

# Contribution to the knowledge on distribution of water boatmen (Heteroptera: Corixidae) in Turkey

## Türkiye Corixidae (Heteroptera: Corixidae) dağılım bilgilerine katkılar

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**Özet:** Türkiye'nin batısındaki 35 farklı lokaliteden toplanan Corixidae örnekleri sistematik açıdan değerlendirilmiştir. Çalışma sonucunda, üç altfamilyaya (Micronectinae, Cymatiainae, Corixinae) ait 11 tür ve 2 alttür dahil toplam 3222 birey incelenmiştir. Yedi tür ve iki alttür araştırma bölgesindeki bazı lokaliteler için ilk kez tespit edilmiştir.

**Anahtar kelimeler:** Heteroptera, Corixidae, Micronectinae, Cymatiainae, Corixinae, Türkiye

**Abstract:** In this study, Corixidae samples were collected from 35 different aquatic localities in Western Turkey and evaluated systematically. As a result of the study, 3222 individuals were found, and 11 species and 2 subspecies belong to 3 subfamilies (Micronectinae, Cymatiainae, Corixinae) were identified in the laboratory. 7 species and 2 subspecies have been reported for the first time for some of the localities in the study area.

**Keywords:** Heteroptera, Corixidae, Micronectinae, Cymatiainae, Corixinae, Turkey

### INTRODUCTION

The Corixidae (water boatmen) are the largest family of aquatic Hemiptera and contains more than 500 species on a worldwide basis, they are found in virtually all aquatic habitats (ponds, lakes, streams, brackish water, salt-marsh pools and dykes near the sea) (Poisson, 1957; Southwood and Leston, 1959; Stonedahl and Latin, 1986; Jansson, 1986; Savage, 1989, 1990; Topkara et al., 2010).

Corixidae family is divided into six subfamilies (Diaprepocorinae, Micronectinae, Cymatiainae, Stenocorixinae, Heterocorixinae and Corixinae) (Stonedahl and Lattin, 1986; Schuh and Slater, 1995). Members of subfamilies Micronectinae, Cymatiainae and Corixinae exist in Europe and adjacent regions (Jansson, 1986).

In the latest study, 28 species and 9 subspecies were reported from Turkey (Fent et al. 2011).

Despite the gradually increasing efforts over recent years, knowledge of the distribution of Corixidae fauna in Turkey still not enough. This study will contribute an amount subject.

### MATERIALS AND METHOD

In this study, specimens of the family Corixidae sampled from lakes, streams, ponds and puddles in the Central Anatolia, Western Black Sea and Mediterranean regions of Turkey between 2002 and 2008 were investigated.

A total of 3222 specimens of 11 species and 2 subspecies were collected from thirty-five localities.

The Corixidae specimens were collected by hand-net with a mesh size of 500 µm and were fixed in jars filled with 4% formaldehyde solution in the field and they were washed by tap water in laboratory and stored in sampling tubes as dry. The male genital segment was cut off, the segment was placed on slide in a drop of water. The left and right parameres were then separated and were examined under a stereo-microscope.

For taxonomical identification of the corixid specimens, the following publications were used: Poisson (1957), Jansson (1986), Savage (1989). All samples were preserved in the Ege University, Faculty of Fisheries Museum (ESFM).

### RESULTS AND CONCLUSION

Corixidae sampled thirty-five different localities in western Turkey specimens of the eleven species and two subspecies in Turkey and worldwide distribution is as follows:

Ordo: Heteroptera

Infraordo: Hydrocorisae

Family: Corixidae Leach 1815

Subfamily: Micronectinae Jaczewski 1924

*Micronecta (s.str.) anatolica anatolica* Lindberg 1922

**Materials:** 3♂4♀, Akçabel Stream (Doğanyurt-Kastamonu), 41°59'28"N 33°31'53"E, 15.06.2005.

**Previous records from Turkey:** Adana, Antalya, Burdur, Denizli, Isparta, İzmir, Kahramanmaraş, Muğla, Van (Lindberg 1922; Hoberlandt 1948; Önder et al. 2006; Kiyak et al. 2007; Dursun 2011).

**Distribution of the World:** Afghanistan, China, Iran, Iraq, Israel, Kaukasia, Saudi Arabia, Syria, Tadjikistan, Turkey, Uzbekistan, Vietnam, Yemen (Aukema and Rieger 1995; Önder et al. 2006).

**Remarks:** First record of this species from Kastamonu.

***Micronecta (Dichaetonecta) scholtzi*** (Fieber 1860)

**Materials:** 5♂5♀, Lake Yeniçağa (Yeniçağa-Bolu), 40°46'N 32°01'E, 990 m a.s.l., 14.08.2002; 1♂2♀, Akpınar Springs (Akpınar-Başmakçı-Denizli), 37°51'11"N 29°58'59"E, 780 m a.s.l., 31.05.2007.

**Previous records from Turkey:** Edirne, Sakarya (Hoberlandt 1948; Önder et al. 2006; Fent et al. 2011).

**Distribution of the World:** Albania, Algeria, Austria, Belgium, Bulgaria, Croatia, Czech Republic, France, Germany, Great Britain, Greece, Hungary, Italy, Luxembourg, Moldavia, Morocco, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey, Ukraine, Yugoslavia (Aukema and Rieger 1995; Önder et al. 2006).

**Remarks:** First record of this species from Bolu and Denizli.

Subfamily: Cymatiinae Walton 1940

***Cymatia rogenhoferi*** (Fieber 1864)

**Materials:** 1♂5♀, Adıyan Stream (Ortaca-Akşehir-Konya), 38°15'23"N 31°36'44"E, 1000 m a.s.l., 23.06.2006.

**Previous records from Turkey:** Ankara, Konya, Van (Hoberlandt, 1948, Önder et al., 2006)

**Distribution of the World:** Algeria, Armenia, Austria, Azerbaijan, Bulgaria, China, Czech Republic, France, Georgia, Germany, Hungary, India, Iran, Iraq, Italy, Kyrgyzstan, The Netherlands!, Mongolia, Poland, Romania, Russia, Saudi Arabia, Slovakia, Spain, Tadjikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yugoslavia (Aukema and Rieger 1995; Önder et al. 2006)

Subfamily: Corixinae Leach 1815

***Corixa affinis*** Leach 1817

**Materials:** 1♂1♀, Avşar Stream (İscehisar-Afyon), 38°50'02"N 30°46'27"E, 980 m a.s.l., 23.06.2006; 1♂1♀, Akarçay Stream (Gebeceler-Afyon), 38°46'40"N 30°46'50"E, 960 m a.s.l., 23.06.2006; 577♂546♀, Kaliçayı Stream (Pazarağaç-Çay-Afyon), 38°36'04"N 30°53'37"E, 940 m a.s.l., 23.06.2006; 2♂3♀, Gediz River (Kula-Manisa), 38°37'58"N 28°57'05"E 480 m a.s.l., 24.06.2006; 1♂, Saltık Stream (Saltık-Sandıklı-Afyon), 38°29'05"N 30°04'26"E, 920 m a.s.l.,

24.06.2006; 4♂3♀, spring near Ephesus (Efes-Selçuk-İzmir), 37°56'35"N 27°19'46"E, 10 m a.s.l., 20.04.2007.

**Previous records from Turkey:** Adana, Afyon, Ağrı, Ankara, Antalya, Aydın, Burdur, Çanakkale, Çorum, Denizli, Diyarbakır, Edirne, Erzincan, Eskişehir, Hatay, Isparta, İzmir, Kırklareli, Kocaeli, Konya, Mersin, Muğla, Osmaniye, Samsun, Sivas, Tekirdağ, Zonguldak (Hoberlandt 1948; Wagner 1966; Önder and Adigüzel 1979; Kiyak et al. 2004, 2007; Önder et al. 2006; Dursun 2011; Salur and Mesci 2011; Fent et al. 2011).

**Distribution of the World:** Albania, Algeria, Armenia, Austria, Azerbaijan, Azores, Belgium, Bulgaria, Canary Islands, Croatia, Cyprus, Czech Republic, Denmark, Egypt?, France, Georgia, Germany, Great Britain, Greece, Hungary, India, Iran, Iraq, Ireland, Israel, Italy, Libya, Madeira Archipelago, Malta, Macedonia, Morocco, The Netherlands, Poland, Portugal, Romania, Russia, Slovakia, Spain, Syria, Tadjikistan, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yemen, Yugoslavia (Aukema and Rieger 1995; Önder et al. 2006).

**Remarks:** Firstly recorded from Manisa.

***Corixa panzeri*** (Fieber 1848)

**Materials:** 1♂, Bedir Stream (Çavdarhisar-Kütahya), 39°12'02"N 29°36'44"E, 20.08.2004.

**Previous records from Turkey:** Ankara, Edirne, Erzurum, Isparta, İzmir, Konya, Samsun (Wagner, 1966; Yıldırım et al., 1999; Önder et al., 2006; Dursun, 2011; Fent et al., 2011).

**Distribution of the World:** Algeria, Austria, Azerbaijan, Belgium, Bulgaria, Denmark, France, Georgia, Germany, Great Britain, Greece, Hungary, Iran, Ireland, Italy, Latvia, Liechtenstein, Morocco, The Netherlands, Poland, Portugal, Russia, Slovakia, Spain, Sweden, Tadjikistan, Tunisia, Turkey, Ukraine (Aukema and Rieger 1995; Önder et al. 2006).

**Remarks:** First record of this species from Kütahya.

***Corixa punctata*** (Illiger 1807)

**Materials:** 1♂1♀, Bayındır Stream (Kızılcahamam-Ankara), 40°19'21"N 32°27'53"E, 880 m a.s.l., 18.08.2004.

**Previous records from Turkey:** Adana, Afyon, Ağrı, Ankara, Antalya, Ardahan, Aydın, Burdur, Çankırı, Çorum, Denizli, Edirne, Erzurum, Isparta, İstanbul, İzmir, Kırklareli, Kocaeli, Kastamonu, Kayseri, Konya, Samsun (Hoberlandt 1948; Linnavouri 1965; Aukema and Rieger 1995; Yıldırım et al. 1999; Kiyak et al. 2004; Önder et al. 2006; Dursun 2011; Salur and Mesci 2011; Fent et al. 2011).

**Distribution of the World:** Albania, Algeria, Armenia, Austria, Azerbaijan, Belgium, Bosnia Hercegovina, Bulgaria, China, Croatia, Denmark, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, India, Iran, Ireland, Italy,

Kyrgyzstan, Liechtenstein, Luxembourg, Macedonia, Moldova, Morocco, The Netherlands, Norway, Poland, Portugal?, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tadzhikistan, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yugoslavia (Aukema and Rieger 1995; Önder et al. 2006).

***Hesperocorixa linnaei*** (Fieber 1848)

**Materials:** 2♂1♀, Kurttepe Stream (Kurttepe Village, Pınarbaşı-Kayseri), 38°35'08"N 36°08'40"E, 1380 m a.s.l., 01.06.2005.

**Previous records from Turkey:** Adana, Adapazarı, Ağrı, Ankara, Antalya, Aydın, Bolu, Burdur, Bursa, Denizli, Düzce, Isparta, Kayseri, Sakarya, Sivas (Hoberlandt 1948; Poisson 1957; Özemesi and Önder 1988; Önder et al. 1981, 2006).

**Distribution of the World:** Algeria, Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Byelorussia, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Great Britain, Germany, Greece, Hungary, Iran, Ireland, Italy, Kyrgyzstan, Liechtenstein, Lithuania, Luxembourg, Macedonia, Moldavia, The Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tadzhikistan, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yugoslavia (Aukema and Rieger 1995; Önder et al. 2006).

***Sigara (s.str.) striata*** (Linnaeus 1758)

**Materials:** 1♂, Lake Yeniçağa (Yeniçağa-Bolu), 40°46'N 32°01'E, 990 m a.s.l., 14.08.2002; 10♂, Ibid., 26.06.2003; 3♂, Küçük Akgöl (Sakarya), 40°52'N 30°26'E, 15 m a.s.l., 26.06.2003; 7♂, Kırkpınar springs (Ilgaz-Çankırı), 41°00'41"N 33°36'51"E, 1650 m a.s.l., 16.06.2005; 1♂2♀, Örenşehir Stream (Pınarbaşı-Kayseri), 38°59'17"N 36°39'40"E, 1520 m a.s.l., 02.06.2005; 1♂2♀, Lake Beyşehir (Kurucaova village, Beyşehir-Konya), 15.09.2005; 17♂10♀, Ağcaşar stream (Yahyalı-Kayseri), 38°07'18"N 35°21'54"E, 1080 m a.s.l., 30.05.2006; 1♂, Göksu River (Antalya), 36°51'51"N 30°37'05"E, 60 m a.s.l., 20.06.2006; 3♂, Kökez stream (Kadınhanı-Konya), 38°21'32"N 32°18'54"E, 940 m a.s.l., 03.06.2006; 2♂3♀, Köprü stream (Serik-Antalya), 36°57'13"N 31°10'29"E, 50 m a.s.l., 21.06.2006; 2♂2♀, Aksu Çayı (Antalya), 36°57'52"N 30°54'11"E, 40 m a.s.l., 21.06.2006; 2♂4♀, Dragon stream (Anamur-Mersin), 36°10'19"N 32°53'48"E, 100 m a.s.l., 22.06.2006; 16♂10♀, Kali stream (Pazarağaç-Çay-Afyon), 38°36'04"N 30°53'37"E, 940 m a.s.l., 23.06.2006; 31♂20♀, Akpınar springs (Akpınar-Başmakçı-Denizli), 37°51'11"N 29°58'59"E, 780 m a.s.l., 31.05.2007; 1♂6♀, Lake Gölarmara (Tekelioğlu village, Salihli-Manisa), 38°35'49"N 27°59'57"E, 160 m a.s.l., 28.06.2007; 2♂, Lake Gölarmara (Akpınar springs-Manisa), 38°42'09"N 27°58'08"E, 180 m a.s.l., 28.06.2007; 7♂9♀, Lake Eğirdir (Akkeçili village, Eğirdir-Isparta), 30°08'02"N 30°47'28"E, 910 m a.s.l., 29.05.2007.

**Previous records from Turkey:** Afyon, Ağrı, Ankara, Antalya, Ardahan, Aydın, Burdur, Çanakkale, Çorum, Denizli,

Edirne, Erzurum, Isparta, İzmir, Kayseri, Konya, Muğla, Samsun, Van (Yıldırım et al. 1999; Özemesi and Önder 1988; Kiyak et al. 2004, 2007; Önder et al. 2006; Dursun 2011; Salur and Mesci 2011; Fent et al. 2011).

**Distribution of the World:** Albania, Armenia, Austria, Azerbaijan, Belgium, Bosnia Hercegovina, Bulgaria, Byelorussia, China, Croatia, Denmark, Estonya, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iran, Italy, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Moldavia, The Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Sweden, Switzerland, Turkey, Ukraine, Yugoslavia (Aukema and Rieger 1995; Önder et al. 2006).

**Remarks:** Fist record of this species from Bolu, Çankırı, Manisa, Mersin, Sakarya.

***Sigara (s.str.) assimilis*** (Fieber 1848)

**Materials:** 2♂, Adıyan Stream (Ortaca-Akşehir-Konya), 38°15'23"N 31°36'44"E, 1000 m a.s.l., 23.06.2006; 5♂17♀, Cebişli stream (Argıthanı-Ilgın-Konya), 38°17'03"N 31°42'07"E, 1040 m a.s.l., 23.06.2006; 34♂52♀, Lake Burdur (Burdur), 37°41'45"N 30°11'21"E, 800 m a.s.l., 30.05.2007.

**Previous records from Turkey:** Bitlis, İzmir, Konya, Van (Seidenstücker 1958; Önder et al. 2006).

**Distribution of the World:** Azerbaijan, Afghanistan, China, Bulgaria Croatia, Georgia, Hungary, Iran, Iraq, Kyrgyzstan, Moldavia, Mongolia, Romania, Russia, Saudi Arabia, Tadzhikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yugoslavia (Aukema and Rieger 1995; Önder et al. 2006).

**Remarks:** Fist record of this species from Burdur.

***Sigara (Pseudovermicorixa) nigrolineata nigrolineata*** (Fieber 1848)

**Materials:** 4♂4♀, Terme stream (Çayyaka village, Cide-Kastamonu), 41°57'33"N 33°12'34"E, 14.06.2005; 3♂1♀, Şehriban stream (Şenpazar-Kastamonu), 41°47'22"N 33°10'36"E, 250 m a.s.l., 14.06.2005; 13♂15♀, Kirazlı stream (Çatalzeytin-Kastamonu), 41°57'22"N 34°11'35"E, 15.06.2005; 48♂47♀, Değirmendere stream (Akçakoca-Düzce), 41°06'10"N 31°15'07"E, 5 m a.s.l., 30.06.2004; 1♂2♀, Kireç stream (İskilip-Çorum), 19.07.2008.

**Previous records from Turkey:** Adana, Adapazarı, Afyon, Ağrı, Ankara, Antalya, Ardahan, Artvin, Aydın, Bolu, Burdur, Bursa, Çorum, Denizli, Diyarbakır, Düzce, Edirne, Erzincan, Erzurum, Eskişehir, Gaziantep, Hatay, Isparta, Iğdır, İstanbul, İzmir, Kars, Kocaeli, Konya, Mersin, Muğla, Rize, Trabzon, Tunceli, Sakarya, Samsun, Sivas, Şanlıurfa, Tokat, Van (Hoberlandt 1948; Seidenstücker 1958; Linnavouri 1965; Kiyak et al. 2004, 2007; Önder et al. 1981, 1984, 2006; Dursun 2011; Salur and Mesci 2011; Fent et al. 2011).

**Distribution of the World:** Albania, Algeria, Andorra, Armenia, Austria, Azerbaijan, Belgium, Bosnia Hercegovina,

Bulgaria, Byelorussia, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Hungary, Iran, Iraq, Ireland, Italy, Latvia, Liechtenstein, Luxembourg, Malta, Macedonia, Moldavia, Morocco, The Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tunisia, Turkey, Ukraine, Yugoslavia (Aukema and Rieger 1995; Önder et al. 2006).

**Remarks:** First record of this species from Kastamonu.

***Sigara (Subsigara) iactans*** Jansson 1983

**Materials:** 2♂, Lake Yeniçağa (Yeniçağa-Bolu), 40°46'N 32°01'E, 990 m a.s.l., 14.08.2002; 29♂, Ibid., 26.06.2003; 1♂, Lake Küçük Akgöl (Sakarya), 40°52'N 30°26'E, 15 m a.s.l., 26.06.2003; 7♂5♀, Lake Gölcük (Bolu), 40°39'N 31°37'E, 1080 m a.s.l., 26.06.2003; 82♂372♀, Kırkpınar springs (Ilgaz-Çankırı), 41°00'41"N 33°36'51"E, 1650 m a.s.l., 16.06.2005.

**Previous records from Turkey:** Edirne, Çorum, Kırklareli (Jansson 1983; Önder et al. 2006; Salur and Mesci 2011).

**Distribution of the World:** Belgium, Bulgaria, Denmark, Germany, Greece, Macedonia, The Netherlands, Poland, Romania, Russia, Sweden, Turkey, Ukraine (Aukema and Rieger 1995).

**Remarks:** First record of this species from Bolu, Çankırı, Sakarya.

***Sigara (Subsigara) kervillei*** (Poisson 1927)

**Materials:** 9♂, Kökez stream (Kadınhanı-Konya), 38°21'32"N 32°18'54"E, 940 m a.s.l., 03/06/2006.

**Previous records from Turkey:** Adana, Afyon, Ankara, Antalya, Konya, Kütahya (Hoberlandt 1948; Seidenstücker 1958; Önder et al. 2006; Fent et al. 2011).

**Distribution of the World:** Turkey (endemic species) (Aukema and Rieger 1995).

***Sigara (Vermicorixa) lateralis*** (Leach 1817)

**Materials:** 1♂, Lake Yeniçağa (Yeniçağa-Bolu), 40°46'N 32°01'E, 990 m a.s.l., 14.08.2002; 7♂18♀, Kirazlı stream (Çatalzeytin-Kastamonu), 41°57'22"N 34°11'35"E, 15.06.2005; 2♂2♀, Avşar Stream (İscehisar-Afyon), 38°50'02"N 30°46'27"E, 980 m a.s.l., 23.06.2006; 2♂1♀, Demirlik stream (Aşağıçiftlik-Ilgın-Konya), 38°04'11"N 31°49'51"E, 1120 m a.s.l., 23.06.2006; 74♂64♀, Adıyan Stream (Ortaca-Akşehir-Konya), 38°15'23"N 31°36'44"E, 1000 m a.s.l., 23.06.2006; 37♂124♀, Akarçay Stream (Gebeceler-Afyon), 38°46'40"N 30°46'50"E, 960 m a.s.l., 23.06.2006; 7♂8♀, Cebişli stream (Argıthanı-Ilgın-Konya), 38°17'03"N 31°42'07"E, 1040 m a.s.l., 23.06.2006; 4♂13♀, Kökez stream (Kadınhanı-Konya), 38°21'32"N 32°18'54"E, 940 m a.s.l., 03/06/2006; 19♂3♀, Battal stream (Ilgın-Konya), 38°16'08"N 31°53'50"E, 980 m a.s.l., 23.06.2006; 498♂403♀, Ağcaşar stream (Yahyalı-Kayseri), 38°07'18"N

35°21'54"E, 1080 m a.s.l., 30.05.2006; 2♂, spring near Ephesus (Efes-Selçuk-Izmir), 37°56'35"N 27°19'46"E, 10 m a.s.l., 20.04.2007.

**Previous records from Turkey:** Adana, Afyon, Ağrı, Amasya, Ankara, Antalya, Artvin, Aydın, Bitlis, Burdur, Bursa, Çanakkale, Çorum, Denizli, Diyarbakır, Edirne, Eskişehir, Gaziantep, Iğdır, Isparta, İstanbul, İzmir, Karabük, Kars, Kayseri, Kırklareli, Kocaeli, Konya, Muğla, Mersin, Niğde, Osmaniye, Rize, Samsun, Sinop, Tekirdağ, Tunceli, Van, Zonguldak (Hoberlandt 1948; Seidenstücker 1958; Linnavuori 1965; Wagner 1966; Özemsı and Önder 1988; Kiyak et al. 2004, 2007; Önder et al. 2006; Dursun 2011; Salur and Mesci 2011; Fent et al. 2011).

**Distribution of the World:** Albania, Algeria, Armenia, Austria, Azerbaijan, Belgium, Bosna Hercegovina, Bulgaria, Byelorussia, Canary Islands, China, Croatia, Cyprus, Czech Republic, Denmark, Egypt, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, India, Iran, Iraq, Ireland, Israel, Italy, Kyrgyzstan, Liechtenstein, Luxembourg, Macedonia, Malta, Moldova, Mongolia, Morocco, The Netherlands, Norway, Poland, Portugal, Romania, Russia, Saudi Arabia, Slovakia, Spain, Sweden, Switzerland, Syria, Tadzhikistan, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Yemen, Yugoslavia, Tropical Africa (Aukema and Rieger 1995; Önder et al. 2006).

**Remarks:** First record of this species from Bolu and Kastamonu.

The following species are firstly recorded from the listed localities; *M. anatolica anatolica* and *S. nigrolineata nigrolineata* from Kastamonu; *M. Scholtzi* from Bolu and Denizli; *C. affinis* from Manisa; *C. panzeri* from Kütahya; *S. striata* from Bolu, Çankırı Manisa, Mersin and Sakarya; *S. assimilis* from Burdur; *S. iactans* from Bolu, Çankırı and Sakarya; *S. lateralis* from Bolu and Kastamonu.

In this study, the most common species was found as *S. striata* at 17 localities and it was followed by *S. lateralis* at 11 localities, *M. anatolica anatolica*, *C. rogenhoferi*, *C. panzeri*, *C. punctata*, *H. linnaei*, *S. kervillei* have been observed at only one locality.

As a consequence of my study, I showed that *S. (Subsigara) iactans* distributes in the northern parts of Anatolia and Turkish Thrace and this result agrees with previously given data.

*M. (s.str.) anatolica anatolica* was recorded from Ege, Mediterranean (including the Lake District) and Eastern Anatolian parts of Turkey (Lindberg 1922; Hoberlandt 1948; Önder et al. 2006; Kiyak et al. 2007; Dursun 2011). As a result, I also reported that this species distributes in the North-Eastern parts of Turkey.

More detailed studies are necessary to understand distribution of the members of Corixidae. By the way, Corixidae family which is represented by 28 species and 9 subspecies for Turkish fauna, the distribution of the known species can be explained with more data and new species may be determined.

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