Demerdzhi, Semidvorye, Tuak (currently Rybachye), Kanaka valley; Sudak: Veseloye, Sudak, Mt. Tarakhtash, Cape Meganom; Feodosiya: Mt. Echkidag, Shchebetovka, Lisya Bay, Kurortnoye, Karadag, Mt. Tepeoba, Feodosiya; Lenino distr.: Kamenskoye, Kamenskoye – Solyanoye, Cape Kazantip, Mysovoye, Zolotoye, Kurortnoye, Karalary Steppe, Osoviny, Uvarovo, 10 km N Uvarovo, Opuk Reserve; Kerch. Sevastopol: Sevastopol, Inkerman, Khersones, Streletskaya Bay, Kazachya Bay, Cape Khersones, Cape Ayya, Batiliman, Cape Sarych, Chorgun (currently Chernorechye), Kizilovoye, Belbek (currently Verkhnesadovoye), Orlovka, Cape Lukull.

Distribution: Russia (EP, NC, CR, UR, WS), W, E, N and S Europe, N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China, N America (introduced), India, S America (introduced), Australia and New Zealand (introduced).

Polistes (*Polistes*) *gallicus* (LINNÉ, 1767)

Polistes chinensis (FABRICIUS): FATERYGA 2002: 260 (Yalta Reserve). These records belong to *P. gallicus*.

Polistes gallicus (LINNAEUS): FATERYGA 2005: 316 (Yalta Reserve); FATERYGA 2006: 293 (Cape Kazantip); FATERYGA & FILATOV 2006: 119 (Opuk Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 68 (Karadag, Otuzy valley, Lisya Bay); FATERYGA 2012a: 111 (Mys Martyan Reserve); FATERYGA & ZHIDKOV 2012: 84 (Tarkhankut).

Material examined: 94♀♀, 36♂♂ [CFUS], 33♀♀, 13♂♂ [ZIN], 6♀♀ [ZMMU], 1♀ [IZAN], 2♂♂ [KHEO], 1♀ [OSZ], 5♂♂ [KNU], 2♀♀ [DPYE]. Republic of Crimea: Crimea (without details); Chernomorskoye distr.: Tarkhankut, Kipchak, Bol. Kastel, Olenevka, Atlesh, Belyaus; Razdolnoye distr.: Portovoye; Pervomayskoye distr.: Voykovo; Dzhankoy distr.: Solenoye Ozero; Saki distr.: Novofedorovka, Pribrezhnoye; Yevpatoriya: Yevpatoriya, Sasyk Lake; Nizhnegorskiy distr.: Listvennoye; Bakhchisaray distr.: Peschanoye, Bakhchisaray, Kuybyshevo, Shelkovichnoye; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Mt. Tashdzhargan, Fontany, Urozhaynoye, Gvardeyskoye, Krasnolesye; Belogorsk distr.: Belogorsk, Belaya Skala, Krasnoselovka; South Coast: Karakau (currently unknown) – Yayla; Yalta: Zori Ukrainy (currently Zori Rossii), Alupka, Yalta, Mt. Lapata, Uchkosh Canyon, Gruzport, Magarach, Mys Martyan Reserve; Alushta; Sudak: Veseloye, Sudak; Feodosiya: Mt. Echkidag, Otuzy (currently Shchebetovka) valley, Lisya Bay, Karadag, Barakol Lake, Mt. Uzunsyrt, Mt. Tepeoba; Lenino distr.: Cape Kazantip, Zolotoye, 3.5 km SE Zavetnoye, Opuk Reserve; Kerch. Sevastopol: Sevastopol, Khersones, Streletskaya Bay, Cape Khersones, Laspi Bay, Kizilovoye, 5 km W Verkhnesadovoye, Cape Lukull.

Distribution: Russia (EP, NC, CR, WS), W, E and S Europe, N Africa, Ethiopia, Caucasus, Turkey, Cyprus, Jordan, Israel, Iran, Afghanistan, Pakistan, Turkmenistan, Kyrgyzstan, Kazakhstan, Mongolia.

Polistes (*Polistes*) *nimpha* (CHRIST, 1791)

Polistes nimpha (CHRIST): FATERYGA 2002: 260 (Yalta Reserve); FATERYGA 2005: 316 (Yalta Reserve); FATERYGA 2012a: 111 (Nikita).

Polistes nimphus (CHRIST): FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 68 (Karadag, Lisya Bay).

Material examined: 128♀♀, 28♂♂ [CFUS], 1♀ [ZIN], 1♀ [KHEO], 4♀♀ [OSZ], 1♀ [DPYE]. Republic of Crimea: Bakhchisaray distr.: Kuybyshevo, Malinovka, Zagorskoye Reservoir, Shelkovichnoye; Simferopol: Simferopol, Mar'ino; Simferopol distr.: Mt. Tashdzhargan, Gvardeyskoye, Chelbash (2 km E Chaykovskoye), Ayan, Krasnolesye, Taushan-Bazar (currently Privolnoye); Belogorsk distr.: Belaya Skala, Karasevka; Yalta: Parkovoye, Zori Ukrainy (currently Zori Rossii), Goluboy Zaliv, Mt. Aypetri, Yalta, Nikita; Alushta: Mt. Chatyrdag, Luchistoye, Mt. Demerdzhi; Sudak: Veseloye; Feodosiya: Lisya Bay, Karadag, Feodosiya. Sevastopol: Sevastopol, Cape Ayya, Cape Sarych, Morozovka, 5 km W Verkhnesadovoye, Adym-Chokrak valley, Orlovka.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Jordan, Israel, Iraq, Iran, Pakistan, Kyrgyzstan, Kazakhstan, Mongolia, China, India.

Subfamily Vespinae

Dolichovespula media (RETZIUS, 1783)

Dolichovespula media (RETZIUS): FATERYGA 2002: 260 (Yalta Reserve); IVANOV & FATERYGA 2003: 114 (Uchkosh Canyon, Yalta); FATERYGA 2005: 316 (Yalta Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA 2012a: 111 (Nikita).

Material examined: 4♀♀, 14♂♂, 41☿☿ [CFUS], 1♂, 1☿ [DPYE]. Republic of Crimea: Simferopol; Simferopol distr.: Krasnolesye; Yalta: Yalta, Mt. Lapata, Uchkosh Canyon, Nikita; Alushta: Mt. Chatyrdag. Sevastopol: Cape Ayya.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Syria, Kazakhstan, Mongolia, China, Korea, Japan, New Zealand (introduced).

Dolichovespula sylvestris (SCOPOLI, 1763)

Dolichovespula silvestris (SCOPOLI): POPOV 1958: 108 (Crimean Mountains); FATERYGA 2002: 260 (Yalta Reserve).

Dolichovespula sylvestris (SCOPOLI): FATERYGA 2005: 316 (Yalta Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA 2012a: 111 (Nikita).

Material examined: 21♀♀, 27♂♂, 93☿☿ [CFUS], 4☿☿ [ZIN], 2☿☿ [ZMMU], 2☿☿ [SMS], 1☿ [DPYE]. Republic of Crimea: Simferopol distr.: Dzhalman (currently Pionerskoye), Kizilkoba, Perevalnoye, Ayan, Krasnolesye, Taushan-Bazar (currently Privolnoye), Mt. Pakhkalkaya; Belogorsk distr.: Karasevka; Yalta: Mt. Aypetri, Yalta, Yaltinskaya Yayla, Mt. Lapata, Uchkosh Canyon, Nikita, Nikitskaya Yayla; Alushta: Mt. Chatyrdag, Babugan Yayla, Angarskiy Pass, Mt. Demerdzhi, Mt. Karabi; Sudak: Ayserez (currently Mezhdurechye).

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, Caucasus, Turkey, Syria, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China, India.

Vespa crabro LINNAEUS, 1758

Vespa crabro LINNAEUS: FATERYGA 2002: 260 (Yalta Reserve); FATERYGA 2005: 316 (Yalta Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 68 (Karadag, Lisya Bay); FATERYGA 2012a: 111 (Nikita, Mys Martyan Reserve).

Material examined: 15♀♀, 3♂♂, 36☿☿ [CFUS], 14☿☿ [ZIN], 4♀♀ [SMS], 3♂♂, 3☿☿ [DPYE]. Republic of Crimea: Crimea (without details); Bakhchisaray distr.: Golubinka, riv. Alma, Mashino, Zagorskoye Reservoir, cordon Zelenyy Gay; Simferopol; Simferopol distr.: Kizilkoba, Ayan, Krasnolesye, Taushan-Bazar (currently Privolnoye); Belogorsk distr.: riv. Burulcha, Povorotnoye; Yalta: Katsiveli, Alupka, Oreanda, Yalta, Nikita, Mys Martyan Reserve; Alushta: Mt. Ayudag, Malyy Mayak, Mt. Chatyrdag, Crimean Reserve, Alushta, Mt. Demerdzhi; Feodosiya: Lisya Bay, Karadag; Kerch. Sevastopol: Sevastopol, Cape Ayya, Alsu (currently Morozovka), riv. Chernaya.

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, Caucasus, Turkey, Iran, Turkmenistan, Kazakhstan, Mongolia, China, Korea, Japan, Taiwan, N America (introduced).

Vespa orientalis LINNÉ, 1771

Vespa orientalis LINNAEUS: IVANOV & FATERYGA 2003: 115 (Simferopol).

Material examined: Republic of Crimea: Simferopol, 10.XI 1986, 28.VII 2003, 2☿☿, SM [SMS].

Distribution: Russia (NC, CR), E and S Europe, N Africa, Somalia, Caucasus, Turkey, Cyprus, Syria, Jordan, Lebanon, Israel, Saudi Arabia, Yemen, Oman, UAE, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, China (introduced), N America (introduced), Nepal, India, Madagascar (introduced).

Vespula germanica (FABRICIUS, 1793)

Paravespula germanica (FABRICIUS): FATERYGA 2002: 260 (Yalta Reserve).

Vespula germanica (FABRICIUS): FATERYGA 2005: 316 (Yalta Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 68 (Karadag, Lisya Bay); FATERYGA 2012a: 111 (Nikita, Mys Martyan Reserve).

Material examined: 70♀♀, 4♂♂, 96☿☿ [CFUS], 39♀♀, 44☿☿ [ZIN], 13☿☿ [ZMMU], 13♀♀, 16☿☿ [OSZ], 2☿☿ [SMS], 1☿ [DPYE], 1☿ [State Natural History Museum of V.N. Karazin Kharkov National University, Kharkov, Ukraine]. Crimea (without details); Saki distr.: Pribrezhnoye; Yevpatoriya; Nizhnegorskiy distr.: Nizhnegorskiy, Listvennoye; Bakhchisaray distr.: Rechnoye, Bakhchisaray, riv. Belbek, Kuybyshevo, Sokolinoye, riv. Alma; Simferopol; Simferopol distr.: Zalesye, Urozhaynoye, Gvardeyskoye, Strogonovka, Ayan, Krasnolesye; Belogorsk distr.: Belogorsk, Vishennoye, Krinichnoye, Karasevka, riv. Karasu; Kirovskoye distr.: Yarkoye Pole; South Coast (without details); Yalta: Mukhalatka (currently Oliva), Kikeneiz (currently Opolznevoye), Zori Ukrainy (currently Zori Rossii), Goluboy Zaliv, Simeiz, Mt. Aypetri, Gaspra, Yalta, Nikita, Mys Martyan Reserve, Nikitskaya Yayla, Artek; Alushta: Mt. Ayudag, Karasan, Mt. Kastel, Mt. Chatyrdag, Alushta, Semidvorye, Tuak (currently Rybachye); Sudak; Feodosiya: Lisya Bay, Karadag; Kerch. Sevastopol: Sevastopol, Inkerman, Streletskaya Bay, Balaklava, Balaklava – Ayazma valley, Cape Ayya, Laspi Bay, Cape Sarych, Alsu (currently Morozovka), Chorgun (currently Chernorechye), Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, N Africa, S Africa (introduced), Caucasus, Turkey, Syria, Jordan, Lebanon, Israel, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China, Korea, Taiwan, N America (introduced), India, S America (introduced), Australia and New Zealand (introduced).

***Vespula rufa* (LINNAEUS, 1758)**

Paravespula rufa (LINNAEUS): FATERYGA 2002: 260 (Yalta Reserve).

Vespula rufa (LINNAEUS): FATERYGA 2005: 316 (Yalta Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA 2012a: 111 (Nikita, Mys Martyan Reserve).

Material examined: 15♀♀, 13♂♂, 63☿☿ [CFUS], 3♀♀, 2☿☿ [ZIN], 2♀♀, 8☿☿ [OSZ], 2☿☿ [SMS], 1☿ [DPYE]. Republic of Crimea: Bakhchisaray distr.: Bakhchisaray, Vysokoye, Kuybyshevo; Simferopol; Simferopol distr.: Kizilkoba, Ayan, Krasnolesye; Belogorsk distr.: Karasevka; Yalta: Kikeneiz (currently Opolznevoye), Zori Ukrainy (currently Zori Rossii), Miskhor, Yalta, Yaltinskaya Yayla, Mt. Lapata, Uchkosh Canyon, Nikita, Mys Martyan Reserve; Alushta: Mt. Kastel, Mt. Chatyrdag, Crimean Reserve, Alushta, Angarskiy Pass; Sudak; Feodosiya: Karadag. Sevastopol: Cape Ayya, Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, Caucasus, Turkey, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China, Korea, Japan, Taiwan, Nepal.

***Vespula vulgaris* (LINNAEUS, 1758)**

Paravespula vulgaris (LINNAEUS): FATERYGA 2002: 260 (Yalta Reserve).

Vespula vulgaris (LINNAEUS): FATERYGA 2005: 316 (Yalta Reserve); FATERYGA et al. 2007: 149 (Krasnolesye); FATERYGA & IVANOV 2009: 68 (Karadag); FATERYGA 2012a: 111 (Nikita, Mys Martyan Reserve).

Material examined: 27♀♀, 1♂, 72☿☿ [CFUS], 3♀♀ [ZIN], 7☿☿ [ZMMU], 7♀♀, 9☿☿ [OSZ], 2☿☿ [SMS], 1☿ [DPYE]. Republic of Crimea: Crimea (without details); Bakhchisaray distr.: Vysokoye, Kuybyshevo, Mt. Kachikalyon, cordon Zelenyy Gay; Simferopol; Simferopol distr.: Dubki, Zalesye, Dobroye, Ayan, Krasnolesye, Sosnovka (Privolnoye), Mt. Kalan-Bair, Mt. Pakhkalkaya; Belogorsk distr.: Vishennoye, Karasevka, Krinichnoye, Krasnoselovka; Yalta: Parkovoye, Zori Ukrainy (currently Zori Rossii), Katsiveli, Goluboy Zaliv, Mt. Aypetri, Yalta, Yaltinskaya Yayla, Mt. Lapata, Uchkosh Canyon, Nikita, Mys Martyan Reserve; Alushta: Mt. Ayudag, Mt. Chatyrdag, Crimean Reserve, Mt. Karabi; Sudak; Feodosiya: Karadag. Sevastopol: Sevastopol, Cape Ayya, Uzundzha Canyon, Belbek (currently Verkhnesadovoye).

Distribution: Russia (EP, NC, CR, UR, WS, ES, FE), W, E, N and S Europe, Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, Mongolia, China, Korea, Japan, India, Australia and New Zealand (introduced), Hawaii (introduced).

Conclusion

A total of 89 vespid species of 31 genera are recognized in the fauna of Crimea; 87 of them are confirmed by the examined collection material, two other species (*Eumenes crimensis* and *Katamenes tauricus*) are added due to its first description from Crimea, taxonomic status of them is doubtful and requires further investigation.

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