



A Study on the Coleoptera Fauna of Bozcaada (Çanakkale Province)

Deniz SEZER¹, Orhan MERGEN^{2,*}

^{1,2} Department of Biology, Faculty of Science, Hacettepe University, Ankara, Türkiye

¹<https://orcid.org/0000-0003-4780-1115>, ²<https://orcid.org/0000-0003-3012-1535>

*Correspondence: yomergen@hacettepe.edu.tr

Abstract

This study was carried out to determine the Coleoptera fauna of Bozcaada in Türkiye. In this study, 67 species belonging 19 families of Coleoptera were recorded. *Chlaenius velutinus* (Duftschmid, 1812), *Pterostichus melanarius* (Illiger, 1798), *Dolichosoma lineare* (Rossi, 1794), *Pachyscelis obscura* Solier, 1836, *Pimelia phymatodes* Solier, 1836, and *Opatrum sculpturatum* (Fairmaire, 1860) species are the first records for Türkiye reported in this study.

Keywords: Coleoptera, fauna, Bozcaada, Çanakkale, Türkiye.

1. Introduction

Coleoptera are the most diverse and species rich group of all orders. With about 400,000 described species they occur in most terrestrial and freshwater habitats and a few occupy marine environments. They can even be found in extreme environments, such as glacial coasts, caves, arctic islands and deserts with the exception of areas covered with continuous ice and snow and open seas. The success of this order, comes from; integument that is minimizing water loss in terrestrial habitats, adaptive abilities that allow them to live in a wide variety of environments and among flying insects, excluding ants, they are the best group that reaches to hidden niches in the soil. Most of them feed on animal and plant material. There are species that are phytophagous, predators, and scavengers and some feed on fungi, some are parasites (Hammond, 1992).

As a result of previous studies in Bozcaada: *Harmonia axyridis* Palas 1773, *Hippodamia variegata* Goeze 1777 (Baştuğ and Kasap, 2015), *Curculio elephas* Gyllenhal, 1836 (Pehlivan et al, 2005) species were identified.

Some of the studies made on insect fauna on Bozcaada before are reported by Okyar and Aktaş, (2006), Lepidoptera; Rhopalocera (Bozcaada), Özşaraç and Kiyak, (2001), Heteroptera (Bozcaada).

The main reasons for choosing Bozcaada as a research area were that no study concerning the fauna of Coleoptera has been done before, and the island are relatively isolated areas that would provide natural laboratories to study the relationship between area and species diversity.

2. Materials and Methods

Insect specimens were collected at Bozcaada in Çanakkale. Field studies were carried out considering the ecological characteristics of the islands and sampling has been done for each different habitat. Sampling sites are; reeds, pine forest, beach, rocky area, sclerophyll, maquis-frigana vegetation, meadow, wild pear trees, chaste plant, corn, clover, vetch, wheat, barley, river, lake, vineyards and olive groves. Sampling has also been made in the ecotone regions. Also, samples from animal carcasses and manure were collected. Field studies were conducted in a twenty-day period in July 2016 and fifteen-day period in may 2017 with 115 pitfall-trap at Bozcaada with addition of aerial net and aspirator collections. The samples in the traps together with the traps collected 14 days after they were set. An aerial net was used to collect

the specimens on the vegetation, and in places such as puddles, bark, under stones, and beaches collection was made with aspirator and manual collection.

3. Results and Discussion

Family: Anthicidae

Subfamily: Anthicinae Latreille, 1819

Endomia tenuicollis (Rossi, 1792)

Materials examined: Yerebakan locality blackberry thickets, 39.80145°N 26.05270°E, 77.5m, 11.08.16, 1 ♀; Leg. D. Sezer.

Distribution in Türkiye: İzmir (Uhmann, 2000).

Hirticomus hispidus (Rossi, 1792)

Materials examined: Tuzburnu locality maquis-frigana vegetation, 39.79875°N 26.06983°E, 46.7m, 11.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Türkiye, Locality is not specified (Löbl and Smetana, 2008)

Family: Brentidae

Subfamily: Brentinae Billberg, 1820

Amorhcephala coronata (Germar, 1817)

Materials examined: Eskikule locality maquis-frigana vegetation, 39.82203°N 26.00452°E, 23.7m, 18.08.16, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Türkiye, Locality is not specified (Löbl and Smetana, 2011).

Family: Buprestidae

Subfamily: Buprestinae Leach, 1815

Anthaxia umbellatarum (Fabricius, 1787)

Materials examined: Yerebakan locality maquis-frigana, 39.79523°N 26.04845°E, 34.8m 11.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Aydın, Çanakkale (Eceabat), İzmir, Manisa, Muğla (Ulay and Tezcan, 1998).

Family: Carabidae

Subfamily: Brachininae Bonelli, 1810

Brachinus (Brachynidius) brevicollis (Motschulsky, 1844)

Materials examined: Killikburnu reed area, 39.84118°N 26.00823°E, 50.5m, 11.08.16, 2 ♂♂; Eskikule locality sclerophyll vegetation, 39.82583°N 26.00435°E, 59.9m, 11.08.16, 5 ♂♂; vineyard, 39.82782°N 25.98864°E, 50.4m 12.08.16, 4 ♂♂; Papazbahçe locality sclerophyll vegetation, 39.82292°N 26.03736°E, 28.5m, 11.08.16, 1 ♀; Red pine trees in Papazbahçe area, 39.82282°N 26.02654°E, 61.8m, 12.08.16, 2 ♂♂; Sulubahçe locality vineyard, 39.81640°N 26.01529°E, 66.8m, 11.08.16, 1 ♀; Arabacı locality vineyard, 39.81237°N 26.02572°E, 44.0m, 11.08.16, 7 ♂♂; red pine trees, 39.81364°N 26.04131°E, 52.9m, 12.08.16, 5 ♂♂; Hacı Mahmut locality vineyard, 39.80865°N 26.03290°E, 72.5m, 11.08.16, 18 ♂♂; Yerebakan locality maquis-frigana vegetation, 39.79392°N 26.05141°E, 33.8m, 54 ♂♂, 72 ♀♀; Çayır locality vetch field, 39.83874°N 26.03029°E, 8.0m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Kahramanmaraş (Avgın, 2006).

Brachinus crepitans (Linnaeus, 1758)

Materials examined: Killikburnu reed area, 39.84118°N 26.00823°E, 50.5m, 12.08.16, 1 ♂; Hacı Mahmut reed area, 39.80802°N 26.04436°E, 54.9m, 12.08.16, 3 ♀♀; grassland, 39.81548°N 26.06946°E, 10.8m, 12.08.16, 1 ♂, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Giresun, Amasya (Kocatepe, 2011).

Subfamily: Carabinae Latreille, 1802

Carabus convexus Fabricius, 1775

Materials examined: grassland, 39.83060°N 26.04462°E, 27.3m, 12.08.16, 3 ♂♂; Mısırlık area vineyard, 39.82077°N 26.01846°E, 59.0m, 12.08.16, 2 ♂♂; Leg. D. Sezer.

Distribution in Türkiye: Marmara Region, Black Sea Region (Casale et al., 2003), Rize (Kocatepe, 2011).

Carabus coriaceus Linnaeus, 1758

Materials examined: Çayır road roadside blackberry bushes, 39.83369°N 26.04540°E, 21.4m, 12.08.16, 2 ♂♂; Killik burnu reed field, 39.84118°N 26.00823°E, 50.5m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Western Mediterranean, Aegean Region, Marmara Region (Casale et al., 2003), Çanakkale (Surgut and Varlı, 2012).

Subfamily: Harpalinae Bonelli, 1810

Acinopus megacephalus (P. Rossi, 1794)

Materials examined: Çayırkoyu beach sandy beach, 39.84278°N 26.03104°E, 3.4m, 12.08.16, 2 ♂♂; plain road roadside vineyard, 39.82896°N 26.01686°E, 44.9m, 12.08.16, 1 ♂, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Anatolia (Casale and Taglianti, 1999), Kahramanmaraş-Bulutoğlu, Kahramanmaraş- Pazarcık (Avgın, 2006).

Chlaenius velutinus (Duftschmid, 1812)

Materials examined: Çayır area vetch field, 39.83874°N 26.03029°E, 8.0m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: First record for Türkiye

Palaearctic Distribution: Southern European Region, North Africa: Algeria, Morocco, Tunisia, Madeira archipelago (Löbl and Smetana, 2003).

Cymindis ornata (Fischer von Waldheim, 1823)

Materials examined: Hacı Mahmut area vineyard, 39.80865°N 26.03290°E, 72.5m, 11.08.16, 1 ♂; Tuzburnu location maquis-frigana vegetation, 39.79902°N 26.07685°E, 24.4m, 11.08.16, 1 ♂; Hacı Mahmut site sclerophyll vegetation, 39.81481°N 26.04444°E, 70.2m, 14.05.17, 1 ♀; Leg. D. Sezer.

Distribution in Türkiye: İstanbul (Guéorguiev, 2011).

Anchomenus dorsalis (Pontoppidan, 1763)

Materials examined: Grassland, 39.82374°N 26.06864°E, 8.1m, 11.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Ankara (Kocatepe and Mergen, 2004), Ardahan, Artvin, Erzincan, Erzurum, Iğdır, Kars (Kesdek, 2007).

Ditomus calydonius (P. Rossi, 1790)

Materials examined: Çayır road area vineyard, 39.83308°N 26.01134°E, 62.5m, 12.08.16, 1 ♂; Killikburnu area grassland, 39.83877°N 26.00145°E, 23.7m, 12.08.16, 2 ♂♂; vineyard, 39.83645°N 26.00785°E, 55.6m, 12.08.16, 1 ♀; Çayırkoyu beach sandy beach, 39.84278°N 26.03104°E, 3.4m, 12.08.16, 2 ♀♀; Plain road roadside grassland,

39.83055°N 26.03026°E, 23.8m, 12.08.16, 1 ♂♂; plain road roadside vineyard, 39.82896°N 26.01686°E, 44.9m, 12.08.16, 1 ♂; Arabacı area vineyard, 39.81304°N 26.02898°E, 60.1m, 12.08.16, 1 ♂; Başağa area grassland, 39.82992°N 26.03429°E, 19.8m, 12.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Ordu (Kocatepe, 2011).

Dixus obscurus (Dejean, 1825)

Materials examined: Çayır road sclerophyll vegetation, 39.83543°N 26.03872°E, 10.1m, 12.08.16, 2 ♂♂; Papazbahçe area vineyard, 39.81955°N 26.03623°E, 42.1m, 12.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Tokat, Çorum (Kocatepe, 2011).

Harpalus cupreus Dejean, 1829

Materials examined: Papazbahçe area vineyard, 39.82625°N 26.03182°E, 36.2m, 12.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Rize (Kocatepe, 2011).

Harpalus reflexus anadoluensis Kataev, 1993

Materials examined: Çayır road area vineyard, 39.83960°N 26.02347°E, 15.0m, 12.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: South and Southeast of Türkiye, Kayseri (Kataev, 1993), Erzurum (Avgın, 2009).

Harpalus rubripes (Duftschmid, 1812)

Materials examined: Hacı Mahmut area vineyard, 39.80865°N 26.03290°E, 72.5m, 12.08.16, 1 ♂; Başağa area grassland, 39.82992°N 26.03429°E, 19.8m, 11.08.16, 1 ♀; Leg. D. Sezer.

Distribution in Türkiye: Anatolia (Casale and Taglianti, 1999), Ardahan, Erzurum, Kars (Kesdek and Yıldırım, 2003), Iğdır (Kesdek, 2013).

Ophonus rupicola (Sturm, 1818)

Materials examined: Tuzburnu location maquis-frigana vegetation, 39.80769°N 26.07472°E, 23.6m, 11.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Türkiye, Locality is not specified (Löbl and Smetana, 2003)

Subfamily: Pterostichinae Bonelli, 1810

Amara aenea (De Geer, 1774)

Materials examined: Çayır road between agricultural area and maquis-frigana, 39.83336°N 26.01071°E, 63.9m, 12.08.16, 1 ♂; Papazbahçe area vineyard, 39.82625°N 26.03182°E, 36.2m, 12.08.16, 1 ♀; Leg. D. Sezer.

Distribution in Türkiye: Eskişehir, Ankara, Antalya, Ardahan, Bitlis, Bolu, Giresun, Gümüşhane, İzmir, Kastamonu, Konya, Manisa, Nevşehir, Ordu, Rize, Sinop, Tokat (Tezcan et al., 2007), Erzurum, Kars, Iğdır, Artvin, Ardahan, Erzincan (Kesdek and Yıldırım, 2010), Muğla (Tanyeri, 2011).

Pterostichus melanarius (Illiger, 1798)

Materials examined: Hacı Mahmut area Sclerophyll vegetation, 39.80818°N 26.02750°E, 55.5m, 12.08.16, 1 ♂; Yerebakan area maquis-frigana, 39.79810°N 26.05681°E, 69.2m, 12.08.16, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: First record for Türkiye

Palaearctic Distribution: Central European Region, Northern Europe Region, Southern European Region, East Siberia and West Siberia, Noctic zone (Löbl and Smetana, 2003).

Subfamily: Cicindelinae Latreille, 1802

Cicindela campestris campestris Linnaeus, 1758

Materials examined: Ayazma locality beach, 39.81857°N 26.00308°E, 7.3m, 04.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Mersin (Sertavul Pass), Aksaray (Mount Hasan), Nevşehir (Göreme), Kayseri (Mount Erciyes) (Franzen, 2007).

Family: Cerambycidae

Subfamily: Lamiinae Latreille, 1825

Agapanthia (Agapanthia) suturalis (Fabricius, 1787)

Materials examined: Papazbahçe location poppy, daisy field, 39.81892°N 26.03486°E, 50.4m, 04.05.17, 3 ♂♂; Leg. D. Sezer.

Distribution in Türkiye: Common species (Özdikmen and Hasbenli, 2004).

Calamobius filum (Rossi, 1790)

Materials examined: Papazbahçe location poppy, daisy field, 39.81892°N 26.03486°E, 50.4m, 04.05.17, 1 ♂; Plain road roadside grassland, 39.83051°N 26.03618°E, 17.3m, 04.05.17, 1 ♀; Çayırkoyu beach barley field, 39.84278°N 26.03104°E, 3.4m, 04.05.17, 2 ♂♂, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Common species (Özdikmen and Hasbenli, 2004).

Dorcadion (Cribridorcadion) gallipolitanum Thomson, 1876

Materials examined: Bozcaada dump ahlat, 39.81039°N 26.05503°E, 63.6m, 14.05.17, 2 ♂♂; Çayır area vetch field, 39.83874°N 26.03029°E, 8.0m, 14.05.17, 3 ♀♀; Çayır road location, the area between the vineyard and the olive grove, 39.83308°N 26.01134°E, 62.5m, 14.05.17, 1 ♂; Bozcaada dump wheat field, 39.80889°N 26.05424°E, 61.5m, 14.05.17, 1 ♂; Çayırkoyu beach barley field, 39.84278°N 26.03104°E, 3.4m, 14.05.17, 1 ♀; Leg. D. Sezer.

Distribution in Türkiye: Çanakkale (Gelibolu), İstanbul (Özdikmen and Hasbenli, 2004).

Family: Chrysomelidae

Subfamily: Bruchinae Latreille, 1802

Bruchidius villosus (Fabricius, 1792)

Materials examined: Eskikule locality grassland, 39.82802°N 26.01394°E, 43.9m, 27.07.16, 10 ♂♂, 11 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Northeast Anatolia Region, Locality is not specified

Bruchidius biguttatus (Olivier, 1795)

Materials examined: Bozcaada dump maquis-frigana vegetation, 39.81039°N 26.05503°E, 63.6m, 12.08.16, 1 ♂; Yerebakan locality maquis-frigana vegetation, 39.79392°N 26.05141°E, 33.8m, 04.05.17, 1 ♀; Leg. D. Sezer.

Distribution in Türkiye: Antalya (Düzlerçamı, Terme, Manavgat, Alanya); Adana (Bahçe, Balcalı); İçel (Çamlıyayla, Gözne) (Mergen, 1996), Kilis, Antalya, Balıkesir, Bilecik, Bitlis, Konya, Marmaris (Borowiec and Anton, 1993).

Subfamily: Cassidinae (Gyllenhal, 1813)

Cassida azurea (Fabricius, 1801)

Materials examined: Çamlık locality grassland, 39.82853°N 25.98151°E, 44.3m, 12.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Anatolia (Locality is not specified) (Özdikmen and Kaya, 2014).

Subfamily: Criocerinae Latreille, 1804

Oulema melanopus (Linnaeus, 1758)

Materials examined: Çayırkoyu beach barley field, 39.84278°N 26.03104°E, 3.4m, 04.05.17, 1 ♂; Leg. D.Sezer.

Distribution in Türkiye: Diyarbakır, Siirt, Kırklareli, Ankara, Eskişehir, Karabük, Çorum, Kahramanmaraş, Kastamonu, Adana, Osmaniye, Hatay (Özdikmen and Turgut, 2008), İzmir, Afyon, Ankara, Samsun (Tomov and Gruev, 1975), Erzurum, Erzincan, Kars, Iğdır, Ardahan (Aslan, 2000a).

Subfamily: Galerucinae Latreille, 1802

Galeruca pomonae (Scopoli, 1763)

Materials examined: Bozcaada dump maquis-frigana vegetation, 39.81039°N 26.05503°E, 63.6m, 12.08.16, 1 ♀; Leg. D. Sezer.

Distribution in Türkiye: Osmaniye (Yarpuz, Zorkun, Hınzırlı Plateau), Konya, Çankırı Erzurum, Rize (Aslan et al., 2000b).

Subfamily: Alticinae Newman, 1835

Psylliodes affinis (Paykull, 1799)

Materials examined: Yerebakan locality maquis-frigana vegetation, 39.79392°N 26.05141°E, 33.8m, 11.08.16, 2 ♂♂; Leg. D. Sezer.

Distribution in Türkiye: Antakya (Aslan et al., 1999).

Family: Coccinellidae

Subfamily: Coccinellinae Latreille, 1807

Coccinella septempunctata (Linnaeus, 1758)

Materials examined: Meadow area vetch field, 39.83874°N 26.03029°E, 8.0m, 04.05.17, 2 ♂♂; Leg. D. Sezer.

Distribution in Türkiye: Common species (Özbek and Çetin, 1991).

Psyllobora vigintiduopunctata (Linnaeus, 1758)

Materials examined: Çayırkoyu beach barley field, 39.84278°N 26.03104°E, 3.4m, 04.05.17, 2 ♂♂; Leg. D. Sezer.

Distribution in Türkiye: Trakya, Edirne, Malatya, Mersin (Yurtsever, 2000).

Family: Curculionidae

Subfamily: Curculioninae Latreille, 1802

Pachytychius hordei (Brulle, 1832)

Materials examined: Çayır Yolu location, the area between the vineyard and olive, 39.83308°N 26.01134°E, 62.5m, 04.05.17, 1 ♂; Çayır Yolu location, the area between olive-maquis-frigana, 39.83336°N 26.01071°E, 63.9m, 04.05.17, 4 ♂♂, 8 ♀♀; Plain road roadside wheat field, 39.83051°N 26.03618°E, 17.3m, 04.05.17, 5 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Konya, Isparta, Ankara (Sert, 2000)

Subfamily: Entiminae Schönherr, 1823

Eusomus ovulum Germar, 1824

Materials examined: Çayırkoyu beach barley field, 39.84278°N 26.03104°E, 3.4m, 04.05.17, 2 ♂♂, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak (Sert and Çağatay, 1999).

Family: Dasytidae

Subfamily: Dasytinae Laporte de Castelnau, 1840

Dolichosoma lineare (Rossi, 1794)

Materials examined: Trash in Bozcaada, 39.81039°N 26.05503°E, 63.6m, 14.05.17, 1 ♂; Papazbahçe location poppy, daisy field, 39.81892°N 26.03486°E, 50.4m, 14.05.17, 7 ♂♂; Meadow area vetch field, 39.83874°N 26.03029°E, 8.0m, 14.05.17, 3 ♀♀; Çayır Yolu location, the area between the vineyard and olive grove, 39.83308°N 26.01134°E, 62.5m, 14.05.17, 2 ♂♂; Çayır Yolu location, the area between olive groves and maquis-frigana, 39.83336°N 26.01071°E, 63.9m, 14.05.17, 1 ♂; Killik nose mustard, 39.84118°N 26.00823°E, 50.5m, 14.05.17, 4 ♂♂, 4 ♀♀; Plain road roadside meadow, 39.83051°N 26.03618°E, 17.3m, 14.05.17, 10 ♂♂; Çayırkoyu beach barley field, 39.84278°N 26.03104°E, 3.4m, 14.05.17, 5 ♂♂, 10 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: First record for Türkiye.

Palaearctic Distribution: Central Asia, Siberia, Central European Region, Northern Europe Region, Southern European Region, East Siberia (Löbl and Smetana, 2003).

Family: Dermestidae

Subfamily: Dermestinae Latreille, 1804

Dermestes lanarius Illiger, 1802

Materials examined: Eskikule local mouse carcass, 39.82583°N 26.00435°E, 59.9m, 12.08.16, 2 ♂♂; Hedgehog carcass in Bozcaada dump, 39.81039°N 26.05503°E, 63.6m, 04.05.17, 3 ♀♀; Bozcaada dump insect carcass, 39.80889°N 26.05424°E, 61.5m, 04.05.17, 2 ♂♂, 9 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Kırklareli (Kadej and Háva, 2007).

Family: Elateridae

Subfamily: Agrypninae Candèze, 1857

Drasterius bimaculatus (Rossi, 1780)

Materials examined: Killikburnu reed area, 39.84118°N 26.00823°E, 50.5m, 12.08.16, 1 ♂; Plain road roadside olive grove, 39.83051°N 26.03618°E, 17.3m, 12.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Ankara, Çankırı, Karaman, Kayseri, Kırıkkale, Konya, Niğde, Yozgat, Aksaray, Kırşehir, Eskişehir, Nevşehir, Sivas (Kabalak and Sert, 2011), Amasya, Samsun, Sinop, İzmir (Sert and Kabalak, 2011).

Subfamily: Elaterinae Leach, 1815

Melanotus fusciceps (Gyllenhal, 1817)

Materials examined: Plain road roadside grassland, 39.83055°N 26.03026°E, 23.8m, 11.08.16, 1 ♀; Eskikule area grassland, 39.82840°N 26.00702°E, 59.9m, 11.08.16, 2 ♂♂; İğdelik locality maquis-frigana vegetation, 39.82573°N 26.07273°E, 36.6m, 12.08.16, 2 ♂♂; Tuzburnu locality maquis-frigana vegetation, 39.80769°N 26.07472°E, 23.6m, 12.08.16, 1 ♂; Yerebakan locality maquis-frigana vegetation, 39.79525°N 26.05708°E, 46.6m, 12.08.16, 2 ♂♂, 6 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: İzmir, Çanakkale (Karabiga), Diyarbakır, Şanlıurfa, Mersin, Bursa (Teodorescu and Maican, 2014).

Melanotus villosus (Fourcroy, 1785)

Materials examined: Çayır Yolu location, the area between the vineyard and olive, 39.83308°N 26.01134°E, 62.5m, 14.05.17, 1 ♂♂, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: İzmir (Gülperçin and Tezcan, 2009).

Subfamily: **Cardiophorinae** Candèze, 1859

Cardiophorus discicollis (Herbst, 1806)

Materials examined: Çayır Yolu location, the area between the vineyard and olive, 39.83308°N 26.01134°E, 62.5m, 04.05.17, 1 ♂; Çayırkoyu beach barley field, 39.84278°N 26.03104°E, 3.4m, 04.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Antalya, Aydın, Bilecik, Çanakkale (Ecabat, Gökçeada), Denizli, İzmir, Kilis, Kütahya, Manisa, Mersin, Muğla, Tekirdağ, Uşak (Gülperçin and Tezcan, 2012), Antalya (Akseki), Çankırı (İlgaz), İzmir (Selçuk) (Platia and Gudenzi, 2002), Ankara, Eskişehir, Tokat, Yozgat (Kesdek and Platia, 2006).

Family: **Histeridae**

Subfamily: **Saprininae** Blanchard, 1845

Hypocacculus rubripes (Erichson, 1834)

Materials examined: Ayazma locality beach, 39.81857°N 26.00308°E, 7.3m, 26.07.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Tekirdağ (Rozner, 2010).

Family: **Melolonthidae**

Subfamily: **Melolonthinae** Leach, 1819

Holochelus aequinoctialis (Herbst, 1790)

Materials examined: Bozcaada dump wheat field, 39.80889°N 26.05424°E, 61.5m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Anatolia, Locality is not specified (Löbl and Smetana, 2006)

Family: **Mordellidae**

Subfamily: **Mordellinae** Latreille, 1802

***Mordella aculeata* Linnaeus, 1758**

Materials examined: Papazbahçe location poppy - daisy field, 39.81892°N 26.03486°E, 50.4m, 04.05.17, 1 ♂; Meadow area daisy field, 39.83874°N 26.03029°E, 8.0m, 04.05.17, 1 ♂; Meadow area vetch field, 39.83874°N 26.03029°E, 8.0m, 04.05.17, 3 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Anatolia, Locality is not specified (Löbl and Smetana, 2008).

Family: **Oedemeridae**

Subfamily: **Oedemerinae** Latreille, 1810

Oedemera barbara (Fabricius, 1792)

Materials examined: Ayazma locality mixed grass, 39.81340°N 26.01269°E, 44.3m, 14.05.17, 1 ♂, 1 ♀; Leg. D. Sezer.

Distribution in Türkiye: Türkiye (Yıldız Dağları) (Sivilov, 2012).

Family: Scarabaeidae

Subfamily: Rutelinae MacLeay, 1819

Blitopertha nigripennis (Reitter, 1888)

Materials examined: Meadow area daisy field, 39.83874°N 26.03029°E, 8.0m, 14.05.17, 1 ♂; Killikburnu reed area, 39.84118°N 26.00823°E, 50.5m, 14.05.17, 3 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Adana, Antalya, Gaziantep, Hatay, İçel, Kahramanmaraş, Kastamonu, Kayseri, Osmaniye, Sinop (Lodos et al., 1999).

Chaetopterozia segetum (Herbst, 1783)

Materials examined: Pasture area in Papazbahçe location, 39.81892°N 26.03486°E, 50.4m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Adana, Pozantı, Saimbeyli and Tufanbeyli, Çorum Osmaniye, Mersin Mut and Silifke, Karabük Merkez, Kastamonu Taşköprü, Kayseri Tomarza, Nevşehir Merkez, Avanos, Hacıbektaş and Ürgüp, Osmaniye, Sinop (Lodos et al., 1999).

Subfamily: Scarabaeinae (Latreille, 1802)

Copris hispanus (Linnaeus, 1764)

Materials examined: Bozcaada garbage dump was installed the previous year, passive trap without antifreeze, 39.80889°N 26.05424°E, 61.5m, 04.05.17, 2 ♂♂, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Common species (Rozner and Rozner, 2009; Bellmann, 2007).

Onthophagus furcatus (Fabricius, 1781)

Materials examined: Çayırkoyu beach sandy beach, 39.84278°N 26.03104°E, 3.4m, 12.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Common species (Lodos et al., 1999; Rozner and Rozner, 2009).

Scarabaeus typhon (Fischer, 1823)

Materials examined: Bozcaada garbage dump was installed the previous year, passive trap without antifreeze, 39.80889°N 26.05424°E, 61.5m, 04.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Kayseri, Sivas, Kırklareli, Ağrı, Afyon (Rozner and Rozner, 2009).

Sisyphus schaefferi (Linnaeus, 1758)

Materials examined: Bozcaada garbage dump was installed the previous year, passive trap without antifreeze, 39.80889°N 26.05424°E, 61.5m, 04.05.17, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Common species (Rozner and Rozner, 2009).

Family: Silvanidae

Subfamily: Silvaninae Kirby, 1837

Oryzaephilus surinamensis (Linnaeus, 1758)

Materials examined: Eskikule locality sclerophyll vegetation, 39.82583°N 26.00435°E, 59.9m, 11.08.16, 4 ♀♀; Vineyard, 39.82782°N 25.98864°E, 50.4m, 11.08.16, 4 ♂♂; Hacı Mahmut locality vineyard, 39.80865°N 26.03290°E, 72.5m, 12.08.16, 1 ♂; Sulubahçe locality vineyard, 39.81640°N 26.01529°E, 66.8m, 12.08.16, 1 ♂; Arabacı locality vineyard, 39.81237°N 26.02572°E, 44.0m, 12.08.16, 2 ♂♂, 3 ♀♀; red pine trees, 39.81364°N 26.04131°E, 52.9m, 12.08.16, 5 ♂♂; Red pine trees in Papazbahçe area, 39.82282°N 26.02654°E, 61.8m, 12.08.16, 1 ♂; Yerebakan locality maquis-frigana vegetation, 39.79392°N 26.05141°E, 33.8m, 12.08.16, 63 ♂♂, 63 ♀♀; Bozcaada garbage dump, the area between olive and maquis frigana, 39.80908°N 26.06104°E, 46.4m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Anatolia, Locality is not specified (Löbl and Sematana, 2007).

Family: Staphylinidae

Subfamily: Staphylininae Latreille, 1802

Astrapaeus ulmi (Rossi, 1790)

Materials examined: Hacı Mahmut area reeds, 39.80802°N 26.04436°E, 54.9m, 11.08.16, 1 ♂; Yerebakan locality maquis-frigana, 39.79647°N 26.05718°E, 56.4m, 11.08.16, 1 ♀; Leg. D. Sezer.

Distribution in Türkiye: İzmir (Anlaş, 2009).

Ocypus (Pseudocypus) mus (Brullé, 1832)

Materials examined: Egyptian red pine trees, 39.82052°N 26.02457°E, 71.7m, 12.08.16, 2 ♂♂; Leg. D. Sezer.

Distribution in Türkiye: Balıkesir (Mount Ida) (Abacıgil, 2011), Ankara, İzmir, Manisa, Mersin, Muğla, Şanlıurfa, Trabzon (Anlaş, 2009).

Family: Tenebrionidae

Subfamily: Alleculinae Laporte de Castelnau, 1840

Podonta nigrita (Fabricius, 1794)

Materials examined: Papazbahçe location poppy-daisy mixed field, 39.81892°N 26.03486°E, 50.4m, 14.05.17, 1 ♂; Pasture area in Papazbahçe location, 39.81892°N 26.03486°E, 50.4m, 14.05.17, 1 ♂; Bozcaada central daisy field, 39.82906°N 26.06730°E, 12.1m, 14.05.17, 1 ♀; Meadow area daisy field, 39.83874°N 26.03029°E, 8.0m, 14.05.17, 6 ♂♂, 8 ♀♀; Meadow area vetch field, 39.83874°N 26.03029°E, 8.0m, 14.05.17, 3 ♂♂; Bozcaada dump site wheat field, 39.80889°N 26.05424°E, 61.5m, 14.05.17, 1 ♂; Plain road roadside wheat field, 39.83051°N 26.03618°E, 17.3m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Anatolia, Locality is not specified (Löbl and Sematana, 2008).

Subfamily: Lagriinae Latreille, 1825

Cossyphus tauricus (Steven, 1832)

Materials examined: Meadow area vetch field, 39.83874°N 26.03029°E, 8.0m, 14.05.17, 2 ♂♂; Leg. D. Sezer.

Distribution in Türkiye: Çanakkale (Karabiga), İstanbul, İzmir, Bornova, Menemen (Hatundere), Manisa (Tezcan et al., 2004a).

Subfamily: Pimeliinae Latreille, 1802

Dailognatha quadricollis (Brullé, 1832)

Materials examined: Ayazma locality beach, 39.81828°N 26.00283°E, 6.0m, 11.08.16, 1 ♂; Hacı Mahmut area agricultural area, 39.80844°N 26.04255°E, 53.1m, 11.08.16, 2 ♂♂; Çayır road locality agricultural area, 39.83336°N 26.01071°E, 63.9m, 11.08.16, 30 ♂♂, 12 ♀♀; Habbele locality agricultural area, 39.82319°N 25.98624°E, 50.3m, 11.08.16, 6 ♂♂; plain road roadside olive grove, 39.83051°N 26.03618°E, 17.3m, 11.08.16, 4 ♂♂, 12 ♀♀; Hacı Mahmut site sclerophyll vegetation, 39.80818°N 26.02750°E, 55.5m, 11.08.16, 1 ♂; Eskikule locality sclerophyll vegetation, 39.82583°N 26.00435°E, 59.9m, 11.08.16, 9 ♂♂; sclerophyll vegetation, 39.82374°N 26.06864°E, 8.1m, 12.08.16, 1 ♂; Plain road roadside grassland, 39.83055°N 26.03026°E, 23.8m, 11.08.16, 3 ♀♀; Killikburnu reed area, 39.84118°N 26.00823°E, 50.5m, 11.08.16, 1 ♂; Papazbahçe area reeds, 39.82164°N 26.03392°E, 38.7m, 11.08.16, 10 ♂♂, 16 ♀♀; Hacı Mahmut area reeds, 39.80802°N 26.04436°E, 54.9m, 12.08.16, 2 ♂♂; Çayır road locality vineyard, 39.83308°N 26.01134°E, 62.5m, 12.08.16, 128 ♂♂; plain road roadside vineyard, 39.82809°N 26.02008°E, 41.4m, 12.08.16, 26 ♀♀; Sulubahçe locality vineyard, 39.81584°N 26.00995°E, 38.3m, 11.08.16, 1 ♂; Arabacı locality vineyard, 39.81237°N 26.02572°E, 44.0m, 12.08.16, 8 ♀♀; Hacı Mahmut locality vineyard, 39.80762°N 26.03102°E, 72.6m, 12.08.16, 2 ♂♂, 10 ♀♀; Hacı Mahmut locality maquis-frigana vegetation, 39.80836°N 26.03836°E, 28.9m, 12.08.16, 1

♂♂; İğdelik locality maquis-frigana vegetation, 39.82573°N 26.07273°E, 36.6m, 12.08.16,25 ♂♂, 35 ♀♀; Tuzburnu locality maquis-frigana vegetation, 39.80769°N 26.07472°E, 23.6m, 12.08.16, 3 ♂♂; Yerebakan locality maquis-frigana vegetation, 39.79678°N 26.05415°E, 62.7m, 12.08.16, 31 ♂♂, 17 ♀♀; Çamlık locality maquis-frigana vegetation, 39.82853°N 25.98151°E, 44.3m, 12.08.16, 3 ♀♀; Eskikule locality maquis-frigana vegetation, 39.82203°N 26.00452°E, 23.7m, 12.08.16, 12 ♂♂; Bozcaada dump maquis-frigana vegetation, 39.81039°N 26.05503°E, 63.6m, 12.08.16, 1 ♂; Meadow area vetch field, 39.83874°N 26.03029°E, 8.0m, 14.05.17, 1 ♂; Çayır road location, the area between the vineyard and olive, 39.83308°N 26.01134°E, 62.5m, 14.05.17, 3 ♀♀; Çayır road location, the area between olive-maquis-frigana, 39.83336°N 26.01071°E, 63.9m, 14.05.17, 3 ♀♀; Bozcaada garbage dump, the area between olive-maquis-frigana, 39.80908°N 26.06104°E, 46.4m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Common species (Tezcan et al., 2004a; Canpolat, 2008).

Dichomma dardanum (Steven, 1829)

Materials examined: Ayazma locality beach, 39.81857°N 26.00308°E, 7.3m, 26.07.16, 5 ♂♂; Leg. D. Sezer.

Distribution in Türkiye: Çanakkale, Sarımsaklı (Balıkesir-Ayvalık) and Altunkum (İzmir-Çeşme) (Keskin and Çevik, 2004)

Erodium orientalis oblongus Solier, 1834

Materials examined: Ayazma locality beach, 39.81828°N 26.00283°E, 6.0m, 26.07.16, 2 ♂♂; Leg. D. Sezer.

Distribution in Türkiye: İzmir, Adana (Keskin, 1999).

Pachyscelis obscura Solier, 1836

Materials examined: Arabacı locality maquis-frigana vegetation, 39.81021°N 26.02248°E, 43.5m, 12.08.16, 1 ♂; Hacı Mahmut area vineyard, 39.80762°N 26.03102°E, 72.6m, 12.08.16, 5 ♀♀; Tuzburnu locality maquis-frigana vegetation, 39.79902°N 26.07685°E, 24.4m, 12.08.16, 1 ♂; Yerebakan locality maquis-frigana vegetation, 39.80007°N 26.05152°E, 75.2m, 12.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: First record for Türkiye.

Palaearctic Distribution: Greece (Peloponnese) (Schawaller, 2017).

Pachyscelis villosa (Drapiez, 1820)

Materials examined: Çayır road area vineyard, 39.83308°N 26.01134°E, 62.5m, 11.08.16, 11 ♂♂, 12 ♀♀; Çayır road locality agricultural area, 39.83336°N 26.01071°E, 63.9m, 11.08.16, 13 ♂♂, 9 ♀♀; plain road roadside olive grove, 39.83051°N 26.03618°E, 17.3m, 11.08.16, 7 ♂♂; İğdelik locality maquis-frigana vegetation, 39.82469°N 26.07450°E, 19.6m, 11.08.16, 8 ♀♀; Papazbahçe area reeds, 39.82164°N 26.03392°E, 38.7m, 11.08.16, 1 ♂; Sulubahçe area vineyard, 39.81640°N 26.01529°E, 66.8m, 11.08.16, 1 ♂; Papazbahçe location olive grove, 39.81955°N 26.03623°E, 42.1m, 11.08.16, 1 ♂; Hacı Mahmut locality sclerophyll vegetation, 39.80818°N 26.02750°E, 55.5m, 11.08.16, 1 ♂; Hacı Mahmut area vineyard, 39.80762°N 26.03102°E, 72.6m, 11.08.16, 3 ♀♀; Hacı Mahmut area agricultural area, 39.80844°N 26.04255°E, 53.1m, 11.08.16, 1 ♂; Tuzburnu locality maquis-frigana vegetation, 39.80769°N 26.07472°E, 23.6m, 12.08.16, 1 ♂; Yerebakan locality maquis-frigana vegetation, 39.79678°N 26.05415°E, 62.7m, 12.08.16, 4 ♂, 2 ♀♀; Hedgehog carcass in Bozcaada dump, 39.81039°N 26.05503°E, 63.6m, 14.05.17, 1 ♀; Çayır Yolu location, the area between the vineyard and olive, 39.83308°N 26.01134°E, 62.5m, 14.05.17, 40 ♂♂, 26 ♀♀; Çayır Yolu location, the area between olive-maquis-frigana, 39.83336°N 26.01071°E, 63.9m, 14.05.17, 3 ♂♂; Bozcaada garbage dump, the area between olive-maquis-frigana, 39.80908°N 26.06104°E, 46.4m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Aydın, Çanakkale, Diyarbakır, Isparta, İzmir, Manisa, Muğla, Eskişehir, Konya, İzmir, Afyon, Ankara, Antalya, Bursa, Denizli, Kayseri, Niğde (Tezcan et al., 2004a), Uşak, Burdur, Mersin, Aksaray (Canpolat, 2008).

Pimelia phymatodes Solier, 1836

Materials examined: Bozcaada, Ayazma locality beach, 39.81857°N 26.00308°E, 7.3m, 14.05.17, 2 ♂♂, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: First record for Türkiye.

Palaearctic Distribution: Greece (Crete) (Schawaller, 2017).

Tentyria rotundata subsp. *mittrei* Solier, 1835

Materials examined: Ayazma locality beach, 39.81857°N 26.00308°E, 7.3m, 12.08.16, 16 ♂♂, 16 ♀♀; Çayırkoyu locality beach, 39.84278°N 26.03104°E, 3.4m, 12.08.16, 17 ♂♂, 22 ♀♀; Killikburnu reed area, 39.84118°N 26.00823°E, 50.5m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Bozdağ (Ödemiş, İzmir) (Mercan et al., 2004).

Zophosis punctata Brullé 1832

Materials examined: Ayazma locality beach, 39.81857°N 26.00308°E, 7.3m, 11.08.16, 5 ♂; Papazbahce area reeds, 39.82164°N 26.03392°E, 38.7m, 11.08.16, 7 ♂♂, 3 ♀♀; Çayır road locality agricultural area - the area between maquis and frigana, 39.83336°N 26.01071°E, 63.9m, 11.08.16, 10 ♂♂, 10 ♀♀; İğdelik locality maquis-frigana vegetation, 39.82573°N 26.07273°E, 36.6m, 12.08.16, 3 ♂♂, 9 ♀♀; vineyard, 39.82782°N 25.98864°E, 50.4m, 12.08.16, 3 ♂♂; Çayır road locality vineyard, 39.83308°N 26.01134°E, 62.5m, 12.08.16, 3 ♀♀; Papazbahçe locality vineyard, 39.82625°N 26.03182°E, 36.2m, 12.08.16, 9 ♂♂; Arabacı locality vineyard, 39.81237°N 26.02572°E, 44.0m, 12.08.16, 22 ♂♂, 23 ♀♀; Hacı Mahmut locality vineyard, 39.80762°N 26.03102°E, 72.6m, 12.08.16, 11 ♂♂, 15 ♀♀; Ayazma locality beach, 39.81857°N 26.00308°E, 7.3m, 14.05.17, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Ankara, Bitlis, Denizli, Elazığ, İzmir, Kayseri, Malatya, Mardin, Muğla, Niğde, Tunceli, Yozgat (Tezcan et al., 2004a; Kaszab, 1968; Ferrer ve Soldati, 1999), Uşak, Mersin, Aksaray, Sivas (Canpolat, 2008).

Subfamily: Tenebrioninae Latreille, 1802

Cephalostenus orbicollis Ménétries, 1836

Materials examined: Eskikule locality sclerophyll vegetation, 39.82583°N 26.00435°E, 59.9m, 11.08.16, 1 ♂; Hacı Mahmut area reeds area, 39.80802°N 26.04436°E, 54.9m, 11.08.16, 1 ♂; Tuzburnu locality maquis-frigana vegetation, 39.79902°N 26.07685°E, 24.4m, 11.08.16, 1 ♀; Çayır road location, the area between olive-vineyard, 39.83308°N 26.01134°E, 62.5m, 14.05.17, 1 ♂; Çayır road location, the area between olive-maquis-frigana, 39.83336°N 26.01071°E, 63.9m, 14.05.17, 3 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Antalya, İzmir, İstanbul, Muğla (Tezcan et al., 2004a; Kaszab, 1968b; Ferrer and Soldati, 1999).

Dendarus messenius (Brullé, 1832)

Materials examined: Ayazma locality beach, 39.81857°N 26.00308°E, 7.3m, 12.08.16, 1 ♂; Çayırkoyu beach sandy, 39.84278°N 26.03104°E, 3.4m, 12.08.16, 5 ♂♂, 7 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: Antalya, Çanakkale (Gökçeada), İzmir, Manisa, Muğla, Uşak (Tezcan et al., 2004b).

Opatrum sculpturatum (Fairmaire, 1860)

Materials examined: Çayırkoyu beach sandy, 39.84278°N 26.03104°E, 3.4m, 12.08.16, 1 ♂♂, 2 ♀♀; Leg. D. Sezer.

Distribution in Türkiye: First record for Türkiye

Palaearctic Distribution: France, Italy (Grimaldi, 2005).

Pedinus femoralis (Linnaeus, 1767)

Materials examined: Habbele locality agricultural area, 39.82319°N 25.98624°E, 50.3m, 12.08.16, 3 ♂♂; Bozcaada dump site maquis-frigana vegetation, 39.81039°N 26.05503°E, 63.6m, 11.08.16, 3 ♀♀; Yerebakan locality maquis-frigana vegetation, 39.80000°N 26.05687°E, 74.8m, 11.08.16, 1 ♂, 1 ♀; grassland, 39.81548°N 26.06946°E, 10.8m, 12.08.16, 1 ♂; Leg. D. Sezer.

Distribution in Türkiye: Ankara, Antalya, Konya, Isparta, Mersin Sivas (Canpolat, 2008).

4. Discussion

As a result of this study, 67 species from 19 families belonging to the Coleoptera family were determined. *Chlaenius velutinus* (Duftschmid, 1812), *Pterostichus melanarius* (Illiger, 1798), from Carabidae family, *Dolichosoma lineare* (Rossi, 1794) from Dasytidae family, and *Pachyscelis obscura* Solier, 1836, *Pimelia phymatodes* Solier, *Opatrum sculpturatum* (Fairmaire, 1860) from Tenebrionidae family are the first records for Türkiye reported in this study.

Carabidae family was determined as the family with the highest number of species with 24%. Carabidae species together with Tenebrionidae with 21% and Staphylinidae with 10% represents almost half of all the species identified on island. Habitat preferences of the species on the island were maquis-frigana with 14% and vineyards and meadows with 10%.

Maquis-frigana vegetation and meadows cover more land than other habitats on island. The scarcity of irrigable agricultural lands and windy conditions of the islands throughout most of the year are seen as the reason that families including predators such as Carabidae and Staphylinidae and terrestrial Tenebrionidae are represented by a larger number of species.

When evaluated in terms of the number, 767 specimens in Bozcaada were examined. Among these specimens, *Dailognatha quadricollis* (Brullé, 1832) from Tenebrionidae family was the most common species in island with 436 individuals in Bozcaada and was observed in almost every habitat.

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