

Orthoptera fauna of Kemaliye (Erzincan)

Kemaliye (Erzincan) Orthoptera faunasi

Research Article

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ABSTRACT

In this study, Orthoptera fauna of Kemaliye (Erzincan) was investigated. In Kemaliye, 91 species/subspecies belonging to 52 genera within 9 families were confirmed to occur. Of these species, 11 species of Tettigoniidae, 1 species of Raphidophoridae, 4 species of Pamphagidae, 5 species of Acrididae are endemic to Anatolia.

Key Words

Orthoptera, grasshoppers, bush-crickets, Kemaliye, Turkey

ÖZET

Bu çalışmada, Kemaliye (Erzincan) Orthoptera faunası araştırılmıştır. Çalışma sonucunda Kemaliye'de, 9 familyaya bağlı 52 cins ve 91 tür/alttür tespit edilmiştir. Bu türlerden Tettigoniidae familyasına ait 11, Raphidophoridae familyasına ait 1, Pamphagidae familyasına ait 4 ve Acrididae familyasına ait 5 tür Anadolu'ya endemiktir.

Anahtar Kelimeler

Orthoptera, çekirge, çalı çekirgesi, Kemaliye, Türkiye.

Article History: Received November 17, 2011; Revised March 05, 2012; Accepted May 3, 2012; Available Online: August 10, 2012.

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INTRODUCTION

Orthoptera from the Turkey have long been studied and its diversity has led to many Turkish and European orthopterists studying them in detail [1-32]. Many factors contribute to the faunal diversity in Turkey, where the number of endemic species is high and most species restricted to small areas [22, 33-35]. Kemaliye is such an interesting district, situated in Eastern part of Turkey which sometimes can have the characteristics of Mediterranean climate [36].

Mainland Kemaliye consists mostly of plateaus uninterrupted by mountainous regions with deep valleys and canyons which supports diverse and distinct fauna and flora. For example, there are 61 endemic plants in Kemaliye and nearby [37]. Bulut and Yılmaz [38] stated that majority of them are in critically endangered category. These mountains host several endemic taxa and some isolated local populations belonging to highland-inhabiting species of Orthoptera. Many endemic species in the region are characterised by limited mobility and a topographic distribution of isolated populations of high or low density and close habitat. There are two faunistic studies about Orthoptera from Malatya (43 Ensiferan, 72 Caelifera species/subspecies) [39,40] and Elaziğ (99 species/subspecies) [41] provinces adjacent to Kemaliye. The Orthoptera fauna of Kemaliye is rather poorly studied, excluding some records by Demirsoy [21] and Çiplak et al. [39,40]. The purpose of the present paper was to determine the Orthoptera fauna of Kemaliye district.

The faunal list produced in this study should provide some baseline data on the Orthoptera species composition of mountains for current and future conservation and restoration efforts. Such efforts are very important given the endemic taxa of Kemaliye district.

In this study, Orthoptera fauna of Kemaliye was investigated. In Kemaliye, 91 species/subspecies belonging to 52 genera within 9 families were confirmed to occur (Table 1). Of these species, 11 species of Tettigoniidae, 1 species of Raphidophoridae, 4 species of Pamphagidae, 5 species of Acrididae are endemic to Anatolia.

MATERIALS AND METHODS

This research covers the results of field studies conducted between 2005-2007. Specimens collected during field studies were prepared as museum materials by the standard methods in University of Hacettepe and deposited in the Museum of Ali Demirsoy in Kemaliye, Erzincan. Some specimens were preserved in alcohol. Taxonomy follows the OSF database [42].

TAXONOMY

ENSIFERA

TETTIGONIIDAE

PHANEROPTERINAE

PHANEROPTERINI

PHANEROPTERA Serville, 1831

Phaneroptera (Phaneroptera) nana (Fieber, 1853)

Distribution in Turkey: This species is widespread in overall Turkey, mainly associated with mediterranean habitats [13, 43]. Adults were seen from mid-July to end of August.

Previous records: Erzincan: Kemaliye, 20.08.1967, 3♂♂, 4♀♀ [20].

Examined material: Although Demirsoy [20] recorded the species from Kemaliye, but we had not been collected in the field during the study.

ACROMETOPINI

ACROMETOPA Fieber, 1853

Acrometopa syriaca (Brunner von Wattenwyl, 1878)

Distribution in Turkey: Two species of the genus known from Turkey; *A. syriaca* and *A. servillea*. *A. servillea* distributes in regions of Marmara, Ege and Batı Karadeniz. Two records known from Erzurum and Şanlıurfa [13, 20], but these records possibly refer to *A. syriaca*. The species has wide distribution than *A. servillea* in Turkey [13, 23, 28-29].

Previous records: It has been recorded from the Malatya [39] and Elaziğ [41] provinces, adjacent to Kemaliye.

Material examined: Kemaliye: Yuva Village, 04.07.2005, 1♀ (H. Sevgili);- Apçağa Village (TR 2434), 06.07.2005, 1♀ (H. Sevgili);- Zincirlikaya (TR 2427), 17.07.2005, 1♂ (Y. Durmuş);- Venk Deresi, 14.07.2005, 1♀ (H. Sevgili);- Ergü Village, 13.07.2005, 1♂ (H. Sevgili);- Ergü Village (Çatalpınar Mevkii),

08.07.2005, 1♂ (H. Sevgili);- Kekikpınarı (TR 2407), 14.07.2005, 1♂;- Kekikpınarı Village, 09.07.2007, 1♀ (in alcohol) (H. Sevgili);- Geşo Beli, 07.07.2007, 1♀, 1660 m, 30° 16'13" N 38°33' 59" E (H. Sevgili).

TYLOPSINI

TYLOPSIS Fieber, 1853

Tylopsis liliifolia (Fabricius, 1793)

Distribution in Turkey: The range of this species covers the whole Turkey. This species can often be found on herbaceous plants from June to October.

Previous records: Erzincan: Kemaliye, 16.07.1968, 10♂♂, 13♀♀ [20].

Material examined: Kemaliye: Rabat Deresi, 13.07.2007, 2♀♀ (H. Sevgili).

BARBITISTINI

POECILIMON Fischer, 1853

Poecilimon zonatus (Bolívar, I., 1899)

Distribution in Turkey: The endemic species is known from Kahramanmaraş, Erzurum, Adiyaman, Kayseri, Malatya, Tunceli, Antalya, Niğde, Ankara Bitlis, Erzincan provinces. Taxonomic position of *P. zonatus* species-group (*P. zonatus*, *P. variicercis*, *P. tauricola*) is already confused. *P. zonatus* species-group occur frequently in sub- and alpine zones of the high mountains of Eastern Turkey.

Previous records: Erzincan, Kemaliye, 22.06.1968, 33♂♂, 35 ♀♀ [20]; Tercan (Gökdere Village), 27.06.2003, 1♂♂ [43]; -Kemaliye (Ocak Village), 27.07.1988, 1♀, 1450 m (as *P. djakanovi*) [39].

Material examined: Kemaliye: Ergü Village (Çatalpınar Mevki), 08.07.2005, 6♀♀, 4♂♂ (H. Sevgili);- Ergü Village (Çatalpınar), 16.07.2005, 1♂ (Y. Durmuş);- Munzurlar (Doymuş), 07.07.2007, 5♀♀, 4♂♂, 2150 m, 39° 14' 35"N 39° 43' 40"E (H. Sevgili);- Munzurlar (Doymuştepe), 07.07.2007, 5♀♀, 7♂♂, 2200 m (H. Sevgili);- Kekikpınarı, 10.06.2006, 1♂ (H. Sevgili).

Poecilimon armeniacus (Uvarov, 1921)

Distribution in Turkey: Known from mainly Eastern Turkey provinces (Kars, Erzurum, Ağrı, Bingöl, Erzincan, Malatya), but there are some records from central Anatolian provinces (Niğde, Çorum, Tokat) [44]. The specimens were collected from high altitudes in Kemaliye district.

Previous records: *P. armeniacus* recorded from Malatya province nearby to Kemaliye (as *Poecilimonella*) [39].

Material examined: Kemaliye: Ergü Village (Çatalpınar Mevki), 08.07.2005, 5♀♀ (H. Sevgili);- Sarıcıçek (Sultan Murat Caddesi, 11.07.2007, 1♂ (H. Sevgili);- Yuva Village, 20.07.2005, 6♀♀, 5♂♂ (Y. Durmuş);- Kekikpınarı (TR 2407), 11.07.2005, 3♀♀, 1♂ (H. Sevgili).

Remark: Recently, this species was transferred into the genus *Poecilimon* by Ünal [45].

Isophya schneideri (Brunner von Wattenwyli, 1878)

Distribution in Turkey: The species is common in eastern part of Anatolia.

Previous records: Kemaliye, 22.06.1968, 11♂♂, 17♀♀ (as *I. schneideri*);-the same locality and date, 11♂♂, 15♀♀ (as *I. hakkarica*) [20].

Material examined: Kemaliye: Kabataş Yolu (İkizsu), 03.06.2007, 5♀♀, 18♂♂ (H. Sevgili);- Yuva Village, 03.06.2007, 8♀♀, 9♂♂ (H. Sevgili);- Geşo Village, 04.06.2007, 4♀♀, 1♂ (H. Sevgili);- Bizmişen Deresi (Maden Yatağı Çıkışı), 11.07.2007, 7♀♀, 4♂♂ (Y. Durmuş);- Ergü Köy ü (Çatalpınar), 08.07.2005, 11♀♀, 11♂♂ (H. Sevgili);- Ergü Village (Çatalpınar), 16.07.2005, 4♂♂ (Y. Durmuş);- Munzur Dağları (Yeşilyayla), 04.06.2007, 11♀♀, 9♂♂ (H. Sevgili);- Subatan, 08.07.2007, 2♀♀ (Y. Durmuş);- Munzurlar (Doymuş), 07.07.2007, 1♀, 1♂, 2150 m, 39° 14' 35"N 39° 43' 40"E (H. Sevgili);- Geşo Beli, 07.07.2007, 1♂, 1660 m, 30° 16' 13" N 38° 33' 59" E (H. Sevgili);- Sarıcıçek (Sultan Murat Caddesi), 11.07.2007, 1♂ (H. Sevgili);- Başpinar, 12.07.2005, 1♀ (Y. Durmuş).

Remarks: : *I. schneideri* species-group,described by Sevgili [30] has three species (*I. hakkarica*, *I. acuminata*, *I. schneideri*, possibly *I. iraka*). Their taxonomic positions have been still unsolved. Especially, population of around Kemaliye shows some different morphological features when compared with northeastern population. We have not sufficient data of the population from Eastern Taurus Mountains to Hakkari. Therefore, already we can not solve the taxonomic position of the population. We think about that some of them can be distribute as subspecies within the main population area.

TETTIGONIINAE

TETTIGONINI

Tettigonia Linnaeus, 1758

Tettigonia viridissima (Linnaeus, 1758)

Distribution in Turkey: It is a common katydid

cricket which can be found in meadows, grasslands and gardens in Anatolia. The localities of Turkey are scattered all over the mainland.

Previous records: Erzurum-Erzincan Road, 12.08.1968, 5♂♂, 4♀♀ [20].

Material examined: Kemaliye: Efeler (Tarhanik Çayı), 11.07.2005, 1♂, 1020 m, 39°06' N 38°33' E; - Sırakokanlar, 06.07.2006, 1♀; - Venk deresi, 14.07.2005, 1♀ (H. Sevgili); -Rabat Deresi, 23.07.2007, 1♀ (H. Sevgili); -Munzurlar (Yeşilyayla Village, Mezra Deresi), 07.07.2007, 1♂, 1580 m, 39°16'28" N 38°40'04" E (H. Sevgili); -Yuva Village, 04.07.2005, 2♀♀ (H. Sevgili).

Tettigonia caudata caudata (Charpentier, 1845)

Distribution in Turkey: Known from whole Turkey, but it is not common in Karadeniz of Turkey.

Previous records: Erzurum-Erzincan Road, 17.07.1969, 4♂♂, 3♀♀ [20].

Material examined: Kemaliye: Venk Deresi, 14.07.2005, 1♀; -Munzur Dağları (Yeşilyayla), 04.06.2007, 1♀; -Geşo Beli, 07.07.2007, 1♀, 1660 m, 39°16'13" N 38°33'59" E; -Yuva Village, 04.07.2005, 1♀; -Sarıçık Village (Sultan Murat Caddesi), 08.07.2007, 1♂, 1600 m, 39°12'02" N 38°20'12" E (H. Sevgili); -Subaşı Village, 07.07.2007, 1♂ (in alcohol) (H. Sevgili); -Bizmişen deresi (Maden Yatağı Çıkışı), 11.07.2007, 1♀ (Y. Durmuş).

MEDECTICUS Uvarov, 1912

Medecticus assimilis (Fieber, 1853)

Distribution in Turkey: Distribution of this bush-cricket is associated with bushes and high herbaceous plants in Mediterranean zones of Turkey. **Previous records:** Known from Elazığ [20, 41] and Malatya [39] adjacent to Kemaliye district.

Material examined: We have been heard the typical song of this species in many places of Kemaliye, but we could not collect the specimens.

DECTICUS Serville, 1831

Decticus verrucivorus (Linnaeus, 1758)

Distribution in Turkey: *D. verrucivorus* is common species in Turkey, reported from Ağrı, Ankara, Ardahan, Artvin, Aydın, Balıkesir, Bursa, Edirne, Erzincan, Hakkari, İstanbul, İzmir, Kahramanmaraş, Kars, Kırklareli, Sinop.

Previous records: It is known from Elazığ [41] and Malatya [39] provinces adjacent to Kemaliye.

Material examined: Kemaliye: Merkez (Zincirlikaya), 09.07.2005, 1♀ (H. Sevgili).

Decticus albifrons (Fabricius, 1775)

Distribution in Turkey: The species resembles to *D. verrucivorus* which is distributed in whole of Turkey.

Previous records: It has been recorded from Elazığ [41].

Material examined: Kemaliye: Rabat Deresi, 13.07.2007, 2♂♂ (in alcohol) (H. Sevgili)

PEZODRYMADUSA Karabağ, 1961

Thirteen species of the genus *Pezodrymadusa* has been recorded from Turkey [46]. Eleven species of them are endemic to eastern Anatolia and eastern part of central Anatolia. All of them inhabit the alpin-subalpine and montane zones of Turkey [47]. Taxonomy of *Pezodrymadusa* the species remain confused and they are difficult to identify by means of existing descriptions and other data in the literature.

Pezodrymadusa striolata (Ramme, 1951)

Distribution in Turkey: It is an endemic species, known from Niğde, Malatya, Erzurum, Erzincan, Tunceli, Van provinces.

Previous records: Kemaliye, 25.06.1968, 15♂♂, 15♀♀ [20].

Material examined: Erzincan: Kemaliye (Geşo Beli), 12.07.2005, 1♂ (H. Sevgili); -Mişigan Village, 06.07.2005, 2♀ (A. Demirsoy).

Pezodrymadusa sinuata (Ramme, 1951)

Distribution in Turkey: Endemic to Sivas and Erzincan provinces.

Previous records: There is no record from Kemaliye district.

Material examined: Erzincan: Kemaliye (Armağan Village, Ehnasol Suyu), 12.07.2005, 1♂; -Rabat Deresi, 13.07.2007, 1♂ (in alcohol) (H. Sevgili).

Pezodrymadusa konowi (Bolivar, 1899)

Distribution in Turkey: This endemic species has been recorded from Kahramanmaraş, Elazığ, Adana, Malatya, Erzurum, Erzincan provinces.

Previous records: It is common species of the genus which previously recorded from Kemaliye, 22.06.1968, 1♀ [20], Malatya [39] and Elazığ [41].

Material examined: Erzincan: Kemaliye (Yuva Village, Kırkgöz), 26.06.1987, 1♀ (A. Demirsoy).

Pezodrymadusa diffusa (Ramme, 1951)

Distribution in Turkey: Endemic to Anatolia. It was recorded from Niğde, Erzurum, Erzincan, Kahramanmaraş, Tunceli, Malatya and Sivas provinces.

Previous records: Kemaliye: 26.06.1968, 11♂, 13♀ [20].

Material examined: Erzincan: Kemaliye (Apçağa Village), 06.07.2005, 1♂ (H. Sevgili); -Ergü Village (Çatalpınar), 08.07.2005, 1♀ (H. Sevgili); -Munzurlar (Ziyaret Tepe Sırtları), 07.07.2007, 1♂ (in alcohol); -Munzurlar (Doymuş), 07.07.2007, 3♂ (in alcohol) (H. Sevgili) -Armağan Village, 06.07.2005, 1♂ (A. Demirsoy).

Pezodrymadusa indivisa (Karabag, 1961)

Distribution in Turkey: Endemic to Bitlis, Malatya and Van provinces.

Previous records: It was known from Malatya near to Kemaliye district [39].

Material examined: Erzincan: Kemaliye (Apçağa Village), 06.07.2005, 1♀ (H. Sevgili).

Pezodrymadusa kurmana (Ramme, 1939)

Distribution in Turkey: It is endemic to Malatya and Van provinces.

Previous records: It is known from Malatya [39].

Material examined: Erzincan: Kemaliye (İkizsu), 13.07.2005, 1♀ (H. Sevgili).

SCOTODRYMADUSA Ramme, 1939**Scotodrymadusa syriaca (Pictet, 1888)**

Distribution in Turkey: It is one of common species of the genus in Turkey. The species is widely distributed from Akdeniz region, southeast Anatolia, eastern part of center Anatolia to northeast Anatolia.

Previous records: Known from Elazığ and Malatya adjacent to Kemaliye district [48].

Material examined: Kemaliye, September 2006, 1♂ (A. Demirsoy).

PLATYCLEIDINI Zeuner, 1941**PLATYCLEIS Fieber, 1852****Platypleis intermedia intermedia (Serville, 1839)**

Distribution in Turkey: The range of the species covers the whole of Turkey [46].

Previous records: Erzincan: Kemaliye, Ocak Village, 27.07.1988, 5♀ [39].

Material examined: Kemaliye: Geço Beli, 07.07.2007, 1♂, 1♀, 1660 m, 30°16'13" N, 38°33'59" E (H. Sevgili); -Subatan, 08.07.2007, 1♂ (in alcohol); -Kemaliye, 13.07.2007, 1♂ (in alcohol); -Kekikpinarı Village, 09.07.2007, 1♂ (in alcohol) (H. Sevgili).

Platypleis affinis (Fieber, 1853)

Distribution in Turkey: Recorded from many localities of Turkey [13, 16, 18, 29, 49, 28].

Previous records: The species was recorded from Malatya [39].

Material examined: Kemaliye: Ergü Başı, 11.07.2005, 1♀ (A. Demirsoy & Y. Durmuş); -Kekikpinarı Village, 09.07.2007, 1♂, 1♀ (H. Sevgili).

Decorana persica (Uvarov, 1917)

Distribution in Turkey: The species is known from mainly Mediterranean, eastern and southeastern part of Anatolia [13, 29, 28, 49].

Previous records: Erzincan: Erzurum Karayolu, 18.07.1967, 9♂, 7♀ [20]; -Erzurum Karayolu (Kurukaya), 28.07.1993, 2♂, 1200 m; -Kelkit (Pöske), 29.07.1993, 1♂, 850 [49].

Material examined: Erzincan: Kemaliye, 13.07.2007, 1♂ (in alcohol) (H. Sevgili).

MONTANA Zeuner, 1941**Montana schererri (Werner, 1901)**

Distribution in Turkey: The species is known from Afyonkarahisar, Ankara, Denizli, Eskişehir, İzmir, Konya, Kütahya, Manisa, Erzincan [28, 49]. The species is associated with montane steppes of high plateaus and montanes.

Previous records: Before this study, there was no record from Kemaliye district.

Material examined: Kemaliye: Sarıcıçek Village (Sultanmurad Caddesi), 08.07.2007, 3♂, 4♀, 39°12'021"N 38°20'17"E, 1600 m (H. Sevgili).

SQUAMIANA Zeuner, 1941**Squamiana sinuata (Ramme, 1951)**

Distribution in Turkey: The species is associated with steppic zones of mountains of central and eastern Anatolia [49, 50].

Previous records: Erzincan: Kemaliye (Ocak Village), 27.08.1989, 2♂, 1♀, 1450 m [49].

Material examined: Kemaliye: Ergü Başı, 11.07.2005, 2♀ (A. Demirsoy & Y. Durmuş); - Geço Beli, 07.07.2007, 1♀, 30°16'13" N, 38°33'59", 1660 m (H. Sevgili).

PARAPHOLIDOPTERA Maran, 1953***Parapholidoptera signata* (Brunner von Wattenwyl, 1861)**

Distribution in Turkey: The species is known from Mersin, Adana, Hatay, Kahramanmaraş, Erzincan, Malatya, Şanlıurfa and Gaziantep provinces.

Previous records: Kemaliye, 22.06.1968, 8♂♂, 7♀♀ Demirsoy, 1975;- Kemaliye, Ocak Village, 2♂♂, 2♀♀, 1450 m [39];- Kemaliye (Ocaklı), 22.06.1988, 1♂, 1♀, 1450 [51].

Material examined: Kemaliye: Yuva Village, 04.07.2005, 1♀, 3♂♂ (H. Sevgili);- Ergü Village (Çatalpınar), 16.07.2005, 3♂♂ (Y. Durmuş);- Munzurlar (Yeşilyayla Village, Mezra Deresi), 07.07.2007, 1♂, 1580 m, 39° 16' 28" N 38° 40' 04" E (H. Sevgili);- Yuva Village, 04.07.2005, 1♀ (H. Sevgili);- Ergü Başı, 07.07.2005, 1♂ (A. Demirsoy);- Venk Deresi, 14.07.2005, 2♀♀ (H. Sevgili);- Venk Village Yolu, 13.07.2005, 2♀♀ (H. Sevgili);- Geço Beli, 07.07.2007, 1♂, 1660 m, 30° 16' 13" N 38°33'59" E (H. Sevgili);- Kekikpinarı Village, 09.07.2007, 1♀, 1♂ (H. Sevgili);- Munzurlar (Doymuş), 07.07.2007, 4♀♀, 1♂, 2150 m, 39° 14' 35" N 39°43'40" E (H. Sevgili);- Miçingah Village (Kanyon Karşısı), 07.05.2005, 1♀, 2♂♂ (H. Sevgili);- Kekikpinarı (TR 2407), 11.07.2005, 3♂♂ (H. Sevgili);- Yuva Village (Mezarlık altı), 03-09.07.1986, 3♀♀, 3♂♂;- Apçağa Village, 10.07.1986, 1♀, 2♂♂;- Kemaliye, 09.06.1986, 1♂ (A. Demirsoy).

***Parapholidoptera karabagi* (Demirsoy, 1974)**

Distribution in Turkey: It is an endemic species, known from Erzincan and Erzurum.

Previous records: Kemaliye, 16.07.1967, 3♂♂, 2♀♀ [20].

Remark: We could not find the species in Kemaliye, although it is type locality.

***Parapholidoptera salmani* (Çiplak, 2000)**

Distribution in Turkey: Endemic to Erzincan and Tokat provinces [51]. The specimens were collected from alpine zones of high altitudes (about 2000 m) of Munzur mountain.

Previous records: It was known only from type locality until now.

Çalışılan örnekler: Erzincan: Kemaliye (Munzurlar, Doymuş), 07.07.2007, 4♂♂ (in alcohol) (H. Sevgili).

APHOLIDOPTERA (Maran, 1953)

Remarks: The genus *Apholidoptera* has two species in the world and both of them are distributed

in Turkey [10, 28, 53]. *A. kurda* is known from Hakkari [13] and North Iraq [53]. Other common species is *A. pietschmanni* which is recorded from Bitlis, Şanlıurfa, Erzincan, Malatya, Diyarbakır, Mardin and North Iraq [13, 28, 29, 39]. The genus is represented one species in our study area.

***Apholidoptera pietschmanni* (Ebner, 1912)**

Distribution in Turkey: The species is widely distributed in eastern Anatolia (Bitlis, Şanlıurfa, Erzincan, Malatya, Diyarbakır, Mardin).

Previous records: Kemaliye, 22.06.1968, 8♂♂, 7♀♀ [20].

Material examined: Kemaliye: Kekikpinarı (Yazı), 11.07.2005, 4♀♀, 3♂♂ (H. Sevgili);- Ergü Başı, 11.07.2005, 1♀ (A. Demirsoy & Y. Durmuş);- Venk Deresi, 14.07.2005, 1♀ (H. Sevgili);- Kekikpinarı Village, 08.07.2005, 2♂♂ (H. Sevgili);- Kekikpinarı (TR 2403), 11.07.2005, 1♀ (H. Sevgili);- Yuva Village (TR 2403), 20.07.2005, 1♂ (Y. Durmuş);- Yuva Village (TR 2404), 20.07.2005, 1♂ (Y. Durmuş);- Kekikpinarı Village (Öşneden Deresi), 09.07.2007, 1♀ (H. Sevgili); - Muşaga (İkisu), 13.07.2005, 1♀;- Rabat Deresi, 13.07.2007, 1♂ (in alcohol) (H. Sevgili);- Apçağa Village, 10.07.1986, 11♂♂, 5♀♀ (A. Demirsoy).

***UVAROVISTIA* (Maran, 1953)**

Remarks: Two species of the genus are known from Turkey. *U. zebra* was recorded from Hakkari and Van provinces in Southeastern of Turkey. *U. satununi* is more common in eastern Turkey than *U. zebra*.

***Uvarovistia satununi* (Uvarov, 1916)**

Distribution in Turkey: The species has been recorded from Ağrı, Bitlis, Diyarbakır, Erzincan, Elazığ, Hakkari, Kars, Muş, Tunceli, Van [7, 13]. The species inhabits in high montane steppe of eastern Anatolia.

Previous records: It is known from Elazığ ve Tunceli adjacent to Kemaliye district [13].

Material examined: Kemaliye: Munzurlar (Ziyarettepe Sırtları), 07.07.2007, 1♂ (in alcohol), 2150 m (H. Sevgili).

SAGINAE**SAGA Charpentier, 1825*****Saga ephippigera ephippigera* (Fischer von Waldheim, 1846)**

Distribution in Turkey: This beautiful katydid is known from Kayseri, Malatya, Erzincan, Elazığ,

Tunceli, Erzurum, Artvin, Kars, Ağrı.

Previous records: Kemaliye, 05.08.1967, 5♂♂, 7♀♀ [20].

Material examined: Kemaliye: Apçağa Village, 08.07.2005, 2♂♂ (H. Sevgili);- Munzurlar (Doymuş), 07.07.2007, 1♀, 2♂♂ (1♂ in alcohol), 2150 m (H. Sevgili);- Ergü Village (Çatalpınar), 08.07.2005, 1♀ (H. Sevgili);- Yuva Village, 08.07.2005, 1♂ (H. Sevgili);- Apçağa Village (TR 2434), 06.07.2005, 1♀ (H. Sevgili).

GRYLLIDAE

GRYLLINAE

MELANOGRYLLUS Chopard, 1961

Melanogryllus desertus (Pallas, 1771)

Distribution in Turkey: *M. desertus* is common cricket in Anatolia.

Previous records: Kemaliye, 22.06.1968, 9♂♂, 7♀♀ (as *Acheta deserta*) [20]; Kemaliye, 22.06.1968, 3♀♀; Erzincan Ovası, 20.07.1968, 6♀♀ (University of Atatürk, Coll. of Faculty) [54].

Material examined: Kemaliye: Yuva Village, 03.06.2007, 9♂♂, 10♀♀, 850 m; -Ariki Deresi (Fırat), 02.06.2007, 4♂♂, 4♀♀; -Çanakçı-Arapgir yolu, 1♀, 1510 m, 39°05'50.3" N 38°20'54.6" E (H. Sevgili).

GRYLLUS Linnaeus, 1758

Gryllus (Gryllus) campestris (Linnaeus, 1758)

Distribution in Turkey: The species is holopaleartic species which inhabits in the mountain grasslands.

Previous records: Kemaliye, 22.06.1968, 7♂♂, 9♀♀ [20];-Kemaliye, Çit Village 24.07.1989, 1♂, 850 m [39]; -Kemaliye, 22.06.1968, 1♂ [54].

Material examined: Kemaliye: Çanakçı-Arapgir road, 07.07.2007, 3♂♂, 39°05'503" N, 38°20'546"E, 1510 m (H. Sevgili); -Mişinhan Village, 06.07.2005, 1♀ (A. Demirsoy).

MODICOGRYLLUS Chopard, 1961

Modicogryllus (Modicogryllus) frontalis (Fieber, 1844)

Distribution in Turkey: The species is known from Antakya, Ankara, Artvin, Giresun, İskenderun.

Previous records: There is no record from study area.

Material examined: Kemaliye: Yuva Village, 03.06.2007, 1♂, 1♀, 850 m (H. Sevgili).

Modicogryllus (Modicogryllus) truncatus

(Tarbinsky, 1940)

Distribution in Turkey: The species is widely spread throughout the Anatolia [54, most of them are described as *M. chopardi*]

Previous records: Erzincan: Kemaliye, 22.06.1968, 5♀♀ (as *Modicogryllus chopardi* Kis) [54].

Material examined: Kemaliye: Yuva Village, 03.06.2007, 1♂, 1♀, 850 m (H. Sevgili).

OECANTHINAE

OECANTHUS Serville, 1831

Oecanthus pellucens pellucens (Scopoli, 1763)

Distribution in Turkey: The species is widely distributed in whole of Turkey.

Previous records: Kemaliye, 15.08.1967, 8♂♂, 9♀♀ [20]; -Kemaliye, Oluk, 25.08.1967, 5♂♂, 4♀♀ [54].

Material examined: We heard the typical calling song of the species at evenings of August in Kemaliye district, but we could not collect the specimens.

GRYLLOTALPIDAE

GRYLLOTALPA Latreille, 1802

Gryllotalpa gryllotalpa (Linnaeus, 1758)

Distribution in Turkey: The species is widely spread throughout the Turkey.

Previous records: Kemaliye, 25.05.1968, 3♂♂, 5♀♀ [20].

Material examined: It is common in vegetable gardens in Kemaliye. But, we did not collect the species.

RHAPHIDOPHORIDAE

TROGLOPHILINAE

Troglophilus

Troglophilus (Troglophilus) escalerae (I. Bolívar, 1899)

Distribution in Turkey: This cave cricket was known from Isparta and Kahramanmaraş [3]. But we recorded from Kemaliye, inhabits within burrows of stone walls.

Material examined: Kemaliye: Yuva Village, Mayıs 2006, 1♂ (Y. Durmuş).

CAELIFERA**TRIDACTYLIDAE****XYA Latreille, 1809*****Xya variegata* (Latreille, 1809)**

Distribution in Turkey: The species has been recorded from many localities of Turkey. *Xya* species inhabit open banks of flooded gravel pits.

Previous records: Known from Elazığ [41] adjacent to Kemaliye district.

Material examined: We have been observed many specimens, inhabit open banks of small streams, natural pools and lake. Forexample, it is very common in Yuva Village which is situated close to Karaçay river.

TETRIGIDAE**TETRIGINAE****TETRIX Latreille, 1804*****Tetrix bolivari* (Saulcy, 1901)**

Distribution in Turkey: In Turkey the pygmy grasshopper occurs along streams and ponds. The range of species covers the typical habitats of all Turkey [13, 21, 55].

Previous records: Known from Elazığ [41] and Malatya [39].

Material examined: Kemaliye: Geşo Village, 04.06.2007, 1♀ (H. Sevgili).

***Tetrix tenuicornis* (Sahlberg, 1891)**

Distribution in Turkey: The range of species covers all Turkey [21, 55].

Previous records: Erzincan: Kemaliye, 22.09.1968, 3♀♂, 2♂♂ [20].

Material examined: Kemaliye: Ariki deresi (Fırat), 02.06.2007, 1♂ (H. Sevgili).

DEPRESSOTETRIX Karaman, 1960***Depresotetrix depressa* (Brisoit de Barneville, 1848)**

Distribution in Turkey: It is widely distributed in Turkey.

Previous records: Erzincan: Kemaliye, 22.08.1968, 1♂, 2♀♂ [20].

Material examined: Kemaliye: Geşo Village, 04.06.2007, 1♀ (H. Sevgili).

PYRGOMORPHIDAE**PYRGOMORPHINAE*****Pyrgomorpha* Serville, 1839*****Pyrgomorpha guentheri* (Burr, 1889)**

Distribution in Turkey: The species occurs all over the mainland of Turkey [13, 21, 23].

Previous records: Erzincan: Kemaliye, 25.08.1967, 7♂♂, 9♀♀; - Erzurum-Erzincan Karayolu, 20.08.1967, 11♂♂, 13♀♀ [20].

Material examined: Kemaliye: Geşo Village, 04.06.2007, 1♀ (H. Sevgili).

***Pyrgomorpha (Pyrgomorpha) conica* (Olivier, 1791)**

Distribution in Turkey: The species is widely distributed in Turkey [56].

Material examined: Kemaliye: Ariki deresi (Fırat), 02.06.2007, 1♀; - Geşo Village, 04.06.2007, 1♀; Ergü Village, 13.07.2005, 2♀♀ (H. Sevgili).

PAMPHAGIDAE**Aklicerinae*****PRIONOTROPIS* Fieber, 1853*****Prionotropis maculinervis urfensis* (Ramme, 1933)**

Distribution in Turkey: The species is endemic to southeast Anatolia and some regions of eastern Anatolia (Elazığ, Erzincan, Kahramanmaraş, Malatya, Şanlıurfa, Tunceli) [21].

Previous records: Erzurum-Erzincan Road, 20.08.1969, 2♂♂ [20].

Material examined: Kemaliye: Çanaklı-Arapçırı yolu, 02.06.2007, 2♂♂, 1♀ (subadults), 1510 m, 39°05'503"N, 38°20'546"E (H. Sevgili).

Remarks: The species has been recorded in Turkey as two subspecies. The nominate subspecies, *P. maculinervis maculinervis*, is known from northeastern part of Central Anatolia. Taxonomical position of the both subspecies has been still confused, but for now we diagnosed as *P. maculinervis urfensis* until revision of the genus.

PAMPHAGINAE***PARANOTHROTES* Mistshenko, 1951*****Paranothrottes kosswigi* (Demirsoy, 1977)**

Distribution in Turkey: Endemic to Anatolia and type locality of the species is Kemaliye.

Previous records: Kemaliye: Yuva Village (Bügelek Kayası), 20.06.1968, 6♀♀ [21].

Material examined: We have never been collected the species during field studies.

***Paranothrotes asulcatus* (Demirsoy, 1973)**

Distribution in Turkey: Endemic to Eastern Anatolia (Erzurum and Erzincan).

Previous records: Known only from Erzurum [21].

Material examined: Erzincan: Kemaliye (Kabataş Yolu, İkizsu), 03.06.2007, 1♂ (H. Sevgili).

***PARANOCARACRIS* Mishchenko, 1951**

***Paranocaracris rubripes* (Fischer von Waldheim, 1846)**

Distribution in Turkey: The species has seven subspecies, one of them currently recognized from western Turkey [42, 57, 58]. The range of the species reaches from western Anatolia to northeastern Karadeniz in Turkey. Taxonomic position of the subspecies have not been fully resolved.

Material examined: Erzincan: Kemaliye (Çanakçı Village), 02.06.2007, 3♀♀; - (Geço Beli), 07.07.2007, 1♀, 30°16'13"N 38°33'53"E, 1♀; - (Subatan), 02.06.2007, 3♂♂; - (Subatan, Çanakçı Village), 02.06.2007, 1♂ (H. Sevgili).

ACRIDIDAE

EUPREPOCNEMIDINAE

***HETERACRIS* Walter, 1870**

***Heteracris pterosticha* (Fischer-Waldheim, 1833)**

Distribution in Turkey: The species is a common, important plague locust on vegetable gardens in Turkey. It has been recorded from many localities in Anatolia such as Ankara, Adana, Maraş, Burdur, Bingöl, Hakkari, Kars, Ağrı [13] Erzincan-Kemaliye, Elazığ-Ağın [20] Kars, Artvin [23].

Previous records: Kemaliye, 25.08.1967, 11♂♂, 13♀♀ [20].

Material examined: Although the species was collected previously, we did not find it. Adults of the species are belong to autumn fauna of Orthoptera and they can be collect in fall season in vegetable gardens in Kemaliye district.

CALLIPTAMINAE

***CALLIPTAMUS* (Serville, 1831)**

Remarks: Four species of the genus are known from Turkey. Two of them, *C. coelesyriensis* and *C. italicus*, can be easily idendificate than others. But, the other species *C. barbarus* and *C. tenuicercis* represent

usually taxonomically problematic populations in Turkey.

***Calliptamus coelesyriensis* (Giglio-Tos, 1893)**

Distribution in Turkey: This common species is mainly associated with dry steppe vegetation of Turkey. It is not common Karadeniz region.

Previous records: Erzincan: Kemaliye, Ocak Village, 27.07.1988, 3♂♂, 13♀♀ [39].

Material examined: Kemaliye: Ergü, 08.07.2005, 6♀♀, 2♂♂ (H. Sevgili);- Ergü Başı, 07.07.2005, 4♀♀, 1♂ (A. Demirsoy);- Ergü Başı, 11.07.2005, 2 ♀♀ (A. Demirsoy, Y. Durmuş);- Ergü Village, 13.07.2005, 2♀♀, 2♂♂ (H. Sevgili);- Venk Civarı, 13.07.2005, 2♀♀, 1♂ (H. Sevgili);- Sırakonaklar, 06.07.2005, 1♀, 3♂♂ (H. Sevgili);- Geço Zirve, 24.09.2006, 1♀, 1600 m (Y. Durmuş);- Apçağa Village, 17.07.2006, 3♀♀, 1♂ (H. Sevgili);- Hotar Demir Madeni, 19.07.2005, 3♀♀ (H. Sevgili);- Geço Beli, 07.07.2007, 1♀, 3♂♂, 1660 m, 30° 16' 13" N 38° 33' 59" E (H. Sevgili);- Kekikpınarı Village, 09.07.2007, 3♂♂, 1♀ (H. Sevgili);- Kekikpınarı (Öşneden Deresi) 09.07.2007, 2♂♂, 1♀ (H. Sevgili);- Kekikpınarı (Yazı), 11.07.2005, 3♂♂, 1♀ (H. Sevgili);- Kirkgöz, 12.07.2007, 2♂♂ (H. Sevgili);- Rabat Deresi, 13.07.2007, 1♂ (H. Sevgili).

***Calliptamus italicus italicus* (Linnaeus, 1758)**

Distribution in Turkey: The species is widely distributed from Thracian part of Turkey to soutehastern Anatolia.

Previous records: It has been recorded from Malatya [39] and Elazığ [41] provinces adjacent to Kemaliye District.

Material examined: Erzincan: Kemaliye (Kekikpınar Village), 09.07.2007, 1♂ (H. Sevgili).

***Calliptamus tenuicercis tenuicercis* (Turbinski, 1930)**

Distribution in Turkey: The species is very common in dry habitats where mean annual rainfall is generally low zones. **Previous records:** Erzincan: Kemaliye, Çit Village, 25.08.1989, 3♂♂, 6♀♀ [39].

Material examined: Kemaliye: Bizmişen-Gözüaydın Village (Uluçayır mevkii), 13.09.2007, 2♂♂, 2♀♀ (Y. Durmuş);- Rabat Deresi, 13.07.2007, 2♂♂ (H. Sevgili).

***SPHENOPHYMA* Uvarov, 1934**

***Sphenophyma rugulosa* (Stål, 1876)**

Distribution in Turkey: The range of the species covers the Mediterranean region of Turkey [13, 21].

Previous records: The species was recorded from Malatya province adjacent to Kemaliye district [39].
Material examined: Erzincan: Kemaliye, 04.07.2005, 2♂♂, 7♀♀ (H. Sevgili).

CHARORA Saussure, 1888

***Charora pentagrammica* (I. Bolívar, 1889)**

Distribution in Turkey: This endemic species is known from Ankara, Kahramanmaraş, Konya, Malatya, Erzincan and Manisa.

Previous records: It was recorded from Malatya adjacent to Kemaliye [39].

Material examined: Kemaliye: Miçingah Village, 06.07.2005, 5♂♂ (A. Demirsoy).

ACRIDNAE

***ACRIDA* Linnaeus, 1758**

***Acrida bicolor* (Thunberg, 1815)**

Distribution in Turkey: This common species occurs from the lowlands up to the timberline.

Previous records: Erzincan: Kemaliye, 25.06.1967, 5♂♂, 7♀♀ [20].

Material examined: The species is common in the study area, but we examined the preserved materials in the museum, collected from Kemaliye.

TRUXALIS Fabricius, 1775

***Truxalis robusta robusta* (Uvarov, 1916)**

Distribution in Turkey: The subspecies is known from Antalya, Maraş, Mersin, Malatya, Amasya, Antep, İskenderun [13]; Elazığ, Erzincan-Kemaliye, Van [59].

Previous records: Erzincan: Kemaliye, 22.06.1968, 2♂♂, 2♀♀ [20].

Material examined: Kemaliye: Ariki Derisi (Fırat), 02.06.2007, 2♂♂ (H. Sevgili);- Sarıcıçek (Sultan Murat Caddesi), 11.07.2007, 1♂ (H. Sevgili);- Kabataş Yolu (ikizsu), 03.06.2007, 1♂ (H. Sevgili);- Miçingah Village, 06.07.2005, 1♀, 1♂ (A. Demirsoy).

OEDIPODINAE

***Aiolopus* Fieber, 1853**

Distribution in Turkey: The species is common in herbaceous zones of Turkey.

Previous records: The species was recorded from Malatya [39] and Elazığ [41].

Material examined: We have been collected many specimens of the common species from different localities of Kemaliye.

LOCUSTA Linnaeus, 1758

***Locusta migratoria migratoria* (Linnaeus, 1758)**

Distribution in Turkey: The range of species the southern half of Europe and Asia and all of Africa [60]. But, Anatolian population is assigned to the nominate subspecies [42].

Previous records: Erzincan, 28.07.1968, 1♂, 2♀♀ [20].

Material examined: We could not have collected the species from Kemaliye, possibly it inhabits usually on high herbaceous plants where common within gardens and edge of ponds in Kemaliye.

OEDAULEUS Fieber, 1853

***Oedaleus decorus* (Germar, 1817)**

Distribution in Turkey: The species is widely distributed whole of Turkey.

Previous records: Erzincan: Kemaliye, 20.08.1967, 15♂♂, 9♀♀;- Erzincan ovası, 28.08.1967, 31♂♂, 20♀♀ [20].

Material examined: Kemaliye: Venk Dere Yolu, 13.07.2005, 1♀ (H. Sevgili);- Apçağa Village, 17.07.2006, 1♀ (H. Sevgili);- Kekikpınarı (Yazı), 11.07.2005, 3♀♀, 2♂♂ (H. Sevgili);- Ergü Başı, 11.07.2005, 2♀♀ (A. Demirsoy, Y. Durmuş);- Ergü Başı, 07.07.2005, 3♀♀ (A. Demirsoy);- Kekikpınarı Village, 09.07.2007, 2♀♀, 2♂♂ (H. Sevgili);- Gözaydın Village (Bizmişen, Uluçayır Mevkii), 13.09.2007, 1♀ (Y. Durmuş);- Venk Çivarı, 13.07.2005, 2♀♀, 4♂♂ (H. Sevgili);- Ergü, 08.07.2005, 1♂ (H. Sevgili);- Venk Village, 22.07.2005, 1♀ (Y. Durmuş).

PYRGODERA Fischer de Waldheim, 1846

***Pyrgodera armata* (Fischer de Waldheim, 1846)**

Distribution in Turkey: This herbivorous grasshopper is widely distributed whole of Turkey, associated with Mediterranean steppe vegetation. It is easily identified by its high, arched, laminate pronotal crest and typical coloration of hindwings.

Previous records: The species has been recorded from Malatya [39] and Elazığ [41] near to Kemaliye district.

Material examined: Kemaliye: Hotar Demir Madeni, 19.07.2005, 2♀♀ (H. Sevgili);- Venk Çivarı, 13.07.2005, 1♂ (H. Sevgili);- Venk Village, 22.07.2005, 1♀ (Y. Durmuş);- Miçingah Village, 06.07.2005, 6♀♀ (A. Demirsoy);- Ergü Village, 13.07.2005, 1♂ (H. Sevgili);- Ergü Village (Çatalpınar), 08.07.2005, 1♂

(H. Sevgili);- Ergü (İst:1-İst:2), 08.07.2005, 1♀ (H. Sevgili); -Yeşilyurt (Şelale Mevki), 09.07.2005, 1♀, 1220 m, 39° 11N 38° 22E (Y. Durmuş); -Sarıçık (Sülüklü Göl), 11.07.2007, 1♀(Y. Durmuş);-Sarıçık (Sultan Murat Caddesi), 11.07.2007, 1♂ (Y. Durmuş);-Bizmişen Deresi (Maden Yatağı Çıkışı), 11.07.2007, 1♀ (Y. Durmuş);-Yeşilyamaç (Geşo), 11.06.2006, 1♂, 697 m (H. Sevgili);-Geşo Village (Yeşilyamaç), 12.07.2005, 2♀♀, 1♂, 1290 m, 39° 15' N 38° 32' E, (H. Sevgili);- Geşo Beli, 07.07.2007, 1♀, 1660 m, 30° 16' 13" N 38° 33' 59" E (H. Sevgili);- Kekikpınarı Village (Öşneden Deresi), 09.07.2007, 1♂ (H. Sevgili).

CELES (Saussure, 1884)

The genus has only two species whose distribution covers the Palearctic region. One of the species is *C. variabilis* and it includes three subspecies, but only both of them has been recorded from Turkey. Other subspecies, *C. variabilis carbonaria* is known from Transcaucasica [42]. Taxonomical problems of the Turkish population could not be solved, so we do not fit the our specimens clearly into any particular subspecies on the basis of present data.

Celes variabilis (Pallas, 1774)

Distribution in Turkey: It is widely distributed in Turkey, associated with dry steppe vegetation in Mediterranean zones.

Previous records: Erzincan: Kemaliye, Ocak Village, 27.07.1988, 1450 m, 10♂♂, 15♀♀ [39].

Material examined: Kemaliye: Sarıçık (Sultan Murat Caddesi), 11.07.2007, 8♀♀, 1♂ (Y. Durmuş);- Hotar Demir Madeni, 19.07.2005, 1♀ (H. Sevgili);- Miçingah Village, 06.07.2005, 1♂ (A. Demirsoy);- Ergü Başı, 11.07.2005, 3♀♀, 1♂ (A. Demirsoy&Y. Durmuş);- Ergü Başı, 07.07.2005, 3♀♀, 1♂ (A. Demirsoy);- Armağan Village (Ehnasor Suyu), 12.07.2005, 2♀♀ (H. Sevgili);-Kemaliye, 15.09.2007, 1♀ (Y. Durmuş);- Subatan, 08.07.2007, 1♀, 1♂ (Y. Durmuş);- Sarıçık Village (Sultan Murat Caddesi), 08.07.2007, 1♀, 1600 m, 39°12' 02"N 38°20'12" (H. Sevgili);- Munzurlar (Doymuş), 07.07.2007, 1♀, 1♂, 2150 m, 39° 14' 35"N 39° 43' 40"E (H. Sevgili).

OEDIPODA Latreille, 1829

Oedipoda caerulescens caerulescens (Linnaeus, 1758)

Distribution in Turkey: This species occurs very widely in Turkey, but it is mainly confined to moderate uplands [13, 20, 21, 23, 29].

Previous records: It has been recorded from Malatya [39] and Elazığ [41] provinces near to Kemaliye..

Material examined: Kemaliye: Kocaçimen Village (Venk Deresi, Davulköprü), 25.09.2006, 6♀♀, 4♂♂, 1365 m (H. Sevgili); -Venk Çivarı, 13.07.2005, 2♀♀ (H. Sevgili); -Kemaliye, 15.09.2007, 2♂♂ (Y. Durmuş); - Kekikpınarı Village (Öşneden Deresi), 09.07.2007, 2♀♀, 1♂ (H. Sevgili); - Kırkgöz, 12.07.2007, 1♀ (H. Sevgili);- Hotar Demir Madeni, 19.07.2005, 2♂♂ (H. Sevgili);- Venk Çivarı, 13.07.2005, 1♀, 1♂ (H. Sevgili);- Ergü, 04.07.2005, 1♀, 1♂ (H. Sevgili).

Oedipoda schochi schochi (Saussure, 1884)

Distribution in Turkey: The subspecies occurs in a large part of Anatolia. The species includes two subspecies in Turkey, but further studies are necessary to clarify the status of the subspecies of *O. schochi*.

Previous records: Erzincan: Kemaliye, 22.06.1968, 9♂♂, 7♀♀; Erzincan ovası, 29.08.1967, 7♂♂, 3♀♀ Demirsoy, 1975; Kemaliye: Ocak Village, 27.07.1988, 1400 m, 4♂♂, 4♀♀ [39].

Material examined: Kemaliye: Hotar Demir Madeni, 19.07.2005, 2♀♀ (H. Sevgili); - Venk Deresi Yolu, 08.07.2005, 2♀♀ (H. Sevgili); - Venk Çivarı, 13.07.2005, 2♀♀ (H. Sevgili);- Kemaliye, 15.09.2007, 2♀♀ (Y. Durmuş); - Gözaydın Village (Bizmişen, Uluçayır Mevki), 13.09.2007, 3♀♀ (Y. Durmuş);- Sarıçık (Sultan Murat Caddesi), 11.07.2007, 2♀♀ (Y. Durmuş);- Sarıçık (Sülüklü Göl), 15.07.2007, 1♀ (Y. Durmuş).

Oedipoda aurea (Uvarov, 1923)

Distribution in Turkey: This species occurs very widely in Turkey, where it is mostly distributed at altitudes above 400 m.

Previous records: Erzincan: Kemaliye, 22.06.1968, 10♂♂, 8♀♀ [20].

Material examined: Although it has been recorded from Kemaliye, we didn't collect the specimens.

Oedipoda miniata miniata (Pallas, 1771)

Distribution in Turkey: Primarily a species of the dry steppe vegetations of Turkey, where it is widely distributed at different altitudes from sea level to 2500 m [13, 20, 21].

Previous records: Erzincan: Kemaliye, 22.06.1968, 11♂♂, 15♀♀ [20].

Material examined: Kemaliye: Rabat Deresi, 13.07.2007, 4♀♀, 5♂♂(H. Sevgili);- Salihli Yolu,

16.07.2006, 1♂ (H. Sevgili);- Gözaydın Village (Bizmişen, Uluçayır Mevkii), 13.09.2007, 2♂♂ (Y. Durmuş);- Ergü, 04.07.2005, 1♂ (H. Sevgili).

Oedipoda germanica germanica (Latreille, 1804)

Distribution in Turkey: This species is widely distributed in Anatolia [21].

Previous records: There has been no record about the species from Kemaliye up till now.

Material examined: Kemaliye: Muşaga (İkisu), 13.09.2007, 3♀♀, 6♂♂ (Y. Durmuş).

ACROTYLUS Fieber, 1853

Acrotylus insubricus insubricus (Scopoli, 1786)

Distribution in Turkey: It is one of the most common Acridid species of Turkey and also in Kemaliye.

Previous records: Erzincan: Kemaliye, 22.06.1968, 8♂♂, 7♀♀ [20].

Material examined: Kemaliye: Kekikpinarı, 15.05.2006, 3♀♀, 4♂♂ (H. Sevgili);- Kocacımén Village (Venk Deresi, Davulköprü), 25.09.2006, 1♂, 1365 m (H. Sevgili);- Öşneden Yolu (Dere kenarı), 15.05.2006, 1♂ (H. Sevgili);- Ergü, 08.07.2005, 1♀, 1♂ (H. Sevgili);- Miçingah Village, 06.07.2005, 1♀, 1♂ (A. Demirsoy);- Yuva Village, 03.06.2007, 1♂ (H. Sevgili);- Efeler (Tarhanık Çayı), 11.07.2005, 1♂, 1020 m, 39°06'N 38° 33E (H. Sevgili);- Geşo Village, 04.06.2007, 1♀ (H. Sevgili);- Konsar Village üstü (Başpinar Yolu), 04.06.2007, 1♀, 39° 11' 132°N 38° 39' 937"E (H. Sevgili);- Çanakçı Village, 02.06.2007, 2♀♀, 2♂♂ (H. Sevgili);- Çanakçı- Arapgir Yolu, 02.06.2007, 1♂, 1510 m, 39° 0.5' 50.3"N 38° 20'54.6"E (H. Sevgili);- Sıräkonaklar, 06.07.2005, 1♂ (H. Sevgili);- Gözaydın Village (Bizmişen, Uluçayır Mevkii), 13.09.2007, 1♀, 2♂♂ (Y. Durmuş).

PSEUDOCELES Bolívar, I., 1899

Pseudoceles obscurus lateritius (Karabag, 1957)

Distribution in Turkey: The species is not common in Turkey, it has been recorded from Eastern part of Anatolia including inlands of Eastern Karadeniz Region [21].

Previous records: It was recorded from Erzincan [21].

Material examined: Erzincan: Kemaliye: Ergü, 08.07.2005, 4♂♂ (H. Sevgili).

HELIOPTERYX Uvarov, 1914

Heliopteryx humeralis (Kuthy, 1907)

Distribution in Turkey: It is common in Turkey, but has rather local distribution in northern and Northwestern part of Turkey [13, 21, 23].

Previous records: Erzincan: Kemaliye, 25.08.1967, 7♂♂, 2♀♀ [20].

Material examined: Kemaliye: Rabat Deresi, 13.07.2007, 5♂♂, 4♀♀ (H. Sevgili);- Yuva Village, 04.07.2005, 1♀, 1095 m (Y. Durmuş).

SPHINGONOTUS Fieber, 1852

Sphingonotus (Sphingonotus) pilosus (Saussure, 1884)

Distribution in Turkey: The range of the species covers western, southern, eastern and northeastern Turkey. **Previous records:** It has been recorded from Kemaliye [20, 39].

Material examined: Although this species has been recorded from Kemaliye, but we could not collect the specimen.

Sphingonotus (Sphingonotus) coerulipes

djakanovi (Mistshenko, 1936)

Distribution in Turkey: The species is quite widespread, but local in eastern Turkey [10, 20, 21, 23, 61].

Previous records: Erzincan: Kemaliye, 22.06.1968, 5♂♂, 2♀♀ [20].

Material examined: We studied on the previous materials, deposited in Zoological museum of Hacettepe.

Sphingonotus (Sphingonotus) rubescens

rubescens (Walker, 1870)

Distribution in Turkey: *S. rubescens* has been recorded from different provinces of Turkey, such as Manisa [10], Hatay [13, 23].

Previous records: It has been recorded from Erzincan [20].

Material examined: Faunistic data from the region was known based on previous studies.

Sphingonotus (Sphingonotus) turcicus

turcicus (Uvarov, 1930)

Distribution in Turkey: This subspecies is basically endemic to Anatolia, but its taxonomy is not clear and needs revision.

Previous records: It has been recorded from Malatya and Elazığ [39, 41].

Material examined: Kemaliye: Gözaydın Village (Bizmişen, Uluçayır Mevki), 13.09.2007, 5♀♀, 1♂ (Y. Durmuş).

Sphingonotus (Sphingonotus) nebulosus anatolicus (Uvarov, 1930)

Distribution in Turkey: It is very common whole of Turkey [13, 21, 39, 62].

Previous records: Erzincan Ovası, 29.08.1967, 7♂♂, 7♀♀ [20].

Material examined: Kemaliye: Ergü, 08.07.2005, 8♀♀, 4♂♂ (H. Sevgili); -Ergü Village, 13.07.2005, 2♀♀, 1♂ (H. Sevgili); - Hotar Demir Madeni, 19.07.2005, 1♀ (H. Sevgili); Ergübaşı, 07.07.2005, 1♀ (A. Demirsoy); -Gözaydın Village (Bizmişen, Uluçayır Mevki), 3♀♀, 1♂ (Y. Durmuş); - Salihli Yolu, 16.07.2006, 1♂ (H. Sevgili); - Apçağa Village, 17.07.2006, 1♀ (H. Sevgili); -Venk Village, 22.07.2005, 1♀ (Y. Durmuş); -Miçinağah Village, 06.07.2005, 1♀ (A. Demirsoy).

***ASPHINGODERUS* Bei-Bienko, 1950**

***Asphingoderus elazigi* (Demirsoy, 1979)**

Distribution in Turkey: The species has been recorded from Elazığ [21, 63] and Şanlıurfa [29].

Previous records: Type locality of the species is Elazığ province near to Kemaliye district.

Material examined: Although we have not been collected the species from Kemaliye, but type locality is very close to the district, so we evaluated it as belonging to fauna of Kemaliye.

GOMPHOCERINAE

ARCYPTERA Serville, 1839

***Arcyptera (Paracyptera) labiata* (Brullé, 1832)**

Distribution in Turkey: The range of the species covers whole of Turkey, bu it is not common in Karadeniz region.

Previous records: Erzincan: Kemaliye, Ocak Village, 27.07.1988, 10♀♀ [39]; Kemaliye, 22.06.1968, 23♂♂, 29♀♀ [20].

Material examined: Kemaliye: Geşo Village (Yeşilyamaç), 12.07.2005, 2♂♂, 1♀ 1290 m, 39° 15 N 38° 32 E (H. Sevgili); - Geşo Beli, 12.07.2005, 1♀ (H. Sevgili); -Geşo Beli, 07.07.2007, 1♂, 2♀♀, 1660 m, 30° 16' 13" N 38° 33' 59" E (H. Sevgili); - Yeşilyamaç (Geşo) Village, 04.06.2007, 1♀ (H. Sevgili); - Sıräkonaklar, 06.07.2005, 1♂, 1♀ (H. Sevgili); - Venk Deresi,

14.07.2005, 2♀♀ (H. Sevgili); - Munzurlar (Doymuş), 07.07.2007, 4♂♂, 3♀♀, 2150 m, 39° 14' 35" N 39° 43' 40" E (H. Sevgili); - Hotar Demir Madeni, 19.07.2005, 1♀ (H. Sevgili); - Yuva Village, 04.07.2005, 1♂ (H. Sevgili); - Yesilyurt (Şelale Mevki), 09.07.2005, 1♀, 1220 m, 39° 11 N 38° 22 E (Y. Durmuş); - Miçinağah Village, 06.07.2005, 2♂♂ 1♀ (A. Demirsoy); - Çanakçı Village, 02.06.2007, 3♂♂ 1♀ (H. Sevgili); - Çanakçı Arapgir Yolu, 02.06.2007, 2♂♂, 1510 m, 39° 05' 50.3" N 38° 20' 54.6" E (H. Sevgili); - Sarıcıçek Village (Sultan Murat Caddesi), 08.07.2007, 2♂♂, 1600 m, 39° 12' 0.2" N 38° 20' 12" E (H. Sevgili); - Kabataş Yolu (İkizsu), 03.06.2007, 1♂ (H. Sevgili); - Ergübaşı, 11.07.2005, 1♀ (A. Demirsoy); - Ergü Village, 13.07.2005, 1♂ (H. Sevgili); - Ergü, 08.07.2005, 1♂ (H. Sevgili); - Ergübaşı, 07.07.2005, 2♂♂, 3♀♀ (A. Demirsoy); - Kekikpinarı (Yazi), 11.07.2005, 3♂♂ 4♀♀ (H. Sevgili).

***RAMBURIELLA* I. Bolívar, 1906**

***Ramburiella (Palaeocesa) turcomana* (Fischer-Waldheim, 1846)**

Distribution in Turkey: It is known from whole of Turkey, but it is possibly absent from Karadeniz region.

Previous records: Erzincan: Kemaliye, 17.08.1966, 17♂♂, 19♀♀ [20].

Material examined: Kemaliye: Miçinağah Village, 06.07.2005, 3♀♀ (A. Demirsoy); Geşo Village (Yeşilyamaç), 12.07.2005, 1♀, 1290 m, 39° 15 N 38° 32 E (H. Sevgili); - Sıräkonaklar, 06.07.2005, 1♀ (H. Sevgili); - Subatan, 08.07.2007, 2♀♀ (Y. Durmuş); - Kekikpinarı (Yazi), 11.07.2005, 5♀♀, 2♂♂ (H. Sevgili); - Kekikpinarı Village, 09.07.2007, 1♀, 1♂ (H. Sevgili); - Ergübaşı, 07.07.2005, 1♂ (A. Demirsoy); - Ergü, 08.07.2005, 1♂ (H. Sevgili); - Kemaliye, 04.07.2005, 1♂ (H. Sevgili); - Munzurlar (Yeşilyayla Village, Mezra Deresi), 07.07.2007, 1♂, 1580 m, 39° 16' 28" N 38° 40' 04" E (H. Sevgili).

***NOTOSTAURUS* Bei-Bienko, 1933**

***Notostaurus anatolicus* (Krauss, 1896)**

Distribution in Turkey: The species is quite widespread in Turkey, but it is not so common in Karadeniz region.

Previous records: Erzincan: Kemaliye, Ocak Village, 27.07.1988, 10♀♀ [39].

Material examined: Kemaliye, Ergübaşı, 07.07.2005, 1♀; - Yuva Village, 23.08.1978, 1♂; - Dutluca,

28.06.1990, 1♀ (A. Demirsoy); -Kekikpınarı Village, 09.07.2007, 2♂♂, 3♀♀; - Geşo Beli, 07.07.2007, 1♀, 1660 m, 30°16'13"N 38°33'59"E (H. Sevgili); -Bizmişan (Gözüaydın Village, Uluçayır mevkii), 13.09.2007, 1♂ (Y. Durmuş).

DOCIOSTAURUS Fieber, 1853

Dociostaurus (Dociostaurus) salmani (Demirsoy, 1979)

Distribution in Turkey: It is an Turkish endemism known from eastern Turkey.

Previous records: Erzincan: Kemaliye, Ocak Village, 27.07.1988, 1♀ [39].

Material examined: The species is not common in Kemaliye district.

Dociostaurus (Kazakia) jagoi jagoi (Soltani, 1978)

Distribution in Turkey: The species has been recorded from many parts of Turkey as *D. genei* [13, 21, 23, 39].

Previous records: Erzincan: Kemaliye, Çit Village, 25.08.1989, 850 m, 2♂♂, 2♀♀ [39].

Material examined: We collected a lot of specimens from Kemaliye district from July to end of the August. They occupy arid areas and prefer open scrub and grass dry land pastures.

Dociostaurus (Kazakia) brevicolis (Eversman, 1848)

Distribution in Turkey: The species lives from June to September and its range covers from sea level to high plateaus whole of Turkey, excluding Karadeniz region.

Previous records: It has been recorded from Malatya [39] and Elazığ [41].

Material examined: Kemaliye: Sıräkonaklar, 06.07.2005, 3♂♂, 6♀♀ (H. Sevgili).

Dociostaurus (Stauronotulus) hauensteini hauensteini (I. Bolívar, 1893)

Distribution in Turkey: It is widely distributed in Turkey and is usually present in dry areas.

Previous records: Known from Elazığ and Malatya [39, 41].

Material examined: Kemaliye: Dutluca, 28.06.1990, 6♀♀ (A. Demirsoy); -Hotar (Demir Madeni), 19.07.2005, 1♀; -Sıräkonaklar, 06.07.2005, 1♀; -Ergü Village, 13.07.2005, 1♀, 1♂ (H. Sevgili).

STENOBOTHRUS Fischer, 1853

Stenobothrus fischeri fischeri (Eversman, 1848)

Distribution in Turkey: This montane species is common in upland areas whole of Turkey.

Previous records: Erzincan: Kemaliye, Ocak Village, 27.07.1988, 1600 m, 2♀♀ [39].

Material examined: Erzincan: Kemaliye (Sarıçık, Sultanmurat Caddesi), 11.07.2007, 3♂♂, 11♀♀ (Y. Durmuş).

Stenobothrus nigromaculatus nigromaculatus (Herrich-Schaffer, 1840)

Distribution in Turkey: : The species is very common in Turkey, but it is often restricted to higher mountains.

Previous records: It has been recorded Erzurum province close to Erzincan.

Material examined: Kemaliye: Kekikpınarı (Yazı), 11.07.2005, 2♂♂, 1♀ (H. Sevgili); -(Subatan), 08.07.2007, 1♀ (Y. Durmuş); -(Geşo Beli), 07.07.2007, 1♂, 30°16'13"N 38°33'59"E, 1660 m (H. Sevgili).

Stenobothrus zubowskyi (Bolívar, I., 1899)

Distribution in Turkey: The species is known from the mountain areas of the Anatolian mainland.

Previous records: It is recorded from Malatya province near to Kemaliye [39].

Material examined: Kemaliye: Munzur Dağları, 04.06.2007, 1♂; -(Geşo Village, Yeşilyamaç), 12.07.2005, 1♂, 39°15'N 38°32'E, 1290 m (H. Sevgili).

OMOCESTUS I. Bolívar, 1878

Omocestus (Omocestus) petraeus (Brisout-Barnevile, 1885)

Distribution in Turkey: The species is widely distributed in Turkey.

Previous records: Erzincan [21].

Material examined: Although it has been recorded from many localities in Turkey, we could not collect the specimens from Kemaliye district.

CHORTHIPUS Fieber, 1852

Chorthippus (Glyptobothrus) bornhalmi (Harz, 1971)

Distribution in Turkey: The range of *Ch. bornhalmi* covers Northern Italy, mainly sotuher Balkans including whole of Greece and with some Aegean Islands and Anatolia [64]. Distribution of the range of the species in Anatolia is badly known.

Previous records: Erzincan: Kemaliye, Çit Village, 25.08.1989, 850 m, 2♂♂ (as *Ch. brunneus brunneus*) [39].

Material examined: Kemaliye: Ergü Başı, 07.07.2005, 2♀♀ (A. Demirsoy); -Ergü Village, 13.07.2005, 1♂ (H. Sevgili); -Kırkgöz, 12.07.2007, 1♂ (H. Sevgili); -Geşo Beli, 07.07.2007, 1♂, 4♀♀, 1660 m, 30° 16' 13"N 38° 33' 59"E (H. Sevgili); - Subatan, 02.06.2007, 16♂♂, 7♀♀, 08.07.2007, 1♀ (H. Sevgili); - Subatan (Çanakçı Village), 02.06.2007, 2♂♂, 2♀♀ (H. Sevgili); - Kabataş Yolu (İkizsu), 03.06.2007, 1♂, 1♀ (H. Sevgili); - Munzur Dağları (Yeşilyayla), 04.06.2007, 6♂♂, 2♀♀ (H. Sevgili); - Venk Civarı, 13.07.2005, 6♀♀; -Kekikpinarı (Yazı), 11.07.2005, 1♂, 2♀♀ (H. Sevgili); -Gözaydın Village (Bizmişen, Uluçayır Mevkii), 13.09.2007, 1♀ (Y. Durmuş).

Chorthippus (Glyptobothrus) biguttulus biguttulus (Linnaeus, 1758)

Distribution in Turkey: The subspecies is very common in Anatolia.

Previous records: It has been recorded from Malatya and Elazığ [39, 41].

Material examined: It is widely distributed in Kemaliye district.

Chorthippus (Glyptobothrus) mollis mollis (Charpentier, 1825)

Distribution in Turkey: The species has been recorded from many provinces of Turkey, including Erzincan.

Previous records: It is known from Malatya and Elazığ [39, 41].

Material examined: Erzincan: Kemaliye (Yuva, Kırkgöz), 28.08.1978, 1♂, 1♀ (A. Demirsoy).

Chorthippus (Chorthippus) dichrous (Eversmann, 1859)

Distribution in Turkey: This species is widely distributed in Anatolia.

Previous records: Erzincan: Kemaliye, 25.08.1967, 27♂♂, 21♀♀ [20].

Material examined: Erzincan: Kemaliye (Sarıçık, Sülüklük Gölü), 14.09.2007, 3♂♂, 9♀♀ (Y. Durmuş); - Bizmişen (Gözüaydın Village, Uluçayır Mevkii), 13.09.2007, 1♀ (Y. Durmuş).

Chorthippus (Chorthippus) parallelus

parallelus (Zetterstedt, 1821)

Distribution in Turkey: This popular species of the genus may be distinguished from other species by being brachypterous. It is not being in arid areas and occurs in mainly grasslands at high altitudes of the mountain valleys in Turkey.

Previous records: It has been recorded from Malatya [39] and Elazığ ([41] as *C. longicornis*).

Material examined: Erzincan: Kemaliye, 10.07.1986, 1♂ (A. Demirsoy); -Sarıçık (Sultanmurat Cad.), 11.07.2007, 1♂, 1♀ (Y. Durmuş) (HUZOM); -Kekikpinarı Village, 09.07.2007, 3♀♀ (H. Sevgili); -Kekikpinarı (Yazı), 11.07.2005, 1♀ (H. Sevgili); - Venk Civarı, 13.07.2005, 11♀♀, 3♂♂ (H. Sevgili); - Sarıçık Village (Sultan Murat Caddesi), 08.07.2007, 8♀♀, 6♂♂, 1600 m, 39° 12'02"N 38° 20' 12"E (H. Sevgili); - Efeler (Tarhanık Çayı), 11.07.2005, 13♀♀, 10♂♂ (H. Sevgili).

Chorthippus (Chorthippus) albomarigantus karelini (Uvarov, 1910)

Distribution in Turkey: This subspecies has a more restricted distribution in northeastern part of Turkey [65].

Previous records: It has been recorded from Malatya [39], Tunceli [20] and Erzurum [65].

Material examined: Erzincan: Kemaliye (Bizmişen, Gözüaydın Village, Uluçayır mevkii), 13.09.2007, 2♂♂, 3♀♀ (Y. Durmuş).

EUCHORTHIPPUS Tarbinsky, 1926

Euchorthippus pulvinatus pulvinatus (Fischer von Waldheim, 1846)

Distribution in Turkey: The species has been recorded from central, Marmara and eastern part of Anatolia. It lives in open grassland and moorland.

Previous records: It is known from Erzurum province near to Erzincan [20].

Material examined: Erzincan: Kemaliye, 10.07.1986, 1♂ (A. Demirsoy); -Venk civarı, 13.07.2005, 1♂, 1♀ (H. Sevgili).

Table I. Number of species of Orthoptera in Kemaliye (Erzincan) district.

Families	Genera	Species/ Subspecies	Endemic taxa
Tettigoniidae	16	30	11
Gryllidae	4	4	-
Gryllotalpidae	1	1	-
Raphidophoridae	1	1	1
Pyrgomorphidae	1	2	-
Tetrigidae	1	3	-
Tridactylidae	1	1	-
Pamphagidae	3	4	4
Acrididae	24	46	5
Total	52	92	21

CHECK-LIST

Remark: The species were given as **Bold** are endemic to Anatolia.

ORTHOPTERA**ENSIFERA****TETTIGONIOIDEA****TETTIGONIIDAE****PHANEROPTERINAE**

1. ***Poecilimon zonatus* Bolívar, I., 1899**
2. *Phaneroptera (Phaneroptera) nana* Fieber, 1853
3. *Isophya schneideri* Brzunner von Wattenwyl, 1878
4. *Poecilimon armeniacus* (Uvarov, 1921)
5. *Acrometapa syriaca* Brunner von Wattenwyl, 1878
6. *Tylopsis liliifolia* (Fabricius, 1793)

TETTIGONIINAE

7. *Tettigonia viridissima* (Linnaeus, 1758)
8. *Tettigonia caudata* (Charpentier, 1845)
9. *Medecticus assimilis* (Fieber, 1853)
10. *Decticus verrucivorus* (Linnaeus, 1758)
11. *Platycleis intermedia intermedia* (Serville, 1839)
12. *Platycleis affinis* Fieber, 1853
13. *Platycleis escalerae* Bolívar, 1899

14. *Decorana persica* (Uvarov, 1917)

15. ***Squamiana sinuata* (Ramme, 1951)**

16. ***Montana schererri* (Werner, 1901)**

17. *Parapholidoptera signata* (Brunner von Wattenwyl, 1861)

18. ***Parapholidoptera salmani* Çiplak, 2000**

19. ***Parapholidoptera karabagi* Demirsoy, 1974**

20. *Apholidoptera pietschmanni* (Ebner, 1912)

21. ***Pezodrymadusa striolata* (Ramme, 1951)**

22. ***Pezodrymadusa sinuata* (Ramme, 1951)**

23. ***Pezodrymadusa konowi* (Bolívar, 1899)**

24. ***Pezodrymadusa diffusa* (Ramme, 1951)**

25. ***Pezodrymadusa kurmana* (Ramme, 1939)**

26. ***Pezodrymadusa indivisa* Karabag, 1961**

27. *Scotodrymadusa syriaca* (Pictet, 1888)

28. *Uvarovistia satunini* (Uvarov, 1934)

SAGINAE

29. *Saga ephippigera ephippigera* Fischer von Waldheim, 184

GRYLLIDAE**GRYLLINAE**

30. *Gryllus campestris* (Linnaeus, 1758)

31. *Melanogryllus desertus* (Pallas, 1771)

32. *Modicogryllus (Modicogryllus) frontalis* (Fieber, 1845)

OECANTHINAE

33. *Oecanthus pellucens* (Scopoli, 1763)

GRYLLOTALPIDAE

34. *Gryllotalpa gryllotalpa* (Linnaeus, 1758)

RAPHIDOPHORIDAE

35. ***Troglophilus (Torglophilus) escalerae* Bolívar, I., 1899**

TETRIGIDAE

36. *Tetrix tenuicornis* (Sahlberg, 1891)

37. *Tetrix bolivari* Saulcy, 1901

38. *Tetrix depressa* Brisoit de Barneville [1848]

TRYDACTYLIDAE

39. *Xya variegata* (Latreille, 1809)

PYRGOMORPHIDAE

40. *Pyrgomorpha guentheri* Burr, 1889

41. *Pyrgomorpha cognata cognata* Krauss, 1877

- PAMPHAGIDAE**
AKICERINAE
- 42. *Prionotropis maculinervis urfensis* (Ramme, 1933)**
- PAMPHAGINAE
- 43. *Paranothrotes kosswigi* Demirsoy, 1977**
- 44. *Paranothrotes asulcatus* Demirsoy, 1973**
- 45. *Paranocaracris rupipes rupipes* (Fischer von Waldheim, 1846)**
- ACRIDIDAE
- EUPREPOCNEMIDINAE
46. *Heteracris pterosticha* (Fischer von Waldheim, 1833)
- CALLIPTAMINAE
47. *Calliptamus coelesyriensis* (Giglio-Tos, 1893)
48. *Calliptamus italicus italicus* (Linnaeus, 1831)
49. *Calliptamus tenuicercis tenuicercis* Tarbinski, 1930
- CATANTOPINAE
50. *Sphenophyma rugulosa* (Stal, 1876)
- EGNATIINAE
- 51. *Charora pentagrammica* Bolivar, I., 1899**
- ACRIDINAE
52. *Acrida bicolor* (Thunberg, 1815)
53. *Truxalis robusta robusta* (Uvarov, 1916)
- OEDIPODINAE
54. *Aiolopus strepens* (Latreille, 1804)
55. *Locusta migratoria migratoria* Linnaeus, 1758
56. *Oedaleus decorus decorus* (Germar, 1817)
57. *Pyrgodera armata* Fischer von Waldheim, 1846
58. *Celes variabilis* (Pallas, 1771)
59. *Oedipoda coerulescens coerulescens* (Linnaeus, 1758)
60. *Oedipoda schochi* Saussure, 1884
61. *Oedipoda aurea aurea* Uvarov, 1923
62. *Oedipoda germanica germanica* (Latreille, 1804)
63. *Oedipoda miniata miniata* (Pallas, 1771)
64. *Acrotylus insubricus insubricus* (Scopoli, 1786)
65. *Pseudoceles obscurus lateritius* Karabağ, 1957
66. *Heliopteryx humeralis* (Kuthy, 1907)
67. *Sphingonotus pilosus*, Saussure 1884
68. *Sphingonotus coerulipes djakanovi* Mistshenko, 1936
69. *Sphingonotus rubescens rubescens* (Walker, 1870)
- 70. *Sphingonotus turcicus turcicus* Uvarov, 1930**
- 71. *Sphingonotus nebulosus anatolicus* Uvarov, 1930**
- 72. *Asphingoderus elazigi* Demirsoy, 1977**
- GOMPHOCERINAE
73. *Arcyptera labiata* (Brulle, 1832)
74. *Ramburiella turcomana* (Fischer von Waldheim, 1846)
75. *Notostaurus anatolicus* (Krauss, 1896)
76. *Dociostarus (Kazakia) genei* (Ocskay, 1832)
77. *Dociostaurus (Dociostaurus) brevicolis brevicolis* (Eversman, 1848)
78. *Dociostaurus (Stauronotulus) hauensteini hauensteini* (I. Bolivar, 1893)
- 79. *Dociostaurus (s.str) salmani* Demirsoy, 1977**
80. *Stenobothrus (Stenobothrus) fischeri fischeri* (Eversman, 1848)
81. *Stenobothrus nigromaculatus nigromaculatus* (Herrich-Schaffer, 1840)
82. *Stenobothrus zubowskyi* Bolivar, I. 1899
83. *Omocestus (Omocestus) petraeus* (Brisout-Barneville, 1885)
84. *Chorthippus apricarius* (Linneaus, 1758)
85. *Chorthippus (Glyptobothrus) bornhalmi* Harz, 1971
86. *Chorthippus (Glyptobothrus) biguttulus biguttulus* (Linneaus, 1758)
87. *Chorthippus (Glyptobothrus) mollis mollis* (Charpentier, 1825)
88. *Chorthippus dorsatus dichrous* (Eversman, 1859)
89. *Chorthippus (Chorthippus) parallelus parallelus* (Zetterstedt, 1821)
90. *Chorthippus (Chorthippus) albomarginatus karelini* (Uvarov, 1910)
91. *Euchorthippus pulvinatus pulvinatus* (Fischer von Waldheim, 1846)

ACKNOWLEDGEMENTS

We would like to thank The Scientific and Technical Research Council of Turkey (TUBITAK) for its financial support (ÇAYDAG 105Y016).

REFRECENCES

1. C. Brunner von Wattenwyl, Monographie der Phaneropteriden, Wien, 1878.
2. F. Werner, Die Dermapteren- und Orthopterenfauna Kleinasiens. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Klasse, Abteilung 1110 (1901) 259.
3. I. Bolivar, Orthopteres Du Voyage De M. Martinez Escalera Dans L'Asie Mineure. Annal. Soc. Entomol. Belgique. 43 (1899) 583.
4. R. Ebner, Ein Beitrag zur Orthopteren Fauna der europaeischen Türkei, Zool. Jahrb. Abteilung für Systematik. 29 (1910) 401.
5. R. Ebner, Orthoptera. I. Mantoidea und Tettigonioidea (= Locustodea), Annal. k.k. Nat. Hofmuseums Wien 26 (1912) 441.
6. B. P. Uvarov, Orthoptera collected by M. Sureya Bey in Turkey. Eos, 6 (1930) 349.
7. B. P. Uvarov, Studies in the Orthoptera of Turkey, Iraq and Syria. Eos, 10 (1934) 21.
8. W. Ramme, Revision der Phaneropterinen-Gattung Poecilimon Fisch. (Orth. Tettigon.), Mitt. Zool. Mus. Berlin, 19 (1933) 497.
9. W. Ramme, Beiträge zur Kenntnis der palaearktischen Orthopterenfauna (Tettig. u. Acrid.) III. Mitt. Zool. Mus. Berlin, 24 (1939) 41.
10. W. Ramme, Zur Systematik, Faunistik und Biologie der Orthopteren von Südost-Europa und Vorderasien, Mitt. Zool. Mus. Berlin, 27 (1951) 1-432.
11. E. F. Miram, New species of the genera Poecilimon Fisch. Fr. and Isophya Br. W. (Subf. Phaneropterinae, Fam. Tettigonioidea-Long-Horned Grasshoppers) of the Fauna of the USSR. Zoologicheskii Zhurnal. 17 (1938) 348.
12. G. Y. Bei-Bienko, Phaneropterinae. Fauna of the USSR, Orthoptera Vol. II, No. 2. Moskva-Leningrad. Israel Program for Scientific Translation, Jerusalem, (1965) 1954.
13. T. Karabağ, Türkiye'nin Orthoptera Faunası - The Orthoptera fauna of Turkey, Ankara Üniversitesi, Fen Fakültesi yayınları, Ankara, 1958.
14. T. Karabağ, Some new species and new records of Tettigoniidae (Orthoptera) from Turkey, Communications Fac. Sci. Univ. Ankara, 13 (1964) 36.
15. T. Karabağ, Studies in the Turkish Orthoptera (Insecta). I. new species and less known Tettigonidae. J. Nat. Hist. 9 (1975) 341.
16. T. Karabağ, S. Balamir, İ. Gümüşsuyu, E. Tutkun, Türkiye Orthoptera faunasının tesbiti üzerinde araştırmalar. Bitki Koruma Bült. 11 (1971) 76.
17. T. Karabağ, S. Balamir, İ. Gümüşsuyu, E. Tutkun, Türkiye Orthoptera faunasının tesbiti üzerinde araştırmalar (II). Bitki Koruma Bült. 14 (1974) 3.
18. T. Karabağ, İ. Gümüşsuyu, E. Tutkun, Türkiye Orthoptera faunasının tesbiti üzerinde araştırmalar (III). Bitki Koruma Bült. 20 (1981) 1.
19. A. Demirsoy, Revision der anatolischen Pamphaginae (Saltatoria, Caelifera, Pamphagidae). Entomol. Mitt. Zool. Mus. Hamburg, 4 (1973) 404.
20. A. Demirsoy, Erzurum Bölgesi Orthoptera (Insecta) faunasının tesbiti and taksonomik incelenmesi. Atatürk Üniv. Yay. No: 347, 1975.
21. A. Demirsoy, Türkiye'nin Caelifera (Insecta) faunasının tespiti ve taksonomik incelenmesi. Atatürk Üniv. Yay. No. 488, 1977.
22. A. Demirsoy, Genel ve Türkiye Zoocoğrafyası: Hayvan Coğrafyası. Meteksan A.Ş., Ankara, Türkiye. 2002.
23. S. Salman, Ağrı, Kars ve Artvin illerinin Orthoptera (Insecta) faunası üzerine taksonomik araştırmalar. Atatürk Üniv. Fen Fak. Yayınları, No. 82, Erzurum, 1978.
24. K. G. Heller, Bioakustik der europäischen Laubheuschrecken. Margraf, Weikersheim, 1988.
25. B. Çiplak, Malatya ve civarı Orthoptera (Insecta) faunasının incelenmesi, PhD thesis, University of İnönü, Malatya, 1992.
26. M. Ünal, Kırıkkale orthopterlerinin fauna ekoloji ve taksonomisi üzerine araştırmalar, PhD thesis, University of Gazi, Ankara, 1997.
27. M. Ünal, Phaneropterinae (Orthoptera: Tettigoniidae) from Turkey and the Middle East. Trans. Am. Entomol. Soc. 131 (2005) 425.
28. M. Ünal, Tettigoniidae (Orthoptera) from Turkey and the Middle East. Trans. Am. Entomol. Soc. 132 (2006) 157.
29. H. Sevgili, B. Çiplak, The Orthoptera of Sanlıurfa province from the Mesopotamian part of Turkey. Ital. J. Zool. (Modena). 67 (2000) 229.
30. H. Sevgili, Türkiye Isophya Brunner von Wattenwyl (Orthoptera: Tettigoniidae: Phaneropterinae) türlerinin revizyonu, PhD thesis, University of Hacettepe, Ankara, 2004.
31. A. Mol, Karadeniz Bölgesi'nde dağılım gösteren Gomphocerinae Uvarov, 1958 (Orthoptera, Acrididae) altfamilyası türlerinin faunistik ve taksonomik yönden incelenmesi, PhD Thesis, University of Ondokuz Mayıs, Samsun, 2007.
32. D. Şirin, Biyoçeşitliliğin evrimi: Chorthippus biguttulus tür grubunun Anadolu'da türleşmesi ve hızlı çeşitlenmesi, PhD thesis, University of Akdeniz, Antalya, 2009.
33. H. Sevgili, A. Demirsoy, Y. Durmuş, Orthoptera and Mantodea fauna of Kazdağı (Ida) National Park with data on the calling songs of some bush-crickets, Turk. J. Zool. 35 (2011) 631.

34. B. Çiplak, Distribution of Tettigoniinae (Orthoptera, Tettigoniidae) bush-crickets in Turkey: the importance of the Anatolian Taurus Mountains in biodiversity and implications for conservation. *Biodiv. Conserv.* 12 (2003) 47.
35. B. Çiplak, The analogy between interglacial and global warming fort he glacial relicts in a refugium. A biogeographic perspective for conservation of Anatolian Orthoptera, In: S. Fattorini, *Insect Ecology and Conservation*, 2008, 135-163.
36. A. Demirsoy, Kemaliyenin Flora ve Faunası. Kemaliye (Eğin) Kent Rehberi, Kemaliye Kültür ve Kakanma vakfı (KEMAV) Yayıni, İstanbul, 2004.
37. Ş. Yıldırımlı, Flora of Munzur Dağları (Erzincan-Tunceli). OT Sist. Bot. Derg. 2 (1995) 1.
38. Z. Bulut, H. Yılmaz, The current situation of threatened endemic flora in Turkey: Kemaliye (Erzincan) case. *Pak. J. Bot.* 42 (2010) 711.
39. B. Çiplak, A. Demirsoy, A. N. Bozçuk, Malatya ve civarı Caelifera (Orthoptera, Insecta) faunası. *Turk. J. Zool.* 20 (1996a) 17.
40. B. Çiplak, A. Demirsoy, A. N. Bozçuk, Malatya (Türkiye) Ensifera (Orthoptera, Insecta) faunası. *Turk. J. Zool.* 20 (1996b) 247.
41. O. Erman, S. Salman, Elazi̇ ili Orthoptera (Insecta) faunası. X. Ulusal Biyoloji Kongresi, Erzurum, 1990.
42. D.C. Eades, D. Otte. Orthoptera Species File Online. [2005/03/15]. <http://Orthoptera.SpeciesFile.org>
43. M. Ünal, Phaneropterina (Orthoptera: Tettigoniidae) from Turkey and the Middle East. *Trans. Am. Entomol. Soc.* 131 (2005) 425.
44. M. Ünal, Distribution of fourty-six species of the genera Isophya Brunner von Wattenwyl, Poecilimon Fischer and Poecilimonella Uvarov (Orthoptera, Tettigoniidae, Phaneropterinae) in Turkey with description of two new species, *Priamus*, 11 (2004) 1.
45. M. Ünal, Phaneropterinae (Orthoptera: Tettigoniidae) from Turkey and the Middle east II. *Trans. Am. Entomol. Soc.* 136 (2010) 125.
46. B. Çiplak, A. Demirsoy, H. Sevgili, B. Yalım, Türkiye'nin Orthoptera (Çekirgeler= Düzkanatlılar) faunası. In: Demirsoy, A., ed, *Genel Zoocoğrafya ve Türkiye Zoocoğrafyası "Hayvan Coğrafyası"*. Meteksan A.Ş., Ankara, Türkiye, (2002) pp. 681-707.
47. T. Karabağ, Revision of Drymadusini Stein and related genera. *Bull. Br. Mus. Nat. Hist. (Entomol.)*, 11 (1961) 1.
48. B. Çiplak, K. G. Heller, Review of the south-west Asian genus Scotodrymadusa (Orthoptera, Tettigoniidae): systematic, phylogeny and biogeography of an eremial lineage. *Insect Syst. Evol.* 36 (2005) 317.
49. B. Çiplak, K. G. Heller, A. Demirsoy, Review and key to species of Platycleis from Turkey (Orthoptera: Tettigoniidae) with descriptions of Yalvaciana subgen. n. and two new species. *J. Nat. Hist.* 36 (2002) 197.
50. B. Massa, P. Fontana, Supraspecific taxonomy of Palaearctic Platycleidini with unarmed prosternum: a morphological approach (Orthoptera: Tettigoniidae, Tettigoniinae), *Zootaxa*, 2837 (2011) 1.
51. B. Çiplak, Systematics and phylogeny of Parapholidoptera (Orthoptera: Tettigoniidae: Tettigoniinae). *Syst. Entomol.* 25 (2000) 411.
52. J. Maran, Contribution to the knowledge of the genus Pholidoptera Wesm. *Acta Entomol. Mus. Nat. Pragae*, 27 (1953) 209.
53. B. P. Uvarov, Orthoptera caucasica nova a cl. Don K. A. Satunin. *Lecta. Bull. Mus. Caucase*, 10 (1916) 45.
54. İ. Gümüşsuyu, Türkiye Grylliidae (Orthoptera) faunası üzerinde sistematik çalışmalar ile türlerin habitat ve davranışlarına ait gözlemler. T. C. Tarım ve Orman Bakanlığı, Ankara Bölge Zirai Mücadele Araştırma Enstitüsü Müdürlüğü, No: 42, (1981).
55. A. W. Lehmann and I. Landeck, Pygmy grasshoppers (Orthoptera: Tetrigidae) from North-eastern Turkey. *Articulata*, 22 (2007) 225.
56. T. Karabağ, A new species of the genus Pyrgomorphella I. Bolivar, 1904 (Orthoptera, Acrididae) from Turkey. *Proc. R. Entomol. London* 30 (1961) 26.
57. M. Ünal, First data on Orthoptera of Mounth Köroğlu, N.W. Anatolia with description of three new taxa. *Entomol. News*, 113 (2002) 275.
58. M. Ünal, Bolu ve Düzce illeri Caelifera (Orthoptera) faunası, Bitki Koruma Bült., 48 (2008) 1.
59. V. M. Dirsh, Revision of the group Truxalis (Orthoptera, Acrididae). *Eos*, (1950).
60. F. Willemse, *Fauna Graeciae I*. Hellenic Zoological Society, Athens, 1984.
61. G. J. Bei-Bienko, L. L. Mistshenko, The grasshoppers of the fauna of the USSR and adjacent countries. Akad. Nauk. USSR, I-II (1951).
62. V. P. Weidner, Beiträge zur Kenntnis der Feldheuschrecken (Caelifera) Anatoliens. *Mitt. Zool. Mus. Hamburg*, 66 (1969) 146.
63. A. Demirsoy, Beiträge zur Kenntnis der Caelifera fauna Anatoliens. Neue Arten, Unterarten und Caelifera sowie für die Türkei neu Festgestellte Arten. *Entomol. Mitt. Zool. Mus. Hamburg*, 6 (1979) 106.
64. F.M.H. Willemse, O. von Helversen, B. Odé. A review of Chorthippus species with angled pronotal lateral keels from Greece with special reference to transitional populations between some Peloponnesean taxa (Orthoptera, Acrididae). *Zool. Mededelingen (Leiden)* 83 (2009) 319.
65. V. Yu. Vedenina, O. V. Helversen, A re-examination of the taxonomy of the Chorthippus albomarginatus group in Europe on the basis of song and morphology (Orthoptera: Acrididae). *Tijdschr. entomol.* 152 (2009) 65.