

**Manisa (Turkey) Invertebrate Biodiversity Preliminary Study**Tuğrul Öntürk \*<sup>1</sup><sup>1</sup>Eskişehir Osmangazi University, Faculty of Arts and Sciences, Department of Biology, Eskişehir, Turkey\*Corresponding author  
E-mail: tugrulonturk@gmail.comReceived: 17 Oct 2020  
Accepted: 21 Nov 2020Tuğrul ÖNTÜRK : <https://orcid.org/0000-0002-6358-6112>**Abstract**

As a result of literature researches conducted in Manisa province, 343 species of Invertebrates were identified. Eight of them are endemic species. Of these 8 species, 4 belong to Gastropoda, 3 belong to Coleoptera and 1 belong to Ephemeroptera.

**Key words:** *manisa, invertebrate, endemic, biodiversity***INTRODUCTION**

In the literature review of Manisa Province, it was stated that a total of 343 invertebrate animal species belonging to 80 families were distributed.

While preparing the invertebrate list of Manisa Province, previous articles, postgraduate theses, papers, etc. All scientific studies were scanned and the literature given at the end of the table was used.

Their conservation status is noted according to the IUCN classification (IUCN Red List of Threatened Species, 2016). In addition, whether it is included in the annexes of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) (CITES, 2016) and its protection status according to the European Convention on the Conservation of Wildlife and Habitats (BERN Convention) are also stated.

Turkey is the country with the richest biodiversity in Europe and the Middle East and ranks ninth in terms of biodiversity in the European continent. The difference in the geographical structure of our country includes high endemism and genetic diversity. From this point of view, Anatolian fauna draws attention with its species richness over 80.000 (Vertebrate and invertebrate species).

**INVERTEBRATES****Literature based determinations**

Invertebrates do not have an endoskeleton made of cartilage or bone as in vertebrates. However, many species have an exoskeleton that protects the body. The best examples of the exoskeleton are found in insects and crustaceans. Insects have an exoskeleton called chitin. Groups of crustaceans such as crabs, lobsters and shrimps also have an outer shell. In crabs, this shell is quite hard. These shells, found in invertebrates, act as exoskeletons.

They can live in almost any part of the world. They can adapt to any ecological environment except the regions covered with snow and glaciers at the poles. While aquatic invertebrate species breathe through gills, tracheal respiration is observed in most terrestrial forms, but cutaneous respiration is observed in a very few species.

Nervous systems are located in the abdominal regions (ventral). Except for arthropods and ringworms, they are unsegmented.

It is the group with the most species on earth in terms of the

number of species as well as many different features they contain. Especially with the beginning of the Cenozoic-Tertiary period, which is the 3rd geological time, the number of species of insects and land arthropods, which provide good adaptation, increased rapidly. As a result, they became dominant on the earth throughout the 3rd geological time.

It is thought that there are over 1,900,000 species of invertebrates today, of which approximately 1,200,000 are insects. Compared to vertebrate animals, it is equivalent to about 50 times.

In Table 1, important branches and their characteristic features, Turkish names, total number of identified species, number of species found in Turkey are given.

*Table 1. Important branches of Invertebrate Animals, number of defined species\**

Invertebrate	Number of defined species	Number of identified species in Turkey
Porifera	5.500	65
Cnidaria	11.000	101
Plathelminthes	25.000	?
Nematoda	80.000+	?
Mollusca	100.000	1.000+
Annelida	16.500	320
Arthropoda	1.200.000+	20.000+
Echinodermata	7.000	60
Porifera	5.500	65

\*: The values here are approximate. The number of species is increasing day by day.

The foundation of biological studies in Turkey started with the Republic. Starting to work at Istanbul University, Ord. prof. Dr. Curt KOSWIG has the most important role in starting these studies. With his influence, scientific studies and research gained momentum and continued with Ankara and Aegean universities, which are among the old universities of our country. Over time, other universities participated in this race and contributed greatly to the determination of the invertebrate fauna of our country.

Today, there are many specialists working with invertebrate animals in our universities and their number is increasing day by day. Although studies have increased with the increasing number of experts, not all of Turkey's invertebrates have been identified yet. For this reason, it is not possible to give an exact number of invertebrate species both in our country and in our study area.

Due to its geography, our country contains many different ecosystems. This ecosystem diversity has led to a rich diversity of invertebrate animal species. Estimates are that there are over 80,000 invertebrate species in our country. To date, around 25,000 species have been identified on average, and the majority of them have not been identified. This shortcoming will be filled with further studies.

Nearly 700 invertebrate species have been identified in Turkish seas. Among them, there are 57 species of economic value such as corals, sponges and medicinal leeches.

### 1. Sponges (Porifera)

They are simple animals that live at the bottom of the water, by clinging to the ground, rocks or animal shells. There are 5,500 species identified in the world, 65 species belonging to 37 families are known in Turkey. 5 of them are of economic importance. The chemicals produced by some sea sponges are also used in the pharmaceutical industry. There are 4 classes: Calcarea, Hexactinellida, Demospongiae and Sclerospongiae.

### 2. Haslams (Cnidaria)

The vast majority are found in the seas. It is known that there are about 10,000 species in the world. In our country, about 100 species belonging to 3 classes are known. Most of them are coral reefs. In addition to being an invertebrate creature, these coral reefs serve as shelters for many invertebrate and vertebrate species. Therefore, the protection of coral reefs is of great importance. According to researches, 19% of the coral reefs in the world have disappeared. It has three classes. These; Hydrozoa are Scyphozoa and Anthozoa.

### 3. Flatworms (Plathelminthes)

Although most of them are parasitic, there are also free-living forms. There are over 20,000 identified species. There are species of parasites in humans and animals. The life cycles of these species are well known. It is divided into 5 classes as Turbellaria, Digenea, Monogenea, Aspidogastrea and Cestoda.

### 4. Roundworms (Nematoda)

In addition to marine, freshwater and terrestrial species, there are species that live as parasites in animals and plants. About 25,000 species are known around the world. Those with plant parasites cause great economic damage to mostly potatoes, cereals, rice, sugar beet, citrus fruits, cotton and many vegetables and fruits. Besides plants, they can cause great discomfort to humans and pets as well. It consists of two classes, Secernenta (Phasmida) and Adenophorea (Aphasmida).

### 5. Ringworms (Annelida)

They live on land, fresh water and seas. About 16,500 species are known in the world. 321 species have been reported from Turkey. Earthworms are the most well-known species. Earthworms both leave organic waste while navigating in the soil and create favorable conditions for the plants in the soil to live, by softening the soil and providing aeration.

Around 500 species are known all over the world, 75 species of earthworms are known in our country.

Medical leeches, on the other hand, are species that are used for therapeutic purposes in alternative medicine and have economic value. 9 leech species are known in our country and 2 of them have economic value.

It has 3 classes: Polychaeta, Oligochaeta and Hirudinea.

### 6. Molluscs (Mollusca)

They live in land, sea and fresh waters. In terms of number of species, it is the second largest invertebrate branch after arthropods. More than 93,000 species are known in the world. Many species are of economic importance. In addition to being used as food, it is sold by obtaining pearls from mussels and making ornaments from the shells of crustacean species.

Approximately 1000 species have been identified in our country, of which 400 are terrestrial forms and 50% are endemic (16).

The most important classes are; Gastropoda are Bivalvia and Cephalopoda.

### 7. Arthropods (Arthropoda)

The Arthropoda phylum contains 75% of known animal species. In terms of the number of species, it is the most crowded branch of the animal kingdom. They are found in almost all ecosystems. their bodies; It consists of 3 parts: Head (Cephal), Chest (Thorax) and Abdomen. Although the studies carried out in our country are of great importance, the biological richness has not been fully revealed. More studies are needed to determine the arthropod fauna of our country.

**7.a. Crustaceans (Crustacea):** There were some general and regional studies in our country about a few orders of this class, which has a wide distribution in the world. These studies, which have been intensifying since 1950, mostly cover specific teams. In studies on marine forms, approximately 430 species have been recorded, mainly in the Bosphorus, Marmara Sea and Aegean Sea. In fresh waters, studies of Amphipoda, Isopoda, Mysida and Decapoda orders belonging to Malacostraca subclass have listed 126 species belonging to 37 genera.

**7.b. Spiders (Arachnida):** Especially in recent years, important studies have been done on spiders, ticks, soil and water mites and scorpions. In our country, 979 spider species and 23 scorpion species were identified in 319 genera belonging to 53 families.

**7.c. Centipedes (Diplopoda):** Although studies on this group and Centipedes (Chilopoda) are insufficient in our country, 123 species belonging to 26 genera have been identified.

**7.d. Insects (Insecta):** Insects, which are the most crowded animal group on earth in terms of both the number of species and the number of individuals, attract the attention of scientists in our country as well as all over the world. Species of economic importance for humans, plants and animals have been studied in detail and continue to be studied. Although some known insect orders are not found in our country, the distribution of the species of a few orders is not known exactly. In addition to these, there are detailed studies on more than 20 insect orders, and the number of these studies is increasing day by day. Although it has not been determined exactly, there are about 20,000 species in our country. About 4000 of them are endemic.

### MATERIALS AND METHODS

Field studies were carried out throughout the province of Manisa in 2019 to determine the Invertebrate biodiversity of Manisa province. Field studies were carried out regularly every month throughout 2019. Findings were created with examples obtained from field studies and literature studies.

### RESULTS AND DISCUSSION

As can be seen in the table above, as a result of the literature review, a total of 343 species belonging to 80 families were identified and 8 of these species are endemic Table 2.

Endemic species; *Pachystus graecus morio* (Mannerheim, 1830), *Helix maltzani* Kobelt, 1883, *Electrogena antalyensis* (Braasch & Kazanci in Kazancı & Braasch, 1986), *Sadleriana byzantina* (KÜSTER 1852), *Theodoxus anaticus* (RECLUZ 1841), *Zabrus asiaticus* (Castelnau) , *Zabrus orientalis* (Apfelback, 1904) and *Zonites chloriticus* cf.

chloritus Riedel, 1987.

day with the continuous researches in the study area.

It is thought that the number of species will change day by

**Table 2.** Invertebrate List of Manisa Province

No	Family	Species	BERN	CITES	IUCN	Endemic	References
1	Aeshnidae	<i>Aeshna affinis</i>	Unlisted	Unlisted	NE	Not Endemic	22
2	Aeshnidae	<i>Anax imperator leach</i>	Unlisted	Unlisted	NE	Not Endemic	22
3	Anapidae	<i>Zangherella relicta</i>	Unlisted	Unlisted	NE	Not Endemic	25
4	Andrenidae	<i>Andrena carbonaria linnaeus</i>	Unlisted	Unlisted	NE	Not Endemic	28
5	Anisolabididae	<i>Anisolabis maritima</i>	Unlisted	Unlisted	NE	Not Endemic	25
6	Aphrophoridae	<i>Lepyronia coleoprata</i>	Unlisted	Unlisted	NE	Not Endemic	25
7	Aphrophoridae	<i>Neophilaenus campestris</i>	Unlisted	Unlisted	NE	Not Endemic	25
8	Aphrophoridae	<i>Philaenus spumarius</i>	Unlisted	Unlisted	NE	Not Endemic	25
9	Apidae	<i>Bombus terrestris</i>	Unlisted	Unlisted	NE	Not Endemic	25
10	Apidae	<i>Bombus pascuorum</i>	Unlisted	Unlisted	NE	Not Endemic	25
11	Apidae	<i>Baetis (baetis) fuscatus</i>	Unlisted	Unlisted	NE	Not Endemic	6
12	Apidae	<i>Apis mellifera linnaeus</i>	Unlisted	Unlisted	NE	Not Endemic	28
13	Apidae	<i>Bombus argillaceus</i>	Unlisted	Unlisted	NE	Not Endemic	28
14	Apidae	<i>Megabombus agrorum</i>	Unlisted	Unlisted	NE	Not Endemic	28
15	Baetidae	<i>Baetis (baetis) lutheri</i>	Unlisted	Unlisted	NE	Not Endemic	1
16	Baetidae	<i>Baetis (baetis) vernus</i>	Unlisted	Unlisted	NE	Not Endemic	1
17	Baetidae	<i>Baetis (labiobaetis) atrebatinus</i>	Unlisted	Unlisted	NE	Not Endemic	1
18	Baetidae	<i>Baetis (nigrobaetis) muticus</i>	Unlisted	Unlisted	NE	Not Endemic	1
19	Baetidae	<i>Centropilum luteolum</i>	Unlisted	Unlisted	NE	Not Endemic	1
20	Baetidae	<i>Baetis (nigrobaetis) niger</i>	Unlisted	Unlisted	NE	Not Endemic	1
21	Baetidae	<i>Baetis (rhodobaetis) rhodani</i>	Unlisted	Unlisted	NE	Not Endemic	1
22	Baetidae	<i>Cloeon dipterum</i>	Unlisted	Unlisted	NE	Not Endemic	1
23	Baetidae	<i>Cloeon simile</i>	Unlisted	Unlisted	NE	Not Endemic	1
24	Baetidae	<i>Proclleon pennulatum</i>	Unlisted	Unlisted	NE	Not Endemic	1
25	Baetidae	<i>Metallina leucoscelis</i>	Unlisted	Unlisted	NE	Not Endemic	1
26	Bembidiidae	<i>Phyla tethys</i>	Unlisted	Unlisted	NE	Not Endemic	9
27	Bembidiidae	<i>Tachyphanes lucasi</i>	Unlisted	Unlisted	NE	Not Endemic	9
28	Bembidiidae	<i>Brachinus explodens</i>	Unlisted	Unlisted	NE	Not Endemic	9
29	Brachinidae	<i>Agathis malvacearum latreille</i>	Unlisted	Unlisted	NE	Not Endemic	9
30	Braconidae	<i>Chelonus longiventris tobias</i>	Unlisted	Unlisted	NE	Not Endemic	28
31	Braconidae	<i>Mesobuthus gibbosus</i>	Unlisted	Unlisted	NE	Not Endemic	28
32	Buthidae	<i>Caenis macrura</i>	Unlisted	Unlisted	NE	Not Endemic	10
33	Caenidae	<i>Pollenia labialis</i>	Unlisted	Unlisted	NE	Not Endemic	1
34	Calliphoridae	<i>Calopteryx splendens intermedia sélys</i>	Unlisted	Unlisted	NE	Not Endemic	8
35	Calopterygidae	<i>Amara (amara) aenea</i>	Unlisted	Unlisted	NE	Not Endemic	21
36	Calopterygidae	<i>Calopteryx splendens splendens</i>	Unlisted	Unlisted	NE	Not Endemic	22
37	Carabidae	<i>Opatroides punctulatus</i>	Unlisted	Unlisted	NE	Not Endemic	25
38	Carabidae	<i>Dendarus moesiacus</i>	Unlisted	Unlisted	NE	Not Endemic	25
39	Carabidae	<i>Calathus (calathus) longicollis</i>	Unlisted	Unlisted	NE	Not Endemic	24
40	Carabidae	<i>Procrustes coriaceus cerisyi</i>	Unlisted	Unlisted	NE	Not Endemic	25
41	Carabidae	<i>Elachiptera bimaculata</i>	Unlisted	Unlisted	NE	Not Endemic	24
42	Carabidae	<i>Calathus longicollis</i>	Unlisted	Unlisted	NE	Not Endemic	24
43	Carabidae	<i>Gonocephalum (gonocephalum) rusticum</i>	Unlisted	Unlisted	NE	Not Endemic	24
44	Carabidae	<i>Pristonychus conspicuus</i>	Unlisted	Unlisted	NE	Not Endemic	24
45	Carabidae	<i>Harpalus smaragdinus</i>	Unlisted	Unlisted	NE	Not Endemic	24
46	Carabidae	<i>Pachystus graecus morio</i>	Unlisted	Unlisted	NE	Not Endemic	24
47	Carabidae	<i>Dilognatha quadricollis quadricollis</i>	Unlisted	Unlisted	NE	Not Endemic	24
48	Carabidae	<i>Phymatitris (graecopachys) quadricollis</i>	Unlisted	Unlisted	NE	Endemic	9
49	Carabidae	<i>Zabrus politus</i>	Unlisted	Unlisted	NE	Not Endemic	9
50	Chloropidae	<i>Clytra (clytraria) novempunctata oliver</i>	Unlisted	Unlisted	NE	Not Endemic	8
51	Chrysomelidae	<i>Labidostomis oertzeni weise</i>	Unlisted	Unlisted	NE	Not Endemic	18
52	Chrysomelidae	<i>Labidostomis rufa</i>	Unlisted	Unlisted	NE	Not Endemic	18
53	Chrysomelidae	<i>Smaragdina (monrosia) tibialis</i>	Unlisted	Unlisted	NE	Not Endemic	18
54	Chrysomelidae	<i>Labidostomis asiatica falderman</i>	Unlisted	Unlisted	NE	Not Endemic	18
55	Chrysomelidae	<i>Clytra (clytraria) atraphaxidis</i>	Unlisted	Unlisted	NE	Not Endemic	18
56	Chrysomelidae	<i>Anaceratagallia laevis</i>	Unlisted	Unlisted	NE	Not Endemic	18
57	Chrysomelidae	<i>Smaragdina limbata</i>	Unlisted	Unlisted	NE	Not Endemic	18
58	Cicadellidae	<i>Thamnotettix zelleri</i>	Unlisted	Unlisted	NE	Not Endemic	25
59	Cicadellidae	<i>Micantulina stigmatipennis</i>	Unlisted	Unlisted	NE	Not Endemic	25
60	Cicadellidae	<i>Macrosteles quadripunctulatus</i>	Unlisted	Unlisted	NE	Not Endemic	25
61	Cicadellidae	<i>Aphrodes bicinctus</i>	Unlisted	Unlisted	NE	Not Endemic	25
62	Cicadellidae	<i>Rhytidodus wagneri</i>	Unlisted	Unlisted	NE	Not Endemic	25
63	Cicadellidae	<i>Selenocephalus pallidus</i>	Unlisted	Unlisted	NE	Not Endemic	25
64	Cicadellidae	<i>Macropsis graminea</i>	Unlisted	Unlisted	NE	Not Endemic	25
65	Cicadellidae	<i>Tachycixius desertorum</i>	Unlisted	Unlisted	NE	Not Endemic	25
66	Cicadellidae	<i>Cicada lodosi</i>	Unlisted	Unlisted	NE	Not Endemic	25
67	Cicadellidae	<i>Idiocerus vicinus</i>	Unlisted	Unlisted	NE	Not Endemic	25
68	Cicadellidae	<i>Eupteryx gyaurdagicus</i>	Unlisted	Unlisted	NE	Not Endemic	25
69	Cicadellidae	<i>Opsius cypriacus</i>	Unlisted	Unlisted	NE	Not Endemic	25

No	Family	Species	BERN	CITES	IUCN	Endemic	References
70	Cicadellidae	<i>Euscelis lineolatus</i>	Unlisted	Unlisted	NE	Not Endemic	25
71	Cicadellidae	<i>Hecalus glaucescens</i>	Unlisted	Unlisted	NE	Not Endemic	25
72	Cicadellidae	<i>Opsiis lethierryi</i>	Unlisted	Unlisted	NE	Not Endemic	25
73	Cicadellidae	<i>Rhytidodus boluicus</i>	Unlisted	Unlisted	NE	Not Endemic	25
74	Cicadellidae	<i>Megophthalmus scabripennis</i>	Unlisted	Unlisted	NE	Not Endemic	25
75	Cicadellidae	<i>Streptanus albanicus</i>	Unlisted	Unlisted	NE	Not Endemic	25
76	Cicadellidae	<i>Tremulicerus fulgidus</i>	Unlisted	Unlisted	NE	Not Endemic	25
77	Cicadellidae	<i>Goniagnathus brevis</i>	Unlisted	Unlisted	NE	Not Endemic	25
78	Cicadellidae	<i>Sulamicerus stali</i>	Unlisted	Unlisted	NE	Not Endemic	25
79	Cicadidae	<i>Lyristes plebejus</i>	Unlisted	Unlisted	NE	Not Endemic	25
80	Cicadidae	<i>Eumecurus bourouensis</i>	Unlisted	Unlisted	NE	Not Endemic	25
81	Cixiidae	<i>Hyalesthes obsoletus</i>	Unlisted	Unlisted	NE	Not Endemic	25
82	Cixiidae	<i>Idyla (idyla) bicristata</i>	Unlisted	Unlisted	NE	Not Endemic	25
83	Cixiidae	<i>Pentastira major</i>	Unlisted	Unlisted	NE	Not Endemic	25
84	Clausiliidae	<i>Enallagma cyathigerum</i>	Unlisted	Unlisted	NE	Not Endemic	26
85	Coenagrionidae	<i>Ischnura pumilio</i>	Unlisted	Unlisted	NE	Not Endemic	21-22
86	Coenagrionidae	<i>Anopheles (cellia) superpictus'un</i>	Unlisted	Unlisted	NE	Not Endemic	21-22
87	Coenagrionidae	<i>Ischnura elegans ebneri schmidt</i>	Unlisted	Unlisted	NE	Not Endemic	21-22
88	Culicidae	<i>Culex (maillotia) deserticola</i>	Unlisted	Unlisted	NE	Not Endemic	12
89	Culicidae	<i>Culiseta (alloeobaldia) longiareolata</i>	Unlisted	Unlisted	NE	Not Endemic	12
90	Culicidae	<i>Culex (neoculex) martinii</i>	Unlisted	Unlisted	NE	Not Endemic	12
91	Culicidae	<i>Canthophorus dubius</i>	Unlisted	Unlisted	NE	Not Endemic	12
92	Culicidae	<i>Culiseta (culiseta) annulata</i>	Unlisted	Unlisted	NE	Not Endemic	12
93	Culicidae	<i>Culex</i>	Unlisted	Unlisted	NE	Not Endemic	12
94	Cydnidae	<i>Dictyophara asiatica</i>	Unlisted	Unlisted	NE	Not Endemic	5
95	Cydnidae	<i>Cydnus aterrimus</i>	Unlisted	Unlisted	NE	Not Endemic	5
96	Dictyopharidae	<i>Campsicnemus curvipes</i>	Unlisted	Unlisted	NE	Not Endemic	25
97	Dolichopodidae	<i>Hercostomus cheitifer</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
98	Dolichopodidae	<i>Hercostomus thraciensis</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
99	Dolichopodidae	<i>Hercostomustanjusilus</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
100	Dolichopodidae	<i>Hydrophorus balticus</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
101	Dolichopodidae	<i>Sybistroma lorifer</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
102	Dolichopodidae	<i>Syntormon denticulatus</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
103	Dolichopodidae	<i>Liancalus virens</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
104	Dolichopodidae	<i>Rhaphium appendiculatum</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
105	Dolichopodidae	<i>Sybistroma israelensis</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
106	Dolichopodidae	<i>Rhaphium brevicorne</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
107	Dolichopodidae	<i>Scellus notatus</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
108	Dolichopodidae	<i>Campsicnemus umbripennis</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
109	Dolichopodidae	<i>Dolichopus signifer</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
110	Dolichopodidae	<i>Syntormon miki</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
111	Dolichopodidae	<i>Syntormon pallipes</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
112	Dolichopodidae	<i>Syntormon zelleri</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
113	Dolichopodidae	<i>Teuchophorus monacanthus</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
114	Dolichopodidae	<i>Hydroglyphus geminus</i>	Unlisted	Unlisted	NE	Not Endemic	14, 15
115	Dytiscidae	<i>Hydroporus pubescens</i>	Unlisted	Unlisted	NE	Not Endemic	17
116	Dytiscidae	<i>Jominia loewii</i>	Unlisted	Unlisted	NE	Not Endemic	17
117	Enidae	<i>Zebrina caesia</i>	Unlisted	Unlisted	NE	Not Endemic	26
118	Enidae	<i>Ephemerella ignita</i>	Unlisted	Unlisted	NE	Not Endemic	26
119	Ephemerellidae	<i>Phantia subquadrata</i>	Unlisted	Unlisted	NE	Not Endemic	1
120	Flatidae	<i>Forficula aetolica</i>	Unlisted	Unlisted	NE	Not Endemic	25
121	Forficulidae	<i>Forficula auricularia</i>	Unlisted	Unlisted	NE	Not Endemic	25
122	Forficulidae	<i>Forficula lurida</i>	Unlisted	Unlisted	NE	Not Endemic	25
123	Forficulidae	<i>Forficula smymensis</i>	Unlisted	Unlisted	NE	Not Endemic	25
124	Forficulidae	<i>Guanchia hincksi</i>	Unlisted	Unlisted	NE	Not Endemic	25
125	Forficulidae	<i>Gomphus schneideri sélys</i>	Unlisted	Unlisted	NE	Not Endemic	25
126	Gomphidae	<i>Onychogomphus forcipatus albotibialis</i>	Unlisted	Unlisted	NE	Not Endemic	21
127	Gomphidae	<i>Lasioglossum aegyptiellum</i>	Unlisted	Unlisted	NE	Not Endemic	23
128	Halictidae	<i>Carterus dama</i>	Unlisted	Unlisted	NE	Not Endemic	25
129	Harpalidae	<i>Parophonus planicollis</i>	Unlisted	Unlisted	NE	Not Endemic	9
130	Harpalidae	<i>Pseudophonus griseus</i>	Unlisted	Unlisted	NE	Not Endemic	9
131	Harpalidae	<i>Helix maltzani kobelt</i>	Unlisted	Unlisted	NE	Not Endemic	9
132	Harpalidae	<i>Lindholmiola lens</i>	Unlisted	Unlisted	NE	Not Endemic	9
133	Harpalidae	<i>Cryptophonus litigiousus</i>	Unlisted	Unlisted	NE	Not Endemic	9
134	Harpalidae	<i>Pseudophonus rufipes</i>	Unlisted	Unlisted	NE	Not Endemic	9
135	Helicidae	<i>Ecdyonurus (ecdyonurus) dispar</i>	Unlisted	Unlisted	NE	Endemic	26
136	Helicodontidae	<i>Electrogena antalyensis</i>	Unlisted	Unlisted	NE	Not Endemic	26
137	Heptageniidae	<i>Hydraena grandis</i>	Unlisted	Unlisted	NE	Not Endemic	1
138	Heptageniidae	<i>Hydraena grata</i>	Unlisted	Unlisted	NE	Endemic	1
139	Hydraenidae	<i>Ochthebius difficilis</i>	Unlisted	Unlisted	NE	Not Endemic	25
140	Hydraenidae	<i>Ochthebius monychus</i>	Unlisted	Unlisted	NE	Not Endemic	25
141	Hydraenidae	<i>Sadleriana byzanthina</i>	Unlisted	Unlisted	NE	Not Endemic	25
142	Hydraenidae	<i>Laccobius obscuratus aegaeus</i>	Unlisted	Unlisted	NE	Not Endemic	25
143	Hydrobiidae	<i>Hydropsyche salihli</i>	Unlisted	Unlisted	NE	Endemic	27
144	Hydrophilidae	<i>Monacha (monacha) carascaloides</i>	Unlisted	Unlisted	NE	Not Endemic	17
145	Hydropsychidae	<i>Agalmatium bilobum</i>	Unlisted	Unlisted	NE	Not Endemic	25
146	Hygromiidae	<i>Latilica maculipes</i>	Unlisted	Unlisted	NE	Not Endemic	26

No	Family	Species	BERN	CITES	IUCN	Endemic	References
147	Issidae	<i>Macrocera centralis</i>	Unlisted	Unlisted	NE	Not Endemic	25
148	Issidae	<i>Antilemon halidayi</i>	Unlisted	Unlisted	NE	Not Endemic	25
149	Keroplattidae	<i>Macrocera fasciata</i>	Unlisted	Unlisted	NE	Not Endemic	11
150	Keroplattidae	<i>Pyratula oracula</i>	Unlisted	Unlisted	NE	Not Endemic	11
151	Keroplattidae	<i>Urytalpa nussbaumi</i>	Unlisted	Unlisted	NE	Not Endemic	11
152	Keroplattidae	<i>Labidura riparia</i>	Unlisted	Unlisted	NE	Not Endemic	11
153	Keroplattidae	<i>Microlestes sahlbergi</i>	Unlisted	Unlisted	NE	Not Endemic	11
154	Labiduridae	<i>Syntomus fuscomaculatus</i>	Unlisted	Unlisted	NE	Not Endemic	25
155	Lebiidae	<i>Habrophlebia lauta</i>	Unlisted	Unlisted	NE	Not Endemic	9
156	Lebiidae	<i>Lestes barbarus</i>	Unlisted	Unlisted	NE	Not Endemic	9
157	Leptophlebiidae	<i>Licinus silphoides</i>	Unlisted	Unlisted	NE	Not Endemic	1
158	Lestidae	<i>Beosus maritimus</i>	Unlisted	Unlisted	NE	Not Endemic	21-22-23
159	Licinidae	<i>Lygaeus equestris</i>	Unlisted	Unlisted	NE	Not Endemic	9
160	Lygaeidae	<i>Tropidothorax leucopterus</i>	Unlisted	Unlisted	NE	Not Endemic	5
161	Lygaeidae	<i>Chalicodoma derasa</i>	Unlisted	Unlisted	NE	Not Endemic	5
162	Lygaeidae	<i>Megachile apicalis spinola</i>	Unlisted	Unlisted	NE	Not Endemic	5
163	Lygaeidae	<i>Spilostethus pandurus</i>	Unlisted	Unlisted	NE	Not Endemic	5
164	Megachilidae	<i>Megaloceroea recticornis</i>	Unlisted	Unlisted	NE	Not Endemic	28
165	Megachilidae	<i>Melanopsis praemorsa</i>	Unlisted	Unlisted	NE	Not Endemic	28
166	Melaniidae	<i>Eudasyphora cyanella</i>	Unlisted	Unlisted	NE	Not Endemic	27
167	Miridae	<i>Brevicornu griseicolle</i>	Unlisted	Unlisted	NE	Not Endemic	25
168	Muscidae	<i>Exechia confinis</i>	Unlisted	Unlisted	NE	Not Endemic	8
169	Mycetophilidae	<i>Exechia fusca</i>	Unlisted	Unlisted	NE	Not Endemic	11
170	Mycetophilidae	<i>Exechiopsis indecisa</i>	Unlisted	Unlisted	NE	Not Endemic	11
171	Mycetophilidae	<i>Leia subfasciata</i>	Unlisted	Unlisted	NE	Not Endemic	11
172	Mycetophilidae	<i>Mycetophila alea</i>	Unlisted	Unlisted	NE	Not Endemic	11
173	Mycetophilidae	<i>Mycetophila britannica</i>	Unlisted	Unlisted	NE	Not Endemic	11
174	Mycetophilidae	<i>Mycetophila lineola</i>	Unlisted	Unlisted	NE	Not Endemic	11
175	Mycetophilidae	<i>Mycetophila ocellus</i>	Unlisted	Unlisted	NE	Not Endemic	11
176	Mycetophilidae	<i>Mycetophila perpallida</i>	Unlisted	Unlisted	NE	Not Endemic	11
177	Mycetophilidae	<i>Mycetophila spectabilis</i>	Unlisted	Unlisted	NE	Not Endemic	11
178	Mycetophilidae	<i>Mycomya (mycomya) tenuis</i>	Unlisted	Unlisted	NE	Not Endemic	11
179	Mycetophilidae	<i>Mycomya maura</i>	Unlisted	Unlisted	NE	Not Endemic	11
180	Mycetophilidae	<i>Mycomya montforti</i>	Unlisted	Unlisted	NE	Not Endemic	11
181	Mycetophilidae	<i>Mycomya prominens</i>	Unlisted	Unlisted	NE	Not Endemic	11
182	Mycetophilidae	<i>Mycomya tumida</i>	Unlisted	Unlisted	NE	Not Endemic	11
183	Mycetophilidae	<i>Sceptonia membranacea</i>	Unlisted	Unlisted	NE	Not Endemic	11
184	Mycetophilidae	<i>Zygomyia humeralis</i>	Unlisted	Unlisted	NE	Not Endemic	11
185	Mycetophilidae	<i>Nebria brevicollis</i>	Unlisted	Unlisted	NE	Not Endemic	11
186	Mycetophilidae	<i>Theodoxus anatolicus</i>	Unlisted	Unlisted	NE	Not Endemic	11
187	Nebriidae	<i>Carpophilus bipustulatus heer</i>	Unlisted	Unlisted	NE	Not Endemic	9
188	Neritidae	<i>Carpophilus hemipterus linnaeus</i>	Unlisted	Unlisted	NE	Endemic	27
189	Nitidulidae	<i>Aelia albovittata</i>	Unlisted	Unlisted	NE	Not Endemic	19
190	Nitidulidae	<i>Carpophilus mutilatus erichson</i>	Unlisted	Unlisted	NE	Not Endemic	19
191	Nitidulidae	<i>Urophorus humeralis</i>	Unlisted	Unlisted	NE	Not Endemic	19
192	Nitidulidae	<i>Orculella critica</i>	Unlisted	Unlisted	NE	Not Endemic	19
193	Orculidae	<i>Aelia furcula</i>	Unlisted	Unlisted	NE	Not Endemic	26
194	Pentatomidae	<i>Palomena prasina</i>	Unlisted	Unlisted	NE	Not Endemic	25
195	Pentatomidae	<i>Apodiphus amygdali</i>	Unlisted	Unlisted	NE	Not Endemic	25
196	Pentatomidae	<i>Aradus cinnamomeus</i>	Unlisted	Unlisted	NE	Not Endemic	2
197	Pentatomidae	<i>Carpocoris melanocerus</i>	Unlisted	Unlisted	NE	Not Endemic	2
198	Pentatomidae	<i>Codophila varia</i>	Unlisted	Unlisted	NE	Not Endemic	2
199	Pentatomidae	<i>Eurydema (eurydema) ornata</i>	Unlisted	Unlisted	NE	Not Endemic	2
200	Pentatomidae	<i>Eurydema (rubrodorsalium) ventralis</i>	Unlisted	Unlisted	NE	Not Endemic	2
201	Pentatomidae	<i>Agenioideus nubecula</i>	Unlisted	Unlisted	NE	Not Endemic	2
202	Pentatomidae	<i>Carpocoris (carpocoris) mediterraneus</i>	Unlisted	Unlisted	NE	Not Endemic	2
203	Pentatomidae	<i>Platynemius pennipes</i>	Unlisted	Unlisted	NE	Not Endemic	2
204	Pentatomidae	<i>Eurydema blandum</i>	Unlisted	Unlisted	NE	Not Endemic	2
205	Pentatomidae	<i>Eurydema ornatum</i>	Unlisted	Unlisted	NE	Not Endemic	2
206	Pentatomidae	<i>Mustha spinosula</i>	Unlisted	Unlisted	NE	Not Endemic	2
207	Pentatomidae	<i>Nezara viridula</i>	Unlisted	Unlisted	NE	Not Endemic	2
208	Pentatomidae	<i>Carpocoris (carpocoris) purpureipennis</i>	Unlisted	Unlisted	NE	Not Endemic	3
209	Pentatomidae	<i>Dolycoris baccarum</i>	Unlisted	Unlisted	NE	Not Endemic	4
210	Pentatomidae	<i>Graphosoma lineatum</i>	Unlisted	Unlisted	NE	Not Endemic	4
211	Pentatomidae	<i>Graphosoma semipunctatum</i>	Unlisted	Unlisted	NE	Not Endemic	4
212	Platynemididae	<i>Agenioideus nubecula nubecula</i>	Unlisted	Unlisted	NE	Not Endemic	21-23
213	Pompilidae	<i>Cryptocheilus albosignatus</i>	Unlisted	Unlisted	NE	Not Endemic	25
214	Pompilidae	<i>Cryptocheilus alternatus alternatus</i>	Unlisted	Unlisted	NE	Not Endemic	25
215	Pompilidae	<i>Cryptocheilus ichneumonoides</i>	Unlisted	Unlisted	NE	Not Endemic	25
216	Pompilidae	<i>Cryptocheilus notatus</i>	Unlisted	Unlisted	NE	Not Endemic	25
217	Pompilidae	<i>Cryptocheilus notatus notatus</i>	Unlisted	Unlisted	NE	Not Endemic	25
218	Pompilidae	<i>Cryptocheilus variabilis variabilis</i>	Unlisted	Unlisted	NE	Not Endemic	25
219	Pompilidae	<i>Priocnemis coriacea</i>	Unlisted	Unlisted	NE	Not Endemic	25
220	Pompilidae	<i>Priocnemis fallax</i>	Unlisted	Unlisted	NE	Not Endemic	25
221	Pompilidae	<i>Agenioideus rypiphorus</i>	Unlisted	Unlisted	NE	Not Endemic	25
222	Pompilidae	<i>Auplopus carbonarius</i>	Unlisted	Unlisted	NE	Not Endemic	25
223	Pompilidae	<i>Tachyaetes filicornis</i>	Unlisted	Unlisted	NE	Not Endemic	25

No	Family	Species	BERN	CITES	IUCN	Endemic	References
224	Pompilidae	<i>Tachyagetes filicornis filicornis</i>	Unlisted	Unlisted	NE	Not Endemic	25
225	Pompilidae	<i>Tachyagetes furvescens</i>	Unlisted	Unlisted	NE	Not Endemic	25
226	Pompilidae	<i>Cryptocheilus variipennis sustera</i>	Unlisted	Unlisted	NE	Not Endemic	28
227	Pterostichidae	<i>Olisthopus glabricollis</i>	Unlisted	Unlisted	NE	Not Endemic	9
228	Pterostichidae	<i>Telestegus inermis inermis</i>	Unlisted	Unlisted	NE	Not Endemic	9
229	Pterostichidae	<i>Calathus libanensis</i>	Unlisted	Unlisted	NE	Not Endemic	9
230	Pterostichidae	<i>Olisthopus fuscatus</i>	Unlisted	Unlisted	NE	Not Endemic	9
231	Pterostichidae	<i>Amara aenea</i>	Unlisted	Unlisted	NE	Not Endemic	9
232	Pterostichidae	<i>Anchomenus dorsalis</i>	Unlisted	Unlisted	NE	Not Endemic	9
233	Pterostichidae	<i>Calathus leptodactylus</i>	Unlisted	Unlisted	NE	Not Endemic	9
234	Pterostichidae	<i>Poecilus cupreus</i>	Unlisted	Unlisted	NE	Not Endemic	9
235	Pterostichidae	<i>Telestegus inermis</i>	Unlisted	Unlisted	NE	Not Endemic	9
236	Pterostichidae	<i>Zabrus asiaticus</i>	Unlisted	Unlisted	NE	Endemic	9
237	Pterostichidae	<i>Zabrus orientalis</i>	Unlisted	Unlisted	NE	Endemic	9
238	Pyrrhocoridae	<i>Pyrrhocoris apterus</i>	Unlisted	Unlisted	NE	Not Endemic	25
239	Rhyparochromidae	<i>Ischnopeza hirticornis</i>	Unlisted	Unlisted	NE	Not Endemic	25
240	Rhyparochromidae	<i>Rhyparochromus phoeniceus</i>	Unlisted	Unlisted	NE	Not Endemic	25
241	Salticidae	<i>Menemerus semilimbatus</i>	Unlisted	Unlisted	NE	Not Endemic	25
242	Sarcophagidae	<i>Sarcophaga lasiostyla</i>	Unlisted	Unlisted	NE	Not Endemic	8
243	Scarabaeidae	<i>Oxythyrea cinctella</i>	Unlisted	Unlisted	NE	Not Endemic	25
244	Scoliidae	<i>Colpa klugii</i>	Unlisted	Unlisted	NE	Not Endemic	7
245	Scoliidae	<i>Colpa sexmaculata</i>	Unlisted	Unlisted	NE	Not Endemic	7
246	Scoliidae	<i>Colpa quinquecincta quinquecincta</i>	Unlisted	Unlisted	NE	Not Endemic	7
247	Scoliidae	<i>Dasyscolia ciliata</i>	Unlisted	Unlisted	NE	Not Endemic	7
248	Scoliidae	<i>Megascolia maculata</i>	Unlisted	Unlisted	NE	Not Endemic	7
249	Scoliidae	<i>Scolia galbula</i>	Unlisted	Unlisted	NE	Not Endemic	7
250	Scoliidae	<i>Scolia fallax</i>	Unlisted	Unlisted	NE	Not Endemic	7
251	Scoliidae	<i>Scolia asiella</i>	Unlisted	Unlisted	NE	Not Endemic	7
252	Scoliidae	<i>Scolia hirta</i>	Unlisted	Unlisted	NE	Not Endemic	7
253	Scoliidae	<i>Megascolia maculata maculata</i>	Unlisted	Unlisted	NE	Not Endemic	7
254	Scutelleridae	<i>Scolia sexmaculata</i>	Unlisted	Unlisted	NE	Not Endemic	25
255	Scytodidae	<i>Maccevechus caucasicus</i>	Unlisted	Unlisted	NE	Not Endemic	25
256	Sphecidae	<i>Scytodes thorocica</i>	Unlisted	Unlisted	NE	Not Endemic	28
257	Sphecidae	<i>Philanthus triangulum</i>	Unlisted	Unlisted	NE	Not Endemic	28
258	Sphecidae	<i>Podalonia hirsuta</i>	Unlisted	Unlisted	NE	Not Endemic	28
259	Sphecidae	<i>Ammophila sabulosa linnaeus</i>	Unlisted	Unlisted	NE	Not Endemic	28
260	Sphecidae	<i>Bembix olivacea fabricius</i>	Unlisted	Unlisted	NE	Not Endemic	28
261	Sphecidae	<i>Cerceris arenaria</i>	Unlisted	Unlisted	NE	Not Endemic	28
262	Sphecidae	<i>Cerceris tuberculata villers</i>	Unlisted	Unlisted	NE	Not Endemic	28
263	Spongiphoridae	<i>Prionyx crudelis</i>	Unlisted	Unlisted	NE	Not Endemic	25
264	Staphylinidae	<i>Achenium scimbaloides</i>	Unlisted	Unlisted	NE	Not Endemic	25
265	Staphylinidae	<i>Quedius levicollis</i>	Unlisted	Unlisted	NE	Not Endemic	25
266	Staphylinidae	<i>Ochtheophilum (s. str.) fracticorne</i>	Unlisted	Unlisted	NE	Not Endemic	13
267	Staphylinidae	<i>Leptobium (s. str.) aff. assingi</i>	Unlisted	Unlisted	NE	Not Endemic	13
268	Staphylinidae	<i>Paederidus (s. str.) rubrothoracicus</i>	Unlisted	Unlisted	NE	Not Endemic	13
269	Staphylinidae	<i>Leptobium anlasi</i>	Unlisted	Unlisted	NE	Not Endemic	25
270	Staphylinidae	<i>Achenium (s. str.) depressum</i>	Unlisted	Unlisted	NE	Not Endemic	25
271	Staphylinidae	<i>Achenium depressum</i>	Unlisted	Unlisted	NE	Not Endemic	25
272	Staphylinidae	<i>Domene stilicina</i>	Unlisted	Unlisted	NE	Not Endemic	25
273	Staphylinidae	<i>Lobrathium rugipenne</i>	Unlisted	Unlisted	NE	Not Endemic	25
274	Staphylinidae	<i>Pseudobium anatolicum</i>	Unlisted	Unlisted	NE	Not Endemic	25
275	Staphylinidae	<i>Pseudolathra tennenbaumi</i>	Unlisted	Unlisted	NE	Not Endemic	25
276	Staphylinidae	<i>Scymbalium anale</i>	Unlisted	Unlisted	NE	Not Endemic	25
277	Staphylinidae	<i>Medon fusculus</i>	Unlisted	Unlisted	NE	Not Endemic	25
278	Staphylinidae	<i>Medon lydicus</i>	Unlisted	Unlisted	NE	Not Endemic	25
279	Staphylinidae	<i>Medon semiobscurus</i>	Unlisted	Unlisted	NE	Not Endemic	25
280	Staphylinidae	<i>Myllaena intermedia</i>	Unlisted	Unlisted	NE	Not Endemic	25
281	Staphylinidae	<i>Paederus (heteropaederus) fuscipes</i>	Unlisted	Unlisted	NE	Not Endemic	13
282	Staphylinidae	<i>Leptobium (s. str.) gracile</i>	Unlisted	Unlisted	NE	Not Endemic	13
283	Staphylinidae	<i>Leptobium bozdaghense</i>	Unlisted	Unlisted	NE	Not Endemic	13
284	Staphylinidae	<i>Astenus (s. str.) lyonessius</i>	Unlisted	Unlisted	NE	Not Endemic	13
285	Staphylinidae	<i>Astenus (s. str.) thoracicus</i>	Unlisted	Unlisted	NE	Not Endemic	13
286	Staphylinidae	<i>Anotylus politus</i>	Unlisted	Unlisted	NE	Not Endemic	13
287	Staphylinidae	<i>Astenus (astenopleuritus) melanurus</i>	Unlisted	Unlisted	NE	Not Endemic	13
288	Staphylinidae	<i>Scopaeus (s. str.) alaniensis</i>	Unlisted	Unlisted	NE	Not Endemic	13
289	Staphylinidae	<i>Scopaeus (s. str.) bicolor</i>	Unlisted	Unlisted	NE	Not Endemic	13
290	Staphylinidae	<i>Scopaeus (s. str.) cameroni</i>	Unlisted	Unlisted	NE	Not Endemic	13
291	Staphylinidae	<i>Scopaeus (s. str.) cariensis</i>	Unlisted	Unlisted	NE	Not Endemic	13
292	Staphylinidae	<i>Scopaeus (s. str.) debilis</i>	Unlisted	Unlisted	NE	Not Endemic	13
293	Staphylinidae	<i>Scopaeus (s. str.) gracilis</i>	Unlisted	Unlisted	NE	Not Endemic	13
294	Staphylinidae	<i>Scopaeus (s. str.) laevigatus</i>	Unlisted	Unlisted	NE	Not Endemic	13
295	Staphylinidae	<i>Scopaeus (s. str.) minutoides</i>	Unlisted	Unlisted	NE	Not Endemic	13
296	Staphylinidae	<i>Achenium (micraachenium) scimbaloides</i>	Unlisted	Unlisted	NE	Not Endemic	13
297	Staphylinidae	<i>Isolaboides kosswigi</i>	Unlisted	Unlisted	NE	Not Endemic	13
298	Staphylinidae	<i>Pseudobium (s. str.) anatolicum</i>	Unlisted	Unlisted	NE	Not Endemic	13
299	Staphylinidae	<i>Pseudolathra (s. str.) tennenbaumi</i>	Unlisted	Unlisted	NE	Not Endemic	13

No	Family	Species	BERN	CITES	IUCN	Endemic	References
300	Staphylinidae	<i>Scymbalium (s. str.) anale</i>	Unlisted	Unlisted	NE	Not Endemic	13
301	Staphylinidae	<i>Domene (s. str.) stilicina</i>	Unlisted	Unlisted	NE	Not Endemic	13
302	Staphylinidae	<i>Lobrathium (s. str.) rugipenne</i>	Unlisted	Unlisted	NE	Not Endemic	13
303	Staphylinidae	<i>Pseudomedon (s. str.) obsoletus</i>	Unlisted	Unlisted	NE	Not Endemic	13
304	Staphylinidae	<i>Medon (s. str.) semiobscurus</i>	Unlisted	Unlisted	NE	Not Endemic	13
305	Staphylinidae	<i>Medon (s. str.) pythonissa</i>	Unlisted	Unlisted	NE	Not Endemic	13
306	Staphylinidae	<i>Medon (s. str.) fuscus</i>	Unlisted	Unlisted	NE	Not Endemic	13
307	Staphylinidae	<i>Medon (s. str.) lydicus</i>	Unlisted	Unlisted	NE	Not Endemic	13
308	Staphylinidae	<i>Sunius (s. str.) anatolicus</i>	Unlisted	Unlisted	NE	Not Endemic	13
309	Staphylinidae	<i>Sunius (s. str.) melanocephalus</i>	Unlisted	Unlisted	NE	Not Endemic	13
310	Staphylinidae	<i>Sunius (s. str.) pinnatus</i>	Unlisted	Unlisted	NE	Not Endemic	13
311	Staphylinidae	<i>Rugilus (s. str.) angustatus</i>	Unlisted	Unlisted	NE	Not Endemic	13
312	Staphylinidae	<i>Rugilus (s. str.) orbiculatus</i>	Unlisted	Unlisted	NE	Not Endemic	13
313	Staphylinidae	<i>Ocypus sericeicollis</i>	Unlisted	Unlisted	NE	Not Endemic	20
314	Staphylinidae	<i>Ocypus picipennis picipennis</i>	Unlisted	Unlisted	NE	Not Endemic	20
315	Staphylinidae	<i>Ocypus mus</i>	Unlisted	Unlisted	NE	Not Endemic	20
316	Staphylinidae	<i>Philonthus concinnus</i>	Unlisted	Unlisted	NE	Not Endemic	20
317	Staphylinidae	<i>Philonthus rufimanus</i>	Unlisted	Unlisted	NE	Not Endemic	20
318	Staphylinidae	<i>Gauropterus sanguinipennis</i>	Unlisted	Unlisted	NE	Not Endemic	20
319	Staphylinidae	<i>Xantholinus graecus</i>	Unlisted	Unlisted	NE	Not Endemic	20
320	Staphylinidae	<i>Rabigus ocaloides</i>	Unlisted	Unlisted	NE	Not Endemic	20
321	Tenebrionidae	<i>Cossyphus tauricus</i>	Unlisted	Unlisted	NE	Not Endemic	25
322	Tenebrionidae	<i>Opatrum alternatum</i>	Unlisted	Unlisted	NE	Not Endemic	25
323	Tenebrionidae	<i>Opatrum geminatum</i>	Unlisted	Unlisted	NE	Not Endemic	25
324	Tenebrionidae	<i>Blaps lethifera</i>	Unlisted	Unlisted	NE	Not Endemic	25
325	Tenebrionidae	<i>Blaps tibialis</i>	Unlisted	Unlisted	NE	Not Endemic	25
326	Tenebrionidae	<i>Cephalostenus elegans</i>	Unlisted	Unlisted	NE	Not Endemic	25
327	Tenebrionidae	<i>Raiboscelis syriacus</i>	Unlisted	Unlisted	NE	Not Endemic	25
328	Tenebrionidae	<i>Euboeus mimonti</i>	Unlisted	Unlisted	NE	Not Endemic	25
329	Tenebrionidae	<i>Nalassus dryadophilus</i>	Unlisted	Unlisted	NE	Not Endemic	25
330	Tenebrionidae	<i>Nalassus plebejus</i>	Unlisted	Unlisted	NE	Not Endemic	25
331	Tenebrionidae	<i>Laena hopffgarteni</i>	Unlisted	Unlisted	NE	Not Endemic	25
332	Tetranychidae	<i>Tetranychus urticae</i>	Unlisted	Unlisted	NE	Not Endemic	25
333	Tettiometridae	<i>Tettiometra eremi</i>	Unlisted	Unlisted	NE	Not Endemic	25
334	Trechidae	<i>Trechus austriacus</i>	Unlisted	Unlisted	NE	Not Endemic	9
335	Trechidae	<i>Trechus quadristriatus</i>	Unlisted	Unlisted	NE	Not Endemic	9
336	Uliidiidae	<i>Physiphora demandata</i>	Unlisted	Unlisted	NE	Not Endemic	8
337	Uloboridae	<i>Uloborus walckenaerius</i>	Unlisted	Unlisted	NE	Not Endemic	25
338	Ulopidae	<i>Utecha trivialis</i>	Unlisted	Unlisted	NE	Not Endemic	25
339	Vespidae	<i>Vespa crabro linnaeus</i>	Unlisted	Unlisted	NE	Not Endemic	28
340	Vespidae	<i>Delta unguiculatum</i>	Unlisted	Unlisted	NE	Not Endemic	28
341	Vespidae	<i>Eumenes coarctatus linnaeus</i>	Unlisted	Unlisted	NE	Not Endemic	28
342	Zonitidae	<i>Zonites chloriticus cf. chloritus riedel</i>	Unlisted	Unlisted	NE	Endemic	26
343	Zonitidae	<i>Oxychilus (schistophallus) samius</i>	Unlisted	Unlisted	NE	Not Endemic	26

**Acknowledgment:** This study was carried out within the scope of the "Terrestrial and Inland Water Ecosystems Biodiversity Inventory and Monitoring" Project of the Ministry of Agriculture and Forestry, General Directorate of Nature Conservation and National Parks.

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