



**PRELIMINARY REPORT ON THE CICADOMORPHA (HEMIPTERA)  
FAUNA OF KEMALIYE (ERZINCAN PROVINCE, EAST TURKEY)\***

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**Abstract** - Cicadomorpha specimens collected in the years 2006 and 2007 in the Kemaliye (Erzincan province) in east Turkey were examined. 63 species belonging to 7 families were found: 4 species belong to the family Cicadidae, 1 to Tibicinidae, 1 to Cercopidae, 6 Aphrophoridae, 1 to Membracidae, 1 Ulopidae and 49 species to Cicadellidae. Distribution of these species in Turkey and their host plants are given along with their locality records. 52 species records are new to the Kemaliye district, 32 new to Erzincan province and 8 species records are new to eastern Turkey.

KEY WORDS: Hemiptera, Cicadomorpha, fauna, Kemaliye district, eastern Turkey.

**Izvešček** – PREDHODNO POROČILO O FAVNI PODREDA CICADOMORPHA (HEMIPTERA) KEMALIJE (POKRAJINA ERZINCAN, VZHODNA TURČIJA)

Pregledani so bili primerki podreda Cicadomorpha, zbrani v letih 2006 in 2007 v Kemaliji (pokrajina Erzincan) v vzhodni Turčiji. Najdenih je bilo 63 vrst, pripadajočih 7 družinam: 4 vrste pripadajo družini Cicadidae, 1 Tibicinidae, 1 Cercopidae, 6 Aphrophoridae, 1 Membracidae, 1 Ulopidae in 49 vrst družini Cicadellidae. Poleg podatkov o najdiščih je navedena razširjenost teh vrst v Turčiji in njihove hranilne rastline. 52 vrst je prvič najdenih v okraju Kemalija, 32 je novih za pokrajino Erzincan, 8 vrst pa za vzhodno Turčijo.

KLJUČNE BESEDE: Hemiptera, Cicadomorpha, favna, okraj Kemaliye, vzhodna Turčija.

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## Introduction

In the studies of Lodos and Kalkandelen on the Auchenorrhyncha of Turkey (1981a, 1981b, 1981c, 1982a, 1982b, 1983a, 1983b, 1983c, 1984a, 1984b, 1984c, 1984d, 1985a, 1985b, 1985c, 1986a, 1986b, 1986c, 1987a, 1987b, 1987c, 1987d, 1988) 43 Cicadomorpha species from the Erzincan province (East Turkey) and one from the Kemaliye district were recorded. Later, the study of Demir and Demirsoy (2008) presented records of 10 additional species, raising the total species number for the province to 54.

District of Kemaliye (in south Erzincan province), which was selected as the study area, is located in east Turkey, between 38° 15' - 39° 0' eastern longitude and 39° 30' - 39° 0' northern latitude. The elevation ranges between 950 m and 2350 m. 11 Cicadomorpha species were known in the Kemaliye area prior to our study, a compilation of records in the studies of the authors mentioned above.

## Material and Methods

Field studies were carried out in the years 2006 and 2007. 1404 adult Cicadomorpha specimens were collected and analyzed. They were collected by sweeping the herbaceous plants with a net. The material is kept dry in the first author's collection.



**Fig. 1:** Photos of the research area (Kemaliye district). Euphrates and surrounding areas, photo E. Demir.



**Fig. 2:** Sarıçiçek Plateau, photo E. Demir.

## Results

Altogether 63 species were found. Along with their distribution in Turkey and the plants found to be their hosts, the examined material of these species is listed below.

### **Suborder CICADOMORPHA**

### **Superfamily CICADOIDEA**

### **Family CICADIDAE**

### **Subfamily CICADINAE**

### **Tribe CICADINI**

### ***Cicadatra atra* (Olivier, 1790)**

**Material examined:** Kemaliye: Kuşak Village (Dere), 06.07.2006, 1♀, 1070 m, Kocaçimen Village (Silk Road), 04.07.2007, 1♂, 1300 m. **Distribution in Turkey:** Adana, Amasya, Ankara, Antalya, Bitlis, Edirne, Erzincan, Gaziantep, İstanbul, İzmir, Kahramanmaraş, Muğla, Siirt, Sivas, Şanlıurfa (Fahringer, 1922; Lodos & Kalkan-delen, 1981a).

### ***Cicadatra hyalina* (Fabricius, 1798)**

**Material examined:** Kemaliye: Yeşilyamaç Village (Dere), 08.07.2006, 1♀, 1290 m, Sarıçiçek (Mazman Well), 07.07.2006, 3♂♂, 1690 m, Sarıçiçek (Mazman Well), 04.07.2007, 1♀, 1650 m, Kocaçimen Village (Silk Road), 04.07.2007, 1♂, 1300 m. **Distribution in Turkey:** Adıyaman, Ankara, Antalya, Elazığ, Erzincan, Gaziantep, Gümüşhane, Hakkari, Hatay, Isparta, İzmir, Konya, Kahramanmaraş, Nevşehir, Niğde,



**Fig. 3:** Munzur mountains Barriers, photo E. Demir.

Siirt, Urfa, Van (Dlabola, 1957, 1981; Lodos & Kalkandelen, 1981a; Kartal & Zeybekoğlu, 1999; Demir, 2007a, 2007b).

***Cicadatra persica* Kirkaldy, 1909**

**Material examined:** Kemaliye: Aşağı Umutlu Village, 05.07.2006, 1♂ (N. Kocatepe leg.). **Distribution in Turkey:** Adana, Ankara, Bitlis, Burdur, Gümüşhane, Kahramanmaraş, Malatya (Fahringer, 1922; Dlabola, 1981, Lodos & Kalkandelen, 1981a; Demir, 2007b).

**Subfamily PLATYPLEURINAE**

**Tribe CRYPTOTYMPANINI**

***Lyristes plebejus* (Scopoli, 1763)**

**Material examined:** Kemaliye: Ocak Village (Çeşme), 06.07.2006, 1♂, 1350 m, Kırkgöz, 08.07.2006, 5♂♂ 2♀♀, 1300 m on *Paliarus*. **Distribution in Turkey:** Adana, Ankara, Antalya, Artvin, Aydın, Balıkesir, Bursa, Denizli, Erzincan, Gaziantep, İzmir, İstanbul, Kahramanmaraş, Kırıkkale, Kırklareli, Kütahya, Manisa, Mardin, Muğla (Fahringer, 1922; Dlabola, 1957, 1981; Linnavuori, 1965; Lodos & Kalkandelen, 1981a; Demir, 2007a; Tezcan et al, 2013).

**Family TIBICINIDAE**

**Subfamily TIBICININAE**

**Tribe CICADETTINI**

***Cicadivetta tibialis* (Panzer, 1788)**



**Fig. 4:** Euphrates and surrounding areas, photo E. Demir.

**Material examined:** Kemaliye: Kekikpınarı Village (Köprü), 06.07.2006, 8♂♂, 4♀♀, 1320 m. **Distribution in Turkey:** Ankara, Artvin, Çorum (Lodos & Kalkandelen, 1981a; Demir, 2006a).

### **Superfamily CERCOPOIDEA**

#### **Family CERCOPIIDAE**

##### ***Cercopis intermedia* Kirschbaum, 1868**

**Material examined:** Kemaliye: Yeşilyayla Village (Subaşı), 04.06.2007, 1♂, 1350 m, Yeşilyurt Village-Dutluca, 10.06.2006, 1♀, 1000 m, Sarıçiçek (Mazman Well), 02.06.2007, 2♂♂, 6♀♀, 1650 m, Kabataş Village (İkisü Place), 03.06.2007, 2♂♂, 3♀♀, 1550 m, Munzur Mountain (Doymuş Top), 04.06.2007, 1♂, 2350 m, Kuşak Village, 10.06.2006, 1♀, 1100 m, Yeşilyurt Village-Dutluca, 10.06.2006, 2♀♀, 970 m. **Distribution in Turkey:** Adıyaman, Amasya, Artvin, Ankara, Kırıkkale, Balıkesir, Bitlis, Çanakkale, Diyarbakır, Elazığ, Eskişehir, Gaziantep, Giresun, Hakkari, Hatay, Isparta, İzmir, Kayseri, Konya, Kütahya, Kırklareli, Mardin, Maraş, Niğde, Rize, Samsun, Siirt, Trabzon, Urfa, Uşak (Dlabola, 1971; Lodos & Kalkandelen, 1981b; Kartal et al., 1994; Demir, 2006a, 2006b, 2007b).

#### **Family APHROPHORIDAE**

##### ***Lepyronia coleoprata* (Linnaeus, 1758)**

**Material examined:** Kemaliye: Yeşilyurt Village-Dutluca, 10.06.2006, 2♂♂, 1000 m, Kabataş Village (İkisü Place), 03.06.2007, 2♂♂, 3♀♀, 1550 m, Sarıçiçek (Mazman Well), 04.07.2007, 1♀, 1650 m, Kekikpınarı Village (Köprü), 06.07.2006,

1♂, 1♀, 1320 m, Kabataş Village (Pınarbaşı Well), 25.09.2006, 1♀, 1640 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 3♂♂, 1670 m, Kuşak Village (Dere), 06.07.2006, 1♂, 1♀, 1070 m, Kırkgöz, 08.07.2006, 2♂♂, 1300 m, Salihli Village (Opposite of Dump), 09.07.2006, 1♂, 1500 m, Yeşilyurt Village, 10.06.2006, 1♂, 950 m, Kuşak Village, 10.06.2006, 3♂♂, 2♀♀, 1100 m, Yeşilyamaç Village (Geşo Park), 11.06.2006, 1♀, 1320 m. **Distribution in Turkey:** Adana, Afyon, Ankara, Antalya, Artvin, Aydın, Bilecik, Bursa, Çanakkale, Çankırı, Çorum, Diyarbakır, Edirne, Erzincan, Gümüşhane, İzmir, Kars, Kütahya, Maraş, Manisa, Mardin, Muğla, Muş, Sakarya, Siirt, Tokat, Samsun (Fahringer, 1922; Dlabola, 1957; Lodos & Kalkandelen, 1981b; Kartal et al., 1994; Demir, 2004a; Demir, 2006b, 2007a, 2007b).

#### *Neophilaenus campestris* (Fallen, 1805)

**Material examined:** Kemaliye: Sarıçiçek (Mazman Well), 02.06.2007, 1♂, 1650 m, Sarıçiçek (Subatan), 11.06.2006, 2♀♀, 1890 m, Başpınar (Konsar Village), 04.06.2007, 1♂, 1468 m, Yeşilyamaç Village (Geşo Park), 11.06.2006, 3♂♂, 1320 m, Yeşilyamaç Village (Geşo Pass), 11.06.2006, 1♀, 1689 m. **Distribution in Turkey:** Adana, Adıyaman, Afyon, Ankara, Antalya, Artvin, Balıkesir, Bitlis, Bursa, Çanakkale, Eskişehir, Giresun, Hatay, İzmir, Kırklareli, Kütahya, Manisa, Muğla, Nevşehir, Samsun, Sinop, Siirt, Trabzon, Van (Linnvuori, 1965; Lodos & Kalkandelen, 1981b; Demir, 2006a, 2006b, 2007a, 2007b).

#### *Neophilaenus lineatus* (Linnaeus, 1758)

**Material examined:** Kemaliye: Salihli Village (Opposite of Dump), 09.07.2006, 3♂♂, 1500 m. **Distribution in Turkey:** Afyon, Ankara, Erzincan, İzmir, Nevşehir, Van (Lodos & Kalkandelen, 1981b; Demir, 2006a).

#### *Aphrophora alni* (Fallen, 1805)

**Material examined:** Kemaliye: Rabat River (Tunceli border) on *Salix*, 03.07.2007, 1♂, Yeşilyurt Village-Dutluca, 10.06.2006, 1♀, 1000 m on *Salix*, Kekikpınarı Village (Köprü), 06.07.2006, 1♀, 1320 m, Kuşak Village (Dere), 06.07.2006, 1♂, 4♀♀, 1070 m on *Salix*, Kuşak Village, 10.06.2006, 1♀, 1100 m on *Salix*. **Distribution in Turkey:** Afyon, Ankara, Artvin, Aydın, Balıkesir, Bolu, Bitlis, Çanakkale, Çorum, Diyarbakır, Erzincan, Erzurum, Giresun, İstanbul, İzmir, Kayseri, Kırklareli, Konya, Kütahya, Mardin, Muğla, Manisa, Ordu, Rize, Samsun, Sinop, Tekirdağ, Trabzon, Yozgat (Linnvuori, 1965; Lodos & Kalkandelen, 1981b; Kartal et al., 1994; Demir, 2006a).

#### *Aphrophora salicina* (Goeze, 1778)

**Material examined:** Kemaliye: Yeşilyurt Village-Dutluca, 10.06.2006, 4♂♂, 2♀♀, 1000 m on *Salix*, Kekikpınarı Village (Köprü), 06.07.2006, 1♀, 1320 m on *Salix*, Kuşak Village (Dere), 06.07.2006, 10♂♂, 11♀♀, 1070 m on *Salix*. **Distribution in Turkey:** Ankara, Balıkesir, Çanakkale, Giresun, Gümüşhane, Kırklareli, Kütahya (Lodos & Kalkandelen, 1981b; Demir, 2006a).

***Philaenus spumarius* (Linnaeus, 1758)**

**Material examined:** Kemaliye: Rabat River (Tunceli Border), 03.07.2007, 3♂♂, 1♀, Yeşilyayla Village (Hinsoy), 04.06.2007, 1♀, 1500 m, Yuva köy, 03.06.2007, 12♂♂, 3♀♀, 970 m, Yeşilyayla Village (Subaşı), 04.06.2007, 1♂, 1♀, 1350 m, Yeşilyurt Village-Dutluca, 10.06.2006, 13♂♂, 11♀♀, 1000 m, Sarıçiçek (Mazman Well), 02.06.2007, 1♀, 1650 m, Kabataş Village (İkisü Place), 03.06.2007, 11♂♂, 9♀♀, 1550 m, Sarıçiçek (Subatan), 04.07.2007, 1♀, 1890 m, Sarıçiçek (Mazman Well), 04.07.2007, 1♂, 1650 m, Kocaçimen Village (Silk Road), 04.07.2007, 1300 m 2♀♀, Munzur Mountain (Doymuş Top), 04.06.2007, 1♀, 2350 m, Kekikpınarı Village (Köprü), 06.07.2006, 2♂♂, 1320 m, Yeşilyamaç Village (Dere), 08.07.2006, 2♂♂, 1290 m, Yuva Köy, 23.09.2006, 2♂♂, 3♀♀, 970 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 1♂, 2♀♀, 1670 m, Sarıçiçek (Subatan), 07.07.2006, 31♂♂, 18♀♀, 1890 m, Kuşak Village (Dere), 06.07.2006, 2♂♂, 3♀♀, 1070 m, Ocak Village 8, 06.07.2006, 1♂, 2♀, 1480 m, Yuva Village, 08.07.2006, 4♂♂, 2♀♀, 930 m, Yeşilyamaç Village, 12.06.2006, 1♂, 1250 m, Kekikpınar Village, 06.07.2006, 3♀♀, 1070 m, Yeşilyurt Village, 10.06.2006, 10♂♂, 10♀♀, 950 m, Sarıçiçek (Mazman Well), 11.06.2006, 1♀, 1690 m, Kuşak Village, 10.06.2006, 23♂♂, 15♀♀, 1100 m, Yeşilyamaç Village (Geşo Park), 11.06.2006, 2♂♂, 2♀♀, 1320 m, Yeşilyamaç Village (Geşo Pass), 11.06.2006, 1♀, 1689 m. **Distribution in Turkey:** Adana, Ağrı, Amasya, Ankara, Antalya, Artvin, Aydın, Balıkesir, Bartın, Bilecik, Bitlis, Bolu, Bursa, Çanakkale, Elazığ, Eskişehir, Erzincan (Bahçeliköy, Centrum, Çağlayan, Dumanlıdağ, Demirpınar, Refahiye, Üzümlü), Erzurum, Giresun, Gümüşhane, Hakkari, İzmir, İstanbul, Kars, Iğdır, Kırklareli, Kütahya, Kocaeli, Malatya, Manisa, Mardin, Muğla, Ordu, Rize, Samsun, Siirt, Sinop, Sivas, Tekirdağ, Trabzon, Tokat, Van (Fahringer, 1922; Linnvuori, 1965; Dlabola, 1957, 1981; Lodos & Kalkandelen, 1981b; Kartal et al., 1994; Demir, 2004a, 2006a, 2006b, 2007a, 2007b; Tezcan et al, 2013).

**Superfamily MEMBRACOIDEA****Family MEMBRACIDAE****Subfamily CENTROTINAE*****Gargara genistae* (Fabricius, 1775)**

**Material examined:** Kemaliye: Kırkgöz, 08.07.2006, 2♂♂, 1300 m. **Distribution in Turkey:** Ankara, Antalya, Aydın, Balıkesir, Çorum, Erzurum, İzmir, Muğla (Dlabola, 1957; Lodos & Kalkandelen, 1981b; Demir, 2006a, 2006b, 2007a).

**Family ULOPIDAE*****Utecha trivialis* (Germar, 1821)**

**Material examined:** Kemaliye: Yeşilyurt Village, 10.06.2006, 1♀, 950 m. **Distribution in Turkey:** Ağrı, Ankara, Antalya, Bilecik, Çanakkale, Çorum, Denizli, Edirne, Elazığ, Erzurum, Gümüşhane, İzmir, Kastamonu, Malatya, Manisa, Mardin, Muğla, Nevşehir, Rize, Siirt, Sivas, Urfa (Dlabola, 1957, 1981; Lodos & Kalkandelen, 1981c; Güçlü & Özbek, 1992; Demir, 2006a, 2006b, 2006c, 2007b).

**Family CICADELLIDAE****Subfamily MEGOPHTPHALMINAE*****Megophthalmus scabripennis* Edwards, 1915**

**Material examined:** Kemaliye: Yuva Köy, 03.06.2007, 1♂, 970 m. **Distribution in Turkey:** Adana, Ankara, Antalya, Bursa, İçel, İzmir, Manisa, Muğla (Dlabola, 1957; Lodos & Kalkandelen, 1981c; Başpınar & Uygun, 1991a; Demir, 2006c).

**Subfamily AGALLIINAE****Tribe AGALLIINI*****Anaceratagallia ribauti* (Ossiannilsson, 1938)**

**Material examined:** Kemaliye: Yeşilyurt Village-Dutluca, 10.06.2006, 1♀, 1000 m, Yuva Village, 08.07.2006, 1♂, 930 m. **Distribution in Turkey:** Adana, Ankara, Antalya, Balıkesir, Bilecik, Çankırı, Erzurum, Hatay, Isparta, İçel, İzmir, Malatya, Mardin, Nevşehir, Samsun, Tekirdağ, Trabzon (Dlabola, 1971; Lodos & Kalkandelen, 1981c; Başpınar & Uygun, 1991a; Güçlü & Özbek, 1992; Demir, 2006a).

**Subfamily PENTHIMIINAE*****Penthimia nigra* (Goeze, 1778)**

**Material examined:** Kemaliye: Yeşilyurt Village-Dutluca, 10.06.2006, 1♀, 970 m. **Distribution in Turkey:** Ankara, Antalya, Bilecik, Isparta, İzmir, Kocaeli, Nevşehir, Sakarya, Tekirdağ, Trabzon (Dlabola, 1971; Lodos & Kalkandelen, 1982b; Demir, 2006b, 2007b).

**Subfamily DORYCEPHALINAE*****Eupelix cuspidata* (Fabricius, 1775)**

**Material examined:** Kemaliye: Yuva Köy, 03.06.2007, 1♂ 4♀♀, 970 m, Yeşilyurt Village-Dutluca, 10.06.2006, 1♂, 1000 m, Munzur Mountain (Doymuş Top), 04.06.2007, 2♂♂, 2350 m, Sarıçiçek (Subatan), 07.07.2006, 1♀, 1890 m, Ocak Village-Kuşak Village, 10.06.2006, 1♂, 1025 m. **Distribution in Turkey:** Adana, Adıyaman, Afyon, Ankara, Antalya, Artvin, Balıkesir, Çanakkale, Diyarbakır, Erzurum, İçel, Konya, Malatya, Mardin, Nevşehir, Niğde, Urfa (Dlabola, 1957, 1981; Lodos & Kalkandelen, 1982b; Başpınar & Uygun, 1991a, Güçlü & Özbek, 1994a; Demir, 2006a, 2006b, 2006c, 2007b).

**Subfamily APHRODINAE*****Aphrodes makarovi* Zachvatkin, 1948**

**Material examined:** Kemaliye: Sarıçiçek (Subatan), 02.06.2007, 1♀, 1890 m, Munzur Mountain (Doymuş Top), 04.06.2007, 2♀♀, 2350 m, Kuşak Village (Dere), 06.07.2006, 1♂, 1070 m. **Distribution in Turkey:** Adana, Ankara, Antalya, Balıkesir (Başpınar & Uygun, 1991b; Demir, 2006a, 2006b, 2006c).

***Anoscopus assimilis* (Signoret, 1879)**

**Distribution in Turkey:** Antalya, Kemaliye (Demir, 2006c; Demir & Demirsoy, 2008).



### Subfamily CICADELLINAE

#### Tribe CICADELLINI

##### *Cicadella viridis* (Linnaeus, 1758)

**Material examined:** Kemaliye: Rabat River (Tunceli Border), 03.07.2007, 5♂♂, 19♀♀, Yeşilyurt Village-Dutluca, 10.06.2006, 1♂, 1000 m on *Juncus*. **Distribution in Turkey:** Amasya, Artvin, Balıkesir, Bolu, Çanakkale, Diyarbakır, Edirne, Erzincan, Erzurum, İzmir, Kars, Kırklareli, Manisa, Mardin, Muğla, Samsun, Tekirdağ (Linnavuori, 1965; Lodos & Kalkandelen, 1983a; Güçlü & Özbek, 1994a).

### Subfamily TYPHLOCYBINAE

#### Tribe ALEBRINI

##### *Alebra albostriella* (Fallen, 1826)

**Material examined:** Kemaliye: Salihli Village (Opposite of Dump), 09.07.2006, 3♂♂, 36♀♀, 1500 m. **Distribution in Turkey:** Adana, Ankara, Antalya, Artvin, Balıkesir, Bitlis, Bolu, Çorum, Hatay, İzmir, Kayseri, Kırıkkale, Kocaeli, Kütahya, Ordu (Linnavuori, 1965; Dlabola, 1957, 1971, 1981; Lodos & Kalkandelen, 1983b; Demir, 2006a, 2006b, 2006c).

#### Tribe DIKRANEURINI

##### *Micantulina (Mulsantina) stigmatipennis* (Mulsant et Rey, 1855)

**Material examined:** Kemaliye: Rabat River (Tunceli Border), 03.07.2007, 1♂, 2♀♀, on *Verbascum*, Sarıçiçek (Subatan), 07.07.2006, 1♀ 1890 m on *Verbascum*. **Distribution in Turkey:** Ankara, Antalya, Balıkesir, Burdur, Erzurum, Isparta, İstanbul, İzmir, Manisa, Van (Dlabola, 1957, 1981; Lodos & Kalkandelen, 1983b; Güçlü & Özbek, 1994b; Demir, 2006a, 2006b, 2006c).

#### Tribe EMPOASCINI

##### *Kybos candelabricus* Dlabola, 1958

**Material examined:** Kemaliye: Başpınar (Konsar Village), 04.06.2007, 2♀♀, 1468 m on *Salix*, Yeşilyamaç Village (Geşo Pass), 24.09.2006, 1♂, 4♀♀, 1670 m on *Salix*, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 2♀♀, 1670 m on *Salix*, Kuşak Village (Dere), 06.07.2006, 2♀♀, 1070 m on *Salix*, Yeşilyamaç Village (Geşo Pass), 11.06.2006, 2♂♂, 1♀, 1689 m on *Salix*. **Distribution in Turkey:** Ankara, Erzincan, Kırşehir, Nevşehir, Van, Yozgat (Linnavuori, 1965; Lodos & Kalkandelen, 1983c; Demir, 2006a).

#### Tribe ERYTHRONEURINI

##### *Arboridia spathulata* (Ribaut, 1931)

**Distribution in Turkey:** Kemaliye (Demir & Demirsoy, 2008).

##### *Fruticidia sanguinosa* (Rey, 1891)

**Distribution in Turkey:** Adana, Antalya, Kemaliye (Dlabola, 1957; Demir, 2006c; Demir & Demirsoy, 2008).

***Tamaricella cypria* (Ribaut, 1948)**

**Material examined:** Kemaliye: Rabat River (Tunceli Border), 03.07.2007, 1♀, on *Tamarix*, Ocak Village-Kuşak Village, 10.06.2006, 1♂, 1025 m on *Tamarix*.  
**Distribution in Turkey:** Ankara, Antalya, Kırıkkale, Malatya (Dlabola, 1981; Lodos & Kalkandelen, 1984c; Demir, 2006c).

**Tribe TYPHLOCYBINI*****Eupteryx pavlovskii* Zachvatkin, 1947**

**Material examined:** Kemaliye: Sarıçiçek (Subatan), 02.06.2007, 1♂, 1890 m, Sarıçiçek (Subatan), 11.06.2006, 1♂, 6♀♀, 1890 m, Sarıçiçek (Subatan), 11.06.2006, 5♀♀, 1890 m, Sarıçiçek (Mazman Well), 04.07.2007, 1♂, 1♀, 1650 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 2♂♂, 1♀, 1670 m. **Distribution in Turkey:** Erzincan (Lodos & Kalkandelen, 1984b).

**Subfamily DELTOCEPHALINAE****Tribe GONIAGNATHINI*****Goniagnathus bolivari* (Melichar, 1907)**

**Material examined:** Kemaliye: Kocaçimen Village (Silk Road), 04.07.2007, 1♂, 1300 m. **Distribution in Turkey:** Adana, Ankara, Edirne, Nevşehir, Urfa (Dlabola, 1957; Linnavuori, 1965; Lodos & Kalkandelen, 1985a).

***Goniagnathus brevis* (Herrich-Schaeffer, 1835)**

**Material examined:** Kemaliye: Sarıçiçek (Subatan), 07.07.2006, 1♀, 1890 m.  
**Distribution in Turkey:** Adana, Amasya, Ankara, Antalya, Burdur, Diyarbakır, Edirne, Erzurum, Manisa, Mardin, Niğde, Samsun, Sinop, Tokat (Dlabola, 1957; Kalkandelen, 1974; Lodos & Kalkandelen, 1985a; Başpınar & Uygun, 1991b; Kartal & Zeybekoğlu, 1991; Zeybekoğlu, 1998; Güçlü & Özbek, 1994c; Demir, 2004b, 2006b, 2007b).

**Tribe OPSIINI*****Opsius cypriacus* Lindberg, 1948**

**Material examined:** Kemaliye: Yuva Köyü, 23.09.2006, 1♂, 1♀, 970 m on *Tamarix*. **Distribution in Turkey:** Adana, Amasya, Ankara, Antalya, Artvin, Aydın, Diyarbakır, Edirne, Erzincan, Erzurum, İzmir, Kırıkkale, Kütahya, Malatya, Manisa, Nevşehir, Samsun, Siirt, Van, Yozgat (Linnavuori, 1965; Dlabola, 1981; Lodos & Kalkandelen, 1985a; Demir, 2006c).

***Circulifer haematoceps* (Mulsant et Rey, 1855)**

**Material examined:** Kemaliye: Sarıçiçek (Mazman Well), 02.06.2007, 2♂♂, 1♀, 1650 m, Başpınar (Konsar Village), 04.06.2007, 1♀, 1468 m, Munzur Mountain (Doymuş Top), 04.06.2007, 1♂, 5♀♀, 2350 m, Sarıçiçek (Subatan), 07.07.2006, 2♂♂, 5♀♀, 1890 m, Salihli Village (Opposite of Dump), 09.07.2006, 1♂, 1500 m, Yeşilyamaç Village (Geşo Park), 11.06.2006, 1♂, 1320 m. **Distribution in Turkey:** Adana, Ağrı, Ankara, Antalya, Aksaray, Bitlis, Erzurum, Hakkari, İçel, Konya, Muğla,

Nevşehir, Sivas, Van (Linnavuori, 1965; Kalkandelen, 1974; Dlabola, 1957, 1971, 1981; Lodos & Kalkandelen, 1985a; Başpınar & Uygun, 1991c; Güçlü & Özbek, 1994c; Kartal et al., 2001; Demir, 2004a, 2006c, 2007b).

***Neoliturus fenestratus* (Herrich-Schaeffer, 1834)**

**Material examined:** Kemaliye: Sarıçiçek (Mazman Well), 07.07.2006, 1♂, 1690 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 1♂, 1670 m, Salihli Village (Opposite of Dump), 09.07.2006, 1♂, 2♀♀, 1500 m. **Distribution in Turkey:** Adana, Ağrı, Aksaray, Amasya, Ankara, Antalya, Bolu, Çorum, Diyarbakır, Edirne, Erzurum, Giresun, Gümüşhane, İçel, İzmir, Iğdır, Mardin, Nevşehir, Ordu, Samsun, Sivas, Sinop, Tokat, Urfa, Van (Linnavuori, 1965; Dlabola, 1957, 1981; Kalkandelen, 1974; Lodos & Kalkandelen, 1985a; Başpınar & Uygun, 1991c; Kartal & Zeybekoğlu, 1991; Güçlü & Özbek, 1994c; Zeybekoğlu, 1998; Demir, 2006b, 2006c).

***Neoliturus transversalis* (Puton, 1881)**

**Material examined:** Kemaliye: Yeşilyamaç Village (Geşo Pass), 11.06.2006, 1♂, 1689 m. **Distribution in Turkey:** Ankara, Çorum, Diyarbakır, Erzincan, İzmir, Muş, Siirt, Van (Kalkandelen, 1974; Lodos & Kalkandelen, 1985a).

**Tribe MACROSTELINI**

***Balclutha pellucens* Horvath, 1909**

**Material examined:** Kemaliye: Yeşilyayla Village (Hınsoy), 04.06.2007, 1♀, 1500 m, Yuva Köyü, 03.06.2007, 1♀, 970 m, Yeşilyurt Village-Dutluca, 10.06.2006, 1♂, 1000 m, Sarıçiçek (Subatan), 11.06.2006, 1♂, 1890 m, Başpınar (Konsar Village), 04.06.2007, 1♀, 1468 m, Sarıçiçek (Mazman Well), 07.07.2006, 1♂, 1690 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 1♂, 1670 m, Salihli Village (Opposite of Dump), 09.07.2006, 3♀♀, 1500 m. **Distribution in Turkey:** Adıyaman, Ağrı, Amasya, Ankara, Artvin, Bitlis, Bolu, Burdur, Çankırı, Diyarbakır, Elazığ, Erzincan, Erzurum, Hakkari, Kars, Iğdır, Mardin, Samsun, Van (Lodos & Kalkandelen, 1985b).

***Macrosteles forficula* (Ribaut, 1927)**

**Material examined:** Kemaliye: Salihli Village (Opposite of Dump), 09.07.2006, 1♂, 1500 m. **Distribution in Turkey:** Adana, Amasya, Ankara, Antalya, Bolu, Erzincan (Iliç, Refahiye), Erzurum, Samsun, Sinop, Van (Dlabola, 1957, 1981; Kalkandelen, 1974; Lodos & Kalkandelen, 1985b; Güçlü & Özbek, 1994d; Zeybekoğlu, 1998; Demir, 2006c).

***Macrosteles laevis* (Ribaut, 1927)**

**Material examined:** Kemaliye: Sarıçiçek (Subatan), 11.06.2006, 41♂♂, 43♀♀, 1890 m. **Distribution in Turkey:** Adana, Afyon, Amasya, Ankara, Artvin, Bitlis, Burdur, Giresun, Hakkari, Karaman, Konya, Malatya, Nevşehir, Ordu, Rize, Sakarya, Samsun, Sinop, Tokat, Trabzon, Van (Kalkandelen, 1974; Dlabola, 1957, 1971, 1981; Lodos & Kalkandelen, 1985b; Kartal & Zeybekoğlu, 1991; Zeybekoğlu, 1998; Kartal et al., 2001).

***Macrosteles sexnotatus* (Fallen, 1806)**

**Material examined:** Kemaliye: Sarıçiçek (Subatan), 02.06.2007, 1♀, 1890 m, Sarıçiçek (Subatan), 11.06.2006, 138♂♂, 86♀♀, 1890 m. **Distribution in Turkey:** Aydın, Ağrı, Amasya, Ankara, Artvin, Bolu, Çankırı, Diyarbakır, Düzce, Erzurum, Giresun, Hakkari, İzmir, Konya, Nevşehir, Ordu, Rize, Samsun, Sinop, Tokat, Trabzon, Van (Kalkandelen, 1974; Lodos & Kalkandelen, 1985b; Kartal et al., 2001; Güçlü & Özbek, 1994d; Zeybekoğlu, 1998).

**Tribe DORATURINI*****Doratura stylata* (Boheman, 1847)**

**Material examined:** Kemaliye: Sarıçiçek (Mazman Well), 04.07.2007, 1♀, 1650 m, Kocaçimen Village (Silk Road), 04.07.2007, 2♂♂, 1♀, 1300 m, Karanlık Canyon (Venkağ Top), 09.07.2006, 2♂♂, 1♀, 1400-1680 m. **Distribution in Turkey:** Amasya, Ankara, Erzurum, Gümüşhane, Kars, Ordu, Samsun, Sinop, Tokat, Van (Kalkandelen, 1974; Lodos & Kalkandelen, 1985c; Kartal & Zeybekoğlu, 1991; Güçlü & Özbek, 1994c; Zeybekoğlu, 1998).

**Tribe ATHYSANINI*****Platymetopius cruentatus* Haupt, 1927**

**Material examined:** Kemaliye: Yeşilyamaç Village (Geşo Pass), 24.09.2006, 5♂♂, 3♀♀, 1670 m on *Euphorbia*. **Distribution in Turkey:** Adana, Ankara, Muğla, Nevşehir (Dlabola, 1957; Kalkandelen, 1974; Lodos & Kalkandelen, 1986b; Başpınar & Uygun, 1992a).

***Platymetopius henribauti* Dlabola, 1961**

**Material examined:** Kemaliye: Ocak Village 8, 06.07.2006, 1♂, 1480 m, Ocak Village-Kuşak Village, 10.06.2006, 1♀, 1025 m. **Distribution in Turkey:** Ankara, Antalya, Balıkesir, Konya, Kütahya, Sivas (Kalkandelen, 1974; Dlabola, 1981; Lodos & Kalkandelen, 1986b; Demir, 2006b, 2006c, 2007b).

***Platymetopius obsoletus* (Signoret, 1880)**

**Distribution in Turkey:** Antalya, Kemaliye, Samsun (Lodos & Kalkandelen, 1988; Kartal & Zeybekoğlu, 1991; Zeybekoğlu, 1998; Demir & Demirsoy, 2008).

***Platymetopius manfredi* Abdul-Nour, 1987**

**Distribution in Turkey:** Kemaliye, Tokat (Kartal & Zeybekoğlu, 1991; Demir & Demirsoy, 2008).

***Phlepsius intricatus* (Herrich-Schaeffer, 1838)**

**Material examined:** Kemaliye: Rabat River (Tunceli Border), 03.07.2007, 1♂, Yeşilyurt Village-Dutluca, 10.06.2006, 1♀, 1000 m, Kabataş Village (Pınarbaşı Well), 25.09.2006, 1♀, 1640 m. **Distribution in Turkey:** Amasya, Ankara, Antalya, Bartın, Bolu, Çanakkale, Diyarbakır, Isparta, İzmir, Kars, Kırşehir, Malatya, Mardin, Muğla, Nevşehir, Samsun, Trabzon (Linnavuori, 1965; Kalkandelen, 1974; Lodos & Kalkandelen, 1986c; Kartal & Zeybekoğlu, 1991; Zeybekoğlu, 1998; Demir, 2006b, 2006c).

***Hardya anatolica* Zachvatkin, 1946**

**Material examined:** Kemaliye: Yeşilyayla Village (Hınsoy), 04.06.2007, 10♂♂, 6♀♀, 1500 m, Sarıçiçek (Subatan), 02.06.2007, 10♂♂, 11♀♀, 1890 m, Yuva Köy, 03.06.2007, 1♀, 970 m, Yeşilyayla Village (Subaşı), 04.06.2007, 2♀♀, 1350 m, Sarıçiçek (Mazman Well), 02.06.2007, 4♂♂, 2♀♀, 1650 m, Sarıçiçek (Subatan), 11.06.2006, 3♂♂, 6♀♀, 1890 m, Sarıçiçek (Subatan), 11.06.2006, 3♂♂, 4♀♀, 1890 m, Kabataş Village (İkisu Place), 03.06.2007, 1♂, 1550 m, Sarıçiçek (Mazman Well), 04.07.2007, 1♂, 1650 m, Munzur Mountain (Doymuş Top), 04.06.2007, 4♂♂, 26♀♀, 2350 m, Kabataş Village (Pınarbaşı Well), 25.09.2006, 5♂♂, 2♀♀, 1640 m, Sarıçiçek (Subatan), 07.07.2006, 2♂♂, 9♀♀, 1890 m, Ocak Village 8, 06.07.2006, 1♀, 1480 m, Sarıçiçek (Mazman Well), 11.06.2006, 1♀, 1690 m. **Distribution in Turkey:** Adıyaman, Ankara, Antalya, Balıkesir, Bolu, Elazığ, Erzincan, Erzurum, Isparta, İzmir, Kayseri, Kırşehir, Karaman, Malatya, Nevşehir, Ordu (Zachvatkin, 1946; Dlabola, 1957, 1981; Linnavuori, 1965; Kalkandelen, 1974; Dlabola, 1981; Lodos & Kalkandelen, 1987a; Güçlü & Özbek, 1994e; Demir, 2004a, 2006a, 2006b, 2006c, 2007b).

***Stenometopiellus angorensis* Zachvatkin, 1946**

**Material examined:** Kemaliye: Sarıçiçek (Subatan), 02.06.2007, 1♂, 1890 m, Sarıçiçek (Subatan), 11.06.2006, 2♀♀, 1890 m, Sarıçiçek (Subatan), 11.06.2006, 1♀, 1890 m, Munzur Mountain (Doymuş Top), 04.06.2007, 1♂, 2350 m, Karanlık Canyon (Venkağ Top), 09.07.2006, 1♂, 1400-1680 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 1♀, 1670 m, Sarıçiçek (Subatan), 07.07.2006, 1♀, 1890 m, Salihli Village (Opposite of Dump), 09.07.2006, 2♂♂, 1500 m. **Distribution in Turkey:** Ağrı, Ankara, Bitlis, Diyarbakır, Erzincan, Erzurum, Hakkari, Iğdır, Kars, Konya, Malatya, Nevşehir, Urfa, Van (Zachvatkin, 1946; Kalkandelen, 1974; Lodos & Kalkandelen, 1987a; Güçlü & Özbek, 1994e; Kartal et al., 2001).

***Rhopalopyx vitripennis* (Flor, 1861)**

**Distribution in Turkey:** Ankara, Kemaliye, Konya (Kalkandelen, 1974; Lodos & Kalkandelen, 1987a; Demir & Demirsoy, 2008).

***Cicadula (Henriana) lineatopunctata* (Matsumura, 1908)**

**Material examined:** Kemaliye: Sarıçiçek (Mazman Well), 02.06.2007, 5♂♂, 4♀♀, 1650 m, Sarıçiçek (Subatan), 11.06.2006, 1♀, 1890 m, Çanakçı Village, 02.06.2007, 1♂, 1400 m, Kuşak Village (Dere), 06.07.2006, 1♀, 1070 m, Salihli Village (Opposite of Dump), 09.07.2006, 1♂, 1♀, 1500 m, Sarıçiçek (Mazman Well), 11.06.2006, 1♂, 1690 m. **Distribution in Turkey:** Adana, Ankara, Antalya, Aydın, Balıkesir, Bolu, Düzce, Bursa, Çankırı, Diyarbakır, Erzincan (Centre), Erzurum, İzmir, Malatya, Mardin, Sakarya, Sinop, Urfa (Kalkandelen, 1974; Dlabola, 1957, 1981; Lodos & Kalkandelen, 1987a; Güçlü & Özbek, 1994e; Demir, 2006a, 2006c).

***Cicadula (s. str.) quadrinotata* (Fabricius, 1794)**

**Material examined:** Kemaliye: Kuşak Village (Dere), 06.07.2006, 1♂, 1070 m. **Distribution in Turkey:** Ankara, Bolu, Çankırı, Sakarya (Kalkandelen, 1974; Lodos & Kalkandelen, 1987a).

***Handianus ignoscus* (Melichar, 1896)**

**Distribution in Turkey:** Ankara, Kemaliye (Dlabola, 1957; Demir & Demirsoy, 2008).

***Conosanus obsoletus* (Kirschbaum, 1858)**

**Material examined:** Kemaliye: Rabat River (Tunceli Border), 03.07.2007, 3♂♂, 2♀♀, Karanlık Canyon (Venkağ Top), 09.07.2006, 3♂♂, 1♀, 1400-1680 m, Salihli Village (Opposite of Dump), 09.07.2006, 2♂♂, 3♀♀, 1500 m. **Distribution in Turkey:** Adana, Ankara, Aydın, Balıkesir, Bolu, Düzce, Erzurum, İzmir, Kırşehir, Niğde (Dlabola, 1957; Kalkandelen, 1974; Lodos & Kalkandelen, 1987b; Başpınar & Uygun, 1992b, Güçlü & Özbek, 1994f; Demir, 2004a, 2006b).

***Euscelis incisus* (Kirschbaum, 1858)**

**Material examined:** Kemaliye: Sarıçiçek (Mazman Well), 02.06.2007, 1♀, 1650 m, Sarıçiçek (Subatan), 07.07.2006, 1♀, 1890 m, Yuva Village, 08.07.2006, 8♂♂, 3♀♀, 930 m. **Distribution in Turkey:** Adana, Ankara, Antalya, Balıkesir, Burdur, Edirne, Eskişehir, Erzurum, Isparta, İçel, İstanbul, Kayseri, Kocaeli (Fahringer, 1922, Dlabola, 1957; Kalkandelen, 1974; Başpınar & Uygun, 1992b, Güçlü & Özbek, 1994f; Demir, 2004a, 2006a, 2006b, 2006c, 2007b).

***Artianus manderstjernii* (Kirschbaum, 1868)**

**Material examined:** Kemaliye: Yuva Köyü, 03.06.2007, 1♂, 970 m, Sarıçiçek (Mazman Well), 04.07.2007, 1♂, 1650 m, Karanlık Canyon (Venkağ Top), 09.07.2006, 1♀, 1400-1680 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 1♂, 1♀, 1670 m, Kuşak Village (Dere), 06.07.2006, 1♂, 1♀, 1070 m. **Distribution in Turkey:** Ağrı, Ankara, Antalya, Balıkesir, Çankırı, Diyarbakır, Edirne, Gaziantep, İzmir, Kırklareli, Urfa, Van, Zonguldak (Dlabola, 1957, Kalkandelen, 1974; Lodos & Kalkandelen, 1987b; Demir, 2004a, 2006a, 2006b, 2006c, 2007b).

***Zercanus rubroocellatus* Dlabola, 1965**

**Distribution in Turkey:** Adana, Antalya, Kemaliye (Lodos & Kalkandelen, 1987b; Demir, 2006c; Demir & Demirsoy, 2008).

**Tribe PARALIMNINI*****Arocephalus* (s. str.) *longiceps* (Kirschbaum, 1868)**

**Material examined:** Kemaliye: Yeşilyayla Village (Subaşı), 04.06.2007, 2♂♂, 1350 m, Kabataş Village (İkisu Place), 03.06.2007, 1♂, 1550 m, Munzur Mountain (Doymuş Top), 04.06.2007, 1♀, 2350 m, Kabataş Village (Pınarbaşı Well), 25.09.2006, 1♂, 1♀, 1640 m, Yeşilyamaç Village (Geşo Pass), 11.06.2006, 1♀, 1689 m. **Distribution in Turkey:** Ankara, Bolu, Erzincan, Erzurum, Hakkari, İzmir, Konya (Lodos & Kalkandelen, 1987c; Güçlü & Özbek, 1995; Kartal et al., 2001).

***Psammotettix alienus* (Dahlbom, 1850)**

**Material examined:** Kemaliye: Rabat River (Tunceli Border), 03.07.2007, 6♂♂, 6♀♀, Sarıçiçek (Subatan), 02.06.2007, 10♂♂, 36♀♀, 1890 m, Yuva Village,

03.06.2007, 4♂♂, 5♀♀, 970 m, Sarıçiçek (Mazman Well), 02.06.2007, 12♂♂, 8♀♀, 1650 m, Sarıçiçek (Subatan), 11.06.2006, 14♂♂, 23♀♀, 1890 m, Sarıçiçek (Mazman Well), 07.07.2006, 2♂♂, 1690 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 5♂♂, 4♀♀, 1670 m, Sarıçiçek (Subatan), 07.07.2006, 12♂♂, 12♀♀, 1890 m, Salihli Village (Opposite of Dump), 09.07.2006, 36♂♂, 40♀♀, 1500 m. **Distribution in Turkey:** Adana, Amasya, Ankara, Antalya, Balıkesir, Bolu, Bursa, Diyarbakır, Erzincan (Centre, Çağlayan, Dumanlı Mountain, Refahiye), Erzurum, Hakkari, Iğdır, İçel, Kastamonu, Konya, Malatya, Mardin, Muş, Nevşehir, Sakarya, Siirt, Sinop, Uşak, Van, Yozgat (Kalkandelen, 1974; Dlabola, 1971, 1981; Lodos & Kalkandelen, 1987c; Kartal & Zeybekoğlu, 1991; Kartal et al., 2001; Demir, 2004a, 2006a, 2006b, 2006c, 2007b).

***Psammotettix confinis* (Dahlbom, 1850)**

**Material examined:** Kemaliye: Yuva Village, 03.06.2007, 1♂, 970 m, Yeşilyurt Village-Dutluca, 10.06.2006, 3♂♂, 2♀♀, 1000 m, Sarıçiçek (Mazman Well), 02.06.2007, 6♂♂, 2♀♀, 1650 m, Kuşak Village (Dere), 06.07.2006, 1♂, 1070 m. **Distribution in Turkey:** Adana, Ağrı, Ankara, Antalya, Balıkesir, Bitlis, Erzincan (Centre, Altıntepe, Çağlayan, Kovalık, Ilıç, Refahiye, Üzümlü), Edirne, Erzurum, Giresun, Hakkari, Iğdır, Isparta, Konya, Ordu, Samsun, Sivas, Van (Dlabola, 1957, 1971; Kalkandelen, 1974; Lodos & Kalkandelen, 1987c; Kartal & Zeybekoğlu, 1991; Güçlü & Özbek, 1995; Kartal et al., 2001; Demir, 2006a, 2006c).

***Psammotettix poecilus* (Flor, 1861)**

**Distribution in Turkey:** Kemaliye, Tokat (Zeybekoğlu, 1998; Demir & Demirsoy, 2008).

***Psammotettix provincialis* (Ribaut, 1925)**

**Material examined:** Kemaliye: Yeşilyayla Village (Subaşı), 04.06.2007, 2♂♂, 3♀♀, 1350 m, Karanlık Canyon (Venkağ Top), 09.07.2006, 1♂, 1♀, 1400-1680 m, Kuşak Village (Dere), 06.07.2006, 1♂, 1♀, 1070 m, Yuva Village, 08.07.2006, 1♂, 930 m, Salihli Village (Opposite of Dump), 09.07.2006, 9♂♂, 7♀♀, 1500 m, Sarıçiçek (Mazman Well), 11.06.2006, 3♂♂, 6♀♀, 1690 m. **Distribution in Turkey:** Adana, Ankara, Antalya, Bolu, Çankırı, Diyarbakır, Edirne, Erzurum, İstanbul, İzmir, Kayseri, Konya, Muğla, Nevşehir, Sakarya, Samsun, Van (Dlabola, 1957, Kalkandelen, 1974; Lodos & Kalkandelen, 1987c; Kartal & Zeybekoğlu, 1991; Başpınar & Uygun, 1992b, Güçlü & Özbek, 1995; Demir, 2006b, 2006c, 2007b; Tezcan et al, 2013).

***Ebarrius cognatus* (Fieber, 1869)**

**Material examined:** Kemaliye: Munzur Mountain (Doymuş Top), 04.06.2007, 1♂, 2350 m. **Distribution in Turkey:** Amasya, Ankara, Antalya, Bolu, Çankırı, Erzincan (Kemaliye), Erzurum, Kars, Kayseri, Niğde, Samsun, Sinop, Van (Dlabola, 1957, 1981; Kalkandelen, 1974; Lodos & Kalkandelen, 1987d; Güçlü & Özbek, 1995; Demir, 2004a, 2006b, 2006c).

***Diplocolenus bekiri* Kalkandelen, 1972**

**Material examined:** Kemaliye: Çanakçı Village, 02.06.2007, 19♂♂, 8♀♀, 1400 m, Sarıçiçek (Subatan), 07.07.2006, 1♀, 1890 m. **Distribution in Turkey:** Ankara, Erzurum, Samsun (Kalkandelen, 1974; Lodos & Kalkandelen, 1987d; Kartal & Zeybekoğlu, 1991; Güçlü & Özbek, 1995).

***Rhoananus hypochlorus* (Fieber, 1869)**

**Material examined:** Kemaliye: Sarıçiçek (Mazman Well), 04.07.2007, 2♀♀, 1650 m, Sarıçiçek (Mazman Well), 07.07.2006, 1♂, 1♀, 1690 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 4♀♀, 1670 m, Yeşilyamaç Village (Geşo Pass), 08.07.2006, 4♀♀, 1670 m. **Distribution in Turkey:** Ankara, Bitlis, Erzurum, Eskişehir, Iğdır, Kars, Van (Kalkandelen, 1974; Lodos & Kalkandelen, 1987d).

***Mocuellus foxi* Kalkandelen, 1972**

**Distribution in Turkey:** Ankara, Kemaliye, Yozgat (Kalkandelen, 1974; Lodos & Kalkandelen, 1987d; Demir & Demirsoy, 2008).

**Discussion**

Our study is the first contribution to the knowledge of the Cicadomorpha fauna of the Kemaliye district. Until now, fifty four species have been known from the Erzincan province including the Kemaliye district. Fifty two of sixty three determined species are new to the Erzincan province and the number of species known from the research area increased to hundred six. *Cicadivetta tibialis* (Panzer, 1788), *Aphrophora salicina* (Goeze, 1778), *Megophthalmus scabripennis* Edwards, 1915, *Penthimia nigra* (Goeze, 1778), *Aphrodes makarovi* Zachvatkin, 1948, *Goniagnathus bolivari* (Melichar, 1907), *Platymetopius cruentatus* Haupt, 1927 and *Platymetopius henribauti* Dlabola, 1961 are recorded for the first time in the eastern Turkey.

**References**

- Başpınar, H., Uygun, N.,** 1991a. Doğu Akdeniz Bölgesi turuncgil bahçelerindeki Cicadellidae türleri üzerinde faunistik ve sistematik çalışmalar I- *Türk. entomol. derg.*, 15(2): 89-106.
- Başpınar, H., Uygun, N.,** 1991b. Doğu Akdeniz Bölgesi turuncgil bahçelerindeki Cicadellidae türleri üzerinde faunistik ve sistematik çalışmalar II.- *Türk. entomol. derg.*, 15(3): 157-172.
- Başpınar, H., Uygun, N.,** 1991c. Doğu Akdeniz Bölgesi turuncgil bahçelerindeki Cicadellidae türleri üzerinde faunistik ve sistematik çalışmalar III.- *Türk. entomol. derg.*, 15(4): 203-222.
- Başpınar, H., Uygun, N.,** 1992a. Doğu Akdeniz Bölgesi turuncgil bahçelerindeki Cicadellidae türleri üzerinde faunistik v sistematik çalışmalar IV.- *Türk. entomol. derg.*, 16(1): 47-64.



- Başpınar, H., Uygun, N.,** 1992b. Doğu Akdeniz Bölgesi turuncgil bahçelerindeki Cicadellidae türleri üzerinde faunistik v sistematik çalışmalar V.- *Türk. entomol. Derg.*, 16(2): 99-114.
- Demir, E.,** 2004a. Karyağdı Dağı (Ankara) Auchenorrhyncha Faunası Hakkında (Homoptera).- *Priamus*, 11(1/2): 17-27.
- Demir, E.,** 2004b. *Goniagnathus guttulinervis* (Kirschbaum, 1868) new to Turkey, with data on ditribution of the Genus in Antalya (Homoptera: Auchenorrhyncha: Cicadellidae).- *Acta Entomologica Slovenica*, 12 (2): 255-257.
- Demir, E.,** 2006a. Contributions to the knowledge of Turkish Auchenorrhyncha (Homoptera) with a new record, *Pentastiridius nanus* (Ivanov, 1885).- *Munis entomology and zoology*, 1(1): 97-122.
- Demir, E.,** 2006b. Preliminary report on the Auchenorrhyncha (Hemiptera) fauna of Kazdağı National Park with two new records for Turkey.- *Acta Entomologica Slovenica*, 14 (1): 89-102.
- Demir, E.,** 2006c. Contributions to the knowledge of Turkish Auchenorrhyncha with twelve new records (Homoptera: Cicadellidae).- *Munis entomology and zoology*, 1(2): 215-236.
- Demir, E.,** 2007a. Contributions to the Knowledge of Turkish Auchenorrhyncha (Homoptera, Fulgoromorpha and Cicadomorpha, excl. Cicadellidae) with a new record, *Setapius klapperichianus* Dlabola, 1988.- *Munis entomology and zoology*, 2(1): 39-58.
- Demir, E.,** 2007b. Auchenorrhyncha (Homoptera) data from Ankara with two new records to Turkey.- *Munis entomology and zoology*, 2(2): 481-492.
- Demir, E., Demirsoy, A.,** 2008. Some interesting and new records of Cicadellidae (Insecta: Hemiptera) from eastern Turkey.- *Zoology in the Middle East*, 45: 116-117.
- Dlabola, J.,** 1957. Results of the Zoological Expedition of the National Museum in Prague to Turkey 20. Homopeta., Auchenorrhyncha.- *Acta ent. Mus. Nat. Pragae*, 31(469): 19-68.
- Dlabola, J.,** 1971. Taxonomische und chorologische Erzangungen zur türkischen und iranischen Zikadenfauna (Homopeta., Auchenorrhyncha).- *Acta faun. ent. Mus. Nat. Pragae*, 14(163): 115-138.
- Dlabola, J.,** 1981. Ergebnisse der Tschechoslowakisch-Iranischen Entomologischen Expeditionen nach dem Iran (1970 und 1973).- *Acta ent. Mus. Nat. Pragae*, 40: 127-311.
- Fahringer, J.,** 1922. Eine Rhynchotenausbeute aus der Türkei, Kleinasien und den benachbarten Gebieten.- *Konowia*, 1: 296-307.
- Güçlü Ş., Özbek, H.,** 1992. Erzurum Yöresinde Cicadellidae (Homoptera, Auchenorrhyncha) Türleri Üzerinde Faunistik ve Sistematik Çalışmalar I. Agallinae, Macropsinae, Ulopiniae.- *Türkiye II. Entomoloji Kongresi*, 28-31 Ocak, Adana, 607-620.
- Güçlü Ş., Özbek, H.,** 1994a. Erzurum Yöresinde Cicadellidae (Homoptera, Auchenorrhyncha) Türleri Üzerinde Faunistik ve Sistematik Çalışmalar II. Idiocerinae,

- Iassinae, Dorycephalinae, Aphrodinae, Cicadellinae.- *Türk. entomol. derg.*, 18(2): 103-117.
- Güçlü Ş., Özbek, H.**, 1994b. Erzurum Yöresinde Cicadellidae (Homoptera, Auchenorrhyncha) Türleri Üzerinde Faunistik ve Sistematik Çalışmalar III. Typhlocybinae.- *Atatürk Ü., Ziraat Fak. Derg.*, 25(1): 78-93.
- Güçlü Ş., Özbek, H.**, 1994c. Erzurum Yöresinde Cicadellidae (Homoptera, Auchenorrhyncha) Türleri Üzerinde Faunistik ve Sistematik Çalışmalar IV. Deltocephalinae, Grypotini, Opsini, Deltocephalini, Doraturini.- *Atatürk Ü., Ziraat Fak. Derg.*, 25(2): 167-179.
- Güçlü Ş., Özbek, H.**, 1994d. Erzurum Yöresinde Cicadellidae (Homoptera, Auchenorrhyncha) Türleri Üzerinde Faunistik ve Sistematik Çalışmalar V. Deltocephalinae, Macrostelini.- *Atatürk Ü., Ziraat Fak. Derg.*, 25(3): 354-366.
- Güçlü Ş., Özbek, H.**, 1994e. Erzurum Yöresinde Cicadellidae (Homoptera, Auchenorrhyncha) Türleri Üzerinde Faunistik ve Sistematik Çalışmalar VI. Deltocephalinae, Athysanini-I.- *Atatürk Ü., Ziraat Fak. Derg.*, 25(3): 367-379.
- Güçlü Ş., Özbek, H.**, 1994f. Erzurum Yöresinde Cicadellidae (Homoptera, Auchenorrhyncha) Türleri Üzerinde Faunistik ve Sistematik Çalışmalar VII. Deltocephalinae, Athysanini-II.- *Atatürk Ü., Ziraat Fak. Derg.*, 25(4): 520-532.
- Güçlü Ş., Özbek, H.**, 1995. Erzurum Yöresinde Cicadellidae (Homoptera, Auchenorrhyncha) Türleri Üzerinde Faunistik ve Sistematik Çalışmalar VIII. Deltocephalinae, Paralimnini.- *Atatürk Ü., Ziraat Fak. Derg.*, 26(3): 336- 354.
- Kalkandelen, A.**, 1974. Orta Anadolu'da Homoptera: Cicadellidae familyası türlerinin taksonomileri üzerinde araştırmalar.- *Zirai Mücadele ve Karantina Genel Müdürlüğü*, Ankara, 1-220.
- Kartal, V., Zeybekoğlu, Ü.**, 1991. Samsun Ondokuz Mayıs Üniversitesi Kurupelit Kampüsü Çevresinde Deltocephalinae (Hom., Auch., Cicadellidae) Alt Familyası Türlerinin Faunistik Yönden İncelenmesi.- *Ondokuz. May. Ü. Fen Derg.*, 3(1): 232-257.
- Kartal, V., Zeybekoğlu, Ü.**, 1999. *Cicadatra hyalina* (Fabricius, 1798) (Homoptera, Cicadidae) Türü Üzerine Taksonomik Bir Araştırma.- *Tr. J. of Zoology*, 23: 63-66.
- Kartal, V., Zeybekoğlu, Ü., Özdemir, G.**, 1994. Samsun Çevresinde Cercopidae (Hom., Auchenorrhyncha) Familyası Türleri Üzerine Taksonomik Bir Araştırma.- *Ondokuz May. Ü. Fen Derg.*, 5(1): 147-157.
- Kartal, V., Zeybekoğlu, Ü., Dursun, A.**, 2001. A faunistic study on Deltocephalinae (Homoptera: Auchenorrhyncha: Cicadellidae) in Yüksekova (Hakkari).- *Türk. entomol. derg.*, 25(2): 83-92.
- Linnavuori, R.**, 1965. Studies on the South and East-Mediterranean Hemipterous fauna.- *Acta Entomol. Fennica, Helsinki*, 21: 1-70.
- Lodos, N., Kalkandelen, A.**, 1981a. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey V. Families Flatidae, Ricaniidae and Cicadidae.- *Türk. Bitki kor. Derg.*, 5(2): 67-82.
- Lodos, N., Kalkandelen, A.**, 1981b. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey VI. Families Cercopidae

- and Membracidae.- *Türk. Bitki kor. Derg.*, 5(3): 133-149.
- Lodos, N., Kalkandelen, A.**, 1981c. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey VII. Family Cicadellidae: Ulopinae, Megophthalminae, Ledrinae, Macropsinae and Agallinae.- *Türk. Bitki kor. Derg.*, 5(4): 215-230.
- Lodos, N., Kalkandelen, A.**, 1982a. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey VIII. Family Cicadellidae: Idiocerinae.- *Türk. Bitki kor. Derg.*, 6(1): 15-28.
- Lodos, N., Kalkandelen, A.**, 1982b. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey IX. Family Cicadellidae: Iassinae, Penthiminae, Dorycephalinae, Hecalinae and Aphrodinae.- *Türk. Bitki kor. Derg.*, 6: 147-159.
- Lodos, N., Kalkandelen, A.**, 1983a. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey X. Family Cicadellidae: Xestocephalinae, Stegelytrinae and Cicadellinae.- *Türk. Bitki kor. Derg.*, 7: 23-28.
- Lodos, N., Kalkandelen, A.**, 1983b. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XI. Family Cicadellidae, Typhlocybinae: Alebrini and Dikraneurini.- *Türk. Bitki kor. Derg.*, 7: 107-115.
- Lodos, N., Kalkandelen, A.**, 1983c. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XII. Family Cicadellidae, Typhlocybinae: Emposcini.- *Türk. Bitki kor. Derg.*, 7: 153-165.
- Lodos, N., Kalkandelen, A.**, 1984a. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XIII. Family Cicadellidae, Typhlocybinae: Typhlocybini (Part I).- *Türk. Bitki kor. Derg.*, 8: 33-44.
- Lodos, N., Kalkandelen, A.**, 1984b. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XIV. Family Cicadellidae, Typhlocybinae: Typhlocybini (Part II).- *Türk. Bitki kor. Derg.*, 8: 87-97.
- Lodos, N., Kalkandelen, A.**, 1984c. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XV. Family Cicadellidae, Typhlocybinae: Erythroneurini (Part I).- *Türk. Bitki kor. Derg.*, 8: 159-168.
- Lodos, N., Kalkandelen, A.**, 1984d. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XVI. Family Cicadellidae, Typhlocybinae: Erythroneurini (Part II).- *Türk. Bitki kor. Derg.*, 8: 201-210.
- Lodos, N., Kalkandelen, A.**, 1985a. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XVII. Family Cicadellidae, Deltocephalinae: Grypotini, Goniagnathini and Opsiini (Part I).- *Türk. Bitki kor. Derg.*, 9: 79-90.
- Lodos, N., Kalkandelen, A.**, 1985b. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XVIII. Family Cicadellidae, Deltocephalinae: Macrostelini (Part II).- *Türk. Bitki kor. Derg.*, 9(3): 147-161.
- Lodos, N., Kalkandelen, A.**, 1985c. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XIX. Family Cicadellidae,

- Deltocephalinae: Deltocephalini, Scaphytopiini, Doraturini.- *Türk. Bitki kor. Derg.*, 9: 207-215.
- Lodos, N., Kalkandelen, A.**, 1986a. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XX. Family Cicadellidae, Deltocephalinae: Fieberiellini, Stirellini and Tetartostyliini.- *Türk. Bitki kor. Derg.*, 10(1): 25-32.
- Lodos, N., Kalkandelen, A.**, 1986b. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XXI. Family Cicadellidae, Deltocephalinae: Athysanini (Part I).- *Türk. Bitki kor. Derg.*, 10(3): 131-139.
- Lodos, N., Kalkandelen, A.**, 1986c. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XXII. Family Cicadellidae, Deltocephalinae: Athysanini (Part II).- *Türk. Bitki kor. Derg.*, 10(4): 203-211.
- Lodos, N., Kalkandelen, A.**, 1987a. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XXIII. Family Cicadellidae, Deltocephalinae: Athysanini (Part III). *Türk. Entomol. Derg.*, 11(1): 29-40.
- Lodos, N., Kalkandelen, A.**, 1987b. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XXIV. Family Cicadellidae, Deltocephalinae: Athysanini (Part IV).- *Türk. Entomol. Derg.*, 11(2): 97-109.
- Lodos, N., Kalkandelen, A.**, 1987c. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XXV. Family Cicadellidae, Deltocephalinae: Paralimnini Distans (Part I).- *Türk. Entomol. Derg.*, 11(3): 151-162.
- Lodos, N., Kalkandelen, A.**, 1987d. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey XXVI. Family Cicadellidae, Deltocephalinae: Paralimnini Distans (Part II).- *Türk. Entomol. Derg.*, 11(4): 195-202.
- Lodos, N., Kalkandelen, A.**, 1988. Preliminary list of Auchenorrhyncha with notes on distribution and importance of Turkey XXVII. (Addenda and Corrigenda).- *Türk. Entomol. Derg.*, 12(1): 11-22.
- Tezcan, S., Gülperçin, N., Zeybekoğlu, Ü., Karavin, M.**, 2013. Contribution to the Fulgoromorpha (Cixiidae, Delphacidae) and Cicadomorpha (Aphrophoridae, Cicadidae, Cicadellidae) (Insecta: Hemiptera) fauna of farming terraces in Aspat (Strobilos) ancient city and its territorium, Bodrum, Muğla western Turkey.- *Linzer biol. Beitr.*, 45(2): 2149-2153.
- Zachvatkin, A. A.**, 1946. Studies on the Homoptera of Turkey.- *Trans. R. Ent. Soc. London*, 97(6): 149-176.
- Zeybekoğlu, Ü.**, 1998. The species of Deltocephalinae (Homoptera: Auchenorrhyncha: Cicadellidae) found in the Middle and East Black Sea Regions.- *Türk. Entomol. Derg.*, 22(1): 37-45.

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