

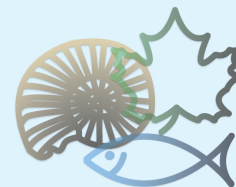
PAPER DETAILS

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Insect (Coleoptera and Orthoptera) species of İstanbul in the Zoology Collection of Istanbul University

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Abstract

Zoology Collection of İstanbul University has a unique position among other institutional collections found in Turkey. This collection has very oldest insect specimens recorded from Turkey and especially from all around İstanbul. Actually the collection owes this uniqueness to a hobbyist, Bernard Tubini. His personal collection which contains specimens collected from 1920 to 1940 was later donated to the İstanbul University. However this special collection has never been studied, nor documented so far. In this study we aimed to make a checklist of the insect species of İstanbul from the Zoology Collection of İstanbul University and by the way take Tubini collection out into daylight. As a result, beyond seven Orthoptera species, 313 species of Coleoptera were listed from the collection.

Introduction

There are about one million described (named) insect species in the world (Grimaldi & Engel, 2005). That amount is nearly three-quarters of all known animal species (Clapham *et al.*, 2016). Because of that they can easily be qualified as the dominant animal group of earth (Borror *et al.*, 1989). This vast amount in the nature directly and indirectly affect human life. They may dominate food chains and food webs (Gullan & Cranston, 2010). They can be a subject in culture, literature or art (such as scarabs and jewel beetles); ingredient in cosmetics (such as bee wax and cochineal dye); food source (insect itself or its product like honey); medical issue as a vector organism (mosquitoes) or an allergen by stinging or direct contact (sting of bees and wasps, lepidopteran caterpillars' skin); agricultural or forestry pests or oppositely beneficial organisms as a biological control agent (Kondo, 2012). They may also be a keystone species due to their critical roles in the ecosystem (Gullan & Cranston, 2010).

Such importance and diversity influenced many naturalists, scientists and even many hobbyists in the past (Gullan & Cranston, 2010). Due to this many people have been collecting insects and preserving them as a collection item in either institutional museums or in their private collections. Today it was noted that only institutional collections worldwide house an estimated 3 billion preserved insect specimens in total (Colvin, 2014).

By the help of this old hobby or tradition we are able to compare alive species with the museum specimens. The data gathered from that comparison would lead us to provide some information about climate change, habitat destruction due to anthropogenic activity and the resulting distributional changes over time (Colvin, 2014). Moreover, such collections may also provide us many benefits in rapid identification of unknown specimens, offering a lens into the past, holding a huge material for exhibitions, and giving an essential reference for the further studies. Because of these factors holding an institutional insect collection is vital for any kind of systematical and ecological studies for the countries.

In Turkey there are various kinds of insect collections in many institutes. Among them, the Zoology Collection of İstanbul University holds a unique position. This collection houses about two thousand of insect specimens in total. However the originality of the collection is not about the number of insect species or specimens it contains but about the antiquity of the collections. Especially one part of the collection belongs to Bernard Tubini. Beyond his profession as an educator, Bernard Tubini was an amateur entomologist who loves to collect insects. He enlarged his personal collection by own efforts. As far as we understand he made field studies and also loaned some specimen from all over the world. Since he lived in İstanbul, he collected many insects, especially Coleoptera specimens. After his death, inheritors donated his personal insect collection to İstanbul University by 1944. This donation has made an invaluable contribution to our zoology collection.

There are five major insect orders (Coleoptera, Lepidoptera, Diptera, Hymenoptera, and Hemiptera) according to their species richness (Gullan & Cranston, 2010). Coleoptera by representing the 40% of all known insect species (ca. 350.000) is by far the most crowded and largest insect order (Gullan & Cranston, 2010). Lepidoptera comes next with about 150.000 described species (Gullan & Cranston, 2010). Due to these facts, our collection mainly contains Coleoptera and Lepidoptera members. Luckily, Lepidoptera members were evaluated and published by various studies in the past (Şengün & Güneyi, 1968; Güneyi & Şengün, 1972a; Güneyi & Şengün, 1972b). However, for other groups and especially for the members of Coleoptera there have been no studies done so far. Since the university revolution happened in Turkey in 1933, Tubini collection, which covers insect specimens from 1926 to 1940, became one of the oldest institutional collection for us. Moreover, nobody had been documented any study on this collection so far. So this study will be the first record or checklist for this collection ever. In addition, the studies focusing on the insect fauna of İstanbul are very rare in the literature, as well. Because of this we aimed to fulfil this gap by making the checklist of the insect species of İstanbul from the Zoology Collection of İstanbul University in this study. That also covers the majority of the Tubini collection stored in our collection, as well.

Material and Method

Tubini Collection consisted of four cabinets (Fig.1) and forty drawer like Fig.2-3 at all. These specimens were collected and deposited between 1920-1940 years (Fig.4). In this study Tubini Collection was indicated with the catalog code (C.N. in Table 1) started by "T". Apart from Tubini collection, there are some specimens collected between 1945 and 1965 were also added to the study. These specimens were deposited in the cabinet 24 and indicated with catalog code (C.N. in Table 1) as "D.24.C". After these codes, number of the drawers and specimen number were also indicated as C.N. in Table 1. For example, for "T.3.09-784.29"; "T" means Tubini Collection, "3" comes after "T" refers the cabinet number, "09-784" refers drawer number and "29" is the specimen number in the drawer.

Before analyzing the specimens all drawers were photographed by digital camera and tried to make a digital database for all. Then specimens were carefully inspected according to their label data. The insects that have no labels or data about İstanbul excluded from the study. Some labels were containing full date data. But the majority was just containing the information about collection month. In the checklist we tried to give location and date information in order to make any contribution to the current phenology and distribution knowledge of the species.

The species and the generic names on the label of the specimens were checked, synonyms, misspelled words are corrected according to the Fauna Europaea (2017), Discover Life (2017), IUCN (2017), UK Beetle Recording (2017), Barsevskis *et al.* (2017) and Muséum national d'Histoire naturelle (2017) databases. Also taxonomic ranks of the groups were evaluated according to the Fauna Europaea database and Borror *et al.* (1989).



Figure 1: Front label of the fourth cabinet of Tubini Collection.



Figure 2: Tubini Collection, 2nd cabinet, 6th drawer.

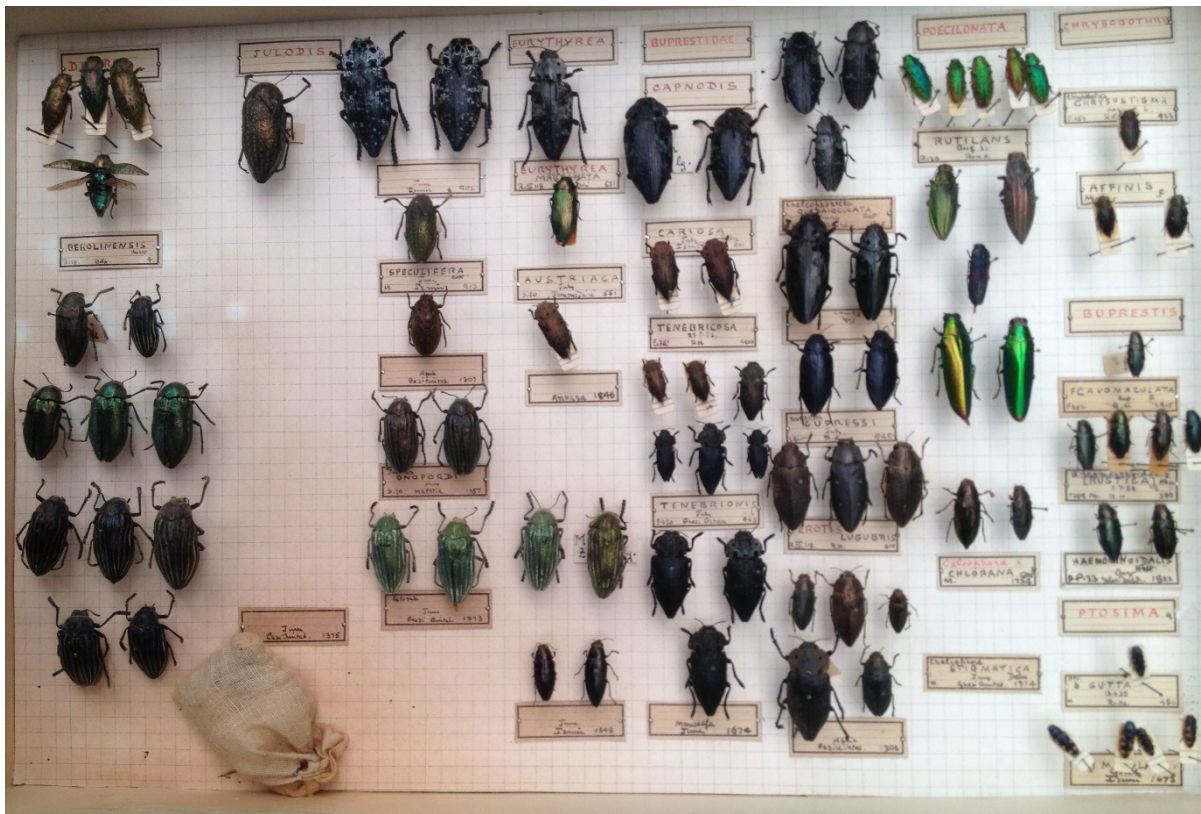


Figure 3: Tubini Collection, 3rd cabinet, 4th drawer.



Figure 4: Male and female *Polyphylla fullo* specimens from Rumeli Hisarı (R.H), date: VIII.1932.

Results

As a result, 334 taxon were listed with four duplicates. Besides, four taxon were listed with only genus names (with “sp.” abbreviation). In addition, there were six dubious taxonomic names which were indicated with “?” mark in the “valid name” column of the Table 1. From the rest, 320 valid species listed. Among, only seven species were Orthoptera members. Apart from the dubious names and duplicates, 313 species were listed that belong to the order Coleoptera. All of the species names were italicized and given in the Table 1 in alphabetical order of the family names.

Table 1: The list of the insect species of İstanbul found in Zoology Collection of Istanbul University. “?” mark indicates no data; “*” indicates Orthoptera member; C.N: Catalog number; S.: Sampling month; L.: Location.

Family	Name on the Label	Valid Name	C. N.	L.	S.
Acrididae*	<i>Notostaurus anaticus</i>	<i>Notostaurus anaticus</i> (Krauss, 1896)	D.24. C.17.01	Yeşilköy	Sept.
Acrididae*	<i>Calliptamus italicus</i>	<i>Calliptamus italicus</i> L.	D.24. C.01.03	B.çekmece, Belgrad	Aug.
Anobiidae	<i>Dorcatoma dresdensis</i>	<i>Dorcatoma dresdensis</i> Herbst, 1792	T.3.09-784.29	Domuzdere	?
Anobiidae	<i>Xyletinus ater</i>	<i>Xyletinus ater</i> (Creutz., 1796)	T.3.09-784.28	Maslak	June
Anobiidae	<i>Ptinus germanus</i>	<i>Ptinus palliatus</i> Perris, 1847	T.3.09-784.17	Yarımburgaz	?
Bostrichidae	<i>Schistoceros bimaculatus</i>	<i>Amphicerus bimaculatus</i> (Olivier, 1790)	T.3.09-784.31	Şile	May.
Bostrichidae	<i>Psoa dubia</i>	<i>Psoa dubia</i> (Rossi, 1792)	T.3.09-784.32	Polenezköy	Apr.
Bothrididae	<i>Bothrideres contractus</i>	<i>Bothrideres bipunctatus</i> (Gmelin, 1790)	T.1.09-767.31	Baltalimanı	?
Buprestidae	<i>Eurythyrea austriaca</i>	<i>Eurythyrea austriaca</i> L.	T.3.09-782.10	Domuzdere	July
Buprestidae	<i>Eurythyrea marginata</i>	<i>Eurythyrea micans</i> (Fabricius, 1794)	T.3.09-782.09	Domuzdere	?
Buprestidae	<i>Capnodis tenebricosa</i>	<i>Capnodis tenebricosa</i> (Olivier, 1790)	T.3.09-782.15	Rumeli Hisarı	May.
Buprestidae	<i>Perotis lugubris</i>	<i>Perotis lugubris</i> (Fabricius, 1777)	T.3.09-782.22	Rumeli Hisarı	?
Buprestidae	<i>Poecilona rutilans</i>	<i>Ovalisia rutilans</i> (Fabricius, 1777)	T.3.09-782.24	Rumeli Hisarı	?
Buprestidae	<i>Buprestis flavomaculata</i>	<i>Buprestis novemmaculata</i> L.	T.3.09-782.31	Rumeli Hisarı	Aug.
Buprestidae	<i>Ptosima guttata</i>	<i>Ptosima undecimmaculata</i> (Herbst, 1784)	T.3.09-782.34	Rumeli Hisarı	June
Buprestidae	<i>Buprestis rustica</i>	<i>Buprestis rustica</i> L.	T.3.09-782.32	Rumeli Hisarı	?
Buprestidae	<i>Acmaeodera flavolineata</i>	<i>Acmaeodera flavolineata</i> Laport&Gory, 1835	T.3.09-795.33	Belgrad	May.
Buprestidae	<i>Acmaeodera ottomana</i>	<i>Acmaeodera ottomana</i> (Friedrichs, 1837)	T.3.09-795.31	Belgrad	May.
Buprestidae	<i>Agrilus bauratus</i>	<i>Agrilus biguttatus</i> (Fabricius, 1776)	T.3.09-795.28	Rumeli Hisarı	May.
Buprestidae	<i>Agrilus integerrimus</i>	<i>Agrilus integerrimus</i> Ratzeburg, 1837	T.3.09-795.23	Belgrad	?
Buprestidae	<i>Agrilus viridis</i>	<i>Agrilus viridis</i> L.	T.3.09-795.26	Belgrad	?

Family	Name on the Label	Valid Name	C. N.	L.	S.
Buprestidae	<i>Anthaxia hungarica</i>	<i>Anthaxia hungarica</i> (Scopoli, 1772)	T.3.09-795.09	Rumeli Hisarı	?
Buprestidae	<i>Anthaxia millefolii</i>	<i>Anthaxia millefolii</i> (Fabricius, 1801)	T.3.09-795.17	Polenezköy	June
Buprestidae	<i>Anthaxia nitidula</i>	<i>Anthaxia nitidula</i> L.	T.3.09-795.10	Rumeli Hisarı	?
Buprestidae	<i>Coraebus graminis</i>	<i>Meliboeus graminis</i> (Panzer, 1789)	T.3.09-795.18	Rumeli Hisarı	May.
Byturidae	<i>Byturus fumatus</i>	<i>Byturus ochraceus</i> (Scriba, 1790)	T.1.09-767.14	Büyük Bent	May.
Carabidae	<i>Agonum viduum</i>	<i>Agonum viduum</i> (Panzer, 1796)	T.1.09-759.21	Baltalimanı	Mar.
Carabidae	<i>Agonum viridicupreum</i>	<i>Agonum viridicupreum</i> (Goeze, 1777)	T.1.09-759.22	Baltalimanı	Nov.
Carabidae	<i>Amara aenea</i>	<i>Amara aenea</i> (De Geer, 1774)	T.1.09-759.55	Bebek	June
Carabidae	<i>Cyrtotus apricarius</i>	<i>Amara apricaria</i> (Paykull, 1790)	T.1.09-759.03	Yarımburgaz	June
Carabidae	<i>Cyrtotus fulvus</i>	<i>Amara fulva</i> (Müller, 1776)	T.1.09-759.04	Baltalimanı	Dec.
Carabidae	<i>Pterostichus fusca</i>	<i>Amara fusca</i> Dejean, 1828	T.1.09-759.45	Kilyos	July
Carabidae	<i>Pterostichus nitida</i>	<i>Amara nitida</i> Sturm, 1825	T.1.09-759.44	Kilyos	July
Carabidae	<i>Amara ovata</i>	<i>Amara ovate</i> (Fabricius, 1792)	T.1.09-759.63	Rumeli Hisarı	?
Carabidae	<i>Pterostichus maritima</i>	<i>Amara quenseli</i> (Schönherr, 1806)	T.1.09-759.64	Kilyos	June
Carabidae	<i>Idiochroma dorsalis</i>	<i>Anchomenus dorsalis</i> (Pontoppidan, 1763)	T.1.09-759.28	Baltalimanı	?
Carabidae	<i>Calathus erratus</i>	<i>Calathus erratus</i> (Sahlberg, 1827)	T.1.09-759.17	Kilyos	July
Carabidae	<i>Calathus fuscipes</i>	<i>Calathus fuscipes</i> (Goeze, 1777)	T.1.09-759.16	Baltalimanı	Mar.
Carabidae	<i>Calathus fuscus</i>	<i>Calathus subfuscus</i> Wollaston, 1865	T.1.09-759.14	Baltalimanı	Nov.
Carabidae	<i>Molops piceus</i>	<i>Molops piceus</i> (Panzer, 1793)	T.1.09-759.05	Polenezköy	June
Carabidae	<i>Olisthopus fuscatus</i>	<i>Olisthopus fuscatus</i> Dejean, 1828	T.1.09-759.66	Baltalimanı	June
Carabidae	<i>Olisthopus rotundatus</i>	<i>Olisthopus rotundatus</i> (Paykull, 1798)	T.1.09-759.68	Şile	Nov.
Carabidae	<i>Olisthopus sturmi</i>	<i>Olisthopus sturmi</i> (Duftschmid, 1812)	T.1.09-759.67	Baltalimanı	June
Carabidae	<i>Pterostichus inaequalis</i>	<i>Pedius longicollis</i> (Duftschmid, 1812)	T.1.09-759.37	Baltalimanı	Nov.
Carabidae	<i>Poecilus lepidus</i>	<i>Poecilus lepidus</i> (Leske, 1785)	T.1.09-759.08	Kilyos	Mar.
Carabidae	<i>Pterostichus diligens</i>	<i>Pterostichus diligens</i> (Sturm, 1824)	T.1.09-759.43	Yarımburgaz	Mar.
Carabidae	<i>Pterostichus anthracinus</i>	<i>Pterostichus anthracinus</i> (Illiger, 1798)	T.1.09-759.40	Büyükdere	Mar.
Carabidae	<i>Pterostichus minor</i>	<i>Pterostichus minor</i> (Gyllenhal, 1827)	T.1.09-759.41	Fevzipaşa	?
Carabidae	<i>Pterostichus nigrita</i>	<i>Pterostichus nigrita</i> (Paykull, 1790)	T.1.09-759.39	Baltalimanı	Mar.
Carabidae	<i>Agonum</i>	<i>Sericoda quadripunctata</i> (De	T.1.09-	Kilyos	July

Family	Name on the Label	Valid Name	C. N.	L.	S.
	<i>quadripunctatum</i>	Geer, 1774)	759.24		
Carabidae	<i>Pterostichus agonoderus</i>	<i>Tapinopterus agonoderus</i> (Chaudoir, 1850)	T.1.09-759.42	Polenezköy	?
Carabidae	<i>Harpalus dimidiatus</i>	<i>Harpalus dimidiatus</i> (Rossi, 1790)	T.1.09-760.01	Rumeli Hisarı	Nov.
Carabidae	<i>Harpalus tenebrosus</i>	<i>Harpalus tenebrosus</i> Dejean, 1829	T.1.09-760.02	Baltalimanı	Mar.
Carabidae	<i>Harpalus rubripes</i>	<i>Harpalus rubripes</i> (Duftschmid, 1812)	T.1.09-760.03	Rumeli Hisarı	Feb.
Carabidae	<i>Harpalus smaragdinus</i>	<i>Harpalus smaragdinus</i> (Duftschmid, 1812)	T.1.09-760.04	Baltalimanı	Jan.
Carabidae	<i>Harpalus atratus</i>	<i>Harpalus atratus</i> (Latreille, 1804)	T.1.09-760.05	Baltalimanı	Nov.
Carabidae	<i>Harpalus melancholicus</i>	<i>Harpalus melancholicus</i> (Dejean, 1829)	T.1.09-760.11	Baltalimanı	Nov.
Carabidae	<i>Harpalus politus</i>	<i>Harpalus politus</i> Dejean, 1829	T.1.09-760.10	Baltalimanı	Nov.
Carabidae	<i>Harpalus rufus</i>	<i>Harpalus flavescens</i> (Piller& Mitterpacher, 1783)	T.1.09-760.24	Kilyos	?
Carabidae	<i>Harpalus cupreus</i>	<i>Harpalus cupreus</i> Dejean, 1829	T.1.09-760.06	Yeşilköy	Mar.
Carabidae	<i>Anisodactylus calceatus</i>	<i>Harpalus calceatus</i> (Duftschmid, 1812)	T.1.09-760.30	Kilyos	Sept.
Carabidae	<i>Harpalus aeneus</i>	<i>Harpalus affinis</i> (Schrank, 1781)	T.1.09-760.22	Yarımburgaz	Mar.
Carabidae	<i>Anisodactylus nemorivagus</i>	<i>Anisodactylus nemorivagus</i> (Duftschmid, 1812)	T.1.09-760.28	Yarımburgaz	June
Carabidae	<i>Acinopus megacephalus</i>	<i>Acinopus megacephalus</i> (Rossi, 1794)	T.1.09-760.31	Suadiye	June
Carabidae	<i>Ophonus punctatulus</i>	<i>Ophonus laticollis</i> Mannerheim, 1825	T.1.09-760.35	Baltalimanı	?
Carabidae	<i>Ophonus azureus</i>	<i>Ophonus azureus</i> (Fabricius, 1775)	T.1.09-760.36	Baltalimanı	Mar.
Carabidae	<i>Ophonus cordatus</i>	<i>Ophonus cordatus</i> (Duftschmid, 1812)	T.1.09-760.38	Baltalimanı	Mar.
Carabidae	<i>Ophonus maculicornis</i>	<i>Parophonius maculicornis</i> (Duftschmid, 1812)	T.1.09-760.39	Bebek	June
Carabidae	<i>Ophonus rupicola</i>	<i>Ophonus rupicola</i> (Sturm, 1818)	T.1.09-760.42	Baltalimanı	Nov.
Carabidae	<i>Ophonus rectangulus</i>	<i>Ophonus melletii</i> (Heer, 1837)	T.1.09-760.43	Baltalimanı	Mar.
Carabidae	<i>Ophonus rupicoloides</i>	<i>Ophonus melletii</i> (Heer, 1837)	T.1.09-760.44	Baltalimanı	Mar.
Carabidae	<i>Ophonus rufibarbis</i>	<i>Ophonus rufibarbis</i> (Fabricius, 1792)	T.1.09-760.45	Rumeli Hisarı	July
Carabidae	<i>Ophonus brevicollis</i>	<i>Ophonus brevicollis</i> (Audinet-Serville, 1821)	T.1.09-760.46	Baltalimanı	July
Carabidae	<i>Stenolophus teutonius</i>	<i>Stenolophus teutonius</i> (Schrank, 1781)	T.1.09-760.50	Baltalimanı	Nov.
Carabidae	<i>Stenolophus skrimshirani</i>	<i>Stenolophus skrimshirani</i> Stephens, 1828	T.1.09-760.53	Yarımburgaz	June
Carabidae	<i>Stenolophus meridianus</i>	<i>Acupalpus meridianus</i> L.	T.1.09-760.51	Baltalimanı	Nov.
Carabidae	<i>Europhilus micans</i>	<i>Agonum micans</i> Nicolai, 1822	T.1.09-760.33	Kilyos	July
Carabidae	<i>Dyschirius aeneus</i>	<i>Dyschiriodes aeneus</i> (Dejean, 1825)	T.1.09-761.03	Şile	?

Family	Name on the Label	Valid Name	C. N.	L.	S.
Carabidae	<i>Dyschiriodes politus</i>	<i>Dyschiriodes politus</i> (Dejean, 1825)	T.1.09-761.05	Şile	Apr.
Carabidae	<i>Chlaenius velutinus</i>	<i>Chlaenius velutinus</i> (Duftschmid, 1812)	T.1.09-761.09	Paşalimanı	Sept.
Carabidae	<i>Chlaenius festinus</i>	<i>Chlaenius festinus</i> (Panzer, 1796)	T.1.09-761.10	Büyükdere	Mar.
Carabidae	<i>Chlaenius chrysocephalus</i>	<i>Chlaenius chrysocephalus</i> (Rossi, 1790)	T.1.09-761.13	Yeşilköy	Apr.
Carabidae	<i>Chlaenius vestitus</i>	<i>Chlaenius vestitus</i> (Paykull, 1790)	T.1.09-761.14	Kilyos	Mar.
Carabidae	<i>Chlaenius nigricornis</i>	<i>Chlaenius nigricornis</i> (Fabricius, 1787)	T.1.09-761.15	Yeşilköy	Mar.
Carabidae	<i>Lebia cyanocephala</i>	<i>Lebia cyanocephala</i> L.	T.1.09-761.18	Bebek	June
Carabidae	<i>Lebia scapularis</i>	<i>Lebia scapularis</i> (Geoffroy, 1785)	T.1.09-761.19	Bebek	Aug.
Carabidae	<i>Demetrias atricapillus</i>	<i>Demetrias atricapillus</i> L.	T.1.09-761.21	Yarımburgaz	June
Carabidae	<i>Odacantha melanura</i>	<i>Odacantha melanura</i> L.	T.1.09-761.22	Yarımburgaz	June
Carabidae	<i>Panagaeus cruxmajor</i>	<i>Panagaeus cruxmajor</i> L.	T.1.09-761.27	Baltalimanı	June
Carabidae	<i>Metabletus obscuroguttatus</i>	<i>Syntomus obscuroguttatus</i> (Duftschmid, 1812)	T.1.09-761.26	Baltalimanı	June
Carabidae	<i>Oodes helopioides</i>	<i>Oodes helopioides</i> (Fabricius, 1792)	T.1.09-761.06	Yarımburgaz	June
Carabidae	<i>Clivina collaris</i>	<i>Clivina collaris</i> (Herbst, 1784)	T.1.09-761.07	Baltalimanı	Dec.
Carabidae	<i>Clivina fossor</i>	<i>Clivina fossor</i> L.	T.1.09-761.08	Baltalimanı	Nov.
Carabidae	<i>Acupalpus dorsalis</i>	<i>Acupalpus parvulus</i> (Sturm, 1825)	T.1.09-762.01	Baltalimanı	Dec.
Carabidae	<i>Acupalpus elegans</i>	<i>Acupalpus elegans</i> (Dejean, 1829)	T.1.09-762.02	Baltalimanı	Dec.
Carabidae	<i>Acupalpus flavicollis</i>	<i>Acupalpus flavicollis</i> (Sturm, 1825)	T.1.09-762.03	Baltalimanı	Nov.
Carabidae	<i>Acupalpus meridianus</i>	<i>Acupalpus meridianus</i> L.	T.1.09-762.04	Baltalimanı	Mar.
Carabidae	<i>Diachromus germanus</i>	<i>Diachromus germanus</i> L.	T.1.09-762.05	Baltalimanı	Nov.
Carabidae	<i>Scybalicus oblongiusculus</i>	<i>Scybalicus oblongiusculus</i> (Dejean, 1829)	T.1.09-762.06	Baltalimanı	July
Carabidae	<i>Siagona europaea</i>	<i>Siagona europaea</i> (Dejean, 1826)	T.1.09-762.10	Fevzipaşa	?
Carabidae	<i>Tschitscherinellus cordatus</i>	<i>Tschitscherinellus cordatus</i> (Dejean, 1825)	T.1.09-762.08	Şile	May.
Carabidae	<i>Laemostenus pyrenaeus</i>	<i>Laemostenus oblongus</i> (Dejean, 1828)	T.1.09-762.16	Yarımburgaz	June
Carabidae	<i>Brachinus crepitans</i>	<i>Brachinus crepitans</i> L.	T.2.09-772.02	Baltalimanı	June
Carabidae	<i>Brachinus explodens</i>	<i>Brachinus explodens</i> (Duftschmid, 1812)	T.2.09-772.03	Baltalimanı	Nov.
Carabidae	<i>Brachinus bipustulatus</i>	<i>Brachinus bipustulatus</i> Quens., 1806	T.2.09-772.04	Fevzipaşa	?
Carabidae	<i>Brachinus psophia</i>	<i>Brachinus psophia</i> Audinet-Serville, 1821	T.2.09-772.05	Baltalimanı	?
Carabidae	<i>Brachinus plagiatus</i>	<i>Brachinus plagiatus</i> Reiche,	T.2.09-	Baltalimanı	?

Family	Name on the Label	Valid Name	C. N.	L.	S.
		1868	772.06		
Carabidae	<i>Broscus nobilis</i>	<i>Broscus nobilis</i> (Dejean, 1828)	T.2.09-772.08	Bebek	Jan.
Carabidae	<i>Tachys micros</i>	<i>Tachys micros</i> (Fischer von Waldheim, 1828)	T.2.09-772.11	Bebek	Jan.
Carabidae	<i>Tachys bisulcatus</i>	<i>Porotachys bisulcatus</i> (Nicolai, 1822)	T.2.09-772.12	Baltalimanı	Dec.
Carabidae	<i>Tachys sexstriatus</i>	<i>Tachys sexstriatus</i> Apfelbeck, 1904	T.2.09-772.13	Bebek	Dec.
Carabidae	<i>Dromius angustus</i>	<i>Dromius angustus</i> Brullé, 1834	T.2.09-772.16	Rumeli Hisarı	Mar.
Carabidae	<i>Dromius agilis</i>	<i>Dromius agilis</i> (Fabricius, 1787)	T.2.09-772.19	Rumeli Hisarı	May.
Carabidae	<i>Bembidion lunatum</i>	<i>Bembidion lunatum</i> (Duftschmid, 1812)	T.2.09-772.21	Şile	Apr.
Carabidae	<i>Bembidion biguttatum</i>	<i>Bembidion biguttatum</i> (Fabricius, 1779)	T.2.09-772.33	Yarımburgaz	Mar.
Carabidae	<i>Bembidion normannum</i>	<i>Bembidion normannum</i> Dejean, 1831	T.2.09-772.40	Şile	Apr.
Carabidae	<i>Bembidion nitidulum</i>	<i>Ocydromus deletus</i> (Audinet-Serville, 1821)	T.2.09-772.48	Baltalimanı	Mar.
Carabidae	<i>Bembidion laterale</i>	<i>Bembidion laterale</i> (Samouelle, 1819)	T.2.09-772.49	Baltalimanı	?
Carabidae	<i>Bembidion monticola</i>	<i>Bembidion monticola</i> Sturm, 1825	T.2.09-772.50	Baltalimanı	Mar.
Carabidae	<i>Bembidion octomaculatum</i>	<i>Bembidion octomaculatum</i> (Goeze, 1777)	T.2.09-772.52	Baltalimanı	Nov.
Carabidae	<i>Bembidion modestum</i>	<i>Bembidion modestum</i> (Fabricius, 1801)	T.2.09-772.63	Şile	May.
Carabidae	<i>Bembidion fasciolatum</i>	<i>Bembidion fasciolatum</i> (Duftschmid, 1812)	T.2.09-772.53	Baltalimanı	Nov.
Carabidae	<i>Bembidion bipunctatum</i>	<i>Bembidion bipunctatum</i> L.	T.2.09-772.64	Baltalimanı	Apr.
Carabidae	<i>Bembidion punctulatum</i>	<i>Bembidion punctulatum</i> Drapiez, 1821	T.2.09-772.65	Baltalimanı	May.
Carabidae	<i>Bembidion tibiale</i>	<i>Bembidion tibiale</i> (Duftschmid, 1812)	T.2.09-772.66	Baltalimanı	May.
Carabidae	<i>Bembidion aspericolle</i>	<i>Bembidion aspericolle</i> (Germar, 1829)	T.2.09-772.67	Şile	May.
Carabidae	<i>Trechus rubens</i>	<i>Trechus rubens</i> (Fabricius, 1792)	T.2.09-772.69	Baltalimanı	Dec.
Carabidae	<i>Trechus minutus</i>	<i>Trechus quadristriatus</i> (Schrank, 1781)	T.2.09-772.74	Şile	?
Carabidae	<i>Calosoma auropunctatum</i>	<i>Calosoma auropunctatum</i> (Herbst, 1784)	T.3.09-790.05	Bebek	July
Carabidae	<i>Calosoma sycophanta</i>	<i>Calosoma sycophanta</i> L.	T.3.09-790.02	Belgrad Forest	June
Carabidae	<i>Leistus montanus</i>	<i>Leistus montanus</i> Stephens, 1827	T.3.09-790.19	Ömerli	Mar.
Carabidae	<i>Scarites laevigatus</i>	<i>Scarites laevigatus</i> Fabricius, 1792	T.3.09-790.13	Kilyos	Mar.
Cerambycidae	<i>Aegosoma cerdo</i>	<i>Cerambyx cerdo</i> L.	T.1.09-766.12; D.24. C.02.01	Rumeli Hisarı, Kandilli	?
Cerambycidae	<i>Aromia moschata</i>	<i>Aromia moschata</i> L.	T.1.09-766.14	Baltalimanı	June

Family	Name on the Label	Valid Name	C. N.	L.	S.
Cerambycidae	<i>Rosalia alpina</i>	<i>Rosalia alpina</i> L.	T.1.09-766.16	Domuzdere	July
Cerambycidae	<i>Strangalia melanura</i>	<i>Stenurella melanura</i> L.	T.1.09-764.01	Domuzdere	?
Cerambycidae	<i>Strangalia maculata</i>	<i>Rutpela maculata</i> (Poda, 1761)	T.1.09-764.05	Domuzdere	July
Cerambycidae	<i>Strangalia quadrifasciata</i>	<i>Leptura quadrifasciata</i> (L.)	T.1.09-764.06	Büyük Bent	June
Cerambycidae	<i>Strangalia aurulenta</i>	<i>Leptura aurulenta</i> (Fabricius, 1792)	T.1.09-764.07	Domuzdere	July
Cerambycidae	<i>Leptura sexguttata</i>	<i>Anoploclera sexguttata</i> (Fabricius, 1775)	T.1.09-764.10	Domuzdere	June
Cerambycidae	<i>Leptura livida</i>	<i>Pseudovadonia livida</i> (Fabricius, 1777)	T.1.09-764.13	Maslak	June
Cerambycidae	<i>Leptura scutellata</i>	<i>Stictoleptura scutellata</i> (Fabricius, 1781)	T.1.09-764.16	Domuzdere	July
Cerambycidae	<i>Leptura bipunctata</i>	<i>Vadonia bipunctata</i> (Fabricius, 1781)	T.1.09-764.15	Polenezköy	July
Cerambycidae	<i>Leptura tesserula</i>	<i>Batesiata tesserula</i> (Charp., 1825)	T.1.09-764.18	Yarımburgaz	June
Cerambycidae	<i>Phytoecia humeralis</i>	<i>Phytoecia humeralis</i> (Waltl, 1828)	T.1.09-764.33	Bakırköy	?
Cerambycidae	<i>Phytoecia coerulescens</i>	<i>Opsilia coerulescens</i> (Scopoli, 1763)	T.1.09-764.31	Rumeli Hisarı	?
Cerambycidae	<i>Phytoecia millefolia</i>	?	T.1.09-764.43	Kartal	May.
Cerambycidae	<i>Clytus rhamni</i>	<i>Clytus rhamni</i> Germar, 1817	T.1.09-764.41	Domuzdere	?
Cerambycidae	<i>Clytus lama</i>	<i>Clytus lama</i> Mulsant, 1847	T.1.09-764.42	Rumeli Hisarı	Apr.
Cerambycidae	<i>Phytoecia pustulata</i>	<i>Phytoecia pustulata</i> (Schrank, 1776)	T.1.09-764.37	Polenezköy	Apr.
Cerambycidae	<i>Plagionotus floralis</i>	<i>Plagionotus floralis</i> (Pallas, 1773)	T.1.09-764.56	Domuzdere	?
Cerambycidae	<i>Liopus nebulosus</i>	<i>Leiopus nebulosus</i> L.	T.1.09-764.54	Rumeli Hisarı	?
Cerambycidae	<i>Liopus punctulatus</i>	<i>Leiopus punctulatus</i> (Paykull, 1800)	T.1.09-764.55	Rumeli Hisarı	July
Cerambycidae	<i>Caenoptera umbellatarum</i>	<i>Glaphyra umbellatarum</i> (Schreber, 1759)	T.1.09-764.47	Rumeli Hisarı	?
Cerambycidae	<i>Pyrrhidium sanguineum</i>	<i>Pyrrhidium sanguineum</i> L.	T.1.09-764.53	Rumeli Hisarı	?
Cerambycidae	<i>Calamobius gracilis</i>	<i>Calamobius filum</i> (Rossi, 1790)	T.1.09-764.38	Rumeli Hisarı	?
Cerambycidae	<i>Ergates faber</i>	<i>Ergates faber</i> L.	D.24. C.02.02	Kandilli	?
Cerambycidae	<i>Aegosoma scabricosane</i>	<i>Aegosoma scabricorne</i> (Scopoli, 1763)	D.24. C.02.05	Kandilli	?
Cerambycidae	<i>Ropalopus clavipes</i>	<i>Ropalopus clavipes</i> (Fabricius, 1775)	D.24. C.02.06	Kandilli	?
Cerylonidae	<i>Cerylon histeroide</i>	<i>Cerylon histeroide</i> (Fabricius, 1792)	T.1.09-767.54	Domuzdere	Nov.
Cetoniidae	<i>Oxythyrea funesta</i>	<i>Oxythyrea funesta</i> (Poda, 1761)	D.24. C.02.07	Kandilli	?
Chrysomelidae	<i>Tituboea macropus</i>	<i>Tituboea macropus</i> (Illiger, 1800)	T.2.09-778.08	Büyük Bent	June
Chrysomelidae	<i>Coptocephala</i>	<i>Coptocephala unifasciata</i>	T.2.09-	Rumeli Hisarı	July

Family	Name on the Label	Valid Name	C. N.	L.	S.
	<i>unifasciata</i>	(Scopoli, 1763)	778.16		
Chrysomelidae	<i>Cryptocephalus ocellatus</i>	<i>Cryptocephalus ocellatus</i> Drapiez, 1819	T.2.09-778.15	Şile	May.
Chrysomelidae	<i>Coptocephala scopolina</i>	<i>Coptocephala scopolina</i> L.	T.2.09-778.17; D.24. C.02.03	Rumeli Hisarı, Kandilli	July
Chrysomelidae	<i>Cryptocephalus flavipes</i>	<i>Cryptocephalus flavipes</i> Fabricius, 1781	T.2.09-778.28	Maslak	June
Chrysomelidae	<i>Gynandrophthalma aurita</i>	<i>Smaragdina aurita</i> (L.)	T.2.09-778.22	Büyük Bent	May.
Chrysomelidae	<i>Gynandrophthalma hypocrita</i>	<i>Smaragdina hypocrita</i> (Lacordaire, 1848)	T.2.09-778.24	Maslak	May.
Chrysomelidae	<i>Gynandrophthalma tibialis</i>	<i>Smaragdina tibialis</i> (Brullé, 1832)	T.2.09-778.25	Maslak	May.
Chrysomelidae	<i>Pachybrachis limbatus</i>	<i>Pachybrachis limbatus</i> (Ménétriés, 1836)	T.2.09-778.29	Maslak	May.
Chrysomelidae	<i>Cryptocephalus flavipes</i>	<i>Cryptocephalus flavipes</i> Fabricius, 1781	T.2.09-778.28	Maslak	June
Chrysomelidae	<i>Cryptocephalus aureolus</i>	<i>Cryptocephalus aureolus</i> Suffrian, 1847	T.2.09-778.30; D.24. C.02.04	Domuzdere, Kandilli	June
Chrysomelidae	<i>Cryptocephalus distinguendus</i>	<i>Cryptocephalus distinguendus</i> Schneider, 1792	T.2.09-778.33	Domuzdere	June
Chrysomelidae	<i>Cryptocephalus violaceus</i>	<i>Cryptocephalus violaceus</i> Laicharting, 1781	T.2.09-778.34	Rumeli Hisarı	May.
Chrysomelidae	<i>Cryptocephalus schaefferi</i>	<i>Cryptocephalus schaefferi</i> Schrank, 1789	T.2.09-778.38	Maslak	May.
Chrysomelidae	<i>Cryptocephalus fulvus</i>	<i>Cryptocephalus fulvus</i> (Goeze, 1777)	T.2.09-778.39	Maslak	May.
Chrysomelidae	<i>Laria cisti</i>	<i>Bruchidius cisti</i> (Fabricius, 1775)	T.2.09-778.48	Kilyos	?
Chrysomelidae	<i>Laria biguttatus</i>	<i>Bruchidius biguttatus</i> (Olivier, 1795)	T.2.09-778.56	Rumeli Hisarı	?
Chrysomelidae	<i>Galerucella lineola</i>	<i>Galerucella lineola</i> (Fabricius, 1781)	T.2.09-778.51	Rumeli Hisarı	Feb.
Chrysomelidae	<i>Cassida rubiginosa</i>	<i>Cassida rubiginosa</i> Muller, 1776	T.2.09-778.59; D.24. C.02.05	Rumeli Hisarı, Kandilli	Mar.
Chrysomelidae	<i>Cassida murraea</i>	<i>Cassida murraea</i> L.	T.2.09-778.60	Maslak	June
Chrysomelidae	<i>Cassida viridis</i>	<i>Cassida viridis</i> L.	T.2.09-778.63	Karanlık bent	June
Chrysomelidae	<i>Cassida seraphina</i>	<i>Cassida seraphina</i> Ménétriés, 1836	T.2.09-778.64	Florya	Apr.
Chrysomelidae	<i>Hispella atra</i>	<i>Hispella atra</i> L.	T.2.09-778.67	Rumeli Hisarı	Oct.
Chrysomelidae	<i>Crioceris 12punctata</i>	<i>Crioceris duodecimpunctata</i> L.	T.2.09-778.76	Maslak	May.
Cicindelidae	<i>Cicindela maritima</i>	<i>Cicindela maritima</i> Latreille & Dejean, 1822	T.2.09-773.04	Kilyos	Mar.
Cicindelidae	<i>Cicindela littoralis</i>	<i>Calomera littoralis</i> (Fabricius, 1787)	T.2.09-773.06	Kilyos	Aug.
Cicindelidae	<i>Elaphus cupreus</i>	<i>Elaphrus cupreus</i> Duftschmid, 1812	T.2.09-773.13	Yarımburgaz	June

Family	Name on the Label	Valid Name	C. N.	L.	S.
Cicindelidae	<i>Elaphus uliginosus</i>	<i>Elaphrus uliginosus</i> Fabricius, 1792	T.2.09-773.14	Yarımburgaz	June
Cleridae	<i>Tillus transversalis</i>	<i>Tilloidea transversalis</i> (Charpentier, 1825)	T.3.09-784.14	Kilyos	June
Cleridae	<i>Orthopleura sanguinicollis</i>	<i>Dermestoides sanguinicollis</i> (Fabricius, 1782)	T.3.09-784.05	Ayazma	Mar.
Cleridae	<i>Trichodes crabiformis</i>	<i>Trichodes crabroniformis</i> (Fabricius, 1787)	T.3.09-784.06	Kilyos	Aug.
Cleridae	<i>Necrobia violacea</i>	<i>Necrobia violacea</i> L.	T.3.09-784.04	Baltalimanı	Apr.
Coccinellidae	<i>Coccinella hieroglyphica</i>	<i>Coccinella hieroglyphica</i> L.	T.3.09-781.04	İstanbul	?
Coccinellidae	<i>Coccinella conglobata</i>	<i>Oenopia conglobata</i> L.	T.3.09-781.09	Riva	?
Coccinellidae	<i>Hippodamia spissa</i>	?	T.3.09-781.25	Şile	Aug.
Coccinellidae	<i>Hyperaspis reppensis</i>	<i>Hyperaspis reppensis</i> (Herbst, 1783)	T.3.09-781.61	Şile	Apr.
Curculionidae	<i>Amorphocephalus coronatus</i>	<i>Amorphocephalus coronatus</i> (Germar, 1817)	T.1.09-763.02	Baltalimanı	July
Curculionidae	<i>Attelabus nitens</i>	<i>Attelabus nitens</i> (Scopoli, 1763)	T.1.09-763.05	Kilyos	May.
Curculionidae	<i>Apoderus coryli</i>	<i>Apoderus coryli</i> L.	T.1.09-763.06	Polenezköy	June
Curculionidae	<i>Otiorhynchus dubius</i>	<i>Otiorhynchus dubius</i> (Ström, 1783)	T.1.09-763.25	Baltalimanı	Mar.
Curculionidae	<i>Rhynchites hungaricus</i>	<i>Mecorhis ungarica</i> (Herbst, 1783)	T.1.09-763.07	Rumeli Hisarı	July
Curculionidae	<i>Rhynchites nanus</i>	<i>Temnocerus nanus</i> (Paykull, 1792)	T.1.09-763.10	Rumeli Hisarı	May.
Curculionidae	<i>Rhynchites aequatus</i>	<i>Coenorhinus aequatus</i> L.	T.1.09-763.09	Rumeli Hisarı	May.
Curculionidae	<i>Rhynchites germanicus</i>	<i>Neocoenorrhinus germanicus</i> (Herbst, 1797)	T.1.09-763.20	Domuzdere	July
Curculionidae	<i>Rhynchites mannerheimi</i>	<i>Caenorhinus mannerheimii</i> (Hummel, 1823)	T.1.09-763.13	Yarımburgaz	July
Curculionidae	<i>Otiorhynchus plumipes</i>	<i>Cirrorhynchus plumipes</i> (Germar, 1817)	T.1.09-763.23	Baltalimanı	June
Curculionidae	<i>Balanobius pyrrhoceras</i>	<i>Archarius pyrrhoceras</i> (Marsham, 1802)	T.1.09-763.41	Kilyos	?
Curculionidae	<i>Balaninus glandium</i>	<i>Curculio glandium</i> Marsham, 1802	T.1.09-763.38	Rumeli Hisarı	Oct.
Curculionidae	<i>Balaninus villosus</i>	<i>Curculio villosus</i> Fabricius, 1781	T.1.09-763.39	Rumeli Hisarı	Aug.
Curculionidae	<i>Polydrosus micans</i>	<i>Polydrusus mollis</i> (Ström, 1768)	T.1.09-763.47	Polenezköy	June
Curculionidae	<i>Polydrosus chrysomela</i>	<i>Polydrusus chrysomela</i> (Olivier, 1807)	T.1.09-763.48	Domuzdere	June
Curculionidae	<i>Sitona humeralis</i>	<i>Sitona humeralis</i> Stephens, 1831	T.1.09-763.64	Rumeli Hisarı	Apr.
Curculionidae	<i>Dorytomus</i>	<i>Dorytomus</i> sp.	T.1.09-768.02	Şile	Apr.
Curculionidae	<i>Phytonomus elongatus</i>	<i>Hypera melancholica</i> (Fabricius, 1792)	T.1.09-768.11	Yarımburgaz	?
Curculionidae	<i>Limobius dissimilis</i>	<i>Limobius borealis</i> (Paykull, 1792)	T.1.09-768.17	Halkalı	Mar.
Curculionidae	<i>Limnobaris</i>	<i>Limnobaris dolorosa</i> (Goeze,	T.1.09-	Şile	?

Family	Name on the Label	Valid Name	C. N.	L.	S.
	<i>pilistriata</i>	1777)	768.20		
Curculionidae	<i>Gymnetron beccabungae</i>	<i>Gymnetron beccabungae</i> L.	T.1.09-768.29	Baltalimanı	Mar.
Curculionidae	<i>Larinus sturnus</i>	<i>Larinus sturnus</i> (Schaller, 1783)	D.24. C.02.08	Kandilli	?
Curculionidae	<i>Otiorhynchus corvus</i>	<i>Otiorhynchus corvus</i> Boheman 1843	D.24. C.02.09	Kandilli	?
Curculionidae	<i>Larinus jaceae</i>	<i>Larinus jaceae</i> (Fabricius, 1775)	T.3.09-794.11	Belgrad	?
Curculionidae	<i>Limnobaris t-album</i>	<i>Limnobaris t-album</i> L.	T.3.09-794.46	Şile	?
Curculionidae	<i>Liparus glabrirostris</i>	<i>Liparus glabrirostris</i> Küster, 1849	T.3.09-794.22	Polenezköy	June
Curculionidae	<i>Mecaspis alternans</i>	<i>Mecaspis alternans</i> (Herbst, 1795)	T.3.09-794.07	Polenezköy	?
Curculionidae	<i>Baris laticollis</i>	<i>Melanobaris laticollis</i> (Marsham, 1802)	T.3.09-794.47	Maslak	?
Curculionidae	<i>Mesites tardyi</i>	<i>Rhopalomesites tardyi</i> (Curtis, 1825)	T.3.09-794.41	Maslak	?
Curculionidae	<i>Sphenophorus piceus</i>	<i>Sphenophorus piceus</i> (Pallas, 1771)	T.3.09-794.35	Belgrad	?
Curculionidae	<i>Trachodes hispidus</i>	<i>Trachodes hispidus</i> L.	T.3.09-794.43	Belgrad	May.
Dermestidae	<i>Trinodes hirtus</i>	<i>Trinodes hirtus</i> (Fabricius, 1781)	T.1.09-767.70	Ayazma	July
Dytiscidae	<i>Agabus chalconotus</i>	<i>Ilybius chalconotus</i> (Panzer, 1797)	T.3.09-783.07	Kartal	May.
Dytiscidae	<i>Agabus guttatus</i>	<i>Agabus guttatus</i> (Paykull, 1798)	T.3.09-783.08	Kartal	May.
Dytiscidae	<i>Colymbetes fuscus</i>	<i>Colymbetes fuscus</i> L.	T.3.09-783.15	Kilyos	Aug.
Dytiscidae	<i>Dytiscus dimidiatus</i>	<i>Dytiscus dimidiatus</i> Bergsträsser, 1778	T.3.09-783.17	Kilyos	Aug.
Dytiscidae	<i>Hydaticus seminiger</i>	<i>Hydaticus seminiger</i> (De Geer, 1774)	T.3.09-783.22	Kilyos	Aug.
Dytiscidae	<i>Cybister lateralis-marginalis</i>	<i>Cybister lateralmarginalis</i> (De Geer, 1774)	T.3.09-783.18	Kilyos	?
Elateridae	<i>Agriotes lineatus</i>	<i>Agriotes lineatus</i> L.	T.2.09-771.01	Yeşilköy	?
Elateridae	<i>Agriotes sputator</i>	<i>Agriotes sputator</i> L.	T.2.09-771.02	Rumeli Hisarı	?
Elateridae	<i>Drasterius bima-culatus</i>	<i>Drasterius bimaculatus</i> (Rossi, 1790)	T.2.09-771.25	Rumeli Hisarı	?
Elateridae	<i>Cardiophorus</i>	<i>Cardiophorus</i> sp.	T.2.09-771.18	Rumeli Hisarı	?
Elateridae	<i>Cardiophorus discicollis</i>	<i>Cardiophorus discicollis</i> (Herbst, 1806)	T.2.09-771.20	Şile	May.
Elateridae	<i>Selatosoma</i>	<i>Selatosomus</i> sp.	T.2.09-771.26	Kartal	Apr.
Elateridae	<i>Selatosoma</i>	<i>Selatosomus</i> sp.	T.2.09-771.27	Yarımburgaz	July
Elateridae	<i>Athous vittatus</i>	<i>Athous vittatus</i> (Fabricius, 1793)	T.2.09-771.34	Rumeli Hisarı	July
Elateridae	<i>Corymbites castaneus</i>	<i>Anostirus castaneus</i> (L.)	T.2.09-771.46	Baltalimanı	July
Elateridae	<i>Corymbites laetus</i>	<i>Selatosomus latus</i> (Fabricius, 1801)	T.2.09-771.47	Kartal	July

Family	Name on the Label	Valid Name	C. N.	L.	S.
Elateridae	<i>Elater rufipennis</i>	<i>Ampedus rufipennis</i> (Stephens, 1830)	T.2.09-771.08	Domuzdere	May.
Elateridae	<i>Elater ferrugatus</i>	<i>Elater ferrugineus</i> L.	T.2.09-771.09	Domuzdere	July
Elateridae	<i>Porthmidius austriacus</i>	<i>Porthmidius austriacus</i> (Schrank, 1781)	T.2.09-772.16	Rumeli Hisarı	?
Empusidae*	Empusinae-Empusa	<i>Empusa</i> sp.	D.24. C.20.02	Florya	May.
Erotylinae	<i>Triplax russica</i>	<i>Triplax russica</i> L.	T.2.09-775.07	Riva	May.
Heteroceridae	<i>Heterocerus flexuosus</i>	<i>Heterocerus flexuosus</i> Stephens, 1828	T.2.09-775.01	Yarımburgaz	Mar.
Hydrophilidae	<i>Laccobius regularis</i>	<i>Laccobius obscuratus</i> Rottenberg, 1874	T.1.09-765.02	Şile	?
Hydrophilidae	<i>Philydrus testaceus</i>	<i>Enochrus testaceus</i> (Fabricius, 1801)	T.1.09-765.05	Yarımburgaz	Mar.
Hydrophilidae	<i>Helophorus laticollis</i>	<i>Helophorus laticollis</i> Thomson, 1853	T.1.09-765.20	Yarımburgaz	Mar.
Hydrophilidae	<i>Helophorus brevipalpis</i>	<i>Helophorus brevipalpis</i> Bedel, 1881	T.1.09-765.21	Baltalimanı	?
Hydrophilidae	<i>Cymbiodyta marginella</i>	<i>Cymbiodyta marginella</i> (Fabricius, 1792)	T.1.09-765.26	Yarımburgaz	Mar.
Hydrophilidae	<i>Ochthebius exsculptus</i>	<i>Ochthebius exsculptus</i> Germar, 1824	T.1.09-765.28	Baltalimanı	?
Hydrophilidae	<i>Scolytus destructor</i>	<i>Scolytus scolytus</i> (Fabricius, 1775)	T.1.09-765.31	Riva	?
Hydrophilidae	<i>Hydrochus elongatus</i>	<i>Hydrochus elongatus</i> (Schaller, 1783)	T.1.09-765.29	Büyükbent	Apr.
Kateretidae	<i>Heterhelus scutellaris</i>	<i>Heterhelus scutellaris</i> (Heer, 1841)	T.1.09-767.16	Baltalimanı	Dec.
Lampyridae	<i>Lampyris noctiluca</i>	<i>Lampyris noctiluca</i> L.	T.3.09-779.01	Baltalimanı	July
Malachiidae	<i>Anthocomus terminatus</i>	<i>Cerapheles terminatus</i> (Ménétriés, 1832)	T.3.09-779.32	Yarımburgaz	June
Malachiidae	<i>Atelestus peragalloi</i>	<i>Brachemys peragalloi</i> (Perris, 1866)	T.3.09-779.37	Yarımburgaz	June
Malachiidae	<i>Ebaeus appendiculatus</i>	<i>Ebaeus appendiculatus</i> Erichson, 1840	T.3.09-779.40	Domuzdere	June
Malachiidae	<i>Axinotarsus pulicarius</i>	<i>Axinotarsus pulicarius</i> (Fabricius, 1777)	T.3.09-779.34	Yarımburgaz	?
Mantidae*	<i>Bolivaria brachyptera</i>	<i>Bolivaria brachyptera</i> Pallas, 1773	D.24. C.20.01	Florya	May.
Mycetophagidae	<i>Mycetophagus populi</i>	<i>Mycetophagus populi</i> Fabricius, 1798	T.1.09-767.38	Domuzdere	May.
Mycetophagidae	<i>Mycetophagus quadripustulatus</i>	<i>Mycetophagus quadripustulatus</i> L.	T.1.09-767.37	Domuzdere	May.
Pamphagidae*	<i>Pamphaginae nocorades</i>	<i>Paranocaracris rubripes burri</i> (Uvarov, 1949)	D.24. C.01.01	Belgrad	July
Pamphagidae*	<i>Paranocorades stranbei</i>	<i>Paranocarodes straubei</i> (Fieber, 1853)	D.24. C.01.02	Belgrad	Aug.
Scarabaeidae	<i>Onitis hungaricus</i>	<i>Chironitis hungaricus</i> Herbst, 1789	T.3.09-785.04	Rumeli Hisarı	?
Scarabaeidae	<i>Scarabaeus sacer</i>	<i>Scarabaeus sacer</i> L.	T.3.09-785.02	Rumeli Hisarı	July
Scarabaeidae	<i>Scarabaeus variolosus</i>	<i>Ateuchetus variolosus</i> (Fabricius, 1787)	T.3.09-785.03	Yarımburgaz	July
Scarabaeidae	<i>Geotrupes spiniger</i>	<i>Geotrupes spiniger</i>	T.3.09-	Tarabya	Sept.

Family	Name on the Label	Valid Name	C. N.	L.	S.
		(Marshall, 1802)	785.16		
Scarabaeidae	<i>Copris lunaris</i>	<i>Copris lunaris</i> L.	T.3.09-785.18	Tarabya	Sept.
Scarabaeidae	<i>Onthophagus camelus</i>	<i>Onthophagus vitulus</i> (Fabricius, 1776)	T.3.09-785.19	Rumeli Hisarı	Dec.
Scarabaeidae	<i>Onthophagus taurus</i>	<i>Onthophagus taurus</i> (Schreber, 1759)	T.3.09-785.20	Rumeli Hisarı	Dec.
Scarabaeidae	<i>Onthophagus vacca</i>	<i>Onthophagus vacca</i> L.	T.3.09-785.21	Rumeli Hisarı	Sept.
Scarabaeidae	<i>Onthophagus fracticornis</i>	<i>Onthophagus fracticornis</i> (Preysler, 1790)	T.3.09-785.23	Rumeli Hisarı	Dec.
Scarabaeidae	<i>Caccobius mundus</i>	<i>Caccobius mundus</i> (Ménétrières, 1838)	T.3.09-785.31	Kilyos	July
Scarabaeidae	<i>Amphimallon ater</i>	<i>Amphimallon ater</i> (Herbst, 1790)	T.3.09-793.30	Rumeli Hisarı	July
Scarabaeidae	<i>Amphimallon errans</i>	?	T.3.09-793.37	Şile	?
Scarabaeidae	<i>Amphimallon ochraceus</i>	<i>Amphimallon ochraceum</i> (Knoch, 1801)	T.3.09-793.28	Rumeli Hisarı	May.
Scarabaeidae	<i>Anomala aenea</i>	<i>Anomala dubia</i> (Scopoli, 1763)	T.3.09-793.25	Belgrad Forest	July
Scarabaeidae	<i>Anomala vitis</i>	<i>Anomala vitis</i> (Fabricius, 1775)	T.3.09-793.24	Domuzdere	July
Scarabaeidae	<i>Gnorimus octopunctatus</i>	<i>Gnorimus variabilis</i> (L.)	T.3.09-793.38	Polenezköy	July
Scarabaeidae	<i>Pentadon monodon</i>	<i>Pentadon idiota</i> (Herbst, 1789)	T.3.09-793.35	Yarımburgaz	June
Scarabaeidae	<i>Polyphylla fullo</i>	<i>Polyphylla fullo</i> L.	T.3.09-793.19	Rumeli Hisarı	June
Scarabaeidae	<i>Rhizotrogus aestivus</i>	<i>Rhizotrogus aestivus</i> (Olivier, 1789)	T.3.09-793.12	Rumeli Hisarı	?
Scarabaeidae	<i>Cetonia aurata</i>	<i>Cetonia aurata</i> (L.)	T.3.09-796.18	Belgrad Forest	July
Scarabaeidae	<i>Cetonia speciosissima</i>	<i>Protaetia ceylanica</i> Schoch, 1894	T.3.09-796.15	Belgrad Forest	May.
Scarabaeidae	<i>Hoplia praticola</i>	<i>Hoplia praticola</i> Duftschmid, 1805	T.3.09-796.10	Polenezköy	Mar.
Scarabaeidae	<i>Protaetia morio</i>	<i>Netocia morio</i> (Fabricius, 1781)	T.3.09-796.20	Kilyos	June
Silphidae	<i>Ablottoria laevigata</i>	<i>Ablattaria laevigata</i> (Fabricius, 1775)	D.24. C.36.01	Küçükçekmece	Apr.
Silphidae	<i>Hister duodecemstriatus</i>	<i>Atholus duodecimstriatus</i> (Schrank, 1781)	T.3.09-792.25	Maslak	?
Silphidae	<i>Xylodrepa quadripunctata</i>	<i>Dendroxena quadrimaculata</i> (Scopoli, 1772)	T.3.09-792.01	Domuz Dere	June
Silphidae	<i>Hister quadrimaculatus</i>	<i>Hister quadrimaculatus</i> L.	T.3.09-792.22	Baltalimanı	?
Silphidae	<i>Saprinus metallicus</i>	<i>Hypocaccus metallicus</i> (Herbst, 1792)	T.3.09-792.36	Marmara Islands	Aug.
Silphidae	<i>Hister merdarius</i>	<i>Margarinotus merdarius</i> (Hoffmann, 1803)	T.3.09-792.23	Sivriada (Oxia)	?
Silphidae	<i>Saprinus aeneus</i>	<i>Saprinus aeneus</i> (Fabricius, 1775)	T.3.09-792.27	Göztepe	?
Silphidae	<i>Saprinus rufipes</i>	<i>Saprinus chalcites</i> (Illiger, 1807)	T.3.09-792.37	Marmara Adaları	Aug.
Silphidae	<i>Saprinus immundus</i>	<i>Saprinus immundus</i> (Gyllenhal, 1827)	T.3.09-792.35	Sivriada (Oxia)	?

Family	Name on the Label	Valid Name	C. N.	L.	S.
Silphidae	<i>Saprinus semistriatus</i>	<i>Saprinus semistriatus</i> (Scriba, 1790)	T.3.09-792.40	Şile	?
Silphidae	<i>Silpha coelestis</i>	?	T.3.09-792.08	Maçka	?
Staphylinidae	<i>Bledius furcatus</i>	<i>Bledius furcatus</i> (Olivier, 1811)	T.3.09-780.06	Tuzla	?
Staphylinidae	<i>Stenus brunnipes</i>	<i>Stenus brunnipes</i> Stephens, 1833	T.3.09-780.26	Halkalı	?
Staphylinidae	<i>Ctenistes palpalis</i>	<i>Ctenistes palpalis</i> Reichenbach, 1816	T.3.09-780.37	Maslak	?
Staphylinidae	<i>Reichenbachia impressa</i>	<i>Fagniezia impressa</i> (Panzer, 1803)	T.3.09-780.22	Maslak	Apr.
Staphylinidae	<i>Proteinus brachypterus</i>	<i>Proteinus brachypterus</i> (Fabricius, 1792)	T.3.09-780.39	Şile	?
Staphylinidae	<i>Lathrobium fulvipenne</i>	<i>Lathrobium fulvipenne</i> (Gravenhorst 1806)	T.3.09-791.37	Kilyos	?
Staphylinidae	<i>Dolicaon biguttatus</i>	<i>Leptobium gracile</i> (Gravenhorst, 1802)	T.3.09-791.44	Maslak	?
Tenebrionidae	<i>Rhinosimus planirostris</i>	<i>Salpingus planirostris</i> (Fabricius, 1787)	T.2.09-774.11	Şile	Apr.
Tenebrionidae	<i>Cephalostenus elegans</i>	<i>Cephalostenus elegans</i> (Brullé, 1832)	T.2.09-774.21	Hisar	Oct.
Tenebrionidae	<i>Caenocorse depressa</i>	?	T.2.09-774.26	Baltalimanı	?
Tenebrionidae	<i>Hypophloeus unicolor</i>	<i>Corticeus unicolor</i> (Piller&Mitterpacher, 1783)	T.2.09-774.23	Domuzdere	Aug.
Tenebrionidae	<i>Helops bosphoranus</i>	<i>Cylindronotus bosphoranus</i> (Allard, 1876)	T.2.09-774.29	Hisar	July
Tenebrionidae	<i>Helops rossii</i>	<i>Helops rossii</i> Germar, 1817	T.2.09-774.30	Hisar	July
Tenebrionidae	<i>Cerocoma schreberi</i>	<i>Cerocoma schreberi</i> Fabricius, 1781	T.2.09-774.36	Bakırköy	June
Tenebrionidae	<i>Epicauta erythrocephala</i>	<i>Epicauta erythrocephala</i> (Pallas, 1781)	T.2.09-774.39	Domuzdere	?
Tenebrionidae	<i>Helops striatus</i>	?	T.2.09-774.33	Maslak	May.
Tenebrionidae	<i>Anthracias cornutus</i>	<i>Cryphaeus cornutus</i> (F. Waldheim, 1823)	T.2.09-774.15	Domuzdere	July
Tenebrionidae	<i>Tenebroides mauritanicus</i>	<i>Tenebroides mauritanicus</i> L.	T.1.09-767.01	Baltalimanı	Mar.
Tenebrionidae	<i>Stenosis brentoides</i>	<i>Stenosis brentoides</i> (Rossi, 1790)	T.2.09-777.02	Baltalimanı	Jan.
Tenebrionidae	<i>Platydemia violaceum</i>	<i>Platydemia violaceum</i> (Fabricius, 1790)	T.2.09-777.10	Alemdağ	May.
Tenebrionidae	<i>Trachyscelis aphodioides</i>	<i>Trachyscelis aphodioides</i> Latreille, 1809	T.2.09-777.11	Şile	Apr.
Tenebrionidae	<i>Bolitophagus reticulatus</i>	<i>Bolitophagus reticulatus</i> L.	T.2.09-777.16	Ayazma	July
Tenebrionidae	<i>Leichenum variegatum</i>	<i>Leichenum canaliculatum</i> (Fabricius, 1798)	T.2.09-777.08	Şile	May.
Tenebrionidae	<i>Diaperis boleti</i>	<i>Diaperis boleti</i> L.	T.2.09-777.14	Rumeli Hisarı	May.
Tenebrionidae	<i>Phaleria bimaculata</i>	<i>Phaleria bimaculata</i> L.	T.2.09-777.12	Kilyos	Aug.
Tenebrionidae	<i>Platyscellis polita</i>	<i>Platyscellis polita</i> (Sturm, 1807)	T.2.09-777.27	Yeşilköy	Apr.
Tenebrionidae	<i>Crypticus</i>	<i>Crypticus quisquilius</i> L.	T.2.09-	Kilyos	June

Family	Name on the Label	Valid Name	C. N.	L.	S.
	<i>quisquilius</i>		777.28		
Tenebrionidae	<i>Platydemia dejeani</i>	<i>Platydemia dejeani</i> Cast.&Brullé, 1831	T.2.09-777.09	Domuzdere	May.
Tettigoniidae*	<i>Tylopsis thimifolia</i>	<i>Tylopsis lilifolia</i> (Fabricius,1793)	D.24. C.09.01	Terkos	Aug.
Zopheridae	<i>Colydium elongatum</i>	<i>Colydium elongatum</i> (Fabricius,1787)	T.1.09.767.35	Ayazma	May.

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