

**Preliminary list of Auchenorrhyncha with notes on distribution and importance  
of species in Turkey. XXIII. Family : Cicadellidae : Deltocephalinae : Athysanini  
( Part III )**

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**Summary**

This thirth section of Athysanini list comprises 24 species belonging to the genera of *Hardya*, *Eohardya*, *Stenometopiellus*, *Paluda*, *Elymana*, *Cicadula*, *Mocydia*, *Mocydiopsis*, *Speudotettix*, *Hesium* and *Thamnotettix*. Five species namely; *Paluda agropyri* Emel., *Hesium domino* (Reuter), *Thamnotettix dilutior* (Kbm.), *Th. seclusus* Linv. and *Th. thrax* Dlab. are new records for Turkey. Distribution, abundance and plants which the specimens were collected on of each species are given.

**Introduction**

19 species of this faunistical list have been recorded by different worker before; Oshanin (1906-8, 1912), Kerville (1939), Zachvatkin (1946), Dlabola (1957, 1971, 1981), Tuatay et al. (1967, 1972), Kalkandelen (1972, 1974) and Kartal (1983).

From the stand point of economical importance, from these species only *Hardya anatolica* Zach. has been reported to be a pest on the cultivated plants. It was stated to be one of the most important pest of wheat in Serbia and destroyed 800 ha wheat in 1961 and again 38.000 ha wheat in 1962 (Camprag, 1930). Although this species is widely distributed in Turkey it was not

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reported as economic pest in this country. It is because its population is not high enough to cause any damage.

Synonyms, distribution of species in Palearctic Region are taken from Nast (1972). Additional countries were given with literature citations.

*Hardya anatolica* Zachvatkin, 1946

General Distribution : Afghanistan, Bulgaria, Romania, Turkey, USSR (Armenia, Georgia), Yugoslavia, Iran (Dlabola, 1981).

Distribution in Turkey : Zachvatkin (l. c.) described this species from the specimens which collected in overwintering areas near Ankara. Later on Dlabola (1957, 1981), listed it from Kayseri (Erciyas Dağı, 3200 m. above sea level), Erzurum (Kandilli, 1720 m), Malatya (Balaban, Karahan geçidi 1880 m), Maraş (Nurhak Dağları) and Nevşehir (Ürgüp). Linnavuori (1965) reported it being based to one specimen which collected it in Bolu (Gerede). However Kalkandelen (1974) listed it from Ankara (Central province, Beynam, Çubuk, Elmadağ, Eymir, Lalahan, Karagöl) and Nevşehir (Ürgüp).

Material examined : Adivaman (Nemrut dağı), Ankara (Central province, Beynam, Çamlidere, Kazan, Kızılcahamam, Şereflikoçhisar), Antalya (Söğüt), Bolu (Kıbrısçık, Seben), Elazığ (Düzünü, Sivrice), Erzincan (Central province, Refahiye), Isparta, İzmir (Menemen), Kayseri (Erciyes), Kırşehir (Central province, Kaman), Konya (Karaman), Nevşehir (Boyalı, Gülşehir, Ürgüp, Yüksekli), Ordu (Mesudiye) - Totally 113 specimens. Distributed widely especially in Middle Anatolia.

Occurrence : Somewhat common but found in small numbers.

Biological note : Specimens were collected starting from mid-April to late October, on *Vitis vinifera*, *Triticum vulgare*, *Oryza sativa*, *Zea mais*, *Pyrus malus*, *Pyrus elaeagnifolia*, *Pinus*, *Juniperus*, *Quercus*, *Astragalus*, and Graminae weeds. Its main host plants are gramineous plants and can be potential pest on wheats, as being reported to this plants in Yugoslavia (Camrag, 1980).

*Eohardya fraudulenta* (Horvath, 1903)

Synonymy : *Thamnotettix imitatus* Haupt, 1924; *Hardya* (*Eohardya*) *byzantina* Zach., 1946; *H.* (*Eohardya*) *mira* Zach., 1946; *H. insularis* Lind., 1948.

General Distribution : Albania, Cyprus, Czechoslovakia, France, Hungary, Iran, Israel, Italy (also Sardinia and Sicily), Romania, Turkey, USSR, Yugoslavia, Greece (Dlabola, 1977).

Distribution in Turkey : Zachvatkin (1946) described the species under the synonym name of *Hardya* (*Eohardya*) *byzantina* from the specimens collected in İstanbul (Bozokdere). Kalkandelen (1974) collected specimens in Ankara (Çubuk, Eymir gölü, Karagöl).

Material examined : Ankara (Eymir gölü) - Only one specimen.

Occurrence : Occasionally.

Biological note : The specimen was collected in late June, on Graminae weeds.

*Stenometiellus angorensis* Zachvatkin 1946

Synonymy : *S. esquazrum* Emel., 1964.

General Distribution : Turkey, USSR (Kazakhstan).

Distribution in Turkey : Zachvatkin (1946) described this species from the specimens collected in Ankara. Diabola (1957) reported also it from Ankara (Beynam). Kalkandelen (1974) listed it from Nevşehir (Ürgüp) in addition to Ankara (Beynam, Eymir, Karagöl, Lalahan, Polatlı).

Material examined : Ağrı, Ankara (Polatlı), Bitlis (Reşadiye), Diyarbakır (Çüngüş), Erzincan (Demirpınar, Kemaliye), Erzurum (İspir), Hakkari (Beytüşebab, Yüksekova), Kars (Iğdır, Sarıkamış), Konya (Tuzgözü), Malatya, Urfa (Ceylanpınar, Siverek), Van (Başkale, Edremit, Kırkgeçit) - Totally 22 specimens.

Occurrence : Occasionally.

Biological note : Specimens collected starting from early May, through June and July, on *Zea mais*, *Stipa*, *Artemisia* and Graminae weeds.

*Stenometiellus macilentus* (Horvath, 1904)

Synonymy : *Diploscolenoidea turkestanica* Linv., 1953.

General Distribution : USSR (Kazakhstan, Kirghizia, Turkmenia, Uzbekistan). Turkey (Diabola, 1981).

Distribution in Turkey : Diabola (l. c.) reported this species from Malatya (Balaban, Tahir dağı 2400 m), Nevşehir (Gülşehir), Sivas (Gürün 1600 m), Tunceli (Mercan Dağı, Munzur Dağı, Pülümür geçidi 1955 m, Cemal Dağı).

The authors have no representative material of this species.

*Paluda agropyri* Emelyanov, 1962

General Distribution : USSR (Kazakhstan).

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

Material examined : Kars (Sarıkamaş) - Totally 6 specimens.

Occurrence : Very occasionally.

Biological note : The specimens were collected in mid-July, in *Pinus* forest.

*Paluda vitripennis* (Flor, 1861)

Synonymy : *Thamnotettix andropogonis* Haupt, 1924; *Th. graminis* Haupt, 1935; *Rhopalopyx monticola* Ribaut, 1939; *Rh. vitripennis hibernia* Le Quesne, 1964; *Rh. v. orientalis* Vilbaste, 1965; *Rh. v. lalahani* Kalkandelen, 1972.

General Distribution : Algeria, Austria, Bulgaria, Czechoslovakia, Denmark, Finland, France, Germany, Hungary, Ireland, Italy (also Sardinia), Mongolia, Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Tunisia, Turkey, USSR, Yugoslavia.

Distribution in Turkey : Diabola (1957) collected two female specimens in Ankara (Beynam). Kalkandelen (1972) described as a new subspecies : *P. v. lalahani* which she collected in Ankara (Lalahan).

Material examined : Konya (Meram) - Totally 5 specimens.

Occurrence : Very occasionally.

Biological note : The specimens were collected in late May on Graminae weeds.

*Elymana sulphurella* (Zetterstedt, 1828)

Synonymy : *Cicada virescens* F., 1794 (Primary homonym); *C. viridans* Turton, 1902 (nomen oblitum); *Thamnotettix combibus* Mats., 1906; *Th. excisus* Haupt, 1917.

General Distribution : Algeria, Austria, Belgium, Bulgaria, China (Manchuria), Cyprus, Czechoslovakia, Denmark, England, Finland, France, Germany, Hungary, Ireland, Japan, Korean Peninsula, Italy, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, Turkey, USSR, Yugoslavia.

Distribution in Turkey : Oshanin (1906-8, 1912) and Diabola (1957) listed the species from Anatolia. The authors have no other literature giving detailed distribution data in Turkey.

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

*Cicadula divaricata* Ribaut, 1952

Synonymy : *C. divaricata pallidifrons* Rib., 1952.

General Distribution : Afghanistan, Algeria, Bulgaria, France, Israel, Italy (also Sardinia), Morocco, Syria, Tunisia, Turkey, USSR (Azerbaijan, Uzbekistan). Iran (Dlabola, 1981).

Distribution in Turkey : Dlabola (1957, 1981) listed it from Adana (Gavur Dağı, Kozan), Malatya (Balaban, Darende 1250 m) and Adapazarı (Sapanca Gölü). Kalkandelen (1974) reported it from Ankara (Central province, Eymir Gölü, Karagöl and Kızılcahamam).

Material examined : Ankara (Çubuk, Nallıhan, Kızılcahamam), Aydın (Germencik), Bolu (Abant, Düzce, Seben), Bursa (Central province, İnegöl), Çankırı (Çatalelma, Karaömer, Konak, İnandık), Diyarbakır (Central province, Silvan), Erzincan (Central province), İzmir (Ödemiş), Mardin (Cizre, Mazı Dağı), Sakarya (Adapazarı, Hendek), Sinop (Boyabat), Urfa (Birecik, Siverek) - Totally 99 specimens.

Occurrence : Somewhat common but found in small numbers.

Biological note : Specimens were collected from late May to early September mostly in June and July, on *Cryza sativa*, *Sesamum indicum*, *Zea mais* and by light traps.

*Cicadula mesasiatica* (Dubovsky, 1966)

General Distribution : Iran, Turkey (Dlabola, 1981)

Distribution in Turkey : Dlabola (l. c.) reported it from Malatya (Balaban).

The authors have no representative material of this species.

*Cicadula placida* (Horvath, 1897)

Synonymy : *C. placida inornata* Rib., 1952.

General Distribution : Bulgaria, Czechoslovakia, France, Hungary, Italy, Romania, USSR (Moldavia, s. Russia), Yugoslavia. Turkey (Kalkandelen, 1974), Crete (Dlabola, 1977).

Distribution in Turkey : Kalkandelen (l. c.) collected specimens in Konya (Akşehir).

Material examined : Amasya (Taşova), Bursa (Central province, İnegöl), Çorum (Kargı), İstanbul (Kartal), Kocaeli (Karamürsel), Sakarya (Adapazarı, Hendek) - Totally 46 specimens.

Occurrence : Somewhat common but found in small numbers.

Biological note : Specimens were collected from late May to mid-October, on *Cryza sativa* and by light traps.

*Cicadula quadrinotata* (Fabricius, 1794)

Synonymy : *Cicada strigipes* Zett., 1828; *Aphrodes pilotocephala* Hardy, 1850.

General Distribution : Albania, Algeria, Austria, Bulgaria, Canary Is., China (Manchuria), Czechoslovakia, England, Finland, France, Germany, Hungary, Iceland, Ireland, Italy (also Sardinia), Japan, Korean Peninsula, Mongolia, Netherlands, Norway, Poland, Portugal, Romania, Sweden, Switzerland, USSR. Turkey (Kalkandelen, 1974).

Distribution in Turkey : Kalkandelen (l. c.) collected specimens in Ankara (Çubuk, Elmadağ, Eymir Gölü, Hasanoğlan, Karagöl, Kayaş, Lalahan).

Material examined : Bolu (Abant, Seben), Çankırı (Yerkuyu), Sakarya (Hendek) - Totally 11 specimens.

Occurrence : Occasionally.

Biological note : Specimens were collected from June to September, on *Oryza sativa*, weeds and also by light traps.

*Mocydia crocea* (Herrich - Schaffer, 1837)

Synonymy : *Amblycephalus nervosus* Curt., 1835 (Primary homonym); *Jassus (Deltocephalus) oxypterus* Kbm., 1868.

General Distribution : Albania, Algeria, Austria, Belgium, Bulgaria, Cyprus, Czechoslovakia, England, France, Germany, Hungary, Ireland, Italy, Jordan, Poland, Portugal, Romania, Switzerland, USSR, Yugoslavia. Turkey (Kalkandelen, 1974), Iran (Diabola, 1981).

Distribution in Turkey : Kalkandelen (l. c.) collected specimens in Ankara (Çubuk, Lalahan), Nevşehir (Ürgüp) and Adapazarı.

Material examined : Bolu (Central province), Bursa (Central province, İnegöl), Manisa (Demirci), Sakarya (Adapazarı), Samsun (Central province, Bafra) - Totally 10 specimens.

Occurrence : Occasionally.

Biological note : Specimens were collected from mid-April to early September, on wheat, and also some by light traps.

*Mocydiopsis monticola* Remane, 1961

General Distribution : Iraq, Yugoslavia, Turkey (Diabola, 1981), France (Giustina, 1983).

Distribution in Turkey : Kalkandelen (l. c.) collected specimens in Ankara (Çubuk, Eymir Gölü), Isparta (Yakiören köyü), Nevşehir (Ürgüp).

She reported them under the name of *M. porvicauda* Ribaut. Dlabola (l. c.) also reported it from Adana (Gavur Dağı).

Material examined : Diyarbakır (Central province), Samsun (Central province, Havza, Ladik), Uşak (Central province) - Totally 5 specimens.

Occurrence : Occasionally.

Biological note : Specimens were collected in April, mid - June and early July, on wheat and also by light trap.

#### *Speudotettix subfuscus* (Fallen, 1806)

Synonymy : *Jassus pectoralis* Germ. 1821; *Aphrodes craticula* Curt.

General Distribution : Algeria, Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, England, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Korean Peninsula, Mongolia, Netherlands, Norway, Poland, Portugal, Romania, Sweden, Switzerland, Tunisia, USSR, Yugoslavia. Turkey (Kartal, 1983).

Distribution in Turkey : Kartal (l. c.) reported it from Bolu (Abant).

Material examined : Bolu (Yedigöller), Zonguldak (Ereğli) - Totally 3 specimens.

Occurrence : Very occasionally.

Biological note : The specimens were collected in late May and mid July, on *Urtica*.

#### *Hesium domino* (Reuter, 1880)

Synonymy : *Cicada biguttata* Fall., 1806 (Primary homonym); *Thamnotettix hyomeles* Csiki, 1940; *Hesium falleni* Metcalf, 1955.

General Distribution : Albania, Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, Finland, France, Germany, Hungary, Italy, Norway, Poland, Romania, Sweden, USSR.

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

Material examined : İzmir (Ödemiş - Bozdağ 1600 m) - Totally 5 specimens.

Occurrence : Very occasionally.

Biological note : The specimens were collected in late June and late July, on *Alnus*.

*Thamnotettix confinis* Zetterstedt, 1828

Synonymy : *Cicada prasina* Fall., 1806; *Jassus simplex* H. S. 1834; *Aphrodes sulphurea* Curt 1837; *Thamnotettix stupidula* Zett., 1840; *Th. tincta* Zett., 1840; *Athysanus prominulus* Reuter, 1880; *Th. simplex rufescenticeps* Strand, 1913; *Th. hoashii* Mats., 1915; *Th. schlueteri* Haupt, 1917.

General Distribution : Austria, Belgium, Cyprus, Czechoslovakia, England, Finland, France, Germany, Hungary, Ireland, Italy (also Sardinia and Sicily), Korean Peninsula, Netherlands, Norway, Poland, Romania, Sweden, Switzerland, Tunisia, Turkey, USSR, Yugoslavia; (Nearctic Region).

Distribution in Turkey : Oshanin (1906-8, 1912) has been listed this species from Turkey. Kerville (1939) reported also it from İzmir.

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

Occurrence : Very occasionally.

Biological note : The specimen was collected in mid-July in *Pinus* forest.

*Thamnotettix creticus* Dlabola, 1974

General Distribution : Greece (Crete) (Dlabola, l. c.). Turkey (Kartal, 1983).

Distribution in Turkey : Kartal (1983) collected specimens in Adana (Gülek, Osmaniye), Hatay (İskenderun), İçel (Kuzucubelen, Çamlıyayla).

Material examined : İçel (Silifke), Sınop (Mertoğlu) - Totally 3 specimens.

Occurrence : Very occasionally.

Biological note : Specimens were collected in late April and late June, on weeds.

*Thamnotettix dilutior* (Kirschbaum, 1868)

Synonymy : *Athysanus erythrostictus* Leth., 1880.

General Distribution : Albania, Algeria, Austria, Belgium, Czechoslovakia, Denmark, England, France, Germany, Hungary, Ireland, Italy (also Sardinia and Sicily), Morocco, Netherlands, Poland, Portugal, Romania, Tunisia, USSR, Yugoslavia.

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

Material examined : Çorum (İskilip), Zonguldak (Ulus) - Only two specimens.



Occurrence : Very occasionally.

Biological note : The specimens were collected in mid - July and early August by light traps.

*Thamnotettix exemtus* Melichar, 1896

General Distribution : Albania, Austria, Bulgaria, Czechoslovakia, Hungary, Italy (also Sicily), Romania, USSR, Yugoslavia. France (Giustina, 1983), Turkey (Kartal, 1983).

Distribution in Turkey : Kartal (1983) collected specimens in Adana (Osmariye).

Material examined : Hatay (İskenderun), Kastamonu (Küre) - Only two specimens.

Occurrence : Very occasionally.

Biological note : The specimens were collected in late April and mid - July, on weeds.

*Thamnotettix klapperichi* Dlabola, 1965

General Distribution : Jordan, Syria. Turkey (Dlabola, 1971).

Distribution in Turkey : Dlabola (1971) reported the species from Antalya (Alanya), Hatay (Nurdağı).

The authors have no representative material of the species.

*Thamnotettix seclusus* Linnavuori, 1958

General Distribution : Israel, Jordan, Lebanon (Dlabola, 1974).

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

Material examined : Tekirdağ (Muratlı) - Only one specimen.

Occurrence : Very occasionally.

Biological note : The specimen was collected in mid-May, on *Brassica napus* var. *oleifera*.

*Thamnotettix thrax* Dlabola, 1965

General Distribution : Bulgaria, Syria, Greece, Yugoslavia (Dlabola, 1977).

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

Material examined : İzmir (Ödemiş) - Only 4 specimens.

Occurrence : Very occasionally.

Biological note : The specimens were collected in August, on *Castanea sativa*.

*Thamnotettix wittmeri* Dlabola, 1971

General Distribution : Endemic.

Distribution in Turkey : Dlabola (l. c.) described this species from the specimens collected in Muğla (Yatağan) and İzmir (Efes).

The authors have no representative material of the species.

*Thamnotettix zelleri* (Kirschbaum, 1868)

General Distribution : Cyprus, France, Israel, İtaly (also Sardinia and Sicily), Syria, Turkey, Yugoslavia.

Distribution in Turkey : Tuatay et al. (1967, 1972) listed it from İzmir (Çeşme). Giray (1980) found specimens in Burdur (Tefenni - Karamanlı) on *Pimpinella anisum*.

Material examined : Adana (Central province), Antalya (Central province, Seki, Side); Aydın (Sultanhisar), Bursa (Mustafakemalpaşa), Çanak-kale (Biga), Çorum (Dodurga), Edirne (Havsa), Hatay (Yayladağ), İzmir (Bornova, Bayındır, İnciraltı, Narlıdere, Dikili, Balıklıova, Çeşme, Kemalpaşa), Kırklareli (Lüleburgaz), Manisa (Akhisar, Gölarmara, Salihli), Muğla (Bodrum), Tekirdağ - Totally 327 specimens.

Occurrence : Very common and sometimes found in large numbers.

Biological note : Specimens were collected from early April to July, on wheat, olive trees, *Sinapis*, *Matricaria* and Graminae weeds.

Özet

Türkiye Auchenorrhyncha türlerinin yayılışı ve önemlerine ait listesi.  
XXIII. Familya : Cicadellidae : Deltocephallinae : Athysanini (Kısım III)

Athysanini faunistik listesinin bu üçüncü bölümü Hardya, Eohardya, Stenometiellus, Paluda, Elymana, Cicadula, Mocydia, Mocydiopsis, Speudotettix, Hesium ve Thamnotettix cinslerinin 24 türünü kapsamaktadır. Beş tür, Paluda agropyri Emel., Hesium domino (Reuter), Thamnotettix dilutior (Kbm.), Th. seclusus Linn. ve Th. thrax Dlab. Türkiye için yeni kayıtlardır. Her bir türün yayılışı ve üzerinden toplandığı bitkiler verilmeye çalışılmıştır.

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