

Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey.

XXII. Family : Cicadellidae : Deltocephalinae : Athysanini (Part II)

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Summary

This second part of the faunistic list of Athysanini includes the only genera of *Allygus*, *Allygidius*, *Tbilisica*, *Phlepsius*, *Selenocephalus* and *Graphocraerus*. Totally of 19 species, including also the recorded species in the literature are listed in this paper. Three species namely; *Allygus mixtus* (F.), *Allygidius commutatus* Fieb. and *Selenocephalus sirvadi* Dlab, are new records for the Turkish Auchenorrhyncha fauna. Distribution, abundance and plants which the specimens were collected on of each species are given.

Introduction

Most of the species listed here are previously recorded by Oshanin (1912), Fahringer (1922), Zachvatkin (1946), Dlabola (1957, 1971, 1977 b, 1981), Linnavuori (1965), Kalkandelen (1974), Kartal (1983). The species which are given in this paper, have not been observed as economically important pest on the cultivated plants up to date in Turkey, nor any other country.

Synonyms, distributions of species in Palaearctic Region are taken Nast (1972). Additional countries are given with literature citations.

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Allygus mixtus (Fabricius, 1794)

Synonymy : *Aphrodes marmoratus* Hardy, 1850; *Jassus mixtus communis* Ferr., 1882; *J.m. corisipennis* Ferr., 1882; *J.m. juvenis* Ferr.; 1882; *J.m. margaritinus* Ferr., 1882; *J.m. gracilis* Rey, 1894; *J.m. immunis* Rey, 1894.

General Distribution : Albania, Algeria, Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, England, Finland, France, Germany, Hungary, Ireland, Italy, (also Sardinia), Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, Tunisia, USSR, Yugoslavia, (Nearctic Region). Iran (Dlabola, 1981).

Distribution in Turkey : This species constitutes a new record for Turkey.

Material examined : Konya (Deştigin) - Only one specimen.

Occurrence : Extremely occasional.

Biological note : The specimen was collected in early July on oak.

Allygus modestus Scott, 1876

General Distribution : Austria, Czechoslovakia, England, France, Germany, Greece, (also Corfu), Italy (also Sardinia), Morocco, Netherlands, Poland, Romania, Spain, Tunisia, USSR (Ukraine), Yugoslavia, Turkey (Dlabola, 1971).

Distribution in Turkey : Dlabola (l. c.) reported it from Muğla (Marmaris).

The authors have no representative material of this species in their collection.

Allygidius atomarius (Fabricius, 1794)

Synonymy : *Cicada reticulata* Thunberg, 1784 (Primary Homonym); *C. conspicillaris* Schrank, 1801; *Jassus (Thamnotettix) heydenii* Kbm., 1868.

General Distribution : Albania, Austria, Bulgaria, Czechoslovakia, Denmark, France, Germany, Hungary, Italy, Netherlands, Poland, Romania, Spain, Tunisia, USSR, Yugoslavia, Crete (Dlabola, 1977 b), Turkey (Fahringer, 1922; Dlabola, 1971).

Distribution in Turkey : Fahringer (l.c.) reported this species from Istanbul (Polenezköy) and Sakarya (Sapanca). Later on Dlabola (1971) listed it from Bursa (Karacabey).

Material examined : Bursa (Central province), Çanakkale (Gökçeada), İzmir (Selçuk), Muğla (Gökova), Sinop (Boyabat), Tekirdağ (Barbaros).
Totally 17 specimens.

Occurrence : Occasionally.

Biological note : Specimens were collected starting from late May to late July, on *Ulmus* and some also by light traps.

Allygidius commutatus Fieber, 1872

General Distribution : Albania, Algeria, Austria, Bulgaria, Czechoslovakia, Denmark, England, Finland, France, Germany, Hungary, Italy (also Sicily), Netherlands, Norway, Poland, Romania, Sweden, Tunisia, USSR, Yugoslavia.

Distribution in Turkey : This species constitutes a new record for Turkey.

Material examined : Kars (Sarıkamış), Kırşehir (Mucur) - Totally 11 specimens.

Occurrence : Occasionally.

Biological note : Specimens were collected in mid- July and August, in pine forest.

Tbilisica anatolica Kartal, 1983

General Distribution : Endemic.

Distribution in Turkey : Kartal (1983) described this species from the specimens collected in Niğde (Demirkazık dağı 1700 m).

The authors have no representative material of this species.

Phlepsius intricatus (Herrich - Schaffer, 1838)

Synonymy : *Jassus* (*Jassus*) *octopunctatus* Burm., 1838.

General Distribution : Afghanistan, Albania, Algeria, Austria, Bulgaria, Czechoslovakia, France, Germany, Greece, Hungary, Iran, Iraq, Italy (also Sardinia), Jordan, Morocco, Palestine, Portugal, Romania, Spain (also Balearic Is.), Turkey, USSR. Cyprus (Lindberg, 1948).

Distribution in Turkey : Oshanin (1912) listed this species from Turkey. Linnavuori (1965) reported it from Bolu (Akçakoca) and Kalkandelen (1974) also from Isparta.

Material examined : Amasya, Çanakkale, Diyarbakır (Central province, Nusaybin, Silvan), Isparta, İzmir, Kars (Gaziler), Kırşehir (Hirfanlı), Malatya (Hasırcılar), Mardin (Silopi), Muğla (Fethiye), Nevşehir (Gülşehir) - Totally 17 specimens. Somewhat common but found in small numbers.

Occurrence : Occasionally.

Biological note : Specimens were collected starting from early April to late August, on *Trifolium*, *Oryza sativa*, tobacco, *Alhagi* and some also by light traps.

Phlepsius ornatus (Perris, 1857)

Synonymy : *Ph. maculatus* Fieber, 1866; *Ph. asiaticus* Zach., 1945; *Ph. asiaticus angorensis* Zach., 1945.

General Distribution : Afghanistan, Algeria, France, German F. R., Iran, Israel, Libya, Romania, Spain, Turkey, USSR.

Distribution in Turkey : Dlabola (1960, 1981) listed this species as Turkey and Van (Başkale) respectively. Kalkandelen (1974), reported it from Ankara (Central province).

Material examined : Ankara (Central province), Diyarbakır (Central province), Konya (Yunak), Nevşehir (Avanos) - Totally 12 specimens.

Occurrence : Occasionally.

Biological note : Specimens were collected starting from late April to Mid-August, by light traps and one specimen on *Euphorbia*.

Phlepsius spinulosus Wagner, 1963

General Distribution : France, Italy (also Sardinia and Sicily), Morocco, Tunisia, Iran and Turkey (Dlabola, 1981).

Distribution in Turkey : Dlabola (l. c.) reported it from Erzurum (Kandilli 1720 m).

The authors have no representative material of this species.

Selenocephalus amasyicus Dlabola, 1977

General Distribution : Endemic.

Distribution in Turkey : Dlabola (1977 a) described this species from the specimens collected in Amasya.

The authors have no representative material of this species in their collection.

Selenocephalus anatolicus Dlabola, 1957

General Distribution : Turkey, Iran (Dlabola, 1981).

Distribution in Turkey : Dlabola (1957) described this species from the specimens collected in Ankara (Çubuk Baraj, Beynam, and Mogan gölü), but later on (1981), he reported it again from Bolu (Gerde 1200 m) and Nevşehir (Gülşehir, Ürgüp). It seems to be restricted in Middle Anatolia.

Material examined : Çorum (Bayat), Nevşehir (Avanos) - Totally 3 specimens.

Occurrence : Occasionally.

Biological note : The specimens were collected in late June and early August on weeds. Dlabola (1957, 1981) stated that he found the specimens on steppe vegetations such as *Astragalus* and *Artemisia*.

Selenocephalus ankarae Dlabola, 1957

General Distribution : Endemic.

Distribution in Turkey : Dlabola (l. c.) described this species from the specimens collected in Ankara (Çubuk Barajı). Kalkandelen (1974) also found it in Ankara (Çubuk Barajı, Karagöl, Lalahan).

Material examined : Antalya (Akseki, Saklıkent, Söğüt), Muğla (Marmaris, Milas) in addition to Kalkandelen's material - Totally 28 specimens. It seems to be distributed in Middle, South and South Western parts of Turkey. It is found in small numbers.

Occurrence : Somewhat occasionally.

Biological note : Specimens were collected beginning in early June to late August, on steppe vegetations and some also on the species of *Quercus*, *Prunus*, *Crataegus* and *Salix*.

Selenocephalus armeniacus Lindberg, 1960

General Distribution : USSR (Armenia). Turkey (Dlabola, 1977 b).

Distribution in Turkey : Dlabola (1977 b, 1981) reported it from Ağrı (Tutak) and Diyarbakır for the first time and later from Nevşehir (Gülşehir) and Malatya (Balaban).

Material examined : Adıyaman (Gölbaşı, Nemrut dağı), Ağrı (Doğubeyazıt, Tahir dağı), Bitlis (Tatvan), Diyarbakır (Devegeçidi, Central province, Nusaybin), Elazığ (Düzönü, Hazar gölü, Central province), Erzincan (Demirpınar), Gümüşhane (Kelkit), Mardin (Hasankeyf, Yukarı Konak), Muş, Urfa (Siverek), Van (Muradiye) - Totally 30 specimens. It seems to be largely distributed in East and Southeastern parts of Turkey, but found in small numbers.

Occurrence : Occasionally.

Biological note : Specimens were collected beginning from early June to late August, on steppe vegetations and the species of *Quercus* and *Artemisia*.

Selenocephalus obsoletus (Germar, 1817)

Synonymy : *Cicada grisea* F., 1794 (Primary homonym); *C. plana* Turton, 1802 (Nomen oblitum); *Selenocephalus punctatonevrosus* Stal, 1854.

General Distribution : Albania, Austria, Bulgaria, Czechoslovakia, France, Hungary, Iran, Italy (also Sardinia and Sicily), Morocco, Romania,

Spain, Tunisia, Turkey, USSR (Azerbaijan, Moldavia, Ukraine), Yugoslavia, Greece, Crete (Dlabola, 1977 b).

Distribution in Turkey : Oshanin (1912) has listed the species from Turkey. Fahringer (1922) and Gadeau de Kerville (1939) reported it from İstanbul (Polenezköy) and İzmir, respectively. Dlabola (1957, 1981) listed it from Adana (Bürücek, Karataş), Ankara (Beynam), Edirne, Sakarya (Sapanca gölü) and Kütahya. Linnavuori (1965) found one specimen near İzmit.

Material examined : Ankara (Bağlum, Beynam, Çamlıdere, Kızılcahamam, Kurtboğazi), Balıkesir, Bilecik (Pazaryeri), Bolu (Mengen), Bursa (Keles), Çanakkale (Biga), Çankırı (Eldivan), Edirne, Eskişehir (Çifteler, Central province, Mihaliçcik), Kırklareli (Pehlivan köyü), Malatya (Yığılca), Samsun (Bafra), Sinop (Gerze, Türkeli), Sivas (Koyulhisar), Tekirdağ (Hayrabolu, Central province), Zonguldak (Çaycuma, Ereğli, Safranbolu) - Totally 65 specimens. It seems distributed largely in Turkey.

Occurrence : Somewhat common, but found in small numbers.

Biological note : Specimens were collected beginning from late June to late August, mostly in July, on *Quercus*, apple, pear, almond, *Trifolium*, sunflower, vine, *Astragalus* and also on steppe vegetations.

Selenocephalus pallens Lindberg, 1948

Synonymy : *S. pallens obscurus* Lind., 1953.

General Distribution : Cyprus, Israel, Morocco, Tunisia, Turkey.

Distribution in Turkey : The authors have no literature reporting it in detailed distribution data in Turkey.

Material examined : Afyon (Erkman, Sultandağı), Çanakkale (Eceabat, Gelibolu, Gökçeada), Isparta, İstanbul, İzmir (Çeşme, Torbalı, Tire, Narlıdere, Pamucak, Ödemiş - Bozdağ, Madran, Selçuk), Konya (Deştiğin), Kütahya (Tavşanlı), Manisa (Gölmarmara, Gördes, Kula), Muğla (Bodrum, Köyceğiz, Central province), Uşak - Totally 86 specimens.

Biological note : Specimens were collected beginning from late May to Mid-September, mostly in June and July, on *Pirus elaeagrifolia*, *Pistacia vera*, *Myrtus*, *Crataegus*, *Platanus*, *Olea europaea*, *Castanea sativa*, *Quercus* and weeds.

Selenocephalus pellidus Kirschbaum, 1868

Synonymy : *S. stenopterus* Sign., 1880; *S. s. simavensis* Zach., 1946; *S. s. tauricus* Zach., 1946.

General Distribution : Albania, Austria, Greece, Hungary, Israel, Italy, Turkey, USSR (s. Russia, Ukraine), Yugoslavia, Iran (Dlabola, 1981).

Distribution in Turkey : Oshanin (1912) has listed the species from Turkey. Zachvatkin (1946) accepted *S. stenopterus* Sign. as proper species, and cited Trabzon as the type locality of the species and described the subspecies *S. s. simavensis* from Kütahya (Simav - Demirci). Dlabola (1957) reported it from Adana (Gavur dağı, Tapan), Ankara (Beynam, Çubuk Barajı). Linnävuori (1965) collected specimens in Adana (Gülek) and Ankara (Kızılcahamam). Kalkandelen (1974) also listed it from Ankara (Çubuk, Lalahan, Eymir).

Material examined : Adana (Hasanbeyli), Ankara (Çubuk, Eymir, Lalahan, Kalecik, Kurtboğazi, Nallıhan), Antalya (Alanya, Manavgat), Aydın (Kuşadası), Bolu, Burdur (Gülhisar), Bursa (Central province - Doğanköy), Çanakkale, Çankırı (Kurşunlu), Çorum (Central province, Bayat), Denizli (Tavas), Isparta (Eğridir), İzmir (Karaburun, Ödemiş - Samsundağı, Mene-men), Kayseri (Hacılar), Kırşehir (Yılandağı), Konya (Ermenek, Seydişehir), Manisa (Gördes), Sinop (Gerze), Tokat (Erbaa), Yozgat (Çekerek) - Totally 71 specimens.

Occurrence : Somewhat common but found in small numbers.

Biological note : Specimens were collected from early June to late September, on the species of *Quercus*, *Fraxinus*, *Onopordon*, *Centaurea*, *Tamarix*, *Juniperus*, *Cirsium* and *Vitis vinifera* and also steppe vegetations as well.

Selenocephalus sirvadi Dlabola, 1965

General Distribution : Jordan.

Distribution in Turkey : This species constitutes a new record for Turkey.

Material examined : Adana (Yumurtalık), Ağrı (Tutak - Patnos), Bitlis, Gaziantep (Central province, İslahiye), Urfa (Ceylanpınar), Van (Başkale) - Totally 42 specimens. It seems distributed mainly in East and Southeastern parts of Turkey.

Occurrence : Somewhat common and found in small numbers.

Biological note : Specimens were collected from early May to early August, mostly in June, on steppe vegetations.

Selenocephalus tapan Dlabola, 1981

General Distribution : Endemic.

Distribution in Turkey : Dlabola (l. c.) described this species from the specimens collected in Adana (Tapan, Gavur dağı).

The authors have no representative material of this species.

Selenocephalus uvarovi Zachvatkin, 1946

General Distribution : Endemic.

Distribution in Turkey : Zachvatkin (1946) described this species from the specimens collected in İzmir (Gölcük - Bozdağ).

The authors have no representative material of this species.

Graphocraerus ventralis (Fallen, 1806)

Synonymy : *Jassus punctifrons* Germar, 1821.

General Distribution : Albania, Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, England, Finland, France, Germany, Hungary, Italy, Netherlands, Norway, Poland, Romania, Spain, Sweden, Switzerland, Tunisia, USSR, Yugoslavia, Turkey (Dlabola, 1981).

Distribution in Turkey : Dlabola (l. c.) reported it from Malatya (Tahir geçidi 2475 m).

Material examined : Kars (Sarıkamış) - Only one specimen.

Occurrence : Very occasionally.

Biological note : The specimen was collected in mid-July in pine forest. According Emelyanov (1964), it feeds on gramineous plants.

Özet

Türkiye Auchenorrhyncha türlerinin yayılışı ve önemlerine ait ön listesi
XXII. Familya : Cicadellidae : Deltocephalinae : Athysanini (Kısım II)

Athysanini faunistik listesinin bu ikinci bölümü *Allygus*, *Allygidius*, *Tbilisca*, *Phlepsius*, *Selenocephalus* ve *Graphocraerus* cinslerine ait türleri kapsamaktadır. Literatürde kayıtlı türler ile birlikte toplam 19 tür listelenmiştir. Bunlardan *Allygus mixtus* (F.), *Allygidius commutatus* Fieb. ve *Selenocephalus sirvadi* Dlab. Türkiye Auchenorrhyncha faunası için yeni kayıtlardır. Her bir türün yayılışı ve üzerinde bulunduğu bitkiler verilmeye çalışılmıştır.

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