

**Preliminary list of Auchenorrhyncha with notes on distribution
and importance of species in Turkey
IV. Family Issidae Spinola**

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Summary

In the present paper, the list of Issidae species, collected in Turkey upto the end of 1979 are given. By this study 48 species belonging to 15 genera are recorded. Seven species : *Mycterodus anatolienis* Dlabola, *M. balikesiricus* Dlabola, *M. izmiticus* Dlabola, *Falcidius anatolicus* Dlabola, *Quadrastylum campanuliforme* Dlabola, *Tshurtshurnella cappadocica* Dlabola and *T. lodosi* Dlabola are described by Dr. Dlabola from the material collected during this study. There are several more new species which will be described by Dr. Dlabola. Also twelve species : *Ommatidiotus dissimilis* (Fallén), *O. inconspicuus* Stal, *Mycterodus carpathicus* Logv., *M. denticulatus* Lind., *M. goricus* (Dlab.), *M. ovifrons* Puton, *M. pallens* Stal, *M. rostratulus* Emel., *M. serbicus* Dlab., *Hysteropterum iesbicum* Dlab., *Quadrastylum scoleogramma* Fieb. and *Issus coleoptratus* (F.) are new records for Turkey. Distribution, abundance, and host plants of each species are given.

Introduction

Turkish fauna of Issidae is not very extensively studied up to now, as it is for the other families of Auchenorrhyncha. The previous records mostly content a few species of Issidae from Turkey. Some earlier records had been made by Fieber (1872, 1876). Oshanin (1912) in his catalogue

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listed six species from Turkey. Fahringer (1922) mentioned only two species and gave their host plants. Bodenheimer (1958) also mentioned shortly from two species and stated the damage of *Agalmatium flavescens* (Oliver) on trees, especially on *Olea europaea*. Dlabola (1957) collected specimens of five species of Issidae from Turkey and described one new species *Hysteropterum parvissimum* Dlabola, from the material collected in Central Anatolia. Metcalf (1958) catalogued 18 species of Issidae, from Turkey including these five species : *Caliscelis affinis* Fieb., *Ommatidiotus viduus* Horvath, *Mycterodus orthocephalus* Ferrari, *Hysteropterum conspurcatum* Spinola and *Issus tendinosus* Spinola. However depending upon the earlier records of Schaum (1850), Puton (1875, 1886, 1899), Montandon (1900), Melichar (1906) and Oshanin (1907), these five species reported from Turkey, during last decades no other records have not been made to confirm the occurrence of these species in Turkey. Also the authors have not been able to collect any representative of these species. Linnavuori (1955) also collected specimens of Issidae in Turkey, belonging to eight species, including new descriptions of *Hysteropterum campestre* ssp. *bidens*, *H. despectum* - now *Tshurtshurnella despecta* (Linn.), *H. trifasciatum* - now *Tshurtshurnella trifasciata* (Linn.) and new genus *Megissus* and its species *M. acutus* - now *Tshurtshurnella acuta* (Linn.). Nast (1972) also listed 18 species from Turkey. Dlabola (1971, 1977, 1979a,b) described totally 12 new species from the material collected in Turkey.

After correspondance with Dr. Dlabola, it is learned that there are several more new species in the material, the authors sent him for identification. These specimens will be described by Dr. Dlabola, to whom the authors are thankful for his contributions and identifications. It is obvious that there could be found more species of Issidae in Turkey, which could be determined by more careful and extensive collecting on various plants.

Species of Issidae have not very much economical importance. Only *Agalmatium flavescens* (Oliver) sometimes may cause slight damage to *Olea europaea* and *Ficus carica* by covering trees with mud egg chambers and feeding of nymphs and adults on young branches and shoots.

Caliscelis wallengreni Stal, 1863

General Distribution : China, s. France, Greece, Hungary, Italy, Romania, USSR.

Distribution in Turkey : This species had been only listed by Oshanin (1912) and Dlabola (1961) from Turkey. No other record could be found by the authors.

The authors have no representative of this species.

Bruchoscelis peculiaris (Horvath, 1904)

General Distribution : Endemic.

Distribution in Turkey : This species had been listed previously by Oshanin (1912). Dlabola (1957) collected the specimens of this species from Ankara (Baraj, Beynam, Mogan gölü) and near Kayseri.

Biological note : Dlabola (l. c.) stated that this species could be found in steppe habitat.

The authors have no representative of this species.

Aphelonema melichari (Horvath, 1897)

General Distribution : Italy, Turkey, Yugoslavia.

Distribution in Turkey : Dlabola (1957) collected five specimens of this species from Ankara (Baraj, Beynam).

Biological note : Dlabola (l. c.) stated that this species also lives in steppe habitat.

The authors have no representative of this species.

Ommatidiotus dissimilis (Fallén, 1806)

General Distribution : Austria, Belgium, Czechoslovakia, Denmark, France, Germany, Hungary, n.Italy, Mongolia, Netherlands, Poland, Romania, Sweden, Switzerland, USSR.

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

Material examined : Ankara (Gölbaşı - Eymir gölü, Mogan gölü) - Totally 4 specimens.

Occurrence : Rare.

Biological note : The specimens were collected in late August of 1978, on *Juncus* in marshy area around the lakes. Dlabola (1966) also stated that this species lives in marshy area and meadows at high places on *Carex*, *Erioporum* and other plants.

Ommatidiotus inconspicuus Stal, 1863

General Distribution : Czechoslovakia, Hungary, USSR.

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

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

Occurrence : Very rare.

Biological note : The only specimen was collected in late August of 1978, on *Phragmites* in marshy area around the lake.

Mycterodus anatolienis Dlabola, 1979

General Distribution : Endemic.

Distribution in Turkey : Dlabola (1979b) described this species from the specimens collected in Mardin (Midyat).

Biological note : Specimens were collected in mid - June of 1976, on various vegetation.

One paratype specimen is in the collection of N. Lodos, in İzmir.

Mycterodus arpadi Dlabola, 1977

General Distribution : Endemic.

Distribution in Turkey : Dlabola described this species from the specimens collected in İstanbul (Beykoz, Bosphorus) on 26.IV.1925 by Biro.

The authors have no representative of this species.

Mycterodus balikesiricus Dlabola, 1979

General Distribution : Endemic.

Distribution in Turkey : Dlabola described this species from the specimen collected in Balıkesir (Sındırgı) on 21.V.1971 by N. Lodos.

Material examined : Afyon (Çay), Balıkesir (Balya, Sındırgı), Manisa (Kula), Kütahya, Uşak (Eşme) - Totally 16 specimens.

Biological note : Specimens were collected from the mid - April through the mid - June of 1975, on *Quercus*.

Two paratype specimens from Balıkesir (Sındırgı) are in the collection of N. Lodos in İzmir.

Mycterodus carpathicus Logvinenko, 1974

General Distribution : Transcarpathian region (Logvinenko, 1974).

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

Material examined : Bilecik (Bozüyük), Bursa (Central province, İznik, Uludağ), Kütahya (Central province, Altıntaş, Domaniç) - Totally 33 specimens.

Biological note : Specimens were collected from the beginning of May through the mid - July, on *Quercus* sp., *Olea europaea*, *Crataegus* sp., *Rosa* sp., and Leguminosae. Logvinenko (1974) stated that this species found on dewberry (*Rubus* sp.) and *Matricaria* sp. and *Origanum vulgare*.

Mycterodus confusus Stal, 1861

General Distribution : Czechoslovakia, Hungary, Romania, Turkey, USSR., Yugoslavia.

Distribution in Turkey : This species had been recorded from Bosphorus by Fieber (1876). Fahringer (1922) also recorded from İstanbul (Pendik) on *Hibiscus esculentus*. Bodenheimer (1958) listed this species in Turkey on *Hibiscus esculentus* too.

The authors have no representative of this species.

Mycterodus denticulatus Lindberg, 1948

General Distribution : Cyprus.

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

Material examined : Ankara (Elmadağ), Konya (Ermenek) - Total - ly 3 specimens.

Biological note : Specimens were collected in late April and beginning of May of 1979, on *Quercus* and *Pirus malus*. Lindberg (1948) reported this species on *Berberis cretica* in Cyprus.

Mycterodus efesicus Dlabola, 1971

General Distribution : Endemic.

Distribution in Turkey : This species has been described by Dr. Dlabola from the specimens collected in İzmir (Efes) on 23 - 24.IV.1969 by W. Wittmer.

The authors have no representative of this species.

Mycterodus goricus (Dlabola, 1958)

General Distribution : USSR. (Armenia, Azerbaijan, Georgia).

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

Material examined : Bitlis (Nemrut dağı), Gümüşhane (Kelkit), Van (Başkale, Başkale - Güzelsu) - Totally 4 specimens.

Occurrence : Very rare.

Biological note : Specimens were collected from the mid - June through the beginning of August, on *Stipa* sp. and various plants. Logvinenko (1974) stated that this species is common on shrubs in xerophytic habitat, especially on *Astragalus*.

Mycterodus hamatus Dlabola, 1971

General Distribution : Endemic.

Distribution in Turkey : Dlabola described this species from the specimens collected in İzmir (Efes) on 22.IV.1969 by W. Wittmer.

The authors have no representative of this species.

Mycterodus horvathi Dlabola, 1977

General Distribution : Endemic.

Distribution in Turkey : This species has been described by Dlabola from the specimens collected in Adapazarı in 1924 by G. Horvath.

The authors have no representative of this species.

Mycterodus intricatus Stal, 1861

Synonymy : *M. jalticus* Dlabola, 1958 (Logvinenko, 1974).

General Distribution : Cyprus, Turkey, USSR.

Distribution in Turkey : This species had been previously reported from Turkey by Fieber (1872, 1876). Linnavuori (1955) collected specimens from Hatay (İskenderun and Yayladağ) in 1963.

The authors have no representative of this species.

Mycterodus izmiticus Dlabola, 1979

General Distribution : Endemic.

Distribution in Turkey : Dlabola described this species from the specimens collected in İzmit (Karamürsel) and İzmir on *Corylus avellana* by N. Lodos.

Material examined : Adapazarı (Central province, Hendek), Uşak (Banaz), Bursa (Uludağ), İstanbul (Yalova), İzmit (Karamürsel), Sakarya (Sapanca), Muğla (Fethiye - Seki) - Totally 22 specimens.

Biological note : Specimens were collected from the late April through the late July, on *Rosa* sp., *Rubus fruticosus*, *Ulmus* sp., *Fraxinus* sp., *Vicia* sp., *Verbascum* sp. and especially on *Corylus avellana*.

Two paratype specimens from İzmit (Karamürsel) are in the collection of N. Lodos in İzmir.

Mycterodus nasutus (Herrich - Schaeffer, 1835)

Synonymy : This species had been accepted as a synonymy of *M. immaculatus* (F.) by Metcalf (1958) and Nast (1972), but according to

Logvinenko (1974) the two species are valid species because the male genitalia are quite different in two species.

General Distribution : Since accepting *M. nasutus* (H.S.) as a proper species, the distribution of the species will be given according to the records under this name in Metcalf (1958) France, Sardinia, Italy, Transylvania, Tyrol, Austria, Galicia, Slovakia, Hungary, Poland, Rumania, Germany, Greece, Croatia, Southern and Central Europe, Asia Minor, Turkey, Smyrna, Southern Russia, Transcaucasia, Caucasus, Armenia, Bulgaria (Logvinenko, 1974). However Oshanin (1912) reported this species in Southern Russia and Caucasia, Logvinenko (1974) stated that the reliable data confirming the occurrence of this species in these regions are lacking and a few females from Moldavia possible belong to *M. nasutus*.

Distribution in Turkey : The previous records of the occurrence of this species in Turkey, according to Metcalf (1958), are made by Amyot and Serville (1843) from Smyrna, Puton (1899) as Turkey and Oshanin (1905, 1912) as Asia Minor, Logvinenko (1974) also listed Asia Minor among the distributed countries.

The authors have no representative of this species.

Mycterodus osellai Dlabola, 1977

General Distribution : Endemic.

Distribution in Turkey : This species has been described by Dlabola from the specimens collected from Bolu (Abant gölü) by Osella.

The authors have no representative of this species.

Mycterodus osmanicus Dlabola, 1971

General Distribution : Endemic.

Distribution in Turkey : This species has been described by Dlabola from the specimens collected from Adana (Nur dağı, Osmaniye) by W. Wittmer on 13 - 14.V.1969.

The authors have no representative of this species.

Mycterodus ovifrons Puton, 1890

General Distribution : USSR. (Caucasus).

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

Material examined : Rize - Only two specimens.

Biological note : Specimens were collected at the beginning of September of 1973, on *Alnus* sp.

Mycterodus pallens Stal, 1861

General Distribution : Greece, Yugoslavia.

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

Material examined : Aydın (Söke - Samsun dağı), Çanakkale (Gökçeada), İzmir (Yamanlar), Muğla (Bodrum) - Totally 24 specimens.

Biological note : Specimens were collected from late May through late August, on *Quercus*, *Cupressus*, *Pinus*, *Nerium oleander*, *Cratagus*, *Cistus*, *Verbascum*, *Juncus* and Graminae grasses.

Mycterodus rostratulus Emelyanov, 1964

General Distribution : USSR (Caucasus).

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

Material examined : Ankara (Çubuk, Elmadağ, Karagöl) - Totally 4 specimens.

Biological note : The specimen was collected at the beginning of May of 1979, on *Pirus malus*.

Mycterodus serbicus Dlabola, 1980

General Distribution : Yugoslavia (Dlabola, 1930b).

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

Material examined : Adapazarı (Akyazı) - Totally 11 specimens.

Biological note : Specimens were collected in late April through mid - May, on *Corylus avellana*, *Rubus fruticosus* and *Platanus* sp.

Falciidius anatolicus Dlabola, 1979

General Distribution : Endemic.

Distribution in Turkey : Dlabola described this species from the specimens collected in Afyon (Kocatepe) on *Pirus eleagrifolia* by N. Lodos and Sivas (Gürün).

Type specimen is in the collection of N. Lodos in İzmir.

Hysteropterum assimile Horvath, 1905

General Distribution : Endemic.

Distribution in Turkey : Metcalf (1958) listed this species from Turkey

depending upon the records of Horvath (1905), Melichar (1906) and Oshanin (1907, 1912).

The authors have no representative of this species.

Hysteropterum campestre Lindberg, 1948

Synonymy : *H. campestre longispinosum* Linnavuori, 1962; *H. campestre bidens* Linnavuori, 1965,

General Distribution : Cyprus, Israel, Turkey.

Distribution in Turkey : Linnavuori (1965) described the subspecies *bidens* from the specimens collected in Adana (Pozantı) and Niğde (Ulukışla).

The authors have no representative of this species.

Hysteropterum ephialtes Linnavuori, 1971

General Distribution : Cyprus, Turkey.

Distribution in Turkey : Linnavuori (1971) described this species from the specimens collected from Yayladağ - Belen and İskenderun in 1963.

The authors have no representative of this species.

Hysteropterum lesbicum Dlabola, 1980

General Distribution : s.Greece.

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

Material examined : Bursa (Keles, Mudanya) - Only 2 specimens.

Biological note : Specimens were collected in mid - July of 1972, on *Quercus* sp. Dlabola (1980a) reported this species on *Quercus macroleptis* in Greece.

Hysteropterum maculipes Melichar, 1906

General Distribution : Cyprus, Greece, Israel, Italy, Turkey, Yugoslavia, s.Austria and Hungary (Lindberg, 1948; Dlabola, 1971).

Distribution in Turkey : Linnavuori (1965) collected one specimen in Hatay (Yayladağ - Belen). Dlabola (1971) reported this species from Adana (Osmaniye) and Antalya (Alanya).

Material examined : Manisa (Gölmarmara, Gördes, Kula), Muğla (Fethiye, Güllük, Marmaris) - Totally 14 specimens.

Biological note : Specimens were collected from late April through August, on *Pirus* sp., *Olea europaeae*, *Citrus* sp., *Myrtus communis*, *Pinus* sp. and some low vegetation. Lindberg (1948) reported this species on *Juniperus phoenicea* in Cyprus.

Hysteropterum parvissimum Dlabola, 1957

General Distribution : Endemic.

Distribution in Turkey : Dlabola (1957) described this species from the specimens collected in Ankara (Beynam).

Material examined : Ankara (Çubuk) - Only one specimen.

Biological note : The only specimen was collected at the first week of May of 1938, on steppe vegetation.

Hysteropterum placophorum Horvath, 1905

General Distribution : Israel, Turkey, USSR.

Distribution in Turkey : Metcalf (1958) listed this species from Turkey according to the records of Horvath (1905), Melichar (1906) and Oshanin (1907, 1912).

The authors have no representative of this species.

Agalmatium bilobum (Fieber, 1877)

General Distribution : s.France, Greece, Israel, Italy, Spain, Syria, Tunisia, Turkey, USSR.

Distribution in Turkey : Metcalf (1958) listed this species from Turkey according to Oshanin (1907). Linnavuori (1965) collected some specimens in Adana (Pozantı) and Hatay (Yayladağ - Belen).

Material examined : Adapazarı, Adıyaman (Besni, Central province), Afyon (Sultandağı), Ankara (Central province, Çubuk, Karagöl), Aydın (Nazilli, Söke, Söke - Samsun dağı), Balıkesir (Balya, Burhaniye, İvrindi, Dursunbey, Susurluk), Bilecik (Bozüyük, Gölpazarı, Pazaryeri), Burdur (Central province, Gölhisar), Bursa (Central province, Uludağ, Gemlik, İznik, Mustafa Kemalpaşa), Çanakkale (Çan, Eceabat, Gelibolu, Gökçeada), Çorum (İskilip, Osmancık), Denizli (Acıpayam, Acıpayam - Kızılhisar, Tavas), Eskişehir (Central province, Çifteler, Mahmudiye, Sarıcakaya, Seyitgazi), Gaziantep, Gümüşhane (Şebinkarahisar), İzmir (Çeşme, Selçuk), Kırklareli (Lüleburgaz, Vize), Kütahya (Simav), Malatya, Manisa (Akhisar, Alaşehir), Muğla (Central province, Bodrum, Dalaman, Fethiye - Seki, Köyceğiz, Marmaris, Milas), Tekirdağ (Central province, Hayrabolu, Keşan, Malkara), Tokat (Erbaa, Niksar, Zile), Uşak (Eşme) - More than 300 specimens.

Biological note : Specimens were collected starting from late May through August, mostly in June and July, on various kinds of cultivated plants and other vegetations, trees, such as *Pistacia vera*, *Eleagnus*, *Fraxinus*, *Populus*, *Quercus*, *Pinus*, *Platanus*, *Cupressus*, *Tamarix*, *Styrax*, *Pyrus communis*, *Olea europaea*, *Prunus domestica*, *Prunus armeniaca*, *Prunus*

amygdalus, *Chenopodium*, *Medicago sativa*, *Cannabis sativa*, *Urtica*, *Sesamum indicum*, *Verbascum*, *Triticum*, *Avena sativa*, *Pimpinella anisum*, *Sinapis*, *Hypericum*, and some grasses.

Agalmatium flavescens (Oliver, 1791)

Synonymy : *Cercopis grylloides* F., 1794; *Issus liliimacula* O. Costa, 1834; *I. bifasciatus* O. Costa, 1834; *I. smyrnensis* Spinola, 1839; *I. dufouri* Spinola, 1839; *I. flavescens sicula* O. Costa, 1840; *Hysteropterum zelleri* Kbm., 1863; *H. flavescens* var. *b.*, Fieber, 1877 (Metcalf, 1958).

General Distribution : Albania, Algeria, Austria, Bulgaria, Canary Is., Cyprus, Czechoslovakia, France, Greece, Hungary, Italy, Jordan, Morocco, Portugal, Romania, Spain, Switzerland, Syria, Tunisia, Turkey, USSR., Yugoslavia.

Distribution in Turkey : This species had been previously listed from Turkey by Oshanin (1912). Fahringer (1922) reported it from Bursa (Uludağ) and İstanbul (Belgrad ormanı, Polonezköy). Lindberg (1948) listed this species from Turkey among the other countries. Bodenheimer (1958) also reported it from Turkey as the pest of *Olea europaea*, *Ficus carica* and forest trees. Dlabola (1957) collected some specimens in Ankara (Baraj) and Edirne. According to Metcalf (1958) additional records of the species from Turkey made by Horvath (1901), Melichar (1906), Oshanin (1907), Gribodo (1920) and Lindberg (1936).

Material examined : Çorum (İskilip), Edirne (Central province, Keşan), Kastamonu (Taşköprü), Tekirdağ (Hayrabolu), Van (Gevaş - Edremit), Zonguldak (Central province, Çaycuma) - Totally 15 specimens.

Biological note : The specimens were collected from June through late August, on *Prunus amygdali*, *Populus* sp., *Tamarix* sp., *Pinus* sp., *Medicago sativa* and various grasses. Fahringer (1922) reported *Olea europaea*, *Morus alba*, *Ficus carica*, *Vitis vinifera* as host plants of this species and collected specimens on *Celtis australis* and *Castanea sativa* in Turkey and stated that it is destructive but has less economical importance. Bodenheimer (1958) listed the above mentioned host plants with addition of *Eucalyptus* and mentioned its biology, destruction by feeding of nymphs and adults on young shoots that cause second degree color change on leaves. Also it causes damage to tree by covering up completely branches of trees with mud egg chambers, so prevent normal respiration of tree, thus tree becomes weak, especially the young branches. Castro (1951) mentioned two parasites of this species, one is *Arotus pulcherrimus* Mercet in Spain, and the other is *Telenomus sacchii* Ogl. in Italy. However, recent studies showed that this species found rather seldom in Turkey. The despite of all relevant literature

written about it. It is possible that it might be confused with *A. bilobum* of which largely and abundantly distributed nearly all over in this country.

Scorlupella discolor (Germar, 1821)

General Distribution : Bulgaria, Italy, Romania, Turkey, USSR.

Distribution in Turkey : According to Metcalf (1958) the previous records of this species from Turkey made by Melichar (1903) and Oshanin (1907). Dlabola (1957) collected many specimens at Ankara (Beynam) at the border of forest.

The authors have no representative of this species.

Scorlupella montana (Becker, 1865)

Synonymy : *Issus arundinis* Becker, 1865.

General Distribution : Greece, Romania, Spain, Turkey, USSR.

Distribution in Turkey : Dlabola (1957) collected many specimens of this species in Ankara (Beynam and Baraj).

Material examined : Ankara (Çubuk Baraj II, Lalahan, Şereflikoçhisar), Erzincan (Central province - Bahçeliköy), Kars (Sarıkamış) - Totally 18 specimens.

Biological note : Specimens were collected starting from early May through July, on various cover vegetation. Dlabola (1957) stated that this species found in steppe vegetation at the border of forest.

Tshurtshurnella acuta (Linnavuori, 1965)

General Distribution : Endemic.

Distribution in Turkey : Linnavuori described this species under the name of *Megissus acutus* Linn. from the specimens collected Hatay (Yayladag) on *Pinus halepensis* in forest and on the species of the genera of *Myrtus* and *Poterium*.

The authors have no representative of this species.

Tshurtshurnella despecta (Linnavuori, 1965)

General Distribution : Turkey, Italy (Dlabola, 1979a).

Distribution in Turkey : Linnavuori (1965) described this species from the specimens collected from 50 km south of Niğde (Aksaray) and Ankara (Hirfanlı).

Material examined : Ankara (Çubuk Barajı I, Çubuk Barajı II, Şereflikoçhisar at border of Tuz gölü), Çankırı (Orta), Çorum (Bayat), Kayseri

(Yılanlıdağ), Kırşehir (Kaman, Mucur), Nevşehir (Central province - Bağcılık İstasyonu) - Totally 20 specimens.

Biological note : Specimens were collected starting from late July through the beginning of October, mostly on various weeds and on *Artemisia* on the coast of Tuz gölü.

Tshurtshurnella lodosi Dlabola, 1979

General Distribution : Endemic.

Distribution in Turkey : Dlabola described this species from the specimens collected in Mardin (Cizre) and Diyarbakır.

Material examined : Mardin (Cizre), Urfa (Ceylanpınar) - Totally 9 specimens.

Biological note : Specimens all collected in June of 1976 on weeds.

Two paratype specimens are in the collection of N. Lodos, in İzmir.

Tshurtshurnella trifasciata (Linnavuori, 1935)

General Distribution : Endemic.

Distribution in Turkey : Linnavuori described this species from the specimens collected in Hatay (Yayladağ - Belen).

Material examined : Adıyaman (Samsat), Diyarbakır, Van - Totally three specimens.

Biological note : Specimens were collected in mid - July through August, on *Gossypium* sp. and weeds.

Bubastia suturale (Fieber, 1877)

General Distribution : Cyprus, Greece, Lebanon, Turkey.

Distribution in Turkey : Dlabola (1957) collected specimens of this species in Adana (Bürücek, Gavur dağları). Linnavuori (1965) also collected specimens in Hatay (İskenderun and Yayladağ - Belen).

Material examined : Burdur (Göhlisar), İzmir (Ödemiş - Erikli), Muğla (Fethiye - Seki) - Totally 4 specimens.

Biological note : Specimens were collected in late July and beginning of August, on *Quercus* sp. and weeds. Dlabola (1957) stated that this species lives in steppe habitat. Lindberg (1948) reported that the species live in brushwood and found on *Cistus villosus creticus* in Cyprus.

Bubastia transcaucasica (Melichar, 1914)

General Distribution : Turkey, USSR.

Distribution in Turkey : Metcalf (1958) listed this species from Turkey

according to Melichar who described it.

The authors have no representative of this species.

Quadrastylum campanuliforme Dlabola, 1979

General Distribution : Endemic.

Distribution in Turkey : Dlabola described this species from the specimens collected in Afyon (Kocatepe) on *Pirus eleagrifolia*.

The authors have no representative of this species.

Quadrastylum scoleogramma Fieber, 1877

General Distribution : Greece.

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

Material examined : Çanakkale (İntepe, Seddülbahir), İzmit (Gölcük) - Totally 4 specimens.

Biological note : Specimens were collected in May and July, on *Quercus* sp., *Platanus* sp., and weeds.

Kervillea ancyrana Bergevin, 1918

General Distribution : Endemic.

Distribution in Turkey : Metcalf (1958) listed this species from Turkey according to Bergevin (1918), who described about it.

Material examined : Adıyaman (Nemrut), Ankara (Çubuk), Diyarbakır - Totally 3 specimens.

Biological note : Specimens collected starting from early May through Mid - June.

Issus coleoptratus (Fabricius, 1781)

Synonymy : *Cicada gibbosa* Goeze, 1778 (Primary homonym); *Cercopis pedestris* Fabricius, 1794; *Issus maurus* Walker, 1851; *I. coleoptratus cribrellus* Rey, 1894.

General Distribution : Algeria, Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, England, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Romania, Spain, Sweden, USSR., Yugoslavia.

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

Material examined : Giresun (Central province, Görele, Keşap), Gü-

müşhane (Kelkit), Ordu (Ünye), Rize, Sinop, Trabzon (Beşikdüzü, Maçka, Sürmene) - Totally 26 specimens.

Biological note : Specimens were collected from July through the early September, on *Alnus*, *Corylus avellana*, *Salix* sp., *Artemisia* and some weeds. However it is seen on *Corylus avellana* frequently, but has no economical importance .

Latissus dilatatus (Fourcroy, 1785)

Synonymy : *Issus luteus* Fieber, 1876.

General Distribution : Albania, France, Greece, Italy, Spain, Turkey, Yugoslavia.

Distribution in Turkey : Metcalf (1953) listed this species from Turkey according to the records of Puton (1886, 1899) and Oshanin (1907).

The authors have no representative of this species.

Özet

Türkiye Auchenorrhyncha türlerinin yayılışı ve önemlerine ait notlarla ön listesi IV. Familia Issidae Spinola

Bu makalede, 1979 yılı sonuna kadar Türkiye'den toplanmış olan Issidae türleri verilmiştir. Bu çalışmada 15 cinse ait 48 tür tesbit edilmiştir. Bunlardan yedi tür : *Mycterodus anatoliensis* Dlabola, *M. balikesiricus* Dlabola, *M. izmiticus* Dlabola, *Falcidius anaticus* Dlabola, *Tshurtshurnella cappadocica* Dlabola, *T. Iodosi* Dlabola ve *Quadrastylum campanuliforme* Dlabola, bu çalışma sırasında toplanan örneklerden Dr. Dlabola tarafından tarif edilmiştir. Dr. Dlabola tarafından tarif edilecek bir kaç yeni tür daha vardır. Oniki tür de : *Ommatidiotus dissimilis* (Fall.), *O. inconspicuus* Stal, *Mycterodus carpathicus* Logv., *M. denticulatus* Lind., *M. goricus* (Dlab.), *M. ovifrons* Puton, *M. pallens* Stal, *M. rostratulus* Emel., *M. serbicus* Dlab., *Hysteropterum lesbicum* Dlab., *Quadrastylum scoleogramma* Fieb. ve *Issus coleopratus* (F.) Türkiye için yeni kayıtlardır. Her türün yayılışı, yoğunluğu ve konukçu bitkileri verilmiştir.

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