

# Türkiye Latridiidae (Coleoptera) Faunası İçin Yeni Kayıtlar

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### ÖZET

Balıkesir İli meşe ve kayın alanlarında bulunan Latridiidae familyasına bağlı türleri saptamak amacıyla pencere ve çukur tuzak kullanılarak yürütülen bu çalışma Nisan-Aralık ayları arasında 2012-2014 yılında gerçekleştirilmiştir. Çalışmanın sonucunda, Latridiidae (Coleoptera) familyasına bağlı dokuz cinse ait toplam 22 tür tespit edilmiştir. Bu türlerden, Cartodere nodifer (Westwood, 1839), Corticaria longicollis (Zetterstedt, 1838), C. obscura C.N.F Brisout de Barneville, 1863, Corticarina minuta (Fabricius, 1792), Enicmus fungicola (C. G. Thomson, 1868) ve E. testaceus (Stephens, 1830) olmak üzere altı tür Türkiye için yeni kayıt niteliğindedir. İlk kez Türkiye'den lokalite kaydı verilen 13 tür ise Metophthalmus hungaricus Reitter, 1884, Enicmus transversus (Oliver, 1790), E. brevicornis (Mannerheim, 1844), Latridius minutus (Linnaeus, 1767), Corticarina curta (Wollaston, 1854), Cortinicara gibbosa (Herbst, 1793), Melanophthalma rhenana Rücker & Johnson, 2007, M. taurica (Mannerheim, 1844), M. fuscipennis (Mannerheim, 1844), Corticaria serrata (Paykull, 1798), C. elongata (Gyllenhal, 1827), C. pubescens (Gyllenhal, 1827) ve Migneauxia crassiuscula (Aubé, 1850)' dır. E. rugosus (Herbst, 1793) ve M. distinguenda (Comolli, 1837) türleri Marmara Bölgesi, Cartodere apfelbecki (Reitter, 1901) türü ise Balıkesir İli lokal faunası için yeni kayıttır. Ek olarak, kaydedilen türlerin zoocoğrafik dağılışları da değerlendirilmiştir.

# New Records for The Latridiidae (Coleoptera) Fauna of Turkey

### ABSTRACT

This study, which was carried out using window and pitfall traps, was conducted between April-December in 2012-2014 to identify the species connected to the Latridiidae (Coleoptera) family found in oak and beech areas in Balıkesir. As a result of the study, a total of 22 species belonging to nine genera of the family Latridiidae were determined. Six of these species, Cartodere nodifer (Westwood, 1839), Corticaria longicollis (Zetterstedt, 1838), C. obscura C.N.F Brisout de Barneville, 1863, Corticarina minuta (Fabricius, 1792), Enicmus fungicola (C. G. Thomson, 1868) and Enicmus testaceus (Stephens, 1830) are new records for Turkey. The 13 species whose locality was recorded for the first time from Turkey are Metophthalmus hungaricus Reitter, 1884, E. transversus (Oliver, 1790), Enicmus brevicornis (Mannerheim, 1844), Latridius minutus (Linnaeus, 1767), Corticarina curta (Wollaston, 1854), Cortinicara gibbosa (Herbst, 1793), Melanophthalma rhenana Rücker & Johnson, 2007, M. taurica (Mannerheim, 1844), M. fuscipennis (Mannerheim, 1844), Corticaria serrata (Paykull, 1798), Corticaria elongata (Gyllenhal, 1827), C. pubescens (Gyllenhal, 1827) and Migneauxia crassiuscula (Aubé, 1850). E. rugosus (Herbst, 1793) and M. distinguenda (Comolli, 1837) species are new records for the Marmara Region, while Cartodere apfelbecki (Reitter, 1901) species are new records for the local fauna of Balikesir Province. In addition, the zoogeographic distribution of the recorded species was also evaluated.

#### Entomoloji

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# INTRODUCTION

Despite their wide geographical distribution, long history among taxonomists, their place in the ecosystem's nutrient cycle, their decomposing role with fungi, and the fact that some 30 species are listed as storage pests in many places, there is very little information on the number of species, their local and regional zoogeographic distribution and biology of the Latridiidae (Coleoptera) family, which we can call 'mold beetles' in Turkish.

Latridiidae family, which occurs in all regions except the north and south Polar Regions, is represented by 31 genera and 839 species depending on two subfamilies in the world. While 235 species belonging to 17 genera belonging to the Latridiidae family have been recorded in the Western Palearctic Region, 182 species belonging to 17 genera are known in Europe. In Turkey, 57 species belonging to 12 genera were recorded (Rücker, 2018, 2020, 2021).

Most of the species of the family Latridiidae do not show strong diagnostic morphological features, with the exception of their yellow, yellow-brown, or dark brown to black exterior, small size, and the 3-3-3 tarsal formula. Despite the increasing number of studies, very few species have been revised, and the abundance of synonyms causes specimens to be misidentified or to remain under old names in many collections and to receive little attention from systematists (Hartley et al., 2007; Trikhleb & Simutnik, 2008; Trikhleb, 2009; Rücker et al., 2009; Lord et al., 2010; Quiroz-Gamboa & Serna, 2011; López, 2014; Otero & Rücker, 2017; Rücker, 2018, 2020, 2021). Despite many studies in the world in recent years, there are almost no studies on the Latridiidae fauna of Turkey.

The aim of this study was to determine the species belonging to the family Latridiidae in oak and beech areas of Balıkesir Province and to contribute to the knowledge of the distribution, biodiversity, and local and regional zoogeographic distribution of these species.

# MATERIAL and METHODS

The material of the study consisted of Latridiidae species caught between April-December in 2012-2014 using the window and pitfall trap method in old, hollow oak (Quercus frainetto Ten., Q. cerris L., Q. infectoria Olivier., Q. petraea Lieble., Q. pubescens Willd., Q. frainetto Ten.× Q. petraea Lieble., Q. cerris L.× Q. pubescens Willd., Quercus spp. L. (dead tree) and beech (Fagus orientalis Lipsky., F. sylvatica L., Fagus spp. L. (dead tree)) trees in 11 different localities in broad-leaved forests of Balikesir Province. Considering the width of the sampling areas, the number of traps set was determined between five and 10 for each trapping method. The map of the oak and beech areas where window and pitfall traps were set is shown in Figure 1, while coordinates, altitude and biotope information are given in Table 1.



Figure 1. The Map of the study fields (Google Earth pro 2022). Şekil 1. Çalışma alanlarının genel görünümü (Google Earth pro 2022).

Table 1 The Information belonging to study fields	5
Cigolas 1 Column Alenlerine Ait Bilgilor	

Çizel	lge 1. Çalışma Alanlarına Ait l	Bilgiler			
No	Localty	Coordinate	Altitude	Trap	Biotope
1	Erdek District, Göletaltı	40°28'16"N	290-345 m	W, P	Quercus petraea,
		27°53'52"E			<i>Q. frainetto</i> × Q.petraea
2	Erdek District, Kurtboğazı	40°27'45"N	601-612 m	W, P	Fagus orientalis,
		27°49'25"E			F. sylvatica
3	Gönen District, Şarkoluk	40°08'54"N	406-508m	W, P	Quercus frainetto,
	Store	27°29'35"E			Q. cerris
4	Gönen District, Porta Hill	40°07'37"N	730-776 m	W, P	Fagus orientalis,
		27°25'44"E			<i>Fagus</i> spp.
<b>5</b>	Susurluk District, Bağıran	39°51'41"N	794-812 m	W, P	Fagus orientalis,
	Stream	28°18'13"E			F. sylvatica
6	Susurluk District, Darıalan	39°52'06"N	570-798 m	W, P	Q. petraea,
		28°16'35"E			<i>Quercus</i> spp.
7	Balya District, Ilıca	39°54'19"N	311-325 m	W, P	Quercus frainetto,
	Quarter, Hisaralan	27°50'43"E			Q. cerris
8	Karesi District, Bakacak	39°40'52"N	432-495 m	W, P	Quercus infectoria,Q. frainetto,
	Quarter, Koruluk	27°43'31"E			Q. cerris, Quercus spp.,Q. cerris
					× Q.pubescens, Q. pubescens
9	Savaștepe District,	39°21'24"N	782-832 m	W, P	Quercus cerris,
	Mancılık	27°48'45"E			Q. frainetto
10	Bigadiç District, Ulus	39°19'26"N	1612-1632 m	W, P	Fagus orientalis,
	Mountain	27°23'41"E			<i>Fagus</i> spp.
11	Bigadiç District, Davutlar	39°29'15"N	666-719 m	W, P	Quercus cerris
	Village	28°19'21"E			

# **Field Studies**

In Turkey and other countries, studies using window and pitfall traps are among the techniques used to identify species that belong to the Latridiidae family. (Sama et al., 2011; Jansson et al., 2011; Platia et al., 2014; Rücker, 2018). The window trap (W), as shown in Figure 2A, consisted of a 30 x 60 cm wide transparent plastic plate with a tray underneath. These traps were placed in the trunks of oak and beech trees (<1 m) beside or in front of a hollow entrance, at a height of 1.5-2.5 m above the ground. The tray was half filled with trapping liquid (1:1 mixture of ethylene glycol and water with a little detergent to reduce surface tension). Pitfall trap (P) consisted of 250 ml plastic containers with an upper diameter of 6.5 cm. These traps were placed at the base of the cavities in the trunk of old hollow oak and beech trees so that the mouth of the trap was flush with the soil level, and the trap was half filled with trapping liquid and camouflaged with stones and plant parts (Figure 2B). The material collected from the traps was taken regularly at three-week intervals, labeled and brought to the laboratory and the trap liquid was completed. The material collected from the traps was regularly taken at three-week intervals, labeled, brought to the laboratory and the decreasing trap fluid was completed.



Figure 2. The trapping methods. A. Window trap; B.. Pitfall trap. *Şekil 2. Tuzak yöntemleri. A. Pencere Tuzak, B. Çukur Tuzak.* 

### Laboratory analysis

The samples brought to the laboratory were washed with water using a 0.1 mm wire strainer to remove the trap liquid. The cleaned samples were taken into a 30 x 50 cm rectangular white container with water and the Latridiidae species were separated from the other insects caught under a white light table lamp and taken into 2 ml Ependorf tubes containing 70% ethyl alcohol. The separated specimens were grouped into upper and lower taxa under Nikon model SMZ 1500 and Olympus model SZX10 stereo microscope and species level distinctions, aedeagus removal, and identification procedures were performed. The material referred to in this study is stored in Balikesir University, Faculty of Arts and Sciences, Department of Biology, Zoological Museum, Balikesir, Turkey.

#### RESULTS

Among the 8537 individuals of the Latriididae family recorded in the study, nine of the 22 species belong to Latridiinae and 13 belong to the Corticariinae subfamily.

#### Familya Latridiidae

Altfamilya Latridiinae Erichson, 1842

Genus Metophthalmus Motschulsky, 1850

Metophthalmus hungaricus Reitter, 1884

**Material examined:** Balıkesir, Savaştepe, Mancılık,  $39^{\circ}21'25"N$  27°48'43"E, 791 m, *Q. frainetto*, 06.VIII.2012, 4P, 1 $\bigcirc$ . Totally 1 ex.

**Distribution in the world: Europe:** Bulgaria, Greece, Hungary, Italy, Romania, Sicily, and Ukraine; **Asia:** Turkey (Rücker, 2018, 2021, Anonymous, 2023).

**Distribution in Turkey:** Regions of Turkey entering the Asian continent (Rücker, 2018, 2021). This is the first time a locality record is given with this study.

Genus Latridius Herbst, 1793

*Latridius minutus* (Linnaeus, 1767)

**Material examined:** This species was identified in traps set on each date. Totally 141  $\bigcirc$  23  $\bigcirc$   $\bigcirc$ , 164 exs.

Distribution in the world: Europe: Albania, Austria, Azores, Baliear Islands, Belarus, Belgium, Bosnia and Herzegovina, Britain, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Feroe Islands, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia: Central European Territories, Russia: Eastern European Territories, Russia: Northern European Territories, Russia: Southern European Territories, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and Yugoslavia; Asia: Mongolia, Russia: East Siberia, Russia: Far East, Turkey, and Russia: West Siberia; North Africa: Canary Islands, Madeira Archipelago, and North Africa; Afrotropics Region; Australia Region; Nearctic Region: North America; Neotropical Region: South America; Near East; Near Region; East Region: (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** Turkey (Asia and Europe) (Johnson, 2007; Anonymous, 2023). This is the first time a locality record is given with this study.

Genus Enicmus (C.G. Thomson, 1859)

*Enicmus transversus* (Oliver, 1790)

**Material examined:** This species was identified in traps set on each date. Totally 2529924, 276 exs.

Distribution in the world: Europe: Armenia, Austria, Azerbaijan, Balear Adası, Belarus, Belgium, Bosnia and Herzegovina, Britain, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia: Central European Terrtories, Russia: Eastern European Territories, Ruissia: Northern European Territories, Russia: Southern European Territories, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, and Yugoslavia; Asia: Afghanistan, Cyprus, Israel, Jordan, Nepal, Russia: West Siberia, Syria, and Turkey; North Africa: Algeria, Canary Islands, Egypt, Madeira Archipelago, Morocco, and Tunisia; Afrotropics Region; East Palearctic; Near East; East Region (Johnson, 2007; Rücker, 2018; Anonymous, 2023).

**Distribution in Turkey:** Regions of Turkey entering the Asian continent (Rücker, 2018; Anonymous, 2023). This is the first time a locality record is given with this study.

*Enicmus rugosus* (Herbst, 1793)

**Material examined:** This species was identified in traps set on each date. Totally 389  $\Im$  70  $\Im$ , 459 exs.

Distribution in the world: Europe: Austria, Belarus, Belgium, Bosnia and Herzegovina, Britain, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Russia: Central Portugal, Romania, European Territories, Russia: Eastern European Territories, Russia: Northern European Territories, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and Yugoslavia; Asia: China, Iran, Mongolia, Russia: Eastern Siberia, and Baikal Region, Russia: Far East, Russia: West Siberia, and Turkey; North Africa: Morocco, and Tunisia; East Palearctic: (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

Distribution in Turkey: İzmir (Karşıyaka-Yamanlar

Mountain) (Johnson, 2007; Tezcan et al., 2010; Rücker, 2018, 2021). This species is reported for the first time from Marmara Region.

### Enicmus brevicornis (Mannerheim, 1844)

**Material examined:** This species was identified in traps set on each date. Totally  $656 \bigcirc \bigcirc 149 \bigcirc \bigcirc$ , 805 exs.

Distribution in the world: Europe: Austria, Belgium, Bosnia and Herzegovina, Britain, Croatia, Czech Republic. Estonia. Finland. France. Georgia. Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia: Central European Territories, Russia: Southern European Territories, Slovakia, Spain, Sweden, Switzerland, Ukraine, and Yugoslavia; Asia: Iran, and Turkey; North Africa: Algeria, Morocco, and Tunisia; East Palearctic (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** Regions of Turkey entering the Asian continent (Johnson, 2007; Rücker, 2018, 2021). This is the first time a locality record is given with this study.

Enicmus fungicola (C. G. Thomson, 1868)

**Material examined:** This species was identified in traps set on each date. Totally,  $79 \bigcirc \bigcirc 5$ , 84 exs.

**Distribution in the world: Europe:** Austria, Belarus, Belgium, Britain, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia: Central European Territories, Russia: Northwest European Territories, Slovakia, Slovenya, Sweden, Switzerland, Ukraine, and Yugoslavia (Johnson, 2007; Rücker, 2018; Anonymous, 2023).

**Distribution in Turkey:** This species is the first record for the fauna of Turkey.

*Enicmus testaceus* (Stephens, 1830)

**Material examined:** This species was identified in traps set on each date. Totally  $98^{\circ}_{\uparrow} \stackrel{\circ}{\to} 1^{\circ}_{\circ}$ , 99 exs.

**Distribution in the world: Europe:** Austria, Belarus, Belgium, Britain, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia: Northern European Territories, Serbia and Montenegro, Slovakia, Spain, Sweden, Switzerland, and Yugoslavia; **Asia:** Iran; **North Africa:** Algeria, and Canary Islands (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** This species is the first record for the fauna of Turkey.

Genus Cartodere (C.G.Thomson, 1859)

Cartodere (Cartodere) apfelbecki (Reitter, 1901)

**Material examined:** Balıkesir, Erdek, Göletaltı, 40°28'15"N 27°53'52"E, 345 m, *Q. petraea,* 16.VII.2012, 2W, 1♀; Susurluk, Darıalan, 39°52'03"N

28°16'39"E, 572 m, *Q. petraea*, 27.VII.2012, 10W, 1♀ 1Å; Karesi, Bakacak, Koru, 39°40'53"N 27°43'33"E, 485 m, Q. frainetto, 02.VIII.2012, 7W, 19; Gönen, Porta Hill,, 40°07'36"N 27°25'47"E, 759 m, Fagus spp., 10.VIII.2012, 6P, 200; Erdek, Göletaltı, 40°28'15"N 27°53'52"E, 345 m, *Q. petraea*, 20.IX.2012, 2P, 19; Susurluk, Darialan, 39°52'04"N 28°16'37"E, 582 m, Q. petraea, 26.IX.2012, 2P, 1<sup>°</sup>; Susurluk, Bağıran Stream, 39°51'40"N 28°18'14"E, 806 m, F. orientalis, 26.IX.2012, 8P, 1<sup>°</sup>; Susurluk, Darialan, 39°52'04"N 28°16'37"E, 582 m, *Q. petraea*, 23.V.2013, 2P, 1♀; Erdek, Kurtboğazı, 40°27'46"N 27°49'25"E, 604 m, F. orientalis, 24.V.2013, 3W, 1<sup>°</sup>; Erdek, Kurtboğazı, 40°27'46"N 27°49'26"E, 601 m, F. sylvatica, 24.V.2013, 4W, 1<sup>(2)</sup>; Gönen, Porta Hill, 40°07'36"N 27°25'48"E, 735 m, F. orientalis, 24.V.2013, 1W, 1Q; Gönen, Porta Hill, 40°07'38"N 27°25'44"E, 730 m, F. orientalis, 24.V.2013, 4W, 1<sup>\overline\$</sup>; Savaştepe, Mancılık 39°21'26"N 27°48'47"E, 832 m, *Q. cerris*, 11.VI.2013, 6P, 1<sup>\operatorn</sup>; Susurluk, Bağıran Stream, 39°51'40"N 28°18'14"E, 806 m, F. orientalis, 19.VI.2013, 8P, 1<sup>°</sup>; Erdek, Göletaltı, 40°28'15"N 27°53'53"E, 334 m, *Q. petraea*, 26.VII.2013,4W, 1♀; Erdek, Kurtboğazı, 40°27'46"N 27°49'26"E, 601 m, F. sylvatica, 26.VII.2013, 4W, 19; Susurluk, Darialan, 39°52'04"N 28°16'36"E, 578m, Q. petraea, 16.VIII.2013, 4W, 1<sup>°</sup>; Susurluk, Bağıran Stream, 39°51'41"N 28°18'13"E, 807 m, *F*. svlvatica. 16.VIII.2013, 5W, 1<sup>Q</sup>; Erdek, Kurtboğazı, 40°27'45"N 27°49'26"E, 606 m, F. orientalis, 27.IX.2013, 8P, 19; Erdek, Kurtboğazı, 40°27'46"N 27°49'23"E, 608 m, F. sylvatica, 01.XI.2013, 10P, 1<sup>°</sup>; Karesi, Bakacak, Koru, 39°40'55"N 27°43'39"E, 455 m, Quercus spp., 7.XI.2013, 11W, 1<sup>Q</sup>; Erdek, Kurtboğazı, 40°27'46"N 27°49'23"E, 608 m, *F. sylvatica*, 28.XI.2013, 10P, 19; Erdek, Göletaltı, 40°28'11"N 27°53'51"E, 290 m, Q. petraea, 26.VI.2014, 1W,19; Erdek, Kurtboğazı, 40°27'46"N 27°49'23"E, 612 m, F. orientalis. 26.VI.2014, 1P, 13; Gönen, Porta Hill,, 40°07'37"N 27°25'44"E, 730 m, F. orientalis, 26.VI.2014, 5P, 1Q; Totally 24, 23, 33, 27 exs.

**Distribution in the world: Europe:** Bulgaria, Hungary, Serbia, and Turkey; **Asia:** Turkey (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** Anatolia, and İstanbul (Johnson, 2007, Rücker, 2018, 2021; Anonymous, 2023). This species is reported for the first time from Balıkesir Province.

**Note:** The main distribution area is Turkey, that is, Anatolia, and Istanbul. Probably migrated to Bulgaria, Serbia, and Hungary from Istanbul (Rücker, 2018).

Cartodere (Aridius) nodifer (Westwood, 1839)

**Material examined:** Bahkesir, Karesi, Bakacak, Koru, 39°40'51"N 27°43'29"E, 478 m, *Q. infectoria*, 18.V.2012, 3W, 1♀; Balya, Ilıca Village, Hisaralan, 39°54'24"N 27°50'37"E, 317 m, *Q. frainetto*, 31.VII.2012, 1P, 1♀; Balya, Ilıca Village, Hisaralan, 39°54'25"N 27°50'39"E,

325 m, *Q. frainetto*, 31.VII.2012, 3P, 1<sup>Q</sup>; Karesi, Bakacak, Koru, 39°40'51"N 27°43'29"E, 478 m, Q. infectoria, 02.VIII.2012, 3W, 19; Savaştepe, Mancılık 39°21'24"N 27°48'45"E, 825 m, Q. cerris, 06.VIII.2012, 5W, 1<sup>Q</sup>; Gönen, Porta Hill, 40°07'37"N 27°25'44"E, 730 m, F. orientalis, 10.VIII.2012, 5P, 19; Susurluk, Bağıran Stream, 39°51'40"N 28°18'13"E, 795 m, F. orientalis, 31.X.2012, 9P, 1Q; Bigadic, Davutlar Village, 39°29'12"N 28°19'17"E, 685 m, Q. cerris, 16.V.2013, 10W, 1♀; Savaştepe, Mancılık 39°21'25"N 27°48'43"E, 802 m, *Q. frainetto*, 21.V.2013, 9W, 1♀1♂; Susurluk, Darialan, 39°52'04"N 28°16'38"E, 584 m, Q. petraea, 23.V.2013, 3W, 1<sup>°</sup>; Erdek, Göletaltı, 40°28'15"N 27°53'53"E, 334 m, Q. petraea, 24.V.2013, 4W, 1♀; Gönen, Şarkoluk Store, 40°08'53"N 27°29'44"E, 439 m, Q. frainetto, 24.V.2013, 2W, 19; Gönen, Şarkoluk Store, 40°08'56"N 27°29'38"E, 425 m, Q. frainetto, 24.V.2013, 3W,  $1^{\circ}$ ; Savaştepe, Mancılık 39°21'26"N 27°48'41"E, 782 m, Q. cerris, 11.VI.2013, 2W, 12; Gönen, Porta Hill, 40°07'37"N 27°25'44"E, 730 m, F. orientalis, 21.VI.2013, 5P, 12; Karesi, Bakacak, Koru, 39°40'55"N 27°43'39"E, 455 m, Quercus spp., 28.VI.2013, 11W, 12; Bigadiç, Davutlar Village, 39°29'15"N 28°19'21"E, 706 m, Q. cerris, 11.VII.2013, 5P, 1<sup>\operatorname</sup>; Erdek, Göletaltı, 40°28'15"N 27°53'54"E, 322 m, Q. frainetto  $\times$  Q. petraea, 26.VII.2013, 6W, 1 $\bigcirc$ ; Erdek, Kurtboğazı, 40°27'45"N 27°49'26"E, 606 m, F. orientalis, 26.VII.2013, 8P, 13; Bigadiç, Davutlar Village, 39°29'12"N 28°19'17"E, 685 m, Q. cerris, 13.VIII.2013, 10W, 2QQ; Susurluk, Darialan, 28°16'36"E, 39°52'06"N 565m, Q. petraea, 16.VIII.2013, 6P, 1♀; Gönen, Şarkoluk Store, 40°08'51"N 27°29'43"E, 508 m, Q. cerris, 21.VIII.2013, 8P, 1<sup>Q</sup>; Karesi, Bakacak, Koru, 39°40'55"N 27°43'35"E, 495 m, *Q. cerris,* 06.IX.2013, 9W, 1<sup>Q</sup>; Bigadiç, Davutlar Village, 39°29'17"N 28°19'20"E, 699 m, Q. cerris, 10.IX.2013, 8W, 12; Savastepe, Mancılık 39°21'26"N 27°48'47"E, 832 m, *Q. cerris*, 13.IX.2013, 6P, 1♀; Erdek, Kurtboğazı, 40°27'46"N 27°49'22"E, 611 m, F. sylvatica, 27.IX.2013, 7P, 1<sup>°</sup>; Erdek, Kurtboğazı, 40°27'46"N 27°49'23"E, 608 m, F. sylvatica, 27.IX.2013, 10W, 1<sup>\operatornoving</sup>; Balya, Ilica Village, Hisaralan, 39°54'22"N 27°50'39"E, 321 m, *Q. frainetto*, 03.X.2013, 2W, 1♀; Susurluk, Bağıran Stream, 39°51'40"N 28°18'13"E, 795 m, *F. orientalis*, 30.X.2013, 9P, 1<sup>\operatorn</sup>; Gönen, Sarkoluk Store, 40°08'53"N 27°29'33"E, 406 m, Q. cerris, 01.XI.2013, 7P, 19; Bigadiç, Ulus Mountain, 39°19'25"N 27°23'41"E, 1.617 m, F. orientalis, 05.XI.2013,2P, 1<sup>°</sup>; Erdek, Kurtboğazı, 40°27'45"N 27°49'26"E, 606 m, *F. orientalis*, 28.XI.2013, 8W, 2♀♀; Gönen, Şarkoluk Store, 40°08'53"N 27°29'33"E, 406 m, Q. cerris, 28.XI.2013, 7P, 1 $\bigcirc$ ; Erdek, Kurtboğazı, 40°27'46"N 27°49'23"E, 608 m, F. sylvatica, 16.V.2014, 10P, 1♀; Susurluk, Bağıran Stream, 39°51'36"N 28°18'15"E, 795 m, F. orientalis, 30.V.2014, 2P, 19; Bigadiç, Davutlar Village, 39°29'15"N 28°19'24"E, 666 m, Q. cerris, 19.VI.2014, 2P,  $1^{\circ}$ ; Bigadic, Ulus Mountain, 39°19'21"N 27°23'41"E, 1.617 m, F. orientalis, 21.VIII.2014, 7P, 1 $\bigcirc$ ; Totally  $38 \bigcirc 2 \oslash \oslash$ , 40 exs.

Distribution in the world: Europe: Albania, Austria, Azores, Baliear Islands, Belarus, Belgium, Bosnia and Herzegovina, Britain, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia: Central European Territories, Russia: Eastern European Territories, Russia: Northern European Territories, Russia: Northwest European Territories, Russia: Southern European Territories, Slovakia, Slovenia, Spain, Sweden, Switzerland, and Ukraine; Asia: Cyprus, and Japan; North Africa: Canary Islands, Madeira Archipelago, and Morocco; Afrotropics Region; Australia Region; Neotropical Region: South America; Nearctic Region: North America, and South Greenland; East Palearctic Bölge; Near East; Near Region; East Region (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023). COS

**Distribution in Turkey:** This species is the first record for the fauna of Turkey.

Altfamilya Corticariinae Curtis, 1829

Genus Corticarina Reitter, 1880

*Corticarina curta* (Wollaston, 1854)

Material examined: Balıkesir, Susurluk, Darıalan, 39°52'04"N 28°16'38"E, 584 m, Q. petraea, 22.VI.2012, 3W, 1<sup>°</sup>; Susurluk, Darialan, 39°51'48"N 28°17'55"E, 750 m, Q. petraea, 27.VII.2012, 15P, 19; Karesi, Bakacak, Koru, 39°40'55"N 27°43'35"E, 495 m, Q. cerris, 02.VIII.2012, 9W, 1<sup>°</sup>; Karesi, Bakacak, Koru, 39°40'57"N 27°43'34"E, 432 m, Q. pubescens, 02.VIII.2012, 16P, 1<sup>°</sup>; Gönen, Şarkoluk Store, 40°08'55"N 27°29'35"E, 443m, Q. frainetto, 27.IX.2012, 6W,  $1^{\bigcirc}$ ; Bigadiç, Davutlar Village, 39°29'18"N 28°19'22"E, 719 m, Q. cerris, 19.X.2012, 6W,  $1^{\bigcirc}$ ; Karesi, Bakacak, Koru, 39°40'51"N 27°43'30"E, 493 m, *Q. cerris*, 04.XII.2012, 4P, 19; Susurluk, Darialan, 39°52'04"N 28°16'37"E, 582 m, Q. petraea, 23.V.2013, 2W, 1<sup>\operatornow</sup>; Susurluk, Bağıran Stream, 39°51'40"N 28°18'12"E, 803 m, F. orientalis, 23.V.2013, 7W, 1<sup>°</sup>; Erdek, Kurtboğazı, 40°27'46"N 27°49'23"E, 608 m, *F. sylvatica*, 24.V.2013, 10W, 2♀♀; Gönen, Porta Hill, 40°07'36"N 27°25'47"E, 776 m, F. *orientalis,* 24.V.2013, 9W,  $2 \stackrel{\bigcirc}{\downarrow} \stackrel{\bigcirc}{\downarrow} 1 \stackrel{\bigcirc}{\ominus}$ ; Susurluk, Bağıran Stream, 39°51'41"N 28°18'13"E, 807 m, F. sylvatica, 19.VI.2013, 5W, 1<sup>°</sup>; Susurluk, Darıalan, 39°52'04"N 28°16'37"E, 582 m, Q. petraea, 19.VI.2013, 2W, 19; Erdek, Kurtboğazı, 40°27'46"N 27°49'25"E, 604 m, F. orientalis, 21.VI.2013, 3W, 1Q; Gönen, Sarkoluk Store, 40°08'55"N 27°29'37"E, 425m,  $Q_{\cdot}$ frainetto. 21.VI.2013, 1W,  $2\downarrow\downarrow\downarrow$ ; Susurluk, Bağıran Stream, 28°18'11"E, 39°51'39"N 794 m, *F*. orientalis, 23.VII.2013, 1W, 200; Gönen, Porta Hill, 40°07'36"N 27°25'48"E, 735 m, *F. orientalis*, 26.VII.2013, 1W, 1 $\bigcirc$ ; Erdek, Göletaltı, 40°28'15"N 27°53'53"E, 334 m, *Q. petraea*, 26.VII.2013, 4P, 1 $\bigcirc$  1 $\checkmark$ ; Gönen, Şarkoluk Store, 40°08'56"N 27°29'38"E, 425 m, *Q. frainetto*, 21.VIII.2013, 3W, 2 $\bigcirc$  $\bigcirc$ ; Bigadiç, Davutlar Village, 39°29'17"N 28°19'20"E, 699 m, *Q. cerris*, 08.V.2014, 8W, 1 $\bigcirc$ ; Gönen, Şarkoluk Store, 40°08'53"N 27°29'44"E, 439 m, *Q. frainetto*, 16.V.2014, 2W, 1 $\bigcirc$ ; Gönen, Şarkoluk Store, 40°08'56"N 27°29'38"E, 425 m, *Q. frainetto*, 16.V.2014, 3W, 1 $\bigcirc$ ; Totally 27 $\bigcirc$  $\bigcirc$  2 $\checkmark$  $\bigcirc$ , 29 exs.

Distribution in the world: Europe: Austria, Azores, Belgium, Bosnia and Herzegovina, Britain, Bulgaria, Croatia, France, Georgia, Greece, Hungary, Italy, Macedonia, Malta, Poland, Portugal, Romania, Russia: Territories, Southern European Serbia and Montenegro, Slovenia, Spain, Switzerland, Turkey, Ukraine, Vóreion Aiyáion (North Aegean Island), and Yugoslavia; Asia: Cyprus, Turkey, and Uzbekistan; North Africa: Algeria, Canary Islands, Egypt, Madeira Archipelago, Morocco, and Tunisia; Nearctic Region: Alaska, America, and Canada; Neotropical Region (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023). **COS** 

**Distribution in Turkey:** Turkey (Asia, and Europe) (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023). This is the first time a locality record is given with this study.

### Corticarina minuta (Fabricius, 1792)

Material examined: Balıkesir, Karesi, Bakacak, Koru, 39°40'58"N 27°43'36"E, 453m, Q.infectoria, 17.07.2012, 15W, 1<sup>°</sup>; Erdek, Kurtboğazı, 40°27'46"N 27°49'23"E, 608 m, *F. sylvatica*, 15.VIII.2012, 10P, 1♀; Bigadiç, Ulus Mountain, 39°19'20"N 27°23'43"E, 1.615 m, F. orientalis, 19.X.2012, 6W, 12; Gönen, Porta Hill, 40°07'37"N 27°25'44"E, 730 m, F. orientalis, 23.X.2012, 5W,1<sup>\operatorn</sup>; Gönen, Porta Hill,, 40°07'36"N 27°25'47"E, 768 m, F. orientalis, 23.X.2012, 7W,1; Savastepe, Mancılık 39°21'24"N 27°48'45"E, 825 m, Q. cerris, 21.V.2013, 5W, 19; Bigadic, Ulus Mountain, 39°19'24"N 27°23'42"E, 1.619 m, F. orientalis, 30.V.2013, 1W, 1<sup>Q</sup>; Karesi, Bakacak, Koru, 39°40'49"N 27°43'28"E, 485 m, *Q. frainetto*, 03.VI.2013, 2W, 1♀; Karesi, Bakacak, Koru, 39°40'55"N 27°43'35"E, 495 m, Q. cerris, 03.VI.2013, 9W, 12; Karesi, Bakacak, Koru, 39°40'53"N 27°43'40"E, 461 m, Q. cerris, 03.VI.2013, 14P, 19; Balva, Ilica Village, Hisaralan, 39°54'22"N 27°50'39"E, 321 m, Q. frainetto, 07.VI.2013, 2W, 1♀; Susurluk, Bağıran Stream, 39°51'41"N 28°18'13"E, 807 m, F. sylvatica, 19.VI.2013, 5W, 12; Erdek, Göletaltı, 40°28'11"N 27°53'51"E, 290 m, Q. petraea, 21.VI.2013, 1W, 1♀; Gönen, Sarkoluk Store, 40°08'54"N 27°29'35"E, 451 m, Q. cerris, 21.VI.2013, 5P. 1♀; Gönen, Şarkoluk Store, 40°08'56"N 27°29'38"E, 425 m, *Q. frainetto*, 21.VIII.2013, 3W, 1♀; Gönen, Sarkoluk Store, 40°08'55"N 27°29'35"E, 443 m, Q. frainetto, 21.VIII.2013, 6W,  $1^{\circ}$ ; Bigadic, Davutlar Village, 39°29'17"N 28°19'20"E, 699 m, *Q. cerris*, 10.IX.2013, 8W, 1 $\checkmark$ ; Erdek, Kurtboğazı, 40°27'46"N 27°49'23"E, 608 m, *F. sylvatica*, 27.IX.2013, 10W, 1 $\bigcirc$ ; Bigadiç, Ulus Mountain, 39°19'24"N 27°23'47"E, 1.632 m, *F. orientalis*, 08.X.2013, 9W, 1 $\bigcirc$ ; Savaştepe, Mancılık 39°21'26"N 27°48'41"E, 782 m, *Q. cerris*, 07.XI.2013, 2W, 1 $\bigcirc$ ; Bigadiç, Ulus Mountain, 39°19'23"N 27°23'46"E, 1.608 m, *F. orientalis*, 08.V.2014, 8W, 1 $\bigcirc$ ; Savaştepe, Mancılık 39°21'26"N 27°48'41"E, 782 m, *Q. cerris*, 19.VI.2014, 2W, 1 $\bigcirc$ ; Savaştepe, Mancılık 39°21'25"N 27°48'47"E, 830 m, *Q. cerris*, 19.VI.2014, 3W, 1 $\bigcirc$ ; Totally 22 $\bigcirc$   $\bigcirc$  1 $\checkmark$ , 23 exs.

Distribution in the world: Europe: Austria, Belarus, Belgium, Britain, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Ireland, Hungary, Italy. Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Russia: Central European Territories, Russia: Eastern European Territories, Russia: Northern European Territories, Russia: Southern European Territories, Slovakia, Slovenya, Spain, Sweden, Switzerland, and Ukraine; Asia: Canary Islands, and Russia; North Africa: Afghanistan, China, Kazakhstan, Mongolia, Russia: East Siberia, Russia: Far East, and Russia: West Siberia; Nearctic Region: Alaska, America and Canada; Neotropical Region; Near Region (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023). COS

**Distribution in Turkey:** This species is the first record for the fauna of Turkey.

Genus *Corticaria* Marsham, 1802

Corticaria pubescens (Gyllenhal, 1827)

**Material examined:** This species was identified in traps set on each date. Totally 76 PP 233, 78 exs.

Distribution in the world: Europe: Austria, Belarus, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Italy, Latvia, Lithuania, Norway, Poland, Portugal, Romania, Russia: Central European Territories, Russia: Eastern European Territories, Russia: Northern European Territories, Russia: Southern European Territories, Slovakia,, Spain, Sweden, Switzerland, and Ukraine; Asia: Russia: East Siberia, Russia: Far East, Russia: West Siberia, and Turkey; North Africa: Canary Islands, Madeira Archipelago, Morocco, and Tunisia; Afrotropics Region; Australia Region; Nearctic Region: USA, Alaska, and North America: Canada; Near East; Near Region (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** Regions of Turkey entering the Asian continent (Johnson, 2007). This is the first time a locality record is given with this study.

*Corticaria serrata* (Paykull, 1798)

**Material examined:** This species was identified in traps set on each date. Totally 69, 63, 75 exs.

Distribution in the world: Europe: Austria, Azerbaijan,

Azores, Belarus, Belgium, Bosnia and Herzegovina, Britain, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Netherlands, Norway, Romania, Poland, Russia: Central European Territories, Russia: Northern European Territories, Russia: Southern European Territories, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, and Yugoslavia; Asia: Afghanistan, Cyprus, Israel, Japan, Kazakhstan, Lebanon, and Turkey; North Africa: Algeria, Canary Islands, Madeira Archipelago, Morocco, and Tunisia; East Palearctic; Nearctic Region: Canada: Alberta, British Columbia, Labrador, Monitoba, Newfoundland, Northwest Territories, Nova Scotia, Ontario, Saskatchewan, USA: Alaska, Arizona, Montana, Wyoming; Neotropical Region: Chile; Near Region: (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023). COS

**Distribution in Turkey:** Regions of Turkey entering the Asian continent (Johnson, 2007; Rücker, 2018, 2021). This is the first time a locality record is given with this study.

# *Corticaria elongata* (Gyllenhal, 1827)

**Material examined:** This species was identified in traps set on each date. Totally  $82 \bigcirc \bigcirc 4 \oslash \odot$ , 86 exs.

Distribution in the world: Europe: Albania, Armenia, Austria, Azerbaijan, Azores, Belarus, Belgium, Bosnia and Herzegovina, Britain, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia: Central European Territories, Russia: Northern European Territories, Russia: Southern European Territories, Serbia and Slovenia, Spain, Sweden, Montenegro, Slovakia, Switzerland, Turkey, Ukraine, and Yugoslavia; Asia: Afghanistan, Cyprus, India, Japan, Nepal, Pakistan, Russia: Far East, Russia: West Siberia, Saudi Arabia, and Turkey; North Africa: Azores Archipelago, Morocco, and Tunisia; Etiyopya Bölgesi: Democratic Republic of the Congo; Afrotropics Region; Australia Region; Neotropical Region: Argentina, Peru: Panguana; Nearctic Region: Canada, and USA; Near East; Near Region; East Region: (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023). COS

**Distribution in Turkey:** Turkey (Asia, and Europe) (Johnson, 2007; Rücker, 2018, 2021). This is the first time a locality record is given with this study.

*Corticaria obscura* C.N.F Brisout de Barneville, 1863

**Material examined:** Balıkesir, Erdek, Kurtboğazı, 40°27'46"N 27°49'23"E, 608 m, *F. sylvatica*, 15.VIII.2012, 10W, 1 ♂; Erdek, Kurtboğazı, 40°27'46"N 27°49'25"E, 604 m, *F. orientalis*, 27.IX.2013, 3W, 1♀; Gönen, Porta Hill, 40°07'36"N 27°25'47"E, 776 m, *F.* 

*orientalis*, 27.IX.2013, 3W, 1 $\bigcirc$ ; Totally  $2 \bigcirc \bigcirc 1 \oslash$ , 3 exs.

**Distribution in the world: Europe:** Austria, Azerbaijan, Belgium, Croatia, Czech Republic, France, Germany, Greece, Hungary, Italy, Netherlands, Poland, Romania, Slovakia, Slovenia, Spain, Switzerland, Ukraine, and Yugoslavia; **North Africa:** Algeria, and Tunisia; **East Palearctic:** (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** This species is the first record for the fauna of Turkey.

Corticaria longicollis (Zetterstedt, 1838)

**Material examined:** This species was identified in traps set on each date. Totally 53  $\bigcirc$  4  $\bigcirc$   $\bigcirc$ , 57 exs.

Distribution in the world: Europe: Austria, Belarus, Belgium, Bosnia and Herzegovina, Britain, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Georgia, Italy, Latvia, Liechtenstein, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Russia: Central European Territories, Russia: Northern European Territories, Russia: Southern European Territories, Slovakia, Spain, Sweden, Switzerland, and Ukraine (Johnson, 2007; Rücker, 2018; Anonymous, 2023).

**Distribution in Turkey:** This species is the first record for the fauna of Turkey.

Genus Cortinicara C. Johnson, 1978

Cortinicara gibbosa (Herbst, 1793)

Material examined: Balıkesir, Erdek, Göletaltı, 40°28'15"N 27°53'54"E, 322 m, Q. frainetto  $\times$  Q. petraea, 16.VII.2012, 6P, 1<sup>°</sup>; Erdek, Kurtboğazı, 27°49'26"E, 601 m, *F.* 40°27'46"N sylvatica, 4P, 1♀; Karesi, 16.VII.2012, Bakacak, Koru. 39°40'54"N 27°43'34"E, 483 m, Quercus spp., 17.VII.2012, 8P, 1<sup>Q</sup>; Susurluk, Darialan, 39°52'05"N 28°16'36"E, 563 m, *Q. petraea*, 27.VII.2012, 8P, 1♀; Balya, Ilica Village, Hisaralan, 39°54'25"N 27°50'39"E, 325 m, Q. frainetto, 31.VII.2012, 3W, 1<sup>Q</sup>; Gönen, Şarkoluk Store, 40°08'51"N 27°29'43"E, 508 m, Q. *cerris*, 10.VIII.2012, 8P, 1; Erdek, Göletaltı, 40°28'11"N 27°53'51"E, 290m, Q. petraea, 15.VIII.2012, Erdek, 1W, 1♀ 288; Göletaltı, 40°28'15"N 27°53'52"E, 345 m, Q. petraea, 14.X.2012, 2P, 13; Bigadic, Davutlar Village, 39°29'19"N 28°19'17"E, 702 m, *Q. cerris*, 19.X.2012, 7W, 2♀♀; Karesi, Bakacak, Koru, 39°40'51"N 27°43'30"E, 493 m, *Q. cerris,* 04.XII.2012, 4W,  $1^{\circ}$ ; Bigadiç, Davutlar Village, 39°29'15"N 28°19'23"E, 678 m, Q. cerris, 16.V.2013, 3P, 1<sup>°</sup>; Susurluk, Darialan, 39°52'03"N 28°16'39"E, 572 m, Q. petraea, 23.V.2013, 10W, 2QQ; Susurluk, Bağıran Stream, 39°51'36"N 28°18'15"E, 795 m, F. orientalis, 23.V.2013, 2W, 19; Susurluk, Bağıran Stream, 39°51'40"N 28°18'12"E, 803 m, F. orientalis, 23.V.2013, 7W, 1º 13; Gönen, Sarkoluk Store, 40°08'53"N 27°29'44"E, 439 m, Q. frainetto, 24.V.2013, 2W, 499; Gönen, Porta Hill, 40°07'36"N 27°25'47"E, 776 m, *F. orientalis*, 24.V.2013, 9W, 1♀; Balya, Ilica Village, Hisaralan, 39°54'25"N 27°50'39"E, 325 m, Q. frainetto, 07.VI.2013, 3W, 1<sup>\operatorney;</sup> Bigadiç, Davutlar Village, 39°29'15"N 28°19'24"E, 666 m, Q. cerris, 11.VI.2013, 2P, 1<sup>°</sup>; Karesi, Bakacak, Koru, 27°43'32"E, 49039°40'52"N m, Q. frainetto, 28.VI.2013, 6W, 1<sup>°</sup>; Savaştepe, Mancılık 39°21'26"N 27°48'41"E, 782 m, Q. cerris, 11.VII.2013, 2W, 19; Susurluk, Bağıran Stream, 39°51'40"N 28°18'14"E, 806 m, F. orientalis, 23.VII.2013, 8P, 13; Susurluk, Darıalan, 39°52'03"N 28°16'39"E, 572 m, Q. petraea, 23.VII.2013, 10W, 200; Erdek, Göletaltı, 40°28'15"N  $27^{\circ}53'54''E$ , 322 m, Q. frainetto  $\times$  Q. petraea, 26.VII.2013, 6W, 1♀; Karesi, Bakacak, Koru, 39°40'52"N 27°43'32"E, 490 m,  $Q_{\cdot}$ frainetto, 05.VIII.2013, 6W, 4  $\bigcirc$  2  $\bigcirc$   $\bigcirc$ ; Karesi, Bakacak, Koru, 39°40'53"N 27°43'33"E, 485m, Q. frainetto. 05.VIII.2013, 7W,  $4 \bigcirc \bigcirc$  1 $\bigcirc$ ; Bigadiç, Ulus Mountain, 39°19'23"N 27°23'39"E, 1.616 m, F. orientalis. 13.VIII.2013, 4W,  $1^{\circ}$ ; Bigadiç, Ulus Mountain, 39°19'23"N 27°23'46"E, 1.608 m, F. orientalis, 13.VIII.2013, 8P, 1<sup>o</sup>; Bigadiç, Davutlar Village, 39°29'15"N 28°19'24"E, 666 m, Q. cerris, 13.VIII.2013, 2P, 1<sup>\overline\$</sup>; Erdek, Kurtboğazı, 40°27'45"N 27°49'25"E, 607 m, F. sylvatica, 27.IX.2013, 5W, 19; Balya, Ilica Village, Hisaralan, 39°54'25"N 27°50'39"E, 325 m, Q. frainetto, 03.X.2013, 3P, 12; Gönen, Sarkoluk Store, 40°08'53"N 27°29'44"E, 439 m, Q. frainetto, 01.XI.2013, 2W, 1<sup>°</sup>; Erdek, Göletaltı, 40°28'16"N  $27^{\circ}53'52$ "E, 315 m, Q. frainetto  $\times$  Q. petraea, 26.VI.2014, 5W, 13; Erdek, Kurtboğazı, 40°27'45"N 27°49'25"E, 607 m, F. sylvatica, 26.VI.2014, 5W, 1♀; Bigadiç, Ulus Mountain, 39°19'23"N 27°23'39"E, 1.616 m, *F. orientalis*, 17.VII.2014, 4P, 1 $\bigcirc$ ; Totally 43 $\bigcirc$ 9∂∂, 52 exs.

Distribution in the world: Europe: Austria, Azerbaijan, Azores, Belarus, Belgium, Bosnia and Herzegovina, Britain, Bulgaria, Croatia, Cyclades Islands, Czech Republic, Denmark, Estonia, Finland, France, Franz Josef Land, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kaliningrad Region, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Netherlands, Norway, Novaya Zemlva, Poland, Portugal, Romania, Russia: Central European Territories, Russia: Eastern European Territories, Russia: Northern European Territories, Russia: Northwest European Territories, Russia: Southern European Territories, Slovakia, Slovenia, Spain, Sweden, Switzerland, The Twelve Islands, Turkey, Ukraine, and Yugoslavia; Asia: Afghanistan, Bhutan, China, Cyprus, Democratic People's Republic of Korea, India, Indonesia, Japan, Mongolia, Nepal, Pakistan, Russia: East Siberia, Russia: Far East, Russia: West Siberia, Svalbard and Jan Mayen Islands, Taiwan, Turkey, and Vóreion Aiyáion (North Aegean Island); North Africa: Canary Islands, Egypt, Madeira Archipelago, and Selvagens Islands; Etiyopya Bölgesi; Afrotropics Region; Australia Region; East Palearctic; Nearctic Region; Neotropical Region; East Region; Near East; Near Region (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023). COS

**Distribution in Turkey:** Turkey (Asia, and Europe) (Johnson, 2007; Anonymous, 2023). This is the first time a locality record is given with this study.

**Note:** *Cortinicara* sp. is represented by only one species in the Western Palearctic Region. The center of diversity of *Cortinicara* sp. is the Oriental and Australian Regions (Rücker, 2018).

Genus Melanophthalma Motschulsky, 1866

*Melanophthalma (Cortilena) fuscipennis* (Mannerheim, 1844)

**Material examined:** This species was identified in traps set on each date. Totally  $194 \bigcirc \bigcirc 31 \bigcirc \bigcirc$ , 225 exs.

Distribution in the world: Europe: Austria, Croatia, France, Georgia, Germany, Greece, Hungary, Italy, Portugal, Romania, Russia: Southern European Territories, Slovenia, Spain, Switzerland, and Turkey; Asia: Cyprus, and Turkey; North Africa: Canary Islands, Egypt, Madeira Archipelago, Morocco, and Tunisia (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** Turkey (Asia and Europe) (Johnson, 2007; Rücker, 2018). This is the first time a locality record is given with this study.

*Melanophthalma (Melanophthalma) taurica* (Mannerheim, 1844)

**Material examined:** This species was detected in traps set on each date during spring, summer and fall seasons. Totally 132  $\bigcirc$  13  $\bigcirc$   $\bigcirc$ , 145 exs.

**Distribution in the world: Europe:** Azerbaijan, Russia: Southern European Territories, and Ukraine; **Asia:** Afghanistan, Iran, Kyrgyzstan, Tajikistan, Turkey, and Turkmenistan (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** Regions of Turkey entering the Asian continent (Johnson, 2007; Rücker, 2018, 2021). This is the first time a locality record is given with this study.

*Melanophthalma (Melanophthalma) distinguenda* (Comolli, 1837)

**Material examined:** This species has been intensely determined in traps set up at all times. Totally 1283  $\bigcirc 287$   $\bigcirc \bigcirc$ , 1570 exs.

Distribution in the world: Europe: Austria, Belarus, Belgium, Britain, Croatia, Czech Republic, Denmark, France, Germany, Greece, Hungary, Italy, Lithuania, Malta, Netherlands, Poland, Portugal, Romania, Sweden, Switzerland, and Ukraine; Asia: Iraq, and Turkey; North Africa: Madeira Archipelago; Nearctic Region: (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023). **Distribution in Turkey:** Regions of Turkey entering the Asian continent, and İzmir (Johnson, 2007; Tezcan ve ark., 2010; Rücker, 2018). This species is reported for the first time from Marmara Region.

*Melanophthalma (Melanophthalma) rhenana* Rücker & Johnson, 2007

**Material examined:** This species has been intensely determined in traps set up at all times. Totally  $3092 \bigcirc \bigcirc$  1066  $\bigcirc \bigcirc$ , 4158 exs.

**Distribution in the world: Europe:** Germany: Rhineland-Palatinate: Neuwied, Baden, Saxony, Italy: Sardinia, and Sicily; **Asia:** Iran, and Turkey (Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** Regions of Turkey entering the Asian continent (Rücker, 2018, 2021). This is the first time a locality record is given with this study.

**Note:** The main distribution region of this species is thought to be Central Asia. It probably spread through Turkey to Italy and Germany.

Genus Migneauxia Jacquelin du Val, 1859

Migneauxia crassiuscula (Aubé, 1850)

**Material examined:** This species was identified in traps set on each date. Totally  $68^{\circ}_{\circ} 13^{\circ}_{\circ}$ , 81 exs.

**Distribution in the world: Europe:** Azerbaijan, Bulgaria, Croatia, France, Georgia, Greece, Hungary, Italy, Spain, and Ukraine; **Asia:** Afghanistan, Cyprus, Iraq, Israel, Jordan, Turkey, and Uzbekistan (Johnson, 2007; Rücker, 2018, 2021; Anonymous, 2023).

**Distribution in Turkey:** Regions of Turkey entering the Asian continent (Johnson, 2007; Rücker, 2018, 2021). This is the first time a locality record is given with this study.

# DISCUSSION and CONCLUSIONS

In the oak and beech areas of Balıkesir province, 22 species belonging to nine genera belonging to two subfamilies were identified from 8537 specimens of Latriididae family by using window and trap trapping methods.

When we examine the geographical distribution of the genera of the family Latridiidae in the world; it is seen that the species belonging to the genera *Cartodere*, Corticaria, Melanophthalma, and Migneauxia are cosmopolitan. Species belonging to the genus *Enicmus* are distributed in the Holarctic, Oriental, Australian, and Neotropical regions, species belonging to the genus Latridius are distributed in the Holarctic, and Oriental regions, species belonging to the genus Metophthalmus are distributed in the Holarctic, Neotropical, and Afrotropical regions, species belonging to the genus Corticarina are distributed in the Holarctic, Neotropical, Afrotropical, and Oriental regions, and species belonging to the genus Cortinicara are distributed in the Holarctic, and Indo-Australian regions (López Fernández, 2014; Rücker, 2018, 2020, 2021).

It is possible to divide the Palaearctic Region into nine sub-regions, namely Siberia, Far East, Central Asia, Middle East, North Africa, Southern Europe, Northern Europe, Western Europe and Eastern Europe (Demir, 2019). When the distribution status of the 22 species in the subregions of the Palaearctic Region was evaluated, it was determined that 16 species were found in Siberia, 16 in the Far East, 16 in Central Asia, 16 in the Middle East, 11 in North Africa, 16 in Southern Europe, 13 in Northern Europe, 15 in Western Europe and 21 in Eastern Europe. Enicmus transversus, Cartodere nodifer and Cortitinicara gibbossa species have the widest distribution in all subregions of the Palaearctic Region. These species are followed by Latridius minutus, Enicmus rugosus, E. brevicornis, Corticaria pubescens, C. serrata and C. elongata.

When the status of the 22 species belonging to the Latridiidae family in the fauna of Turkey is evaluated, it is seen that six species (Cartodere nodifer, Corticaria longicollis, C. obscura, Corticarina minuta, Enicmus *fungicola* and *E. testaceus*) are reported from Turkey for the first time. 13 species (Metophthalmus hungaricus, Enicmus transversus, E. brevicornis, Latridius minutus, Corticarina curta, Cortinicara gibbosa, Melanophthalma rhenana, M. taurica, M. fuscipennis, Corticaria serrata, C. elongata, C. pubescens and Migneauxia crassiuscula) have been previously recorded from Turkey without giving the locality name, and with this study, the locality is recorded for the first time. Enicmus rugosus and Melanophthalma distinguenda were also detected for the first time in the Marmara Region. Cartodere apfelbecki is a new record for the local fauna of Balikesir Province.

According to these data, the number of species belonging to Latridiidae family in Turkey has increased from 57 to 63. In addition to providing important information about the Latridiidae fauna of Turkey, this study is important in terms of contributing to the zoogeographic distribution of this family due to the many cosmopolitan species.

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### Contribution of the Authors as Summary

The authors report that the data for this study were collected by Dr. Aylin TUVEN, and the experiment of the study was executed by Dr. Aylin TUVEN under the supervision of Ass. Prof. Dr. Sakin Vural VARLI, declare that the text of the article was written by Aylin Tüven under the supervision of Ass. Prof. Dr. Sakin Vural VARLI.

# Statement of Conflict of Interest

The authors have declared no conflict of interest.

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