

Preliminary list of Chrysomelidae with notes on distribution and importance of species in Turkey. I. Subfamily Hispinae Gemminger & Harold

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Summary

This is the first paper of Turkish Chrysomelidae particularly subfamily of Hispinae. In the present paper, distribution, abundance, host plants and importance of Hispa atra, Dicladispa testacea, Acmenychus inermis, A. caucasicus and A. planus are given.

Introduction

The fauna of Chrysomelidae in Turkey is very rich. Chrysomelidae species are well studied and documented in Europe and Palaearctic region, there are few publications on the species of Turkey. Fairmaire (1866), Bodemeyer (1900), Weise (1901), Sahlberg (1912-1913), Kerville (1939), Bodenheimer (1958), Kral (1967) and Medvedev (1970) have listed some Chrysomelidae species from Turkey in their publications. Although Kismali (1973), Kasap and Crowson (1980, 1985), Kasap 1987 a, b; 1988 a, b) have published papers concerning of some species of Chrysomelidae, there is no comprehensive work dealing with the vertical distribution, importance and abundance of the species within the boundary of Turkey. Therefore, Chrysomelidae specimens have been collected during last 23 years by the author from all over the Turkey.

Many of the recorded species occur only infrequently, but some are economically important which exist more regularly, sometimes building up large populations and cause considerable damage to the

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agricultural crops. For example, Leptinotarsa decemlineata Say caused extensive damage to potato after introduced in Turkey in 1963. In recent years, attention have been focused on such economically important species and researches started on their biology, distribution and control measures.

However the list is by no means can not be accepted as complete. Also many of species are still waiting for clarification. Therefore it is likely that this list will be out of date, even before it is published.

The author is thinking to publish the list of Chrysomelidae in a series of publications, which each one comprising one or two subfamilies together according to contended species number. The list will also include the species given by the other authors from Turkey, even though the author has no representative specimens. Systematics of genera and species will be followed mostly according to W. Junk's "Coleopterorum Catalogus", Uhmman (1958) and Würmli (1975). Also synonymy and distribution in Palaearctic region are taken from Uhmman (l.c.) as well as Winkler (1924-1932) and Gressitt and Kimoto (1963). In case of additional country, it is given at the end with literature citation. Informations on distribution, abundance, and host plants of the species is based mainly on either to collection and observations made by the author as well as from the relevant literature.

Specimens have been collected generally by sweeping vegetation, shaking plants in sweeping net. The list will include the records of the specimens collected up to the end of 1988. The identified specimens are deposited in the collections of Department of Plant Protection, Faculty of Agriculture, University of Ege, İzmir.

In the present paper, the list of species of the subfamily Hispinae are given. This subfamily is represented in Turkish fauna for the time being, by 5 species belonging to 3 genera.

Majority of the species that is going to be published in the next issues were identified by J. Kral of Prague, L. Kocher of Villeneuve-sur-Lot, some by Dr. M. Würmli of Tutzing, Dr. H. Kippenberg of Herzogenaurach, Dr. Steinhausen of F.R.G., A. Warchalowski of Wroclaw and also by the author. The author wishes to thank to the taxonomists above for naming the specimens.

Hispa (=Hispella) atra L. 1767

Synonymy: Hispa algira Motsch., 1861; H. aptera Motsch., 1861; H. balbi Donck., 1899; H. cariosa Reiche and Saulcy, 1858; H. minuta Balbi, 1892.

General distribution: Afghanistan, Algeria, Azerbaijan, China, Egypt, England, Georgia, Hungary, Iraq, Israel, Italy, Persia, Romania, Sweden, Syria, Tunisia, Turkestan, Turkey, S. USSR (Uhmman, 1958; Weise, 1911; Winkler 1924-1932).

Distribution in Turkey: This species has been previously listed from Turkey (Manisa-Alaşehir) by Bodemeyer (1900). Weise (1911) and Uhmman (1958) recorded it from Turkey without giving specific locality.

Material examined: Artvin, Balıkesir (İvrindi, Manyas), Bursa

(Mudanya), Çanakkale (Gökçeada), Denizli (Kızılcabölük), Diyarbakır, Erzurum (Horasan), Gaziantep (in centrum, Oğuzeli), Hakkari, İstanbul (Yalova), İzmir (mount Yamanlar), Kocaeli, Konya (Hadim), Kütahya (in centrum, Gediz), Malatya, Mardin (Hasankeyf), Niğde (Çiftahan), Ordu (Mesudiye), Sakarya (Hendek, Sapanca), Siirt (Kurtalan) - Totally 38 specimens have been examined.

Occurrence: Common, but found in very small numbers.

Biological note: Adults have been collected from the end of April to the beginning of August on Juniperus sp., Medicago sp., Oryza sativa, Pinus sp., Pirus elaeagrifolia, Platanus sp., Prunus amygdali, Quercus sp., Rubus sp., Triticum sp., Ulmus sp., Verbascum sp. and different species of weeds. Its main host plants are Poa sp. and Agropyron repens and the larvae mine in the leaves of these plants. Hering (1957) has given Agropyron sp., Helictotrichon sp., Poa sp. and Triticum sp. as a host plants of this species.

Dicladispa testacea (Linnaeus, 1767)

Synonymy: Dicladispa algeriana Guér. 1841; D. numida Guér. 1841.

General distribution: Algeria, N. Africa, S. Europe, Greece, Italy, Syria, Turkey (Uhmann, 1958; Tzanakakis et al., 1963).

Distribution in Turkey: This species has been previously found in Turkey (İzmir-Tire) by İyriboz (Gül-Zümreoğlu, 1972). Giray (1980) recorded it also in İzmir (Bornova).

Material examined: Adana (Karatepe), Antalya (in centrum, Akseki, Alanya, Gazipaşa, Gündoğmuş, Kaş), Aydın (Kuşadası, mount Samsun), Bursa (mount Uludağ), Giresun (Keşap), Hatay (Soğukoluk, Yayladağ), İstanbul (Cevizli), İzmir (in centrum, Balçova, Bornova, Çatalkaya, Çeşme, Çiçekli, Gaziemir, Meryemana, Özdere), Kastamonu (Cide), Manisa (Gördes), Muğla (Bodrum, Marmaris), Sinop (Ayancık, Erfelek), Zonguldak (in centrum, Ereğli). - Totally 196 specimens have been examined.

Occurrence: Common; sometimes found in large numbers.

Biological note: Adults have been collected from June to the end of August on various plants such as Cistus spp., Cirsium sp., Laurus sp., Arbatus sp., Crataegus sp., Ficus carica, Castanea sativa, Quercus sp., Nicotiana tabacum, Platanus sp., Tamarix sp., Myrtus sp. and different species of weeds. Giray (1980) has given Pimpinella anisum as a host plant of this species, but the author is not agree about it. The larvae feed as a leaf-miner of the Cistus sp.

Acmenychnus inermis (Zoubkoff, 1833)

Synonymy: Acmenychnus potanini Weise, 1899.

General distribution: Surroundings of Caspian Sea, Caucasia, Turkmenistan, Kirghiz, Turkestan, Mongolia and Turkey.

Distribution in Turkey: This species has been listed from Turkey

by Weise (1911) and Winkler (1924-1932) but without specific location. However Uhmman (1958) is not included Turkey in its distributional areas. It is possible that it is found somewhere in northeastern part of Turkey. Since the author has no specimens in her collection, the presence of this species in Turkey needs further confirmation.

Acmenychus caucasicus (Heyden, 1878)

Synonymy: Hispa inermis Motsch. 1861 (nec Zoubkoff 1833)

General distribution: Caucasia, Kirghiz, Turkey.

Distribution in Turkey: As the previous species, it was listed by Weise (1911) and Winkler (1924-1932) under the name of A. inermis (as the synonym). Since the distributional areas of this species in Uhmman's list is not clear, its presence in Turkey needs further confirmation.

The author has no representative specimens of this species.

Acmenychus planus Maulik, 1919

This species described by Maulik (1919) based on the specimens collected in Arabia. According to Uhmman (1958), Turkey seems to be in the distributional area of this species. Again its presence in Turkey needs further confirmation.

Özet

Türkiye Chrysomelidae türlerinin yayılış ve önemlerine ait notlarla ön listesi I. Altfamilya Hispinae Gemminger and Harold

Bu makalede 1966 yılından 1988 sonuna kadar, bitkilerden atrap ve silkeleme yoluyla toplanan Hispinae türleri verilmiştir. Bu altfamilyaya ait Hispa atra, Dicladispa testacea, Acmenychus inermis, A. caucasicus and A. planus türlerinin yayılış, konukçu bitki ve önemleri belirtilmiştir.

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