

**Preliminary list of Auchenorrhyncha with notes on distribution
and importance of species in Turkey
V. Families Flatidae, Ricaniidae and Cicadidae**

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Summary

This paper includes two species of Flatidae, one species of Ricaniidae and 21 species of Cicadidae, recorded in Turkey up to the end of 1979. Among these species, *Phantia ferganensis* Dubovsky from Flatidae family is a new record for Turkey. *Cicada lodosi* Boulard and *C. mordoganensis* Boulard are described from the material collected during this study. Distribution, abundance, host plants and economical importance of each species are given.

Introduction

Turkish species of those three families were mostly recorded previously. Fieber (1872, 1876) described and listed about 8 species of Cicadidae from Turkey. Oshanin (1908, 1912) catalogued one species of Flatidae, one species of Ricaniidae and 10 species of Cicadidae in each publication from Turkey. Fahringer (1922) listed one flatid and 9 cicadid species from Turkey by giving collection data and host plants. Diabola (1957) also mentioned one flatid and two cicadid species in his paper. Metcalf (1963) catalogued 14 species of cicadid in Turkey according to other authors. Linnavuori (1965) recorded only

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2 cicadid species. Tuatay et al. (1972) reported 9 species of Cicadidae from Turkey with collection data. Boulard (1979) described two new species of Cicadidae from the material collected during this study. Dr. V. Kartal, of Univ. of Ankara, Science Faculty, had done a postdoctoral study on the fauna and systematic of Turkish Cicadidae, which is not published yet.

Alkan (1946), Bodenheimer (1958) and İyriboz (1968) reported *Lyristes plebejus* (Scop.) being destructive on fruit and forest trees and *Olea europaea* by inserting the eggs in young shoots, which causes drying of shoots. Anbaroğlu (1967) stated that *Klapperichien viridissima* (Walk.) (= *Cicadatra alhageos* Kol.) is a serious pest of vine, which caused damage in 20 % of 90 hectares vineyard in the southeastern part of Turkey. Bodenheimer (1958) reported *Cicadatra atra* (01.) also being destructive on fruit trees, such as apple, pear, almond and plums in Kayseri in June of 1941. Even though *C. atra* being accused to be destructive, no serious economical damage have been encountered since that time. Also, *Cicada orni* L. was reported to make damage on *Olea europaea*, *Pinus*, *Castanea sativa*, and many other fruits and forest trees, but not very serious pest during past years. The other species of cicadids have minor importance which will be stated under «Biological note» of each species in the text.

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Family : Flatidae Spinola, 1839

Phantia ferganensis Dubovsky, 1966

General Distribution : USSR. (Uzbekistan)

Distribution in Turkey : This is the first record of this species in Turkey.

Material examined : Mardin (Nusaybin) - Totally 3 specimens.

Occurrence : Very rare.

Biological note : Adults were collected in mid-August on *Hypericum* sp.

Phantia subquadrata (Herrich - Schäffer, 1838)

General Distribution : Cyprus, Greece, Iraq, Israel, Italy, Lebanon, Romania, Turkey, Yugoslavia, Germany, Hungary, Austria (Metcalf, 1957; Nast, 1972).

Distribution in Turkey : This species had been listed from Turkey by Schaum (1850), Puton (1875, 1886, 1899), Melichar (1902, 1923) and Rusiecha

(1902) according to Metcalf (1957). Oshanin (1908, 1912) also catalogued this species from Turkey. Fahringer (1922) reported it from Konya. Lindberg (1948) listed it as Turkey among the other countries in which the species is distributed. Dlabola (1957) collected specimens in Turkey from Ankara (Baraj), Adana (Bürücek Toros) and Gaziantep.

Material examined : Ankara (Çubuk Baraj I, Eymir gölü, Şereflikoçhisar), Aydın (Germencik, Karacasu), Bilecik, Denizli, Diyarbakır (Çınar), Edirne, Isparta (Central province, Eğridir), İzmir (Selçuk), Manisa (Gördes), Mardin (Central province, Cizre, Ömerli), Muğla (Fethiye, Marmaris) - Totally 75 specimens.

Occurrence : Common, sometimes in large numbers.

Biological note : Specimens were collected starting from late May through mid-September, mostly in July and August, on *Artemisia*, *Cirsium*, *Alkanna*, *Alhagi*, *Prosopis*, *Tamarix* and various weeds. Fahringer (1922) reported this species on *Astragalus anthylloides*. Dlabola (1957) stated that he collected the specimens on steppe vegetation in forest and vineyards.

Family : Ricaniidae Amyot et Serville, 1843

Ricania hedenborgi Stal, 1865

General Distribution : Greece, Turkey, USSR., (Ethiopian region).

Distribution in Turkey : Metcalf (1955) catalogued this species from Turkey according to Melichar (1898, 1923) and Oshanin (1908, 1912).

Material examined : Diyarbakır (Ergani), Elazığ, İzmir (Selçuk), Mardin (Nusaybin), Muğla (Marmaris), Muş - Totally 78 specimens.

Occurrence : Mostly distributed in southeastern and southwestern part of Turkey, sometimes found in large numbers.

Biological note : Specimens were collected from mid-June through mid-August on *Vitex agnus-castus*, *Punica granatum* and various weeds.

Family : Cicadidae Leach, 1815

Lyristes plebejus (Scopoli, 1763)

Synonymy : *Tettigonia frazini* F., 1803; *T. obscura* F., 1803; *Cicada plebeja armeniaca* Kolenati, 1857; *Fidicina africana* Metcalf, 1955.

General Distribution : Albania, Austria, Cyprus, Czechoslovakia, France, Germany, Greece, Hungary, Iran, Italy, Poland, Portugal, Romania, Spain, Syria, Switzerland, Turkey, USSR., Yugoslavia.

Distribution in Turkey : Fahringer (1922) reported this species from Bursa (Mudanya), İzmir and Maraş (Yarbaşı) and stated that while it was abundant in southeastern part of Turkey, it is not so common in western Anatolia. The additional previous records of this species from Turkey had been made by Hagen (1855), Escherich (1897), Horvath (1901, 1905) and Oshanin (1908) according to Metcalf (1963). Diabola (1957) collected specimens in Adana - Toros (Bürücek) and Ankara (Baraj). Also Linnavuori (1965) collected some specimens near Adana (Gülek). Tuatay et al. (1972) reported this species from İzmir (Bayındır) and Manisa.

Material examined : Adana, Ankara (Central province, Çubuk Baraj I), Antalya, Artvin, Aydın (Nazilli, Söke - Samsun dağı), Balıkesir (Edremit), Denizli (Acıpayam), Erzincan, Gaziantep (Nizip), İzmir (Bayındır, Mene-men), İstanbul, Kırklareli (Türkgeldi - Lüleburgaz), Manisa (Akhisar), Mardin, Muğla (Köyceğiz), Kütahya (Gediz) - Totally 65 specimens.

Occurrence : Common in Turkey, but sometimes in very large numbers.

Biological note : Specimens were collected starting from mid-June through late September, mostly in July and August, on various trees, such as *Olea europaea*, *Pinus*, *Ligustrum*, *Populus*, *Citrus*, *Prunus* and *Vitis vinifera*. Fieber (1876) reported on *Fraxinus*, *Ficus*, *Morus* being very common and in June on *Styria* and, found solitary individuals. Fahringer (1922) reported *Quercus lusitanica* as the host plant. Bodenheimer (1958) stated that this species is destructive on deciduous forest trees and *Olea europaea* in Turkey. Alkan (1946) and İyriboz (1968) also stated that this species makes damage by inserting eggs on young shoots of fruit and forest trees. However, Lodos* has been found this species very harmful to pear, almond, cherry and some other fruit trees as well as many deciduous forest trees and shrubs in some part of Aegean Region. During 1979-1980 it has made a great outbreak in that region. Females lay their eggs during July and August (mostly in the second half of July) in the stems of weeds (especially canary grass). The eggs have been seen also in the dead branches as well as basal and terminal shoots of trees, but these are less common. Embryon develops in the egg after some time and pass the winter in the last embryonic stage.

Triglena virescens Fieber, 1876

General Distribution : Syria, Turkey.

Distribution in Turkey : This species has been described by Fieber

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(1876) from İzmir. Melichar (1902) and Distant (1906) described, keyed and catalogued from Turkey according to Metcalf (1963).

The authors have no representative of this species.

Klapperichien viridissima (Walk., 1858)

Synonymy : *Cicadatra atra* var. *alhageos* Kol. 1857, *C. atra* var. *glycyrrhizae* Kol. 1857, *Cicada ochreatea* Mel. 1902, *C. olivacea* Mel. 1913, *Cicadatra stenoptera* Hpt. 1917, *Chloropsalta smaragdula* Hpt., 1920 .

General Distribution : Afghanistan, Greece, Iran, Iraq, Israel, Italy, Jordan, Turkey, USSR.

Distribution in Turkey : Oshanin (1908, 1912) catalogued this species from Turkey. Fahringer (1922) recorded this species under the name of *C. glycyrrhizae* Kol. from Afyon, Konya, Belemelik and Maraş. Metcalf (1963) catalogued this species under the names of *C. alhageos* Kol. and *C. glycyrrhizae* Kol. from Turkey, according to Esherich (1897), Horvath (1901) in addition to the above mentioned authors. Anbaroğlu (1967) reported this species under the name of *C. viridissima* Walker from Gaziantep.

Material examined : Diyarbakır (Çınar), Gaziantep, Mardin (Central province, Ömerli), Siirt, Urfa (Bilecik) - Totally 145 specimens.

Occurrence : Common in southeastern part of Turkey.

Biological note : Adults were collected starting in mid - June through July, on *Vitis vinifera*. Fieber (1876) stated that females were found on *Alhagi maurum* in July and August, and males on *Glycyrrhiza echinata* and *G. glandulosa* in July and August. Fahringer (1922) recorded this species on *Quercus aegilops* L. Anbaroğlu (1967) investigated biology of this species as a pest of vineyards, infesting 20 % of 90 hectares in Gaziantep. Nymphs feed on roots of vine and live for five years in the soil. They cause yellowing the leaves as well as reduced their size. Shoots are not developed normally and become dwarfed, internodes shorter. Therefore the yield is reduced. Also it causes drying of branches by inserting the eggs in them. It is one of the most harmful insect pest of vineyards in southeastern part of Turkey.

Cicadatra adanai Kartal, 1980

General Distribution : Endemic.

Distribution in Turkey : Kartal (1980) described this species from the specimens collected in Adana in July of 1958.

The authors have no representative of this species.

Cicadatra atra (Olivier, 1790)

Synonymy : *Cicada concinna* Germ., 1821; *C. transversa* Germ., 1830 (Primary homonym); *Tibicen vitreus* Brullé, 1832; *T. hyalinatus* Brullé, 1832; *Cicada helianthemi* Rambur, 1840; *Cicadatra atra aquila* Fieb., 1876; *C. atra pallipes* Fieb., 1876; *C. atra tau* Fieb., 1876; *C. appendiculata* Linn., 1954.

General Distribution : Albania, Bulgaria, Cyprus, Czechoslovakia, France, Greece, Iran, Italy, Lebanon, Palestine, Rhodes, Romania, Spain, Switzerland, Syria, Turkey, USSR., Yugoslavia.

Distribution in Turkey : According to Metcalf (1963); Hagen (1856, 1857, 1858), Horvath (1901, 1905) listed this species from Turkey. Fieber (1872, 1876) described and keyed *C. atra* Fieb. and *C. atra tau* Fieb. from Turkey. Oshanin (1908, 1912) catalogued it also from Turkey. Fahringer (1922) reported it from Adana, Maraş (Göksun) and Kayseri. Bodenheimer (1958) stated that this species is a serious pest of fruit trees in Kayseri. Tuatay et al. (1972) reported some specimens collected in Ankara and Gaziantep.

Material examined : Adana, Amasya, Ankara (Central province, Elmadag), Antalya, Bitlis, Edirne, Erzincan, Gaziantep, İstanbul (Erenköy), İzmir (Bornova, Gaziemir, Karaburun, Torbalı-Ayrancılar), Muğla (Bodrum, Köyceğiz), Siirt (Sason), Sivas (Suşehri), Urfa (Central province, Akziyaret) - Totally 49 specimens.

Occurrence : Common but in small numbers.

Biological note : Specimens were collected starting from mid-May through August, on *Vitis vinifera*, *Citrus nobilis*, and other *Citrus* trees, *Salix* sp., *Prunus cerasus*, *Cercium* sp., *Centaurea* sp., *Glycyrhiza glabra* and some weeds. Bodenheimer (1958) stated that this species is destructive on fruit trees, such as apple, pear, almond, plums in Turkey.

Cicadatra hyalina (Fabricius, 1798)

Synonymy : *Cicada (Cicadatra) hyalina geodesma* Kol., 1857; *Cicadatra hyalina taurica* Fieb., 1876; *C. hyalina virens* Fieb., 1876; *C. (Rustavelia) burriana* Horv., 1912; *C. viridis* Haupt, 1917; *C. geodesma discrepans* Schumacher, 1923, *C. geodesma rossica* Schumacher.

General Distribution : Balcan Peninsula, Iran, Israel, Jordan, Syria, Turkey, USSR.

Distribution in Turkey : Metcalf (1963) catalogued this species from Turkey according to Hagen (1857), Esherich (1897), Horvath (1901), Haupt

(1917), Schumacher (1923). Also Fieber (1872, 1876) described and listed this species from Turkey. Fahringer (1922) reported it from Maraş (Göksun) and surrounding areas. Dlabola (1957) collected one male specimen in Ankara (Baraj). Tuatay et al. (1972) also reported this species from Ankara (Baraj).

Material examined : Adıyaman (Besni, Kahta, Karıcık), Ankara (Çubuk, Baraj I), Elazığ, Erzincan, Gümüşhane, Hakkari (Üzümcü), Isparta (Eğridir), İzmir (Bornova, Kemalpaşa, Torbalı), Siirt (Aydınlar, Kozluk, Sason, Şirvan), Urfa (Ceylanpınar), Van (Erciş, Gevaş) - Totally 50 specimens.

Occurrence : Common but in small numbers.

Biological note : Adults were collected from the first week of June through August, on *Vitis vinifera*, *Salix* sp., *Olea europaea* and various Graminae weeds.

Cicadatra persica Kirkaldy, 1909

Synonymy : *Cicada lineola* Hagen, 1856 (Primary homonym).

General Distribution : Iran, Israel, Italy, Syria, Turkey, USSR.

Distribution in Turkey : Metcalf (1963) listed this species from Turkey according to statements of Horvath (1901), Melichar (1902), Haupt (1917) and Fahringer (1922). Fahringer (1922) reported it under synonym name of *C. lineola* Hagen from Adana and Maraş (Yarbaşı). Tuatay et al. (1972) listed it from Ankara.

Material examined : Ankara (Central province, Çubuk Baraj I), Bitlis (Central province, Çukur), Burdur, Gümüşhane - Totally 13 specimens.

Occurrence : Occasional.

Biological note : Specimens were collected from late June through July, on *Vitis vinifera* and some shrubs. Fieber (1876) reported *Astragalus* as a host plant of this species.

Cicadatra platyptera Fieber, 1876

Synonymy : *C. platyptera livens* Schumacher, 1923; *C. decumana* Schumacher, 1923; *C. platyptera melanaria* Schumacher, 1923.

General Distribution : Iran, Israel, Italy, Syria, Turkey, USSR, Lebanon (Dlabola, 1974).

Distribution in Turkey : Fieber (1872, 1876) described and listed this species from Turkey. Oshanin (1908, 1912) listed it from Turkey. Additional

literature reporting this species from Turkey are Puton (1875, 1886, 1899) and Haupt (1917) of which were given by Metcalf (1963). Also Tuatay et al. (1972) reported it from İzmir (Bergama, Bornova, Ilıca) and Konya (Ereğli).

Material examined : Giresun (Şebinkarahisar), Gümüşhane (Central province, Torul), İzmir (Bergama, Bornova, Ilıca, Karaburun), Muğla (Bodrum), Sivas (Hafik), Konya (Ereğli) - Totally 50 specimens.

Occurrence : Common but in small numbers.

Biological note : Specimens were collected starting from beginning of May through end of July, on *Prunus armeniaca*, *Citrus* spp., *Olea europaea* and various weeds.

Cicadatra querula (Pallas, 1773),

Synonymy : *Cicada steveni* Stal, 1854 (Primary homonym), *C. querula* var. *paliuri* Kol., 1857 (Fieber, 1872, 1876; Metcalf, 1963; Dlabola, 1968).

General Distribution : Afghanistan, Algeria, S. France, Iran, Israel, Mongolia, Tunisia, USSR, Turkey (Oshanin, 1912; Metcalf, 1963; Dlabola 1966).

Distribution in Turkey : Metcalf (1963) catalogued this species from Turkey according to Puton (1886) and Oshanin (1912). Dlabola (1966) also listed Turkey among the distributed countries of this species.

Occurrence : Very occasional.

Biological note : Fieber (1876) stated that this species was found on *Paliurus aculeatus* and *Acacia julibrissim*.

The authors have no representative of this species. Some specimens collected in Turkey of this species were known to be found in the collection of Department of Entomology, Faculty of Agriculture, Ankara University.

Cicadatra tenebrosa Fieber, 1876

General Distribution : Endemic.

Distribution in Turkey : Fieber (1872, 1876) listed and described this species from Turkey. Oshanin (1908, 1912) listed it from Turkey. In addition to these, Metcalf (1963) catalogued Puton (1875, 1886, 1899) and Melichar (1902) who reported the species from Turkey.

The authors have no representative of this species.

Cicada lodosi Boulard, 1979

General Distribution : Endemic.

Distribution in Turkey : Boulard (1979) described this species from the specimens collected in Manisa (Gördes).

Material examined : İzmir (Çiçekli), Manisa (Gördes) - Totally 28 specimens including paratypes.

Occurrence : Found sometimes in large numbers.

Biological note : Specimens were collected in late July on *Pinus* sp.

Cicada mordoganensis Boulard, 1979

General Distribution : Endemic.

Distribution in Turkey : Boulard (1979) described the species from the specimens collected in İzmir (Mordoğan).

Material examined : Antalya (Alanya, Side, Ulupınar, Yenice), İzmir (Balıklıova, Gaziemir, Karaburun, Mordoğan, Torbalı, Urla), Muğla (Bodrum) - Totally 51 specimens, including paratypes.

Occurrence : Common and found sometimes in large numbers.

Biological note : Specimens were collected starting from beginning of June through July to beginning of August, on *Olea europaea*, *Prunus amygdalus*, *P. domestica*, *Populus* sp., *Vitis vinifera*, *Citrus nobilis*, *Juniperus* sp., *Platanus* sp.

Cicada orni Linnaeus, 1758

Synonymy : *Tettigonia punctata* F., 1798; *Macropotopus oleae* A. Costa, 1877.

General Distribution : Albania, Austria, Cyprus, Czechoslovakia, Egypt, France, Greece, Hungary, Israel, Italy, Jordan, Lebanon, Romania, Switzerland, Spain (also Balearic Is.), Tunisia, USSR., Yugoslavia, Turkey (Metcalf, 1963).

Distribution in Turkey : Oshanin (1908, 1912) catalogued this species from Turkey. Fahringer (1922) reported specimens from Beledüğü, Eskişehir, Maraş (Yarbaşı), İstanbul (Belgrad forest). Bodenheimer (1958) reported this species as pest of *Olea europaea*, *Vitis vinifera* and *Quercus* in Turkey. Dlabola (1965) listed Turkey among the distributed countries of

this species. Linnavuori (1965) collected specimens in Adana near Gülek. Tuatay et al. (1972) reported specimens from Aydın, İzmir (Menemen). It is possible that earlier reports may be based on the misidentified specimens.

Material examined : Artvin (Central province, Oruçlu, Zeytinli), Aydın (Central province, Söke - Samsun dağı), Balıkesir (Erdek), Diyarbakır (Lice), İzmir (Bornova, Menemen) - Totally 31 specimens.

Occurrence : Common but in small numbers.

Biological note : Specimens were collected starting from late June through July and August on *Olea europaea*, *Morus* sp., *Pinus* sp., *Cupressus* sp., *Quercus* sp., Fieber (1876) has given *Olea europaea*, *Pinus maritima*, *Agave* as host plants of this species. Fahringer (1922) collected specimens on *Quercus coccifera* L., *Q. cerris* L., *Castanea sativa*.

Cicada permagna (Haupt, 1917)

General Distribution : Endemic.

Distribution in Turkey : This species had been described from Turkey and not found at any other country up to now. Boulard (1979) reported one male specimen collected in Antalya (Alanya) which is in the collection of Prof. Dr. N. Lodos in İzmir.

Material examined : The authors have the only specimen mentioned above.

Occurrence : Very occasional.

Tibicina haematodes (Scopoli, 1763)

Synonymy : *Tettigonia sanguinea* F., 1803; *Cicada helvola* Germ., 1821; *C. steveni* Krynicki, 1837; *Tibicina haematodes viridinervis* Fieb., 1876.

General Distribution : Albania, Austria, Bulgaria, Czechoslovakia, France, Germany, Greece, Hungary, Italy, Palestine, Portugal, Romania, Spain, Switzerland, Turkey, USSR., Yugoslavia.

Distribution in Turkey : Fieber (1876), Oshanin (1908, 1912) and Metcalf (1963) catalogued the species from Turkey. Fahringer (1922) reported it from İstanbul (Belgrad forest and Polenezköy) and Maraş. Diabola (1957) listed Turkey among the distributed countries of this species. Bodenheimer (1958) found it on *Quercus*.

Occurrence : It might be very occasional.

Biological note : Fieber (1876) stated that this species feed on trees, especially on vine and weeds. Fahringer (1922) has given *Quercus*, particularly *Q. lusitanica* as a host plant of this species.

The authors have no representative of this species.

Pagiphora annulata (Brullé, 1832)

General Distribution : Albania, Algeria, Bulgaria, Czechoslovakia, Greece, Tunisia, Turkey, Yugoslavia.

Distribution in Turkey : Oshanin (1908, 1912) listed this species from Turkey. Metcalf (1963) listed it also from Turkey according to Oshanin (1906) and Haupt (1917) who described and illustrated this species under the name of *Enneaglena annulata* Haupt from Turkey. Bodenheimer (1958) has given *Pagiphora* sp. as a pest of *Quercus* which probably might be the species *P. annulata* Brullé. Linnavuori (1965) collected one specimen in İskenderun (Yayladağ). Tuatay et al. (1972) listed it from İzmir (Gümüldür). Kartal (1978) reported one male specimen from Zonguldak and two females from Tarsus - Çamlıyayla.

Material examined : İzmir (Gümüldür), Tekirdağ (Central province, Hayrabolu, Gelibolu) - Totally 6 specimens.

Occurrence : Occasional.

Biological note : Specimens were collected in late June and July, on wild pear, *Prunus amygdali*, *Paliurus aculeatus*.

Cicadetta dimissa (Hagen, 1856)

General Distribution : Albania, China, Greece, Italy, Turkey, USSR., Yugoslavia; (Oriental Region).

Distribution in Turkey : Fieber (1872, 1876) described and listed this species from environment of İzmir. Oshanin (1908, 1912) listed it from Turkey. Fahringer (1922) recorded it from İstanbul (Polenezköy) on *Quercus*. Bodenheimer (1958) reported as the pest of *Quercus* in Turkey. Metcalf (1963) catalogued it from Turkey according to Dohrn (1859), Puton (1875, 1886, 1899), Horvath (1901) in addition to the above mentioned authors. Tuatay et al. (1972) reported it from Isparta.

Material examined : Antalya, Aydın (Kuşadası, Söke - Samsun dağı) Gümüşhane, Isparta, İzmir (Bornova, Menemen - Hatundere) - Totally 7 specimens.

Occurrence : Occasional.

Biological note : Specimens were collected starting from late May through June and July, on *Platanus* sp., *Olea europaea*, *Citrus* sp. and some weeds.

Cicadetta montana (Scopoli, 1772)

Synonymy : *Cicada flavofenestrata* Goeze, 1778; *Tettigonia schaefferi* Gmelin, 1780, *Cicada pygmaea* Olivier, 1790; *Tettigonia dimidiata* F., 1803; *Cicada anglica* Samouelle, 1819; *C. parvula* Walker, 1850 (Primary homonym); *C. saxonica* Hartwig, 1857; *Cicadetta megerlei* Fieb., 1876; *C. montana brevipennis* Fieb., 1876; *C. montana longipennis* Fieb., 1876; *C. montana petryi* Schumacher, 1924.

General Distribution : Austria, Belgium, Bulgaria, China, Czechoslovakia, Denmark, England, Finland, France, Germany, Greece, Hungary, Italy, Norway, Palestine, Poland, Romania, Spain, Sweden, Switzerland, Turkey, USSR., Yugoslavia.

Distribution in Turkey : Metcalf (1963) catalogued this species from Turkey according to Hagen (1856, 1857) and Fahringer (1922) who reported it from İstanbul (Belgrad forest). Dlabola (1957) collected one specimen in Adana (Bürücek - Toros).

Occurrence : Very occasional.

Biological note : Fieber (1876) stated that this species was found on *Crataegus*, *Fagus*, *Betula*, *Pinus* and various shrubs. This species had been found to be destructive sometimes on forest trees especially on *Quercus*, *Pinus*, *Cupressus*, and on fruit trees, such as *Prunus avium*, *P. armeniaca*, *Olea europaea*, in France and Yugoslavia (Olivier, 1970; Boulard, 1965, 1972).

Cicadetta musiva (Germar, 1830)

Synonymy : *Cicada (Melampsalta) musiva caspica* Kolenati, 1857; *Cicada tamarisci* Walker, 1870; *Cicadetta musiva suoedicola* Bergevin, 1913.

General Distribution : Afghanistan, Algeria, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Morocco, Tunisia, Turkey, USSR.

Distribution in Turkey : Fieber (1876) reported the species from Turkey (Amasya). Oshanin (1908, 1912) listed this species from Turkey. Metcalf (1963) catalogued it according to the authors mentioned above with addition of Schumacher (1923). Dlabola (1966) also listed Turkey among the other

distributed countries. Bodenheimer (1953) reported this species as the pest of *Tamarix pallasii* and other species of *Tamarix* in Turkey.

Material examined : Siirt (Kurtalan) and from Cyprus - Totally 25 specimens.

Occurrence : Occasional but sometimes occurs in fairly large numbers.

Biological note : Specimens were collected in late July in Siirt and at beginning of September in Cyprus on *Tamarix* sp.

Cicadetta parvula Fieber, 1876

Synonymy : *Cicadetta fieberi* Oshanin, 1908; *C. fieberi* Kirkaldy, 1909 (Primary homonym).

General Distribution : Morocco, Turkey.

Distribution in Turkey : Fieber (1872) listed this species and described in his 1876 publication from Turkey (Amasya). Oshanin (1908, 1912) also listed it from Turkey. In addition to the above mentioned authors, Metcalf (1963) catalogued it from Turkey according to Puton (1875, 1886, 1899), Melichar (1902) and Bergevin (1934).

Occurrence : Extremely occasional.

The authors have no representative of this species.

Cicadetta sibilatrix Horvath, 1901

General Distribution : Israel, Syria, Turkey.

Distribution in Turkey : Oshanin (1908, 1912) listed this species from Turkey. Fahringer (1922) reported it from İzmir, Maraş, Mersin. In addition to these authors, Metcalf (1963) catalogued it according to Horvath (1901), and Distant (1906) also reported it from Turkey.

Occurrence : Extremely occasional.

The authors have no representative of this species.

Pauropsalta tibialis (Panzer, 1788)

Synonymy : *Cicada tibialis minor* Everman, 1837; *Heptaglena libanotica* Horv., 1911; *Cicadetta cissilvanica* Haupt, 1935; *C. tibialis acuta* Dlab., 1961.

General Distribution : Albania, Austria, Bulgaria, Czechoslovakia, France, Germany, Greece, Hungary, Italy, Morocco, Portugal, Romania, Spain, Tunisia, USSR., Israel (Linnavuori, 1962), Turkey (Tuatay et al., 1972).

Distribution in Turkey : Metcalf (1963) catalogued this species from Turkey according to Hagen (1856), Escherich (1897) and Horvath (1901). Tuatay et al. (1972) reported it from Ankara.

Material examined : Ankara (Lalahan), Artvin (Borçka), Çorum (İskilip) - Totally 4 specimens.

Occurrence : Occasional.

Biological note : Specimens were collected in mid-June through mid-July, on *Glycyrrhiza glabra*, and Graminae weeds.

Özet

Türkiye Auchenorrhyncha türlerinin yayılışı
ve önemlerine ait notlarla ön liste.
V. Flatidae, Ricaniidae ve Cicadidae Familyaları

Bu makale 1979 yılı sonuna kadar Türkiye'den tesbit edilen 2 Flatidae, 1 Ricaniidae ve 21 Cicadidae türünü kapsamaktadır. Bu türler arasında Flatidae familyasından *Phantia ferganensis* Dubovsky Türkiye için yeni kayıttır. *Cicada lodosi* Boulard ve *C. mordoganensis* Boulard ise bu çalışma sırasında toplanan materyal içinden yeni türler olarak tarif edilmişlerdir. Her bir türün yayılışı, yoğunluğu, konukçu bitkileri ekonomik önemleri açıklanmıştır.

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