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# A Study on Scarabaeoidea (Insecta:Coleoptera) Fauna of Yavşan Plateau Nature Park (Kahramanmaraş-Türkiye)

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## ABSTRACT
It is of great significance to reveal the insect fauna of Kahramanmaraş, which has different ecosystems and climatic conditions, in terms of biological diversity. This study investigated the Scarabaeoidea fauna of Yavşan Plateau which is located in Kahramanmaraş and which was declared as a nature park in 2009. The present study examined adult Scarabaeoidea specimens collected between March and October 2016. The specimens were obtained throughpitfall the trap method and field search method (using tools such as forceps, etc.).The findings demonstrated that 28 species and 5 subspecies belonging to 25 genera from the Scarabaeoidea superfamily were identified in the study area. 31 of them belong to the family Scarabaeidae, while two species are included in the family Hybosoridae amongst them. *Elaphocera dilatata* (Erichson, 1840) was recorded for the first time from Türkiye. 14 of the recorded species and subspecies were reported for the first time for fauna of Kahramanmaraş province. The study covers the distribution of the identified species in Türkiye and throughout the world as well as their chorotype information, locality and history. This study is expected to shed light onto the ever-decreasing biodiversity due to various reasons such as global climate change, habitat degradation etc.

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# Yavşan Yaylası Tabiat Parkı (Kahramanmaraş-Türkiye) Scarabaeoidea (Insecta: Coleoptera) Faunası Üzerine Bir Araştırma

## ÖZET
Farklı iklim koşulları ve farklı ekosistemlerin yer aldığı Kahramanmaraş ilinin böcek faunasının ortaya konulması biyolojik çeşitlilik açısından oldukça önemlidir. Bu çalışmada Kahramanmaraş ilinde yer alan ve 2009 yılında tabiat parkı olarak ilan edilen Yavşan Yaylasının Scarabaeoidea faunası araştırılmıştır. Çalışma kapsamında 2016 yılı Mart ve Ekim ayları arasında toplanan ergin Scarabaeoidea örnekleri incelenmiştir. Örnekler çukur tuzak yöntemi ve arazi taraması yöntemi ile (pens vb. araçlar yardımıyla) elde edilmiştir. Yapılan teşhis çalışmaları sonucunda çalışma alanında Scarabaeoidea üst familyasından 25 cinse ait 28 tür ve 5 alt türün tanımlaması yapılmıştır. Bu tür ve alttürlerden 31 tanesi Scarabaeidae familyasına, 2 tanesi ise Hybosoridae familyasına aittir. *Elaphocera dilatata* (Erichson, 1840) türü Türkiye'den ilk defa bu çalışma ile kaydedilmiştir. Çalışmada elde edilen tür ve alttürlerden 14 tanesi Kahramanmaraş ilinden ilk defa kaydedilmiştir. Tespit edilen türlerin Türkiye ve dünya genelindeki yayılışları, korotip bilgileri, yakalandıkları lokalite ile tarih bilgileri çalışmada yer almaktadır. Bu çalışma ile küresel iklim değişikliği, habitat bozulmaları vb. sebeplerle her geçen gün azalan biyoçeşitliliğe katkı sağlamak amaçlanmıştır.

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## INTRODUCTION

Great biodiversity has emerged in terms of both the number of species and individuals within the order Coleoptera. Such a variety of sizes, colours and shapes are not observed in any other animal groups (Evans et al., 2000; Şenyüz & Şahin, 2013). The superfamily Scarabaeoidea (Coleoptera), is an important superfamily as it involves various harmful and beneficial species. This superfamily includes more than 35,000 species around the world (Ratcliffe & Paulsen, 2008). Under the superfamily Scarabaeoidea, there are 12 families and 43 subfamilies (Smith, 2006). The Palaearctic Catalogue of Coleoptera reported that 7,200 species belong to the Scarabaeoidea superfamily, and around 700 different species belonging to this superfamily are distributed in Türkiye (Löbl & Smetana, 2006).

Species belonging to the superfamily Scarabaeoidea live in a wide variety of habitats, and hence they can be fungivores, herbivores, carnivores, necrophags, coprofags and saprophags (Ratcliffe, 2002). The Scarabaeoidea superfamily is amongst the prominent superfamilies with different characteristics in order Coleoptera. Although they have strong muscles, they are not good walkers. The body structures of the species belonging to the Scarabaeoidea superfamily may be in quite different forms since they live in different habitats. These species are noted to have remarkable features as they are large, brightly coloured and mostly ornamented (Lodos, 1995; Polat, 2016).

Scarabaeoidea species prefer weak and potentially dying plants as hosts. All life stages of this superfamily, such as eggs, larvae and pupae, occur around the roots of their hosts. Some species of the Scarabaeidae family undertake the tasks of environmental cleaning and recycling, especially in areas like pastures.

Therefore, these species are an indispensable part of the ecosystem of any region. Scarabaeoidea adults fly at a fast speed. Many species fly and act at twilight or at night. Those that roll their droppings into balls, on the other, fly or move during the day. The sense of smell is quite well-developed in the vast majority of dung beetles (Polat, 2016).

Scarabaeoidea species mix feces with soil in agricultural lands, meadows and pastures thus contributing to the elimination of environmental pollution. Besides, the mixing of animal feces with the soil increases the formation of humus, contributes to the aeration of the soil, increases the water permeability of the soil, and helps to improve the physical structure of the soil by descending to the lower layers of the soil. Mixing animal feces with the soil throughthese insects prevents the proliferation of flies, parasites, nematodes and similar pests that develop in the feces and cause diseases as well as harms (Polat, 2016).

Yavşan Plateau in Kahramanmaraş is located in the area where the Mediterranean, Eastern Anatolia and Southeastern Anatolia Regions come closest to each other. Rich in terms of natural water resources, this plateau houses approximately 65 plant species specific to the region. A continentalized Mediterranean climate type is dominant due to the distance and altitude from the sea in general in Kahramanmaraş (Uslu & Kaya, 2015). Besides, Yavşan plateau was announced as Türkiye's 39th Nature park in 2009 (Ministry of Agriculture and Forestry, 2020).

This study is an attempt to reveal the Scarabaeoidea fauna of the Yavşan Plateau and to present the distribution and chorotype information regarding the species found in the area. Therefore, the study is expected to shed light on the insect fauna and biological diversity of Kahramanmaraş province's Yavşan Plateau and Türkiye as a whole.

## MATERIAL and METHODS

This study was carried out in Yavşan Plateau, Kahramanmaraş province of Turkiye between March and October 2016. Specimens were collected from different locations every 15 days using pitfall trap method and field search method (using tools such as forceps, etc.). Pitfall traps containing a mixture of antifreeze and water (at a 1:1 ratio) were placed at different elevation levels. The traps were set up at elevations ranging from 1200 m to 1900 m, with 5 pitfall traps placed at intervals of 50 meters for every 100 meters of elevation. Scarabaeoidea samples were euthanized using ethyl acetate. Subsequently, these samples were brought to the laboratory in plastic containers and fixed with insect pins. The diagnosis of samples, whose preparation was finalized, was conducted by Assoc. Prof. Dr. Yakup ŞENYÜZ (Kütahya Dumlupınar University, Faculty of Letters and Science, Department of Biology, Zoology). The elicited samples are kept in the Biology Laboratory of the Faculty of Education in Kahramanmaraş Sütçü İmam University.

Yavşan Plateau Nature Park is located in the

Mediterranean Region within the borders of the Onikisubat district of Kahramanmaraş. Yavşan Plateau Nature Park is situated 36 km away from the city center of Kahramanmaraş and covers an area of 3480 hectares, between the coordinates 37.48258° N and 36.70281° E (Figure 1). The area was introduced as the 39th nature park of our country on 15.12.2009 thanks to the natural and cultural resources it contains. Coniferous species naturally growing in Türkiye, such as *Abies cilicica* (Antoine et Kotschy), *Cedrus libani*A. Richard, *Pinus nigra* Arnold and *Juniperus* sp. Linnaeus and leafy trees such as aspen *Populus tremula*Linnaeus and *Quercus*Linnaeus species are widespread in Yavşan Plateau Nature Park. There are wild walnuts (*Juglans regia*) in the streams. Yavşan Plateau Nature Park is located at the point where the Mediterranean, Eastern Anatolia and Southeastern Anatolia Regions come closest to each other, and the area has a rich natural water resources (Özkan et al., 2020). 529 plant taxa have been identified within the area and 65 of them are endemic. The plant species named *Ajuga relicta* (Eskimayasıl) is distributed only in the region called Pekmez Pınarı in Yavşan plateau (Varol, 1997; Özkan et al., 2020).

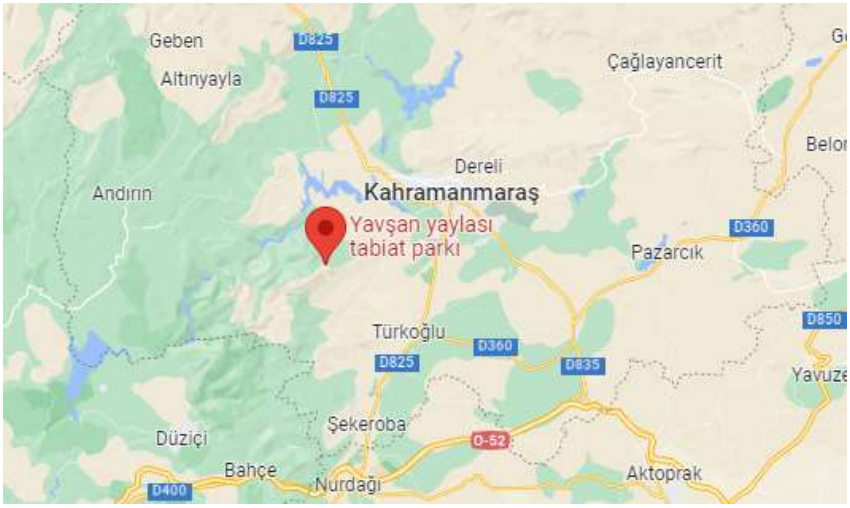


Figure 1. Map view of Yavşan Plateau Nature Park.
*Şekil 1. Yavşan Yaylası Tabiat Parkına ait harita görüntüsü.*

Yavşan Plateau Nature Park is divided into three protection and use zones, namely the Sensitive Protection Zone, the Sustainable Use Zone and the Controlled Use Zone. The nature park has great significance due to the most beautiful pure and mixed stands of *Cedrus libani*, whose distribution areas are getting narrower in the world (Özkan et al., 2020).

## RESULTS

In this study, the description of 28 species and 5 subspecies belonging to 25 genera within the superfamily Scarabaeoidea has been conducted. Among these species and subspecies, 31 belong to the family Scarabaeidae, and 2 belong to the family Hybosoridae.

**Family: Scarabaeidae Latreille, 1802**

**Subfamily: Scarabaeinae (Latreille, 1802)**

**Genus: *Copris* Geoffroy, 1762**

***Copris hispanus cavolinii* (Petagna, 1792)**

Material examined:Kahramanmaraş: Yavşan plateau, 1536 m, 14.V.2016, 37°24′28.5552″ N 36°35′3.6168″ E; 1495 m, 28.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E. Totally two specimens.

Distribution in Türkiye:Adana, Adıyaman, Afyon, Ankara, Antalya, Bitlis, Bursa,Çorum, Diyarbakır, Eskişehir, Gaziantep, Hatay, Isparta,İzmir, Kahramanmaraş, Kastamonu, Kayseri, Kırıkkale,Kırşehir, Mersin, Muğla,Niğde, Osmaniye, Sivas, Uşak,Van (Lodos et al., 1999; Rozner & Rozner., 2009; Coşkun, 2012; Şenyüz et al., 2016).

Distribution in the world: Afghanistan, Algeria, Cyprus, Egypt, France, Iran, Italy, Libya, Mediterranean islands, Morocco, Pakistan, Portugal, Russia, Spain, Tunisia, Türkiye(Löbl & Smetana, 2006).

Chorotype: Asia – Europe – Mediterranean (Carpaneto et al., 2000).

**Genus: *Gymnopleurus* Illiger, 1803**

***Gymnopleurus geoffroyi* (Fuessly, 1775)**

Material examined:Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1412 m, 23.V.2016, 37°24′01.28″ N 3°35′07.01″E; 1216 m, 8.VI.2016, 37°24′57.21″ N 36°35′04.74″ E; 1291 m, 16.VI.2016, 37°24′58.09″ N 36°34′58.54″ E; 1356 m, 28.VI.2016, 37°24′19.87″ N 36°35′05.21″ E. Totally five specimens.

Distribution in Türkiye:Adana, Adıyaman,

Afyonkarahisar, Amasya, Ankara, Antalya, Balıkesir, Bilecik, Bitlis, Bolu, Burdur, Bursa, Çanakkale, Çorum, Denizli, Diyarbakır, Edirne, Eskişehir, Gaziantep, Giresun, Hakkari, Hatay, Isparta, İzmir, İzmir, Kastamonu, Kayseri, Kırklareli, Kırşehir, Karabük, Kocaeli, Kütahya, Manisa, Manisa, Muğla, Mersin, Ordu, Osmaniye, Rize, Siirt, Sinop, Sivas, Tekirdağ, Tokat, Trabzon, Uşak, Van, Zonguldak(Kırgız, 1982; Lodos et al., 1999; Rozner & Rozner, 2009; Anlaş, Keith & Tezcan, 2011a; Coşkun, 2012; Şahiner, 2013; Şenyüz, Dindar & Altunsoy, 2013; Gülmez, Dinar & Ari, 2019).

Distribution in the world: Albania, Algeria, Armenia, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Israel, Italy, Kuwait, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Switzerland, Türkiye, Ukraine(Löbl & Smetana, 2006).

Chorotype: Europe – Central Asia – Mediterranean (Carpaneto et al., 2000).

**Genus: *Onthophagus* Latreille, 1802**

***Onthophagus* (*Furconthophagus*) *furcatus* (Fabricius, 1781)**

Material examined: Kahramanmaraş: Yavşan plateau, 1705 m, 14.V.2016, 37°23′53.18″ N 36°34′58.90″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E. Totally two specimens.

Distribution in Türkiye: Adana, Adıyaman, Afyonkarahisar, Ağrı, Amasya, Ankara, Antalya, Artvin, Aydın, Balıkesir, Bartın, Batman, Bayburt, Bilecik, Bingöl, Bitlis, Bolu, Burdur, Bursa, Çanakkale, Çankırı, Çorum, Denizli, Diyarbakır, Düzce, Edirne, Elazığ, Erzincan, Erzurum, Eskişehir, Gaziantep, Giresun, Gümüşhane, Hakkari, Hatay, Iğdır, Isparta, İstanbul, İzmir, Karaman, Kars, Kastamonu, Kayseri, Kırıkkale, Kırklareli, Kırşehir, Kilis, Kocaeli, Konya, Kütahya, Malatya, Manisa, Mardin, Mersin, Muğla, Muş, Nevşehir, Niğde, Ordu, Osmaniye, Rize, Sakarya, Samsun, Siirt, Sinop, Sivas, Şanlıurfa, Şırnak, Tekirdağ, Tokat, Trabzon, Tunceli, Uşak, Van, Yalova, Yozgat, Zonguldak(Lodos et al., 1999; Pehlivan, 1989; Tezcan & Pehlivan, 2001; Bellmann, 2007; Rozner & Rozner, 2009; Anlaş, Keith & Tezcan, 2011a,b; Şenyüz et al., 2013; Özgen, Şenyüz & Temizer, 2014; Sullivan et al., 2016).

Distribution in the world: Albania, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, England, France, Georgia, Germany, Greece, Hungary, India, Iraq, Israel, Italy, Kazakhstan, Macedonia, Montenegro, Morocco, Poland, Portugal, Romania, Russia, Saudi Arabia, Serbia, Slovakia, Slovenia, Spain, Switzerland, Türkiye, Turkmenistan, Ukraine(Löbl & Smetana, 2006).

Chorotype: Turan – Europe – Mediterranean (Carpaneto et al., 2000).

***Onthophagus illyricus* (Scopoli, 1763)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1216 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E; 1456 m, 16.VII.2016, 37°24′09.36″ N 36°35′06.46″ E; 1625 m, 27.VII.2016, 37°24′21.89″ N 36°35′11.50″ E; 1524 m, 07.VIII.2016, 37°34′23.85″ N 36°35′02.86″ E. Totally six specimens.

Distribution in Türkiye: Adana, Antalya, Aydın, Bartın, Çanakkale, Eskişehir, Gaziantep, Hakkari, Hatay, Isparta, Kahramanmaraş, Karaman, Kastamonu, Kayseri, Kırşehir, Konya, Kütahya, Manisa, Mersin, Muğla, Niğde, Osmaniye, Uşak, Zonguldak(Pehlivan, 1989; Lodos et al., 1999; Bellmann, 2007; Rozner & Rozner, 2009; Anlaş et al., 2011a; Şenyüz & Şahin, 2013; Küçükkaykı et al., 2013; Ataş, 2019).

Distribution in the world: Afghanistan, Albania, Armenia, Austria, Azores, Belarus, Belgium, Bosnia and Herzegovina, Croatia, Cyprus, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Iraq, Israel, Italy, Kazakhstan, Lebanon, Luxembourg, Macedonia, Moldova, Montenegro, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Syria, Türkiye, Ukraine(Löbl & Löbl, 2016).

Chorotype: Turan – Europe (Carpaneto et al., 2000).

***Onthophagus* (*Palaeonthophagus*) *opacicollis* Reitter, 1893**

Material examined: Kahramanmaraş: Yavşan plateau, 1456 m, 18.IV.2016, 37°24′19.87″ N 36°35′05.21″ E; 1512 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1526 m, 08.VII.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Adana, Antalya, Balıkesir, Bolu, Çanakkale, Eskişehir, Gaziantep, Hatay, Kahramanmaraş, Kütahya, Manisa, Mersin, Niğde, Ordu, Samsun, Tokat (Lodos et al., 1999; Rozner & Rozner, 2009; Anlaş et al.,2011a; Şenyüz & Şahin, 2013; Şenyüz et al., 2013; Sullivan et al., 2016; Ataş, 2019).

Distribution in the world: Albania, Algeria, Bulgaria, Bosnia and Herzegovina, Croatia, Cyprus, France, Greece, Hungary, Israel, Italy, Macedonia, Morocco, Portugal, Slovakia, Spain, Switzerland, Syria, Tunisia, Türkiye(Löbl & Smetana, 2006).

Chorotype: Europe –Mediterranean (Carpaneto et al., 2000).

***Onthophagus*(*Palaeonthophagus*) *ruficapillus* Brulle, 1832**

Material examined: Kahramanmaraş: Yavşan plateau, 1695 m,14.VI.2016, 37°24′13.70″ N 36°37′07.65″ E; 1712 m, 23.VI.2016, 37°24′28.55″ N 36°35′03.61″ E;

1656 m, 08. VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Adana, Afyonkarahisar, Amasya, Ankara, Antalya, Aydın, Balıkesir, Bartın, Bolu, Burdur, Çanakkale, Çankırı, Çorum, Denizli, Edirne, Erzurum, Eskişehir, Gaziantep, Giresun, Hatay, Isparta, İzmir, Kahramanmaraş, Kastamonu, Kırklareli, Kırşehir, Konya, Kütahya, Kilis, Mardin, Manisa, Muğla, Mersin, Nevşehir, Niğde, Osmaniye, Sakarya, Samsun, Sinop, Sivas, Tekirdağ, Yozgat, Zonguldak(Pehlivan, 1989; Lodos et al., 1999; Bellmann, 2007; Rozner & Rozner, 2009; Anlaş et al., 2011a; Özgen et al., 2014; Sullivan et al., 2016).

Distribution in the world:Albania, Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, France, Georgia, Greece, Hungary, Iraq, Iran, Israel, Italy, Jordan, Macedonia, Moldova, Montenegro, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Switzerland, Syria, Turkey, Ukraine(Löbl & Smetana, 2006).

Chorotype: Europe (Carpaneto et al., 2000).

### Genus: *Scarabaeus* Linnaeus, 1758

### *Scarabaeus* (*Scarabaeus*) *pius* (Illiger, 1803)

Material examined: Kahramanmaraş: Yavşan plateau, 1295 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1395 m, 8.VI.2016, 37°24′57.21 ″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Adıyaman, Ankara, Antalya, Bilecik, Bolu, Bursa, Çanakkale, Çorum, Denizli, Diyarbakır, Eskişehir, İzmir, Kahramanmaraş, Kayseri, Kırklareli, Kırşehir, Konya, Kütahya, Manisa, Mersin, Muğla, Niğde, Pamukkale, Şanlıurfa, Siirt, Tokat, Van(Pehlivan, 1988; Lodos et al., 1999; Rozner & Rozner, 2009; Özgen et al., 2014).

Distribution in the world: Afghanistan, Albania, Armenia, Austria, Azerbaijan, Bulgaria, Croatia, France, Georgia, Greece, Hungary, Iran, Israel, Italy, Jordan, Kazakhstan, Lebanon, Macedonia, Romania, Russia, Spain, Syria, Tajikistan, Turkmenistan, Turkey, Uzbekistan, Yugoslavia (Löbl & Smetana, 2006).

Chorotype: Europe – East Mediterranean – Turan (Vigna Taglianti et al., 1999).

### Genus: *Sisyphus* Latreille, 1807

### *Sisyphus schaefferi* (Linnaeus, 1758)

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1816 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye:Adana, Adıyaman, Ankara, Afyon, Antalya, Balıkesir, Bilecik, Bitlis, Burdur, Çanakkale, Çorum, Edirne, Eskişehir, Erzurum, Gümüşhane, Hatay, Isparta, İzmir, Kahramanmaraş, Kars, Kırıkkale, Kırklareli, Kütahya, Mersin, Muğla, Osmaniye, Samsun, Sivas, Tekirdağ, Van(Lodos et al., 1978; Kırgız, 1982; Pehlivan, 1988; Lodos et al., 1999; Bellmann, 2007; Rozner & Rozner, 2009; Coşkun, 2012; Şenyüz & Şahin, 2013; Ataş, 2019).

Distribution in the world: Albania, Algeria, Armenia, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Israel, Italy, Jordan, Kazakhstan, Luxembourg, Macedonia, Moldavia, Morocco, Netherlands, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Switzerland, Syria, Tunisia, Turkmenistan, Turkey, Ukraine, Yugoslavia(Löbl & Smetana, 2006).

Chorotype: Central Asia – Europe – Mediterranean (Carpaneto et al., 2000).

## Subfamily: Dynastinae (MacLeay, 1819)

### Genus: *Oryctes* Illiger, 1798

### *Oryctes nasicornis* (Linnaeus, 1758)

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 37°24′18.6516″ N 36°35′10.8996″ E; 1572 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1345 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Adana, Ağrı, Artvin, Bilecik, Çorum, Denizli, Erzincan, Erzurum, Hatay, Isparta, İzmir, Kahramanmaraş, Kars, Konya, Manisa, Mersin, Ordu, Sakarya, Samsun, Siirt, Trabzon (Lodos et al., 1999; Öztürk & Kalkar, 2011; Atay, Jansson & Gürkan, 2012; Şenyüz et al., 2013; Özgen et al., 2014; Göktürk & Mihli, 2015; Polat, Yıldırım & Ulıana, 2018).

Distribution in the world: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Egypt, Greece, Israel, Lebanon, Macedonia, Romania, Slovenia, Syria, Turkey, Yugoslavia (Löbl & Smetana, 2006).

Chorotype: Central Asia – Mediterranean (Carpaneto et al., 2000).

### Genus: *Pentodon* Hope, 1837

### *Pentodon bidens punctatus*(Villers, 1789)

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1216 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Adana, Antalya, Karaman, Konya, Kütahya (Lodos et al., 1999; Aydın & Kazak, 2007; Şenyüz & Şahin, 2009).

Distribution in the world:Southern Europe, North Africa (Pivotti et al., 2011).

Chorotype:Turan – Mediterranean (Pivotti et al., 2011).

***Pentodon idiota* (Herbst, 1789)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1412 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1286 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E; 1512 m, 16.VI.2016, 37°24′21.73″ N 36°35′04.58″E. Totally four specimens.

Distribution in Türkiye: Adana, Adıyaman, Ankara, Antalya, Denizli, Isparta, İstanbul, İzmir, Kırklareli, Kırşehir, Kocaeli, Konya, Kütahya, Muğla, Samsun, Siirt(Lodos et al., 1999; Rozner & Rozner, 2009; Şenyüz & Şahin, 2009; Aslan & Karaca, 2012; Özgen et al., 2014; Polat et al., 2018).

Distribution in the world: Albania, Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Georgia, Greece, Hungary, Iran, Iraq, Israel, Lebanon, Macedonia, Russia, Slovakia, Turkey, Ukraine, Yugoslavia(Löbl & Smetana 2006).

Chorotype: Southern Europe (Carpaneto et al., 2000).

**Genus: *Phyllognathus* Eschscholtz, 1830**

***Phyllognathus excavatus* (Forster, 1771)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1278 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1384 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Adana, Ağrı, Antalya, Elazığ, Erzurum, Isparta, İzmir, Kahramanmaraş, Mersin, Muğla, Niğde, Osmaniye(Ulusoy, Vatansever & Uygun, 1999; Demirözer & Karaca, 2011; Gömlek, 2018).

Distribution in the world: Albania, Algeria, Arab Emirates, Bosnia and Herzegovina, Canary Islands, Croatia, Cyprus, Egypt, France, Greece, Iraq, Iran, Israel, Italy, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Macedonia, Malta, Montenegro, Morocco, Oman, Portugal, Russia, Saudi Arabia, Spain, Syria, Tunisia, Turkmenistan, Türkiye, Ukraine, Yemen(Löbl & Löbl, 2016).

Chorotype: Europe – Turan – Mediterranean (Carpaneto et al., 2000).

**Subfamily: Melolonthinae Leach, 1819**

**Genus: *Anoxia* Laporte de Castelnau, 1833**

***Anoxia orientalis* (Krynicki, 1832)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m,14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1418 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1746 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye:Adana, Adıyaman, Ankara, Antalya, Bayburt, Bursa, Çorum, Erzincan, Gaziantep, Hatay, İzmit, Kahramanmaraş, Kastamonu, Kayseri, Kocaeli, Kütahya, Mersin, Niğde, Osmaniye, Sakarya, Samsun, Sinop, Trakya (Lodos, 1995; Ulusoy et al., 1999; Rozner & Rozner, 2009; Rezaei, 2015; Polat et al., 2018).

Distribution in the world: Albania, Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Georgia, Greece, Hungary, Iran, Israel, Italy, Lebanon, Macedonia, Romania, Russia, Slovenia, Syria, Switzerland, Turkmenistan, Yugoslavia(Löbl & Smetana, 2006).

Chorotype: Europe – Mediterranean (Carpaneto et al., 2000).

**Genus: *Elaphocera*Gene, 1836**

***Elaphocera dilatata* Erichson, 1840**

Material examined: Kahramanmaraş: Yavşan plateau, 1409 m, 02.IV.2016, 37°24′50.34″ N 36°34′49.51″ E; 1357 m 09.IV.2016, 37°24′51.16″ N 36°34′44.39″ E. Totally two specimens.

Distribution in Türkiye: This species is new record for fauna ofTürkiye.

Distribution in the world: Sardinia Island (Fancello, Bazzato & Cillo, 2014: Fauna Europaea, 2022a).

Chorotype: Endemic to Sardinia Island (Carpaneto et al., 2011).

**Genus:*Holochelus* Reitter, 1889**

***Holochelus* (*Miltotrogus*) *pilicollis* (Gyllenhal, 1817)**

Material examined: Kahramanmaraş: Yavşan plateau, 1683 m, 02.IV.2016, 37°24′09.86″ N 36°35′04.00″ E. Totally two specimens.

Distribution in Türkiye: Kahramanmaraş (Gömlek, 2018).

Distribution in the world: Austria, Bosnia and Herzegovina, Bulgaria, Greece, Hungary, Romania, Türkiye, Ukraine(Fauna Europaea, 2022c).

Chorotype: Europe (Carpaneto et al., 2000).

**Genus: *Melolontha* Fabricius, 1775**

***Melolontha anita* (Reitter, 1902)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 18.IV. 2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1471 m, 09.V.2016, 37°24′19.87″ N 36°35′05.21″ E; 1508 m, 24.V.2016, 37°24′18.65″ N 36°35′10.03″ E; 1357 m, 22.IV.2016, 37°24′26.84″ N 36°35′08.12″ E; 1596 m, 16.V.2016, 37°24′13.70″ N 36°37′07.65″ E. Totally five specimens.

Distribution in Türkiye: Kahramanmaraş (Gömlek, 2018).

Distribution in the world:Türkiye (Carpaneto et al., 2000).

Chorotype: Endemic (Carpaneto et al., 2000).

**Genus: *Polyphylla* Harris, 1842**

***Polyphylla olivieri* (Castelnau, 1840)**

Material examined: Kahramanmaraş: Yavşan plateau, 1683 m, 14.VII.2016, 37°24′09.86″ N 36°35′04.00″ E; 1668 m, 23.VII.2016, 37°23′53.18″ N 36°34′58.90″ E; 1712 m, 08.VIII.2016, 37°23′51.64″ N 36°34′55.13″ E. Totally three specimens.

Distribution in Türkiye: Antalya, Ankara, Bitlis, Bolu, Bursa, İstanbul, Isparta, Kahramanmaraş, Kütahya, Niğde, Samsun, Van (Sabatinelli, 1977; Rey, 1999; Lodos et al., 1999; Karaca et al., 2006; Akdoğan, 2006; Coşkun, 2012; Rezaei, 2015).

Distribution in the world:Greece, Iran, Near East, Transcaucasia, Türkiye(Bunalski et al., 2014).

Chorotype:Turan – Mediterranean (Vigna Taglianti et al., 1999).

**Subfamily: Rutelinae MacLeay, 1819**

**Genus: *Anomala* Schoenherr, 1817**

***Anomala affinis* (Ganglbauer, 1882)**

Material examined: Kahramanmaraş: Yavşan plateau, 1668 m, 25.VI.2016, 37°23′53.18″ N 36°34′58.90″ E. Totally three specimens.

Distribution in Türkiye: Balıkesir, Mersin (Polat et al., 2018).

Distribution in the world: Greece,Türkiye(Löbl & Löbl, 2016).

Chorotype: Asia - Europe (Vigna Taglianti et al., 1999).

***Anomala osmanlis* Blanchard, 1850**

Material examined: Kahramanmaraş: Yavşan plateau, 1201 m, 25.VI.2016, 37°24′58.46″ N 36°35′04.73″ E. Totally two specimens.

Distribution in Türkiye: Adana, Adıyaman, Antalya, Isparta, İzmir, Manisa, Muğla, Osmaniye(Gümüş & Avcı, 2015; Polat et al., 2018).

Distribution in the world: Bulgaria, Greece, Near East,Türkiye (Fauna Europaea, 2022b).

Chorotype:East Mediterranean (Carpaneto et al., 2000).

**Genus: *Blitopertha* Reitter, 1903**

***Blitopertha nigripennis* Reitter, 1888**

Material examined: Kahramanmaraş: Yavşan plateau, 1357 m, 25.VI.2016, 37°24′51.16″ N 36°34′44.39″ E; 1409 m, 15.VII.2016, 37°24′50.34″ N 36°34′49.51″ E; 1201 m, 28.VII.2016, 37°24′58.46″ N 36°35′04.73″ E. Totally three specimens.

Distribution in Türkiye: Adana, Ankara, Antalya, Bingöl, Eskişehir, Erzincan, Erzurum, Gaziantep, Gümüşhane, Hatay, Isparta, Kahramanmaraş, Kastamonu, Kayseri, Kırşehir, Kütahya, Malatya, Mersin, Osmaniye, Sivas, Sinop(Şenyüz & Şahin, 2009; Küçükkaykı et al., 2013; Özgen et al., 2014; Rezaei, 2015; Uliana & Sabatinelli, 2017; Polat et al., 2018; Sert & Özdemir, 2019).

Distribution in the world: Armenia, Azerbaijan, Cyprus, Georgia, Iran, Israel, Jordan, Lebanon, Russia, Syria, Türkiye, Turkmenistan(Löbl & Smetana, 2006).

Chorotype:Asia – Mediterranean (Vigna Taglianti et al., 1999).

**Subfamily: Cetoniinae Leach, 1815**

**Genus: *Oxythyrea* Mulsant, 1842**

***Oxythyrea cinctella*(Schaum, 1841)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1216 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye:Adana, Adıyaman, Afyon, Aksaray, Amasya, Ankara, Antalya, Artvin, Aydın, Balıkesir, Bartın, Bilecik, Bingöl, Bitlis, Bolu, Burdur, Bursa, Çanakkale, Çorum, Denizli, Diyarbakır, Elazığ, Erzincan, Erzurum, Eskişehir, Gaziantep, Hatay, Isparta, İstanbul, İzmir, Iğdır, Kahramanmaraş, Karaman, Karabük, Kars, Kastamonu, Kayseri, Kırıkkale, Kırşehir, Kırklareli, Kilis, Konya, Kütahya, Malatya, Manisa, Mardin, Mersin, Muğla, Muş, Nevşehir, Niğde, Osmaniye, Rize, Sakarya, Samsun, Şanlıurfa, Tekirdağ, Tunceli, Uşak, Van(Lodos et al., 1978; Lodos et al., 1999; Akdoğan, 2006; Şenyüz & Şahin, 2009; Coşkun, 2012; Polat, Yıldırım & Uliana, 2017; Laz & Avgın, 2017).

Distribution in the world: Afghanistan, Albania, Armenia, Azerbaijan, Bulgaria, China, Cyprus, Georgia, Greece, Hungary, Iran, Iraq, Israel, Jordan, Kazakhstan, Kyrgyzstan, Lebanon, Macedonia, Pakistan, Russia, Syria, Tajikistan, Turkmenistan, Turkey, Uzbekistan, Yugoslavia (Löbl & Smetana, 2006).

Chorotype: Turan – Mediterranean (Carpaneto et al., 2000).

**Genus: *Protaetia* Burmeister, 1842**

***Protaetia* (*Netocia*) *cuprina* (Motschulsky, 1849)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1632 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1712 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Ankara, Antalya, Aydın, Balıkesir, Burdur, Denizli, Erzurum, Eskişehir, İzmir, Karaman, Mersin, Muğla, Nevşehir, Osmaniye, Rize, Samsun (Carpaneto et al., 2000; Rozner & Rozner, 2009; Sürgüt et al., 2014).

Distribution in the world: Bulgaria, Moldova, Near East, Türkiye (Fauna Europaea, 2023).

Chorotype: Europe - Mediterranean(Vigna Taglianti et al., 1999).

***Protaetia* (*Netocia*) *aethiessina* Reitter, 1891**

Material examined: Kahramanmaraş: Yavşan plateau, 1357 m, 16.IV.2016, 37°24′51.16″ N 36°34′44.39″ E;

1409 m, 25.VI.2016, 37°24′50.34″ N 36°34′49.51″ E. Totally two specimens.

Distribution in Türkiye: In the literature review, no locality data regarding the distribution areas of this species in our country were encountered.

Distribution in the world:Armenia, Iran, Türkiye(Vondracek, 2010; Bunalski et al., 2014).

Chorotype: Asia - Turan (Vigna Taglianti et al., 1999).

***Protaetia* (*Cetonischema*) *speciosissima* (Scopoli, 1786)**

Material examined: Kahramanmaraş: Yavşan plateau, 1216 m, 25.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally one specimens.

Distribution in Türkiye: Balıkesir (Polat et al, 2017).

Distribution in the world: Albania, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, France, Germany, Greece, Hungary, Italy, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Slovakia, Slovenia, Switzerland, Türkiye, Ukraine(Catalogue of Life, 2022).

Chorotype: Europe -Mediterranean (Lapiana & Sparacio, 2006).

***Protaetia* (*Philhelena*) *ungarica armeniaca* (Menetries, 1832)**

Material examined: Kahramanmaraş: Yavşan plateau, 1712 m, 02.IV.2016, 37°23′51.64″ N 36°34′55.13″ E. Totally one specimens.

Distribution in Türkiye: Adana, Erzurum (Polat et al., 2017).

Distribution in the world: Caucasus, Central Asia, Northern Iran (Shokhin, 2019).

Chorotype: Asia – Turan (Vigna Taglianti et al., 1999).

***Protaetia* (*Potosia*) *besucheti* (Alexis & Delpont, 1996)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E. Totally three specimens.

Distribution in Türkiye: Adana, Antalya, Denizli, Kayseri (Polat et al., 2017).

Distribution in the world:Greece, Türkiye(Löbl & Löbl, 2016).

Chorotype: Mediterranean (Vigna Taglianti et al., 1999).

***Protaetia* (*Netocia*) *afflicta* (Gory & Percheron, 1833)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1216 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Adıyaman, Diyarbakır, Mardin, Mersin, Siirt (Rozner & Rozner, 2009; Özgen, Şen & Anlaş, 2012; Sert & Özdemir, 2019).

Distribution in the world: Cyprus, Egypt, Greece, Israel, Jordan, Lebanon, Syria, Türkiye(Vondracek, 2010).

Chorotype: Eastern Mediterranean (Carpaneto et al., 2000).

***Protaetia* (*Netocia*) *subpilosa subpilosa* (Desbrochers des Loges, 1869)**

Material examined: Kahramanmaraş: Yavşan plateau, 1712 m, 25.VI.2016, 37°23′51.64″ N 36°34′55.13″ E; 1216 m, 02.IV.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally two specimens.

Distribution in Türkiye: Adana, Gaziantep, Karaman (Polat et al., 2018; Bolu et al., 2018).

Distribution in the world: Bulgaria, Greece, Jordan, Lebanon, Syria, Türkiye (Löbl & Löbl, 2016).

Chorotype: Europe – Mediterranean (Carpaneto et al., 2000).

***Protaetia* (*Netocia*) *vidua* (Gory & Percheron, 1833)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1216 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Balıkesir, Bingöl, Burdur, Çanakkale, Denizli, Erzurum, Eskişehir, Iğdır, Isparta, İzmir, Kırklareli, Kütahya, Muş, Osmaniye, Tunceli(Rozner & Rozner, 2009; Özgen et al., 2014; Polat et al., 2017).

Distribution in the world: Armenia, Azerbaijan, Bulgaria, Egypt, Georgia, Greece, Iran, Israel, Jordan, Lebanon, Macedonia, Romania, Syria, Türkiye(Löbl & Smetana, 2006).

Chorotype: East Mediterranean (Carpaneto et al., 2000).

**Genus: *Tropinota* Mulsant, 1842**

***Tropinota* (*Epicometis*) *hirta* (Poda, 1761)**

Material examined: Kahramanmaraş: Yavşan plateau, 1438 m, 24.VI.2016, 37°24′36.92″ N 36°34′54.96″ E; 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1216 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally four specimens.

Distribution in Türkiye: Adana, Afyonkarahisar, Aydın, Ankara, Antalya, Balıkesir, Bilecik, Bolu, Bursa, Burdur, Çanakkale, Çankırı, Çorum, Denizli, Edirne, Gaziantep, Hatay, Isparta, İzmir, Kahramanmaraş, Karaman, Karabük, Kastamonu, Kayseri, Kırıkkale, Kırklareli, Kırşehir, Kilis, Konya, Kütahya, Manisa, Mersin, Muğla, Niğde, Osmaniye, Sakarya, Tekirdağ, Uşak (Lodos et al, 1978, Lodos et al, 1999; Şenyüz & Şahin, 2009).

Distribution in the world: Albania, Andorra, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, France, Georgia, Germany, Greece, Hungary, Italy, Kazakhstan,

Latvia, Lithuania, Luxembourg, Macedonia, Malta, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Switzerland, Türkiye, Ukraine, Yugoslavia (Löbl & Smetana, 2006).

Chorotype:Europe – Mediterranean (Carpaneto et al., 2000).

**Genus: *Valgus* Scriba, 1790**

***Valgus hemipterus*(Linnaeus, 1758)**

Material examined: Kahramanmaraş: Yavşan plateau, 1395 m, 14.V.2016, 37°24′18.6516″ N 36°35′10.8996″ E; 1712 m, 23.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1436 m, 08.VI.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Bilecik, Burdur, Çanakkale, Edirne, Erzurum, Isparta, İstanbul, İzmir, Kahramanmaraş, Kırklareli, Manisa, Muğla, Nevşehir, Ordu, Sakarya, Tekirdağ (Lodos et al., 1978; Bahadıroğlu et al., 2007; Rozner & Rozner, 2009; Polat et al., 2017).

Distribution in the world: Albania, Algeria, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, China, Corsica, Crete, Croatia, Cyprus, Czech Republic, Denmark, England, Estonia, Finland, France, Georgia, Germany, Hungary, Iran, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Macedonia, Morocco, Netherlands, Poland, Portugal, Romania, Russia, Sardinia, Sicily, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Tunisia, Türkiye, Ukraine, Uzbekistan, Yugoslavia (Löbl & Löbl, 2016).

Chorotype:Europe – Turan – Mediterranean (Carpaneto et al., 2000).

**Family: Hybosoridae Erichson, 1847**

**Subfamily: Hybosorinae Erichson, 1847**

**Genus: *Hybosorus* MacLeay, 1819**

***Hybosorus illigeri* (Reiche, 1853)**

Material examined: Kahramanmaraş: Yavşan plateau, 1282 m, 26.IV.2016, 37°24′55.15″N 36°35′01.49″ E; 1712 m, 09.V.2016, 37°23′51.64″ N 36°34′55.13″ E; 1216 m, 21.V.2016, 37°24′57.21″ N 36°35′04.74″ E. Totally three specimens.

Distribution in Türkiye: Adana, Balıkesir, Çanakkale, Mersin, Siirt(Lodos et al., 1999; Rozner & Rozner, 2009; Özgen et al., 2014; Arslan, 2015; Ataş, 2019).

Distribution in the world: Afghanistan, Albania, Algeria, Azerbaijan, Bulgaria, China, Croatia, Cyprus, Egypt, France, Georgia, Greece, India, Iran, Iraq, Israel, Italy, Jordan, Libya, Macedonia, Morocco, Pakistan, Portugal, Romania, Russia, Saudi Arabia, Spain, Syria, Tajikistan, Tunisia, Turkmenistan, Türkiye, Ukraine, Uzbekistan, Yemen, Yugoslavia (Löbl & Smetana, 2006).

Chorotype:Turan – Mediterranean (Carpaneto et al., 2000).

**Genus: *Seleucosorus* Kuijten, 1983**

***Seleucosorus punctatissimus*(Reiche, 1861)**

Material examined: Kahramanmaraş: Yavşan plateau, 1712 m, 02.IV.2016, 37°23′51.64″ N 36°34′55.13″ E. Totally one specimens.

Distribution in Türkiye: Antalya, Muğla (Bellmann, 2007; Rozner & Rozner, 2009).

Distribution in the world:Türkiye(Bellmann, 2007; Carpaneto et al., 2000).

Chorotype: South West Asia (Carpaneto et al., 2000)

## CONCLUSIONS and DISCUSSION

On analysing adult Scarabaeoidea species collected from Yavşan plateau in Kahramanmaraş between March and October 2016, 28 species and 5 subspecies belonging to this superfamily were identified. 31 of these species and subspecies belong to the Scarabaeidae family, while 2 of them to the Hybosoridae family. *Elaphoceradilatata* (Erichson, 1840) is a new record for Türkiye.Also*Protaetia* (*Cetonischema*) *speciosissima* (Scopoli, 1786) was recorded for the first time from Mediterranean region of Türkiye.

Some species and subspecies such as *Pentodonbidens punctatus* (Villers, 1789); *Pentodonidiota* (Herbst, 1789); *Anomalaaffinis* (Ganglbauer, 1882); *Anomalaosmanlis* Blanchard, 1850; *Protaetia* (*Philhelena*) *ungaricaarmenica* (Menetries, 1832); *Protaetia* (*Potosia*) *besucheti* (Alexis &Delpont, 1996); *Protaetia* (*Netocia*) *afflicta* (Gory &Percheron, 1833); *Protaetia* (*Netocia*) *subpilosasubpilosa* (Desbrochers des Loges, 1869); *Protaetia* (*Netocia*) *vidua* (Gory &Percheron, 1833); *Hybosorusilligeri*(Reiche, 1853); *Seleucosoruspunctatissimus*(Reiche, 1861) are new record for Kahramanmaraş province. In addition, *Holochelus* (Miltotrogus) *pilicollis* (Gyllenhal, 1817) and *Melolonthaanita* (Reitter, 1902) were reported from Kahramanmaraş for the second time. Besides, the present study recorded exact locality information of *Protaetia (Netocia) aethiessina*Reitter, 1891, whose distribution in Türkiye was mentioned in different sources, yet locality information was not found in the literature review.

As in Figure 2, the number of Scarabaeoidea species obtained from Yavşan Plateau Nature Park by subfamilies are as following: Scarabaeinae; 8 species, Dynastinae; 4 species, Melolonthinae; 5 species, Rutelinae; 3 species, Cetoniinae; 11 species and Hybosorinae; 2 species. Accordingly, Cetoniinae and Scarabaeinaesubfamilies have the highest species diversity in the study area.

On analysing the graph in Figure 3, the sample numbers obtained from the study area by elevation steps are as following: 1200-1300 m; 17 samples, 1300-1400 m; 22 samples, 1400-1500 m; 11 samples, 1500-

1600 m; 8 samples, 1600-1700 m; 8 samples, 1700-1800 m; 19 samples and 1800-1900 m; 1 sample. Hence, the highest number of samples were obtained at 1300-1400 m and 1700-1800 m.

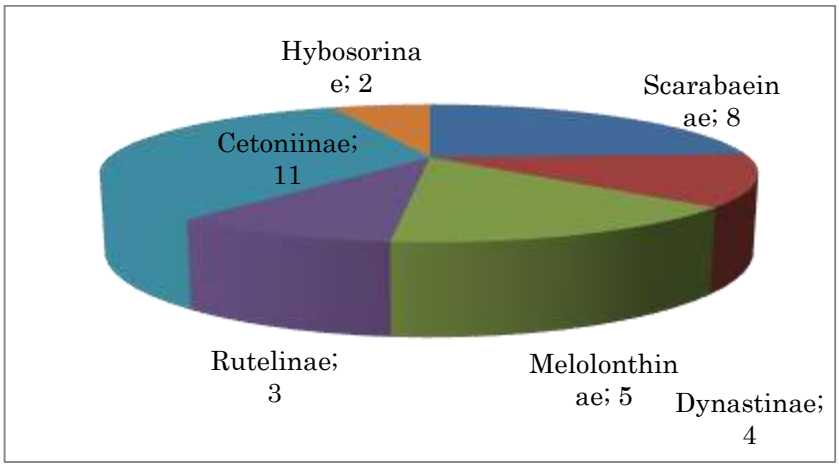


Figure 2.The number of species by subfamilies.
*Şekil 2. Altfamilyalara göre elde edilen tür sayıları.*

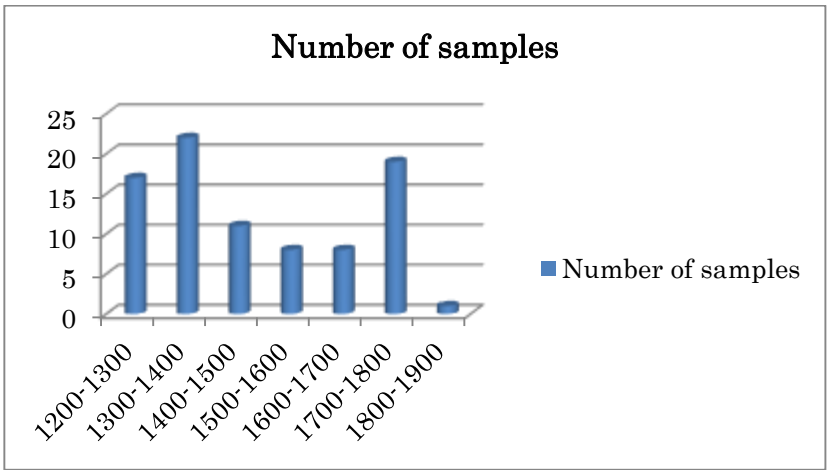


Figure 3. Number of samples by elevation steps.
*Şekil 3. Yükselti basamaklarına göre elde edilen örnek sayıları.*

The graph in Figure 4 depicts the numbers of the species obtained from the study area according to their chorotype distribution: Asia-Europe; 3 species, Central Asia-Mediterranean; 2 species, Turan-Europe-Mediterranean; 1 species, Turan-Europe; 1 species, Mediterranean; 1 species, Southern Europe; 3 species, Eastern Mediterranean; 4 species, Central Asia-Europe-Mediterranean; 2 species, Turan-Mediterranean; 6 species, Europe-Mediterranean; 4 species, Asia-Mediterranean; 1 species, Asian; 2 species, Southwest Asia; 1 species, Endemic; 1 species. Accordingly, Turan-Mediterranean chorotype has the most species.

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## Contribution Rate Statement Summary of Researchers

The authors declare that they have contributed equally to the article.

## Conflict of Interest Statement

The authours report no conflict of interest.

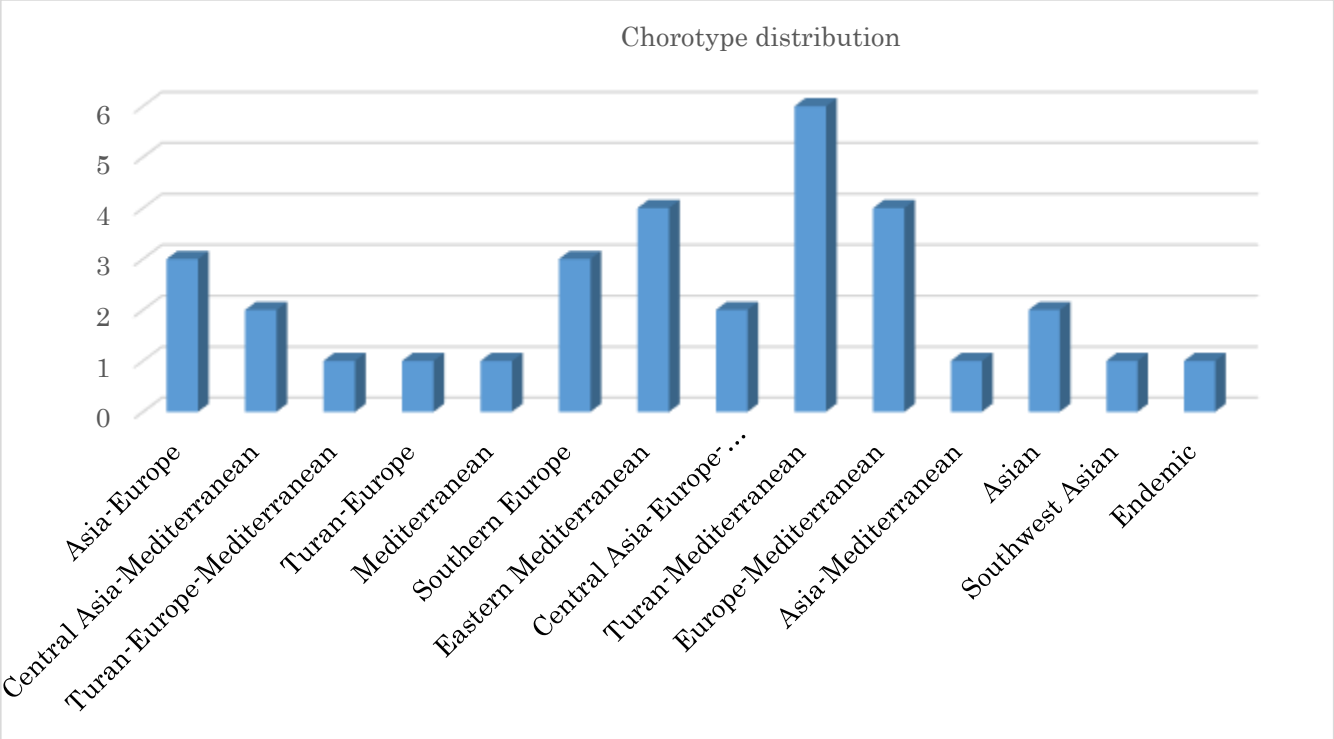


Figure 4.Chorotype distribution of the obtained species.
*Şekil 4. Elde edilen türlerin korotip dağılımları.*

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