

A Preliminary List on the Host Plants of Lygaeoidea Species (Hemiptera: Heteroptera) in Turkey- I

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ABSTRACT: In this preliminary study hostplants relationships of Lygaeoidea species of Turkey are listed, discussed and summarised. The hostplants of Lygaeoidea species are from various floristic elements of Turkey. According to various families of the superfamily Lygaeoidea studies done between the years 1922-2020, a total of 222 plant taxa in 36 families have been identified as hostplants. 77 of these taxa are given at genus level and 145 of them at species level. These hostplants are shrubs, trees, and herbaceous vegetations. In this part of the study, lygaeoid species found on 36 host plant families of Turkey are listed alphabetically. The remaining plant families will be given in the second part of the study. The relationships between these species and the hostplants are discussed in this research review.

KEYWORDS: Hemiptera, Lygaeoidea, host plant, relationship, Turkey

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INTRODUCTION

At least 708 genera and 4290 species belonging to 17 families of the superfamily Lygaeoidea (Hemiptera: Heteroptera) are known in the world (Henry, 2017).

The family Lygaeoidea contains both important phytophagous and also zoophagous insects.

The superfamily Lygaeoidea shows great diversity whithfeeding habits, the majority of the species feed on mature plant seeds while some utilize sap (Blissidae, many Lygaeidae, etc.).

Geocoridae species are predatory. Some lygaeoid taxons are specialized in some food plant species. For example the Cymidae and Pachygronthini are largely

restricted to Cyperaceae and Juncaceae, the Blissidae to monocotyledons, the Heterogastridae to Moraceae. Labiatae and Urticaceae, to grasses etc. (Slater, 1975).

Between 1922- 2020, we had the opportunity to make intensive collections, literatureses data and observations on the Turkey lygaeoid fauna.

The studies were concentrated primarily on the Turkey fauna with some field studies and literatures data.

These studies for the Insect fauna of Turkey are of considerable zoogeographic importance. And the present paper is a preliminary list of host plants of Lygaeoidea of Turkey to interpret and implications relative to the Turkey flora.

Lygaeoidea species of Turkey have host plants that belong to the too much plant families, they are seventy-four plant family species.

A high number of Lygaeoidea species associated with more than one type of vegetation is known in Turkey, and species absorb green plant parts (e.g. leaves, seeds, or flowers).

The lygaeoid species can fit into a wide range of ecological habitats. E.g. such as leaves, seeds, flowers, petiole, on sedges, or in the seed.

These can cause damage in trees, shrubs and herbaceous plants. Therefore they are considered economically important.

MATERIAL AND METHODS

In some literature about host plants of Lygaeoidea species located in Turkey limited informations are found.

The bibliographical references of the genera and species of host-plants for lygaeid's were given in the following literatures.

These are: Fahringer, 1922; Aysev, 1974; Çağlar, 1992; Çakır, 1988; Çakır, Önder, 1990; Hoberlandt, 1955; Kaya, Hincal, 1991; Kiyak, 1990; Kiyak, 1993; Lodos, Önder, Pehlivan, Atalay, 1978; Lodos et al., 1999; Seidenstücker, 1958; 1960; 1965; Stichel, 1957-1962.

The aim of this study is to presented a list of Lygaeoidea species inhabiting on hostplants in Turkey according to our studies and the previous literatures.

These have been reviewed and listed. The host plant taxa were given at the family, genera and species level.

Lygaeoid species determined from each plant taxon are given in table 1.

In addition, the relevant source references has been given.

RESULTS

All host plants and the Lygaeoidea species are given into a list in the following table 1.

Table 1.The plant relationships of Lygaeoidea species from Turkey.

Host Plant Taxa	Lygaeoidea recorded	Cited Literature(s)
Adoxaceae		
<i>Lonicera</i> sp.	<i>Heterogaster artemisiae</i> Schilling, 1829	Lodos et al., 1999
<i>Sambucus</i> sp.	<i>Heterogaster cathariae</i> (Geoffroy, 1785) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Lodos et al., 1999
<i>Sambucus ebulus</i> L.	<i>Macroplax fasciata fasciata</i> (Herrich-Schaeffer, 1835) <i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Fahringer, 1922, Stichel, 1957; Aysev, 1974
<i>Sambucus nigra</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Hoberlandt, 1955; Stichel, 1957; Aysev, 1974
<i>Viburnum</i> sp.	<i>Geocoris luridus luridus</i> (Fieber, 1844)	Çakır, 1988; Lodos et al., 1999

Table 1. Continued

Amaranthaceae		
<i>Beta vulgaris</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835) <i>Nysius cymoides</i> (Spinola, 1837) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Ortholomus punctipennis</i> (Herrick-Schaeffer, 1838) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Paromius gracilis</i> (Rambur, 1839) <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Xanthochilus quadratus</i> (Fabricius, 1798)	Stichel, 1957; Lodos et al., 1978, 1999
<i>Chenopodium</i> sp.	<i>Emblethis denticollis</i> Horváth, 1878 <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835) <i>Nysius cymoides</i> (Spinola, 1837) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Nysius senecionis senecionis</i> (Schilling, 1829) <i>Ortholomus punctipennis</i> (Herrick-Schaeffer, 1838) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Paromius gracilis</i> (Rambur, 1839) <i>Peritrechus meridionalis</i> Puton, 1877 <i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Xanthochilus quadratus</i> (Fabricius, 1798)	Lodos et al., 1978, 1999; Péricart, 1998a.
<i>Spinacia</i> sp.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Lodos et al., 1999
<i>Spinacia oleracea</i> L.	<i>Emblethis denticollis</i> Horváth, 1878 <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris luridus luridus</i> (Fieber, 1844) <i>Geocoris megacephalus</i> (Rossi, 1790) <i>Heterogaster urticae</i> (Fabricius, 1775) <i>Lamprodema maura</i> (Fabricius, 1803) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Metapoplax origani</i> (Kolenati, 1845)	Lodos et al., 1978; Çakır, 1988; Lodos et al., 1999
Amaryllidaceae		
<i>Allium cepa</i> L.	<i>Nysius graminicola graminicola</i> (Kolenati, 1845)	Lodos et al., 1999
Anacardiaceae		
<i>Pistacia lentiscus</i> L.	<i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835)	Stichel, 1957; Aysev, 1974
<i>Pistacia terebinthus</i> L.	<i>Arocatus longiceps</i> Stål, 1872 <i>Arocatus roeselii</i> (Schilling, 1829) <i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835) <i>Microplax limbata</i> Fieber, 1864	Aysev, 1974 Lodos et al., 1999
<i>Pistacia vera</i> L.	<i>Beous quadripunctatus</i> (Müller, 1766) <i>Camphocera glaberrima</i> (Walker, 1872) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris luridus luridus</i> (Fieber, 1844) <i>Emblethis angustus</i> Montandon, 1890 <i>Emblethis denticollis</i> Horváth, 1878 <i>Heterogaster urticae</i> (Fabricius, 1775) <i>Lamprodema maura</i> (Fabricius, 1803) <i>Leptodemus minutus</i> (Jakovlev, 1876) <i>Lethaeus cribratissimus</i> (Stål, 1859) <i>Lethaeus picipes</i> (Herrick-Schaeffer, 1850) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Megalonotus colon</i> Puton, 1874 <i>Megalonotus maximus</i> (Puton, 1895) <i>Nysius cymoides</i> (Spinola, 1837) <i>Peritrechus flavicornis</i> Jakovlev, 1877 <i>Peritrechus rhomboidalis</i> Puton, 1877 <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Tropistethus lanternae</i> Linnnavuori, 1960 <i>Xanthochilus saturnius</i> (Rossi, 1790)	Lodos et al., 1978; 1999; Çakır, 1988; Yanık & Yücel, 2001; Matocq et al., 2014; Şimşek & Bolu, 2016, 2017; Özgen et al., 2018; Özgen et al., 2020

Table 1. Continued

<i>Rhus</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Heterogaster artemisiae</i> Schilling, 1829 <i>Lygaeus creticus</i> Lucas, 1854 <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Nysius cymoides</i> (Spinola, 1837) <i>Oxycarenus hyalinipennis</i> (A. Costa, 1843) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Çakır, 1988; Lodos et al., 1999
Apiaceae		
<i>Anethum graveolens</i> L.	<i>Brachyplax tenuis</i> (Mulsant & Rey, 1852) <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Stichel, 1957; Aysev, 1974
<i>Ammi</i> sp.	<i>Nysius graminicola graminicola</i> (Kolenati, 1845)	Lodos et al., 1999
<i>Daucus carota</i> L.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Fahringer, 1922; Aysev, 1974
<i>Daucus</i> sp.	<i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Lodos et al., 1999
<i>Heracleum apiifolium</i> Boiss.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Kiyak, 1993
<i>Heracleum sphondylium</i> L.	<i>Spilostethus saxatilis</i> (Scopoli, 1763)	Stichel, 1957
<i>Pastinaca sativa</i> L.	<i>Spilostethus saxatilis</i> (Scopoli, 1763)	Stichel, 1957; Aysev, 1974
<i>Pastinaca schekakul</i> Russ.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Çakır, 1988
<i>Pimpinella anisum</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Metoplax origani</i> (Kolenati, 1845) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Ortholomus carinatus</i> (Lindberg, 1932) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Lodos et al., 1978
<i>Seseli hippomarathrum</i> Jacq.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Stichel, 1957; Aysev, 1974
<i>Torilis</i> sp.	<i>Metoplax origani</i> (Kolenati, 1845)	Aysev, 1974
Apocynaceae		
<i>Nerium oleander</i> L.	<i>Lygaeus creticus</i> Lucas, 1853 <i>Caenocoris nerii</i> (Germar, 1847)	Péricart, 1998a; Matocq et al. 2014
<i>Vincetoxicum officinale</i> Moench	<i>Horvathiulus superbus</i> (Pollich, 1781) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Tropidothorax leucopterus</i> (Goeze, 1778) <i>Lygaeus simulans</i> Deckert, 1985 <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Stichel, 1957; Aysev, 1974; Péricart, 1998a
<i>Vincetoxicum stepposum</i> (Pobed.)	<i>Spilostethus saxatilis</i> (Scopoli, 1763)	Péricart, 1998a
<i>Verbascum sinuatum</i> L.	<i>Emblethis angustus</i> Montandon, 1890	Özsaraç et al., 2001
Araliaceae		
<i>Hedera helix</i> L.	<i>Geocoris ater</i> (Fabricius, 1787)	Çakır, 1988
<i>Hedera</i> sp	<i>Spilostethus pandurus</i> (Scopoli, 1763)	Lodos et al., 1999
Asteraceae		
Asteraceae	<i>Metoplax origani</i> (Kolenati, 1845) <i>Microplax interrupta</i> (Fieber, 1837) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Aysev, 1974; Matocq et al., 2014
<i>Achillea odorada</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Fahringer, 1922; Stichel, 1957
<i>Achillea</i> sp.	<i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Nysius thymi thymi</i> (Wolff, 1804) <i>Nysius ericae ericae</i> (Schilling, 1829)	Kiyak, 1993; Péricart, 1998a
<i>Anthemis</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Nysius senecionis senecionis</i> (Schilling, 1829) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Stichel, 1957; Aysev 1974; Lodos et al., 1978, 1999; Çakır, 1988; Péricart, 1998a

Table 1. Continued

<i>Artemisia</i> sp.	<i>Aellopus atratus</i> (Goeze, 1778) <i>Icus angularis</i> Fieber, 1861 <i>Metopoplax fuscinervis</i> Stål, 1872 <i>Nysius cymoides</i> (Spinola, 1837) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Ortholomus punctipennis</i> (Herrick-Schaeffer, 1838)	Hoberlandt, 1955; Stichel, 1957; Seidenstücker, 1960; Aysev, 1974 Lodos et al., 1999; Péricart, 1998a
<i>Artemisia absinthium</i> L.	<i>Nysius cymoides</i> (Spinola, 1837)	Péricart, 1998a
<i>Artemisia campestris</i> L.	<i>Heterogaster artemisiae</i> Schilling, 1829	Stichel, 1957
<i>Artemisia maritima</i> L.	<i>Henestaris halophilus</i> (Burmeister, 1835)	Stichel, 1957
<i>Aster</i> sp.	<i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Aysev, 1974
<i>Carduus nutans</i> nutans L.	<i>Spilostethus pandurus</i> (Scopoli, 1763)	Kiyak, 1990
<i>Carthamus flavescent</i> Willd.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Aysev, 1974
<i>Carthamus</i> sp.	<i>Beosus quadripunctatus</i> (Müller, 1766)	Lodos et al., 1999
<i>Centaurea</i> sp.	<i>Beosus maritimus</i> (Scopoli, 1763) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris luridus luridus</i> (Fieber, 1844) <i>Graptopeltus validus</i> (Horváth, 1875) <i>Ischnodemus suturalis</i> Horváth, 1883 <i>Lygaeosoma sardeum sardeum</i> Spinola, 1837 <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Metopoplax origani</i> (Kolenati, 1845) <i>Nysius cymoides</i> (Spinola, 1837) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Nysius thymi thymi</i> (Wolff, 1804) <i>Oxycarenus hyalinipennis</i> (A. Costa, 1843) <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Xanthochilus minusculus</i> (Reuter, 1885)	Lodos et al., 1978: Çakır, 1988; Lodos et al., 1999
<i>Centaurea aggragata</i> Fisch. & C.A.Mey	<i>Geocoris pubescens</i> (Jakovlev, 1871)	Kiyak, 1993
<i>Centaurea jacea</i> L.	<i>Graptopeltus lynceus</i> (Fabricius, 1775)	Stichel, 1957
<i>Centaurea solstitialis</i> L.	<i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Nysius cymoides</i> (Spinola, 1837)	Aysev, 1974; Lodos et al., 1999; Péricart, 1998a
<i>Conyza bonariensis</i> (L.)	<i>Xanthochilus saturnius</i> (Rossi, 1790)	Özsaraç et al., 2001
<i>Cichorium</i> sp.	<i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Aysev, 1974
<i>Cirsium</i> sp.	<i>Artheneis alutacea</i> Fieber, 1861 <i>Emblethis griseus</i> (Wolff, 1802) <i>Geocoris arenarius</i> (Jakovlev, 1867) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris megacephalus</i> (Rossi, 1790) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Nysius cymoides</i> (Spinola, 1837) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Oxycarenus hyalinipennis</i> (A. Costa, 1843) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Stichel, 1957; Aysev 1974; Lodos et al., 1978, 1999; Çakır, 1988;
<i>Crepis</i> sp.	<i>Metopoplax origani</i> (Kolenati, 1845) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Nysius ericae ericae</i> (Schilling, 1829)	Aysev, 1974; Péricart, 1998a
<i>Crepis foetida</i> L.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Aysev, 1974
<i>Echinops</i> sp.	<i>Aphanus rolandri</i> (Linnaeus, 1758) <i>Neurocladus brachiiidens</i> (Dufour, 1851)	Hoberlandt, 1955
<i>Echinops viscosus</i> <i>bthynicus</i> (Boiss.)	<i>Cymus clavicularis</i> (Fallén, 1807)	Lodos et al., 1999

Table 1. Continued

<i>Erigeron</i> sp.	<i>Nysius senecionis senecionis</i> (Schilling, 1829)	Stichel, 1957; Péricart, 1998a
<i>Filago minima</i> (Sm.) Pers.	<i>Microplax interrupta</i> (Fieber, 1837)	Stichel, 1957
<i>Gundelia tournefortii</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Lethaeus fulvovarius</i> Puton, 1884	Kiyak, 1990, 1993
<i>Helichrysum</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Nysius helveticus</i> (Herrick-Schaeffer, 1850) <i>Paranysius fraterculus</i> Horvath, 1895	Kiyak, 1990, 1993; Péricart, 1998a
<i>Helichrysum italicum</i> (Roth) G. Don fil.	<i>Nysius immunis</i> (Walker, 1872)	Stichel, 1957
<i>Hieracium</i> sp.	<i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Nysius ericae ericae</i> (Schilling, 1829)	Stichel, 1957; Aysev, 1974; Péricart, 1998a
<i>Inula</i> sp.	<i>Cymus claviculus</i> (Fallén, 1807) <i>Cymus melanocephalus</i> Fieber, 1861 <i>Geocoris arenarius</i> (Jakovlev, 1867) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Nysius thymi thymi</i> (Wolff, 1804) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Peritrechus meridionalis</i> Puton, 1877	Çakır, 1988 Lodos et al., 1999; Péricart, 1998a
<i>Lactuca</i> sp.	<i>Spilostethus pandurus</i> (Scopoli, 1763)	Kiyak, 1990
<i>Lactuca serriola</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Nysius cymoides</i> (Spinola, 1837)	Kiyak, 1990; Péricart, 1998a
<i>Matricaria</i> sp.	<i>Beosus quadripunctatus</i> (Müller, 1766) <i>Auchenodes costalis</i> (Lethierry, 1875) <i>Emblethis ciliatus</i> Horvath, 1875 <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris luridus luridus</i> (Fieber, 1844) <i>Ischnopeza hirticornis</i> (Herrick-Schaeffer, 1850) <i>Lasiocoris crassicornis</i> (Lucas, 1849) <i>Metoplax origani</i> (Kolenati, 1845) <i>Nysius cymoides</i> (Spinola, 1837) <i>Oxycarenus hyalinipennis</i> (A. Costa, 1843) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Aysev, 1974; Çakır, 1988; Péricart, 1998b; Lodos et al., 1999
<i>Matricaria chamomilla</i> L.	<i>Cymus claviculus</i> (Fallén, 1807) <i>Cymus melanocephalus</i> Fieber, 1861 <i>Emblethis brachynotus</i> Horváth, 1897 <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Horvathiulus superbus</i> (Pollich, 1781) <i>Leptodemus minutus</i> (Jakovlev, 1874) <i>Lygaeosoma sardicum erythropterum</i> (Puton, 1876) <i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835) <i>Metoplax fuscinervis</i> Stål, 1872 <i>Metoplax origani</i> (Kolenati, 1845) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Nysius senecionis senecionis</i> (Schilling, 1829) <i>Ortholomus carinatus</i> (Lindberg, 1932) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Xanthochilus minusculus</i> (Reuter, 1885)	Lodos et al., 1978; 1999; Stichel, 1957
<i>Tripleuraspermum inodorum</i> (L.) Sch. Bip.	<i>Metoplax origani</i> (Kolenati, 1845)	Stichel, 1957; Aysev, 1974
<i>Onopordon</i> sp.	<i>Beosus maritimus</i> (Scopoli, 1763) <i>Geocoris ater</i> (Fabricius, 1787) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Graptopeltus validus</i> (Horváth, 1875) <i>Henestaris kareli</i> Hoberlandt, 1956 <i>Ischnopeza hirticornis</i> (Herrick-Schaeffer, 1850) <i>Leptodemus minutus</i> (Jakovlev, 1874) <i>Lygaeosoma sardicum sardicum</i> Spinola, 1837 <i>Lygaeus equestris</i> (Linnaeus, 1758)	Lodos et al., 1978, 1999; Çakır, 1988

Table 1. Continued

	<i>Macroplax fasciata fasciata</i> (Herrich-Schaeffer, 1835) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850) <i>Platyplast inermis</i> (Rambur, 1839) <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Spilostethus saxatilis</i> (Scopoli, 1763)	
<i>Onopordon tauricum</i> Willd.	<i>Spilostethus pandurus</i> (Scopoli, 1763)	Fahringer, 1922
<i>Scolymus hispanicus</i> L.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Aysev, 1974
<i>Senecio</i> sp.	<i>Nysius senecionis senecionis</i> (Schilling, 1829) <i>Nysius thymi thymi</i> (Wolff, 1804)	Hoberlandt, 1955; Péricart, 1998a
<i>Senecio jakobaeae</i> L.	<i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Nysius senecionis senecionis</i> (Schilling, 1829)	Stichel, 1957; Aysev, 1974; Péricart, 1998a
<i>Senecio vernalis</i> Waldst. & Kit.	<i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850)	Aysev, 1974
<i>Senecio viscosus</i> L.	<i>Nysius senecionis senecionis</i> (Schilling, 1829)	Stichel, 1957; Péricart, 1998a
<i>Senecio vulgaris</i> L.	<i>Melanocoryphus albomaculatus</i> (Goeze, 1778)	Stichel, 1957; Aysev, 1974
<i>Sonchus</i> sp	<i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850) <i>Nysius ericae ericae</i> (Schilling, 1829)	Péricart, 1998a; Lodos et al., 1999
<i>Taraxacum</i> sp.	<i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Nysius ericae ericae</i> (Schilling, 1829)	Aysev, 1974; Péricart, 1998a
<i>Taraxacum officinale</i> (L.)	<i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850)	Aysev, 1974
Berberidaceae		
<i>Berberis</i> sp.	<i>Geocoris ater</i> (Fabricius, 1787)	Çakır, 1988; Lodos et al., 1999
Betulaceae		
<i>Alnus</i> sp.	<i>Horvathiolus superbus</i> (Pollich, 1781) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Lodos et al., 1978, 1999
<i>Alnus glutinosa</i> (L.) Gaertn.	<i>Arocatus roeselii</i> (Schilling, 1829) <i>Oxycarenus modestus</i> (Fallén, 1829) <i>Kleidocerys resedae resedae</i> (Panzer, 1797)	Stichel, 1957; Aysev, 1974; Péricart, 1998a
<i>Alnus incana</i> (L.) Moench	<i>Oxycarenus modestus</i> (Fallén, 1829)	Stichel, 1957
<i>Alnus viridis</i> (Chaix.) D.C.	<i>Kleidocerys resedae resedae</i> (Panzer, 1797)	Aysev, 1974; Péricart, 1998a
<i>Betula</i> sp.	<i>Kleidocerys resedae resedae</i> (Panzer, 1797)	Aysev, 1974
<i>Betula verrucosa</i> Ehrh.	<i>Kleidocerys resedae resedae</i> (Panzer, 1797)	Yıldırım & Eroğlu, 2015; Péricart, 1998a
<i>Betula vulgaris</i> Roth	<i>Nysius ericae ericae</i> (Schilling, 1829) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Stichel, 1957; Lodos et al., 1978
<i>Carpinus betulus</i> L.	<i>Kleidocerys resedae resedae</i> (Panzer, 1797)	Aysev, 1974
<i>Corylus</i> sp.	<i>Emblethis angustus</i> Montandon, 1890	Lodos et al., 1978
<i>Corylus avellana</i> L.	<i>Beosus maritimus</i> (Scopoli, 1763) <i>Horvathiolus superbus</i> (Pollich, 1781) <i>Kleidocerys resedae resedae</i> (Panzer, 1797) <i>Metopoplax origani</i> (Kolenati, 1845)	Aysev, 1974; Lodos et al., 1978, 1999;
Boraginaceae		
<i>Alkanna</i> sp.	<i>Brachyplax tenuis</i> (Mulsant & Rey, 1852) <i>Hyalochilus dolosus</i> Horváth, 1897	Lodos et al., 1999
<i>Anchusa</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Çakır, 1988 Lodos et al., 1999
<i>Anchusa azurea</i> Mill.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Çakır, 1988
<i>Anchusa officinalis</i> L.	<i>Aellopus atratus</i> (Goeze, 1778)	Stichel, 1957

Table 1. Continued

<i>Borago officinalis</i> L.	<i>Aelopus atratus</i> (Goeze, 1778)	Stichel, 1957
<i>Cynoglossum officinale</i> L.	<i>Aelopus atratus</i> (Goeze, 1778)	Stichel, 1957
<i>Echium</i> sp.	<i>Aelopus atratus</i> (Goeze, 1778) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris megacephalus</i> (Rossi, 1790) <i>Metopoplax origani</i> (Kolenati, 1845) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Trichaphanus fuentei</i> (Puton, 1894)	Seidenstücker, 1958; Lodos et al., 1978; 1999; Çakır, 1988; Péricart, 1998a
<i>Echium italicum</i> L.	<i>Geocoris arenarius</i> (Jakovlev, 1867) <i>Geocoris ater</i> (Fabricius, 1787)	Çakır, 1988
<i>Echium plantagineum</i> L.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Çakır, 1988
<i>Echium vulgare</i> L.	<i>Aelopus atratus</i> (Goeze, 1778) <i>Emblethis verbasci</i> (Fabricius, 1803) <i>Graptopeltus lynceus</i> (Fabricius, 1775) <i>Platyplax salviae</i> (Schilling, 1829)	Stichel, 1957
<i>Heliotropium</i> sp.	<i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Lodos et al., 1999
<i>Hormuzakia aggregata</i> Lehm. Gusuleac	<i>Apterola kuenckeli rubicunda</i> (Stål, 1872) <i>Apterola lownii</i> (Saunders, 1876)	Stichel, 1957
Brassicaceae		
<i>Brassicaceae</i>	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Metopoplax origani</i> (Kolenati, 1845) <i>Peritrechus gracilicornis</i> Puton, 1877 <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Aysev, 1974; Çakır, 1988 Lodos et al., 1999
<i>Aethionema</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Lygaeus equestris</i> (Linnaeus, 1758)	Lodos et al., 1978; Çakır, 1988
<i>Alyssum condensatum</i> Boiss. Et Hausskn	<i>Emblethis verbasci</i> (Fabricius, 1803)	Stichel, 1957
<i>Alyssum troodi</i> Boiss.	<i>Emblethis verbasci</i> (Fabricius, 1803)	Stichel, 1957
<i>Brassica napus</i> (L.)	<i>Nysius cymoides</i> (Spinola, 1837)	Demirel (2009)
<i>Lepidium</i> sp.	<i>Emblethis denticollis</i> Horváth, 1878 <i>Nysius thymi thymi</i> (Wolff, 1804) <i>Nysius ericae ericae</i> (Schilling, 1829)	Péricart, 1998a; Özsaraç & Kiyak, 2001
<i>Capsella bursa-pastoris</i> (L.) Medik.	<i>Spilostethus pandurus</i> (Scopoli, 1763)	Özsaraç & Kiyak, 2001
<i>Cardaria draba</i> L.	<i>Spilostethus pandurus</i> (Scopoli, 1763)	Özsaraç & Kiyak, 2001
<i>Lepidium draba</i> (L.) Desv.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Kiyak, 1990; Özsaraç & Kiyak, 2001
<i>Descurania sophia</i> (L.) Webb	<i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Aysev, 1974
<i>Sinapis</i> sp.	<i>Artheneis foveolata</i> Spinola, 1837 <i>Beosus quadripunctatus</i> (Müller, 1766) <i>Dimorphopterus spinolae</i> (Signoret, 1857) <i>Geocoris arenarius</i> (Jakovlev, 1867) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris luridus luridus</i> (Fieber, 1844) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Metopoplax fuscinervis</i> Stål, 1872 <i>Metopoplax origani</i> (Kolenati, 1845) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Nysius thymi thymi</i> (Wolff, 1804) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Çakır, 1988; Lodos et al., 1999
<i>Sinapis arvensis</i> L.	<i>Leptodemus minutus</i> (Jakovlev, 1874) <i>Metopoplax origani</i> (Kolenati, 1845) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Oxy-</i> <i>carenus pallens</i> (Herrick-Schaeffer, 1850)	Aysev, 1974; Lodos et al., 1978
Cannabaceae		
<i>Humulus lupulus</i> L.	<i>Kleidocerys ericae</i> (Horváth, 1908)	Lodos et al., 1978
<i>Solanum nigrum</i> L.	<i>Taphropeltus contractus</i> (Herrick-Schaeffer, 1835)	Stichel, 1957

Table 1. Continued

Capparaceae		
<i>Capparis</i> sp.	<i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Lodos et al., 1999; Özgen et al., 2020
<i>Capparis spinosa</i> L.	<i>Caenocoris nerii</i> (Germar, 1847) <i>Heterogaster urticae</i> (Fabricius, 1775) <i>Lamprodema maura</i> (Fabricius, 1803) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Lodos et al., 1978, 1999
Caryophyllaceae		
<i>Herniaria</i> sp.	<i>Cymus claviculus</i> (Fallén, 1807)	Stichel, 1957
<i>Herniaria glabra</i> L.	<i>Nysius senecionis senecionis</i> (Schilling, 1829)	Stichel, 1957; Péricart, 1998a
<i>Illecebrum verticillatum</i> L.	<i>Cymus claviculus</i> (Fallén, 1807)	Stichel, 1957; Aysev, 1974
<i>Saponaria</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Çakır, 1988
<i>Dianthus carthusianorum</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Özsaraç et al., 2001
<i>Spergula arvensis</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Özsaraç et al., 2001
<i>Silene longipetale</i> Vent.	<i>Beosus maritimus</i> (Scopoli, 1763) <i>Emblethis verbasci</i> (Fabricius, 1803)	Stichel, 1957
Cistaceae		
<i>Cistus</i> sp.	<i>Cymus melanocephalus</i> Fieber, 1861 <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Kleidocerys ericae</i> (Horváh, 1908) <i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835) <i>Metopoplax origani</i> (Kolenati, 1845) <i>Nysius immunis</i> (Walker, 1872) <i>Orsillus depressus</i> (Mulsant & Rey, 1852) <i>Raglius tristis</i> (Fieber, 1861) <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Stygnocoris sabulosus</i> (Schilling, 1829)	Çakır, 1988 Lodos et al., 1999
<i>Cistus albidus</i> L.	<i>Ischnopeza hirticornis</i> (Herrick-Schaeffer, 1850) <i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835) <i>Nysius graminicola graminicola</i> (Kolenati, 1845)	Lodos et al., 1978
<i>Cistus creticus</i> L.	<i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835)	Stichel, 1957; Aysev, 1974
<i>Cistus parviflorus</i> Lam.	<i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835)	Stichel, 1957; Aysev, 1974
<i>Cistus salviaefolius</i> L.	<i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835)	Stichel, 1957; Aysev, 1974
<i>Cistus villosus</i> L.	<i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835)	Stichel, 1957; Aysev, 1974
Convolvulaceae		
<i>Convolvulus</i> sp.	<i>Geocoris ater</i> (Fabricius, 1787) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Tropidothorax leucopterus</i> (Goeze, 1778)	Lodos et al., 1999
<i>Convolvulus elegantissima</i> L.	<i>Emblethis denticollis</i> Horváth, 1878	Özsaraç et al., 2001
Crassulaceae		
<i>Sedum acre</i> L.	<i>Ortholomus punctipennis</i> (Herrick-Schaeffer, 1838)	Stichel, 1957; Aysev, 1974
Cucurbitaceae		
<i>Citrullus lanatus</i> Matsum. & Nakai	<i>Nysius cymoides</i> (Spinola, 1837)	Özgen et al., 2020
<i>Cucumis sativus</i> L.	<i>Nysius cymoides</i> (Spinola, 1837)	Özgen et al., 2020
<i>Cucurbita</i> sp.	<i>Megalonotus praetextatus</i> (Herrick-Schaeffer, 1835) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Lodos et al., 1999
<i>Cucumis melo</i> L.	<i>Geocoris ater</i> (Fabricius, 1787)	Çakır, 1988
Cornaceae		
<i>Cornus</i> sp.	<i>Kleidocerys ericae</i> (Horváth, 1908)	Lodos et al., 1999

Table 1. Continued

Cupressaceae		
<i>Cupressus</i> sp.	<i>Cymus melanocephalus</i> Fieber, 1861 <i>Eremocoris fenestratus</i> (Herrick-Schaeffer, 1839) <i>Geocoris luridus luridus</i> (Fieber, 1844) <i>Orsillus depressus</i> (Mulsant & Rey, 1852) <i>Orsillus maculatus</i> (Fieber, 1861) <i>Orsillus reyi</i> Puton, 1871 <i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835) <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Stichel, 1957; Çakir, 1988 Lodos et al., 1999;
<i>Cupressus sempervirens</i> L.	<i>Eremocoris fenestratus</i> (Herrick-Schaeffer, 1839) <i>Orsillus maculatus</i> (Fieber, 1861) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Lodos et al., 1978; Péricart, 1998a
<i>Juniperus</i> sp.	<i>Beosus quadripunctatus</i> (Müller, 1766) <i>Eremocoris fenestratus</i> (Herrick-Schaeffer, 1839) <i>Gastromes grossipes grossipes</i> (De Geer, 1773) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Gonianotus galactodennus</i> Fieber, 1861 <i>Emblethis verbasci</i> (Fabricius, 1803) <i>Heterogaster artemisiae</i> Schilling, 1829 <i>Lethaeus cibratissimus</i> (Stål, 1859) <i>Lygaeosoma sardeum sardeum</i> Spinola, 1837 <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Microplax interrupta</i> (Fieber, 1837) <i>Nysius thymi thymi</i> (Wolff, 1804) <i>Orsillus depressus</i> (Mulsant & Rey, 1852) <i>Orsillus maculatus</i> (Fieber, 1861) <i>Orsillus reyi</i> Puton, 1871 <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Peritrechus meridionalis</i> Puton, 1877 <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Lodos et al., 1978, 1999 Çakir, 1988;
<i>Juniperus communis</i> L.	<i>Eremocoris plebejus</i> (Fallén, 1807) <i>Graptopeltus lynceus</i> (Fabricius, 1775)	Stichel, 1957; Péricart, 1998a
<i>Juniperus excelsa</i> M. Bieb.	<i>Eremocoris pellitus</i> Seidenstücker, 1965 <i>Orsillus depressus</i> (Mulsant & Rey, 1852)	Hoberlandt, 1955; Stichel, 1957; Seidenstücker, 1965; Péricart, 1998a
Cyperaceae		
<i>Carex</i> sp.	<i>Cymus claviculus</i> (Fallén, 1807) <i>Cymus glandicolor</i> Hahn, 1832 <i>Cymus melanocephalus</i> Fieber, 1861	Hoberlandt, 1955; Stichel, 1957; Aysev, 1974
<i>Scirpus</i> sp.	<i>Cymus glandicolor</i> Hahn, 1832	Stichel, 1957
Cystopteridaceae		
<i>Cystopteris fragilis</i> (L.) Bernh.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Kiyak, 1993
Dipsacaceae		
<i>Knautia arvensis</i> (L.) Coult.	<i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Aysev, 1974
<i>Scabiosa argentea</i> L.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Kiyak, 1990
<i>Scabiosa canescens</i> Waldst. & Kit.	<i>Heterogaster artemisiae</i> Schilling, 1829	Stichel, 1957
Dryopteridaceae		
<i>Dryopteris</i> sp.	<i>Raglius tristis</i> (Fieber, 1861)	Lodos et al., 1999
Elaeagnaceae		
<i>Elaeagnus commutata</i> L.	<i>Lygaeus creticus</i> Lucas, 1854	Lodos et al., 1999
<i>Elaeagnus orientalis</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Lodos et al., 1999;
Ericaceae		
<i>Arbutus</i> sp.	<i>Geocoris ater</i> (Fabricius, 1787)	Çakir, 1988; Lodos et al., 1999

Table 1. Continued

<i>Calluna</i> sp.	<i>Lamprodema maura</i> (Fabricius, 1803) <i>Ortholomus punctipennis</i> (Herrich-Schaeffer, 1838) <i>Pionosomus varius</i> (Wolff, 1804) <i>Scolopostethus thomsoni</i> Reuter, 1875	Stichel, 1957; Aysev, 1974;
<i>Calluna vulgaris</i> (L.) Hull	<i>Aelopus atratus</i> (Goeze, 1778) <i>Beosus maritimus</i> (Scopoli, 1763) <i>Cymus clavicularis</i> (Fallén, 1807) <i>Eremocoris plebejus</i> (Fallén, 1807) <i>Graptopeltus lynceus</i> (Fabricius, 1775) <i>Nysius senecionis senecionis</i> (Schilling, 1829) <i>Scolopostethus decoratus</i> (Hahn, 1833) <i>Tropistethus holosericus</i> (Scholtz, 1846)	Stichel, 1957
<i>Erica</i> sp.	<i>Ortholomus punctipennis</i> (Herrich-Schaeffer, 1838) <i>Nysius senecionis senecionis</i> (Schilling, 1829)	Stichel, 1957; Aysev, 1974; Lodos et al., 1978
<i>Erica arborea</i> L.	<i>Emblethis denticollis</i> Horváth, 1878 <i>Stygnocoris faustus</i> Horváth, 1888	Özsaraç et al., 2001; Péricart, 1998b
<i>Rhododendron</i> sp.	<i>Macroplax fasciata fasciata</i> (Herrich-Schaeffer, 1835) <i>Kleidocerys ericae</i> (Horváth, 1908)	Lodos et al., 1978 Lodos et al., 1999
<i>Rhododendron ferrugineum</i> L.	<i>Kleidocerys resedae resedae</i> (Panzer, 1797)	Aysev, 1974; Péricart, 1998a
<i>Rhododendron hirsutum</i> L.	<i>Kleidocerys resedae resedae</i> (Panzer, 1797)	Péricart, 1998a
Euphorbiaceae		
<i>Euphorbia</i> sp.	<i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Kiyak, 1990; Lodos et al., 1978, 1999;
<i>Euphorbia gerardiana</i> Jacq.	<i>Emblethis ciliatus</i> Horváth, 1875	Stichel, 1957
Fabaceae		
<i>Acacia</i> sp.	<i>Geocoris luridus luridus</i> (Fieber, 1844)	Matocq et al., 2014
<i>Alhagi</i> sp.	<i>Artheneis alutacea</i> Fieber, 1861 <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Lodos et al., 1999
<i>Astragalus</i> sp.	<i>Diomphalus hispidulus</i> Fieber, 1864 <i>Emblethis brachynotus</i> Horváth, 1897 <i>Emblethis ciliatus</i> Horvath, 1875 <i>Emblethis dilaticollis</i> (Jakovlev, 1874) <i>Emblethis griseus</i> (Wolff, 1802) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris gryloides</i> (Linnaeus, 1761) <i>Geocoris lineola</i> (Rambur, 1839) <i>Geocoris megacephalus</i> (Rossi, 1790) <i>Geocoris pallidipennis pallidipennis</i> (A. Costa, 1843) <i>Gonianotus galactodennus</i> Fieber, 1861 <i>Horvathiolus superbus</i> (Pollich, 1781) <i>Lasiocoris crassicornis</i> (Lucas, 1849) <i>Lygaeosoma sardeum sardeum</i> Spinola, 1837 <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Macroplax fasciata fasciata</i> (Herrich-Schaeffer, 1835) <i>Megalonotus brevicornis</i> (Puton, 1883) <i>Megalonotus praetextatus</i> (Herrich-Schaeffer, 1835) <i>Metopoplax fuscinervis</i> Stål, 1872 <i>Metopoplax origani</i> (Kolenati, 1845) <i>Microplax interrupta</i> (Fieber, 1837) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Nysius helveticus</i> (Herrich-Schaeffer, 1850) <i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850) <i>Rhyparochromus phoeniceus</i> (Rossi, 1794) <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Stygnocorisella mayeti</i> (Puton, 1879) <i>Xanthochilus minusculus</i> (Reuter, 1885) <i>Paranyssius fraterculus</i> Horvath, 1895	Hoberlandt, 1955; Seidenstücker, 1958; Aysev, 1974; Çakır, 1988; Çakır & Önder, 1990; Kiyak, 1990; Lodos et al., 1999; Péricart, 1998a,b.

Table 1. Continued

<i>Astragalus hamasus</i> L.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Özsaraç & Kiyak, 2001; Özsaraç et al., 2001
<i>Astragalus microcephalus</i> Willd.	<i>Geocoris gryloides</i> (Linnaeus, 1761) <i>Geocoris lineola lineola</i> (Rambur, 1839) <i>Henestaris laticeps laticeps</i> (Curtis, 1836) <i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Rhyparochromus phoeniceus</i> (Rossi, 1794) <i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Xanthochilus quadratus</i> (Fabricius, 1798)	Çağlar, 1992
<i>Astragalus spruneri</i> Boiss.	<i>Lygaeus equestris</i> (Linnaeus, 1758)	Özsaraç & Kiyak, 2001
<i>Cicer arietinum</i> L.	<i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Nysius thymi thymi</i> (Wolff, 1804)	Lodos et al., 1999
<i>Coronilla varia</i> (L.) Lassen	<i>Heterogaster artemisiae</i> Schilling, 1829	Stichel, 1957
<i>Dorycnium suffruticosum</i> Will.	<i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835)	Stichel, 1957; Aysev, 1974
<i>Dorycnium hirsutum</i> L.	<i>Rhyparochromus phoeniceus</i> (Rossi, 1794)	Özsaraç et al., 2001
<i>Genista</i> sp.	<i>Homoscelis ruficollis</i> Horvath, 1884 <i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Seidenstücker, 1960 Lodos et al., 1999
<i>Glychirizza glabra</i> L.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Nysius thymi thymi</i> (Wolff, 1804)	Lodos et al., 1999
<i>Glycine soja</i> Siebold & Zucc.	<i>Geocoris ater</i> (Fabricius, 1787)	Lodos et al., 1978
<i>Lathyrus</i> sp	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Lodos et al., 1999
<i>Lens culinaris</i> L.	<i>Geocoris ater</i> (Fabricius, 1787) <i>Geocoris arenarius</i> (Jakovlev, 1867) <i>Horvathiulus superbus</i> (Pollich, 1781) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Metopoplax fuscinervis</i> Stål, 1872 <i>Nysius graminicola graminicola</i> (Kolenati, 1845)	Kaya & Hincal, 1991 Çakır, 1988; Lodos et al., 1999
<i>Medicago</i> sp.	<i>Cymus glandicolor</i> Hahn, 1832 <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Lamprodema maura</i> (Fabricius, 1803) <i>Melanocoryphus tristrami</i> (Douglas & Scott, 1868) <i>Pionosomus varius</i> (Wolff, 1804)	Stichel, 1957; Çakır, 1988; Lodos et al., 1999
<i>Medicago maritima</i> Pall.	<i>Emblethis griseus</i> (Wolff, 1802) <i>Geocoris arenarius</i> (Jakovlev, 1867) <i>Geocoris ater</i> (Fabricius, 1787) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris lineola lineola</i> (Rambur, 1839) <i>Geocoris megacephalus</i> (Rossi, 1790) <i>Lethaeus cribritissimus</i> (Stål, 1859) <i>Lethaeus picipes</i> (Herrick-Schaeffer, 1850) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850)	Çakır, 1988; Lodos et al., 1999
<i>Medicago minima</i> L.	<i>Geocoris ater</i> (Fabricius, 1787) <i>Geocoris lineola lineola</i> (Rambur, 1839)	Çakır, 1988 Lodos et al., 1999
<i>Medicago disciformis</i> DC.	<i>Macroplax fasciata fasciata</i> (Herrick-Schaeffer, 1835)	Özsaraç et al., 2001
<i>Medicago sativa</i> L.	<i>Arocatus longiceps</i> Stål, 1872 <i>Beosus maritimus</i> (Scopoli, 1763) <i>Cymus melanocephalus</i> Fieber, 1861 <i>Emblethis griseus</i> (Wolff, 1802) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Megalonotus sabulicola</i> (Thomson, 1870) <i>Metopoplax origani</i> (Kolenati, 1845) <i>Nysius cymoides</i> (Spinola, 1837) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Nysius senecionis senecionis</i> (Schilling, 1829)	Lodos et al., 1978, 1999; Özbek, 1986; Kaya, 2018, Özgen et al., 2020

Table 1. Continued

	<i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850) <i>Peritrechus meridionalis</i> Puton, 1877 <i>Remaudiereana annulipes</i> (Bärensprung, 1859) <i>Scolopostethus pictus</i> (Schilling, 1829) <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Spilostethus saxatilis</i> (Scopoli, 1763)	
<i>Melilotus</i> sp.	<i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Metopoplax origani</i> (Kolenati, 1845)	Kiyak, 1993 Lodos et al., 1999
<i>Melilotus officinalis</i> (L.) Pall.	<i>Beosus maritimus</i> (Scopoli, 1763) <i>Xanthochilus saturnius</i> (Rossi, 1790)	Kiyak, 1990
<i>Onobrychis</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Spilostethus pandurus</i> (Scopoli, 1763)	Cakir, 1988 Lodos et al., 1999
<i>Ononis</i> sp.	<i>Beosus quadripunctatus</i> (Müller, 1766) <i>Rhyparochromus pini</i> (Linnaeus, 1758)	Lodos et al., 1999
<i>Ononis spinosa</i> L.	<i>Spilostethus saxatilis</i> (Scopoli, 1763)	Stichel, 1957; Aysev, 1974
<i>Phaseolus</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris pallidipennis pallidipennis</i> (A. Costa, 1843)	Çakir, 1988; Çakir & Önder, 1990
<i>Phaseolus vulgaris</i> L.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Lodos et al., 1999
<i>Prosopis</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Çakir, 1988
<i>Trifolium</i> sp.	<i>Cymus melanocephalus</i> Fieber, 1861 <i>Emblethis angustus</i> Montandon, 1890 <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris megacephalus</i> (Rossi, 1790) <i>Geocoris pallidipennis pallidipennis</i> (A. Costa, 1843) <i>Ortholomus punctipennis</i> (Herrich-Schaeffer, 1838) <i>Peritrechus geniculatus</i> (Hahn, 1832)	Stichel, 1957; Aysev, 1974; Çakir, 1988; Kiyak, 1993; Lodos et al., 1999;
<i>Trifolium campestre</i> Scrieb.	<i>Heterogaster artemisiae</i> Schilling, 1829	Stichel, 1957
<i>Trifolium pratense</i> L.	<i>Beosus maritimus</i> (Scopoli, 1763)	Kiyak, 1990
<i>Trifolium repens</i> L.	<i>Geocoris ater</i> (Fabricius, 1787)	Lodos et al., 1978
<i>Vicia</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Melanocoryphus albomaculatus</i> (Goeze, 1778) <i>Nysius cymoides</i> (Spinola, 1837) <i>Nysius ericae ericae</i> (Schilling, 1829)	Çakir, 1988; Lodos et al., 1999;
<i>Vicia cracca</i> L.	<i>Heterogaster urticae</i> (Fabricius, 1775) <i>Leptodemus minutus</i> (Jakovlev, 1874) <i>Macrolapax fasciata fasciata</i> (Herrich-Schaeffer, 1835) <i>Melanocoryphus albomaculatus</i> (Goeze, 1778) <i>Metopoplax origani</i> (Kolenati, 1845) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Xanthochilus minusculus</i> (Reuter, 1885)	Lodos et al., 1978; Kiyak, 1993
<i>Vicia ervilia</i> (L.) Willd.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Çakir, 1988
<i>Vicia faba</i> L.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Kleidocerys ericae</i> (Horváth, 1908) <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Peritrechus gracilicornis</i> Puton, 1877 <i>Scolopostethus decoratus</i> (Hahn, 1833)	Lodos et al., 1978; Çakir, 1988; Lodos, et al., 1999
Fabaceae	<i>Eremocoris plebejus</i> (Fallén, 1807) <i>Ortholomus carinatus</i> (Lindberg, 1932)	Lodos et al., 1978; Kaya & Hincal, 1991
<i>Hippocrepis unisiliquosa</i> L	<i>Xanthochilus saturnius</i> (Rossi, 1790)	Özsaraç et al., 2001
Fagaceae		
<i>Castanea</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Homoscelis ruficollis</i> Horváth, 1884 <i>Arocatus longiceps</i> C. Stål, 1872	Seidenstücker, 1960; Çakir, 1988; Péricart, 1998a
<i>Castanea sativa</i> Mill.	<i>Emblethis angustus</i> Montandon, 1890 <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Macrolapax fasciata fasciata</i> (Herrich-Schaeffer, 1835) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Raglius alboacuminatus</i> (Goeze, 1778)	Hoberlandt, 1955; Lodos et al., 1978

Table 1. Continued

<i>Fagus</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Macroplax fasciata fasciata</i> (Herrich-Schaeffer, 1835) <i>Metopoplax origani</i> (Kolenati, 1845) <i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850) <i>Spilostethus affinis</i> (Schilling, 1829)	Lodos et al., 1978, 1999; Çakır, 1988
<i>Quercus</i> sp.	<i>Artheneis alutacea</i> Fieber, 1861 <i>Arocatus melanocephalus</i> (Fabricius, 1798) <i>Beosus maritimus</i> (Scopoli, 1763) <i>Cymus glandicolor</i> Hahn, 1832 <i>Cymus melanocephalus</i> Fieber, 1861 <i>Eremocoris fenestratus</i> (Herrich-Schaeffer, 1839) <i>Geocoris arenarius</i> (Jakovlev, 1867) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Geocoris luridus luridus</i> (Fieber, 1844) <i>Ischnopeza hirticornis</i> (Herrich-Schaeffer, 1850) <i>Ischnopeza pallipes</i> Puton, 1892 <i>Kleidocerys ericae</i> (Horváth, 1908) <i>Lygaeosoma sardeum sardeum</i> Spinola, 1837 <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Horvathiolus superbus</i> (Pollich, 1781) <i>Macroplax fasciata fasciata</i> (Herrich-Schaeffer, 1835) <i>Megalonotus praetextatus</i> (Herrich-Schaeffer, 1835) <i>Metopoplax origani</i> (Kolenati, 1845) <i>Microplax interrupta</i> (Fieber, 1837) <i>Microplax limbata</i> Fieber, 1864 <i>Nysius cymoides</i> (Spinola, 1837) <i>Nysius helveticus</i> (Herrich-Schaeffer, 1850) <i>Rhyparochromus vulgaris</i> (Schilling, 1829) <i>Tropistethus fasciatus</i> Ferrari, 1874 <i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850) <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Lodos et al., 1978, 1999; Çakır, 1988; Özgen et al., 2012
<i>Quercus coccifera</i> L.	<i>Horvathiolus guttatus</i> (Rambur, 1839)	Hoberlandt, 1955
<i>Quercus ilex</i> L.	<i>Nysius ericae ericae</i> (Schilling, 1829) <i>Peritrechus gracilicornis</i> Puton, 1877 <i>Spilostethus pandurus</i> (Scopoli, 1763)	Lodos et al., 1999
<i>Quercus macrolepis</i>	<i>Nysius ericae ericae</i> (Schilling, 1829)	Lodos et al., 1999
<i>Quercus pubescens</i> Willd.	<i>Camptotelus lineolatus lineolatus</i> (Schilling, 1829) <i>Heterogaster affinis</i> Herrich-Schaeffer, 1835 <i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Macroplax fasciata fasciata</i> (Herrich-Schaeffer, 1835) <i>Melanocoryphus albomaculatus</i> (Goeze, 1778) <i>Melanocoryphus tristrami</i> (Douglas & Scott, 1868) <i>Oxycarenus pallens</i> (Herrich-Schaeffer, 1850) <i>Spilostethus saxatilis</i> (Scopoli, 1763) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Çağlar, 1992; Özsaraç et al., 2001
<i>Quercus robur</i> L.	<i>Kleidocerys resedae resedae</i> (Panzer, 1797)	Aysev, 1974
Gentianaceae		
<i>Gentiana asclepiadea</i> L.	<i>Spilostethus saxatilis</i> (Scopoli, 1763)	Stichel, 1957; Aysev, 1974
Geraniaceae		
<i>Erodium</i> sp.	<i>Lygaeus equestris</i> (Linnaeus, 1758) <i>Megalonotus praetextatus</i> (Herrich-Schaeffer, 1835) <i>Ortholomus carinatus</i> (Lindberg, 1932) <i>Platyplax inermis</i> (Rambur, 1839)	Lodos et al., 1978
<i>Geranium stepporum</i> Davis	<i>Spilostethus pandurus</i> (Scopoli, 1763)	Kryak, 1990
Ribes		
<i>Ribes nigrum</i> L.	<i>Kleidocerys resedae resedae</i> (Panzer, 1797)	Aysev, 1974
Hypericaceae		
<i>Hypericum</i> sp.	<i>Cymus claviculus</i> (Fallén, 1807) <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Stichel, 1957; Aysev, 1974; Çakır, 1988; Lodos et al., 1999

Table 1. Continued

<i>Hypericum perforatum</i> L.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Lodos et al., 1978
Juglandaceae		
<i>Juglans</i> sp.	<i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825)	Çakır, 1988
<i>Juglans regia</i> L.	<i>Arocatus longiceps</i> Stål, 1872 <i>Geocoris erythrocephalus</i> (Lepeletier & Serville, 1825) <i>Kleidocerys ericae</i> (Horváth, 1908) <i>Lygaeus creticus</i> Lucas, 1854 <i>Metopoplax origani</i> (Kolenati, 1845) <i>Rhyparochromus vulgaris</i> (Schilling, 1829) <i>Spilostethus pandurus</i> (Scopoli, 1763) <i>Stygnocoris rusticus</i> (Fallén, 1807)	Lodos et al., 1978, 1999
Juncaceae		
<i>Juncaceae</i>	<i>Cymus melanocephalus</i> Fieber, 1861	Hoberlandt, 1955; Aysev, 1974
<i>Juncus</i> sp.	<i>Cymus claviculus</i> (Fallén, 1807) <i>Cymus glandicolor</i> Hahn, 1832 <i>Cymus melanocephalus</i> Fieber, 1861 <i>Dimorphopterus spinolae</i> (Signoret, 1857) <i>Geocoris ater</i> (Fabricius, 1787) <i>Henestaris halophilus</i> (Burmeister, 1835) <i>Holcocranum saturejae</i> (Kolenati, 1845) <i>Ischnodemus quadratus</i> Fieber, 1837 <i>Metopoplax origani</i> (Kolenati, 1845) <i>Microplax interrupta</i> (Fieber, 1837) <i>Nysius cymoides</i> (Spinola, 1837) <i>Nysius graminicola graminicola</i> (Kolenati, 1845) <i>Nysius ericae ericae</i> (Schilling, 1829) <i>Oxycarenus hyalinipennis</i> (A. Costa, 1843) <i>Oxycarenus pallens</i> (Herrick-Schaeffer, 1850) <i>Peritrechus gracilicornis</i> Puton, 1877 <i>Spilostethus saxatilis</i> (Scopoli, 1763)	Hoberlandt, 1955; Stichel, 1957; Aysev, 1974 Lodos et al., 1999

Table 2. The number of Lygaeoidea species on hostplants family in Turkey.

Host Plant Family	Number of Lygaeoidea species on the host	Host Plant Family	Number of Lygaeoidea species on the host
Adoxaceae	9	Crassulaceae	1
Amaranthaceae	22	Cucurbitaceae	4
Amaryllidaceae	1	Cupressaceae	25
Anacardiaceae	29	Cyperaceae	3
Apiaceae	9	Cystopteridaceae	1
Apocynaceae	8	Dipsacaceae	3
Araliaceae	2	Dryopteridaceae	1
Asteraceae	55	Elaeagnaceae	3
Berberidaceae	1	Ericaceae	18
Betulaceae	9	Euphorbiaceae	4
Boraginaceae	16	Fabaceae	69
Brassicaceae	20	Fagaceae	41
Cannabaceae	2	Gentianaceae	1
Capparaceae	5	Geraniaceae	5
Caryophyllaceae	6	Grossulariaceae	1
Cistaceae	12	Hypericaceae	4
Convolvulacea	5	Juglandaceae	8
Cornaceae	1	Juncaceae	17

Relationship of Lygaeoidea species and hostplant families

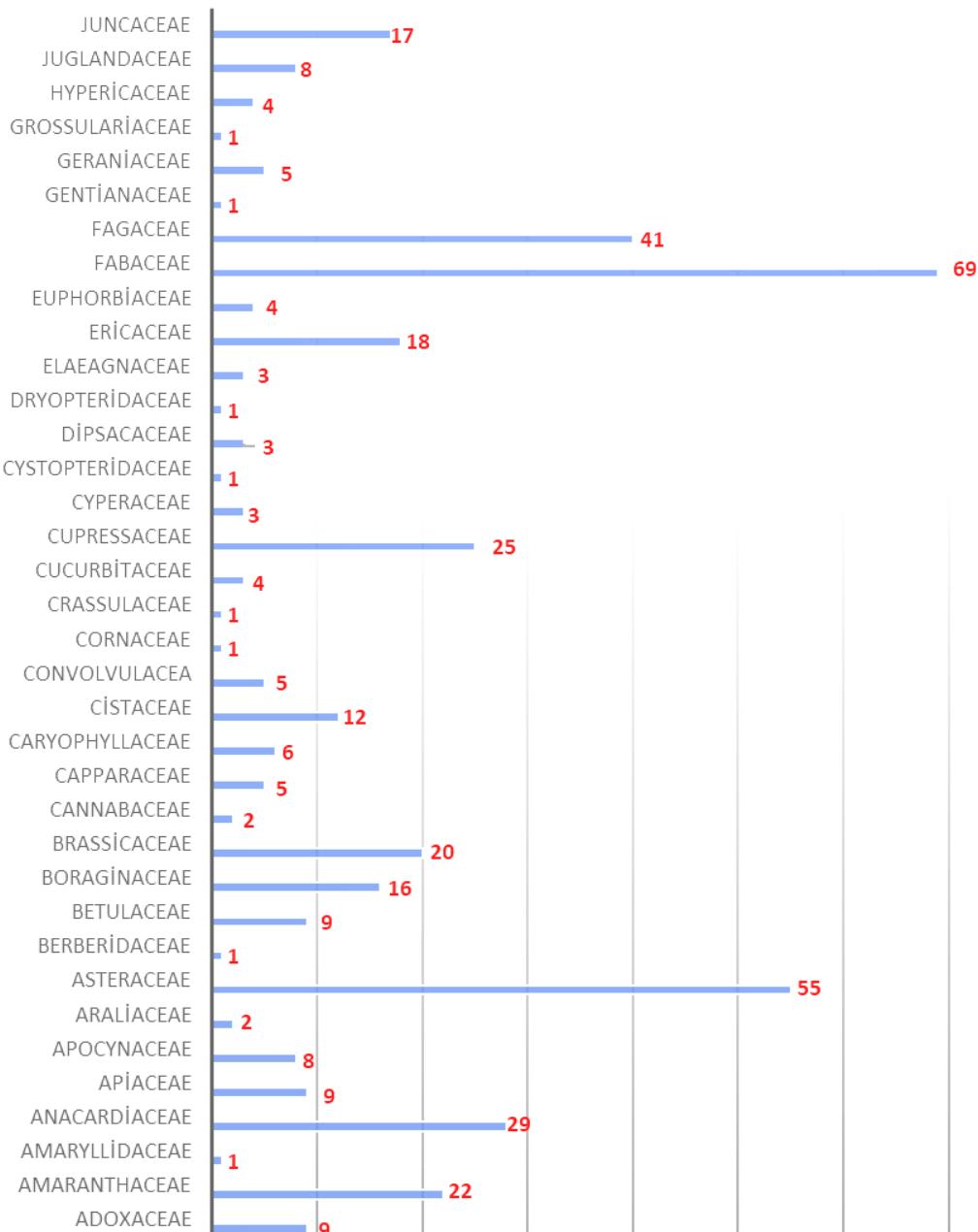
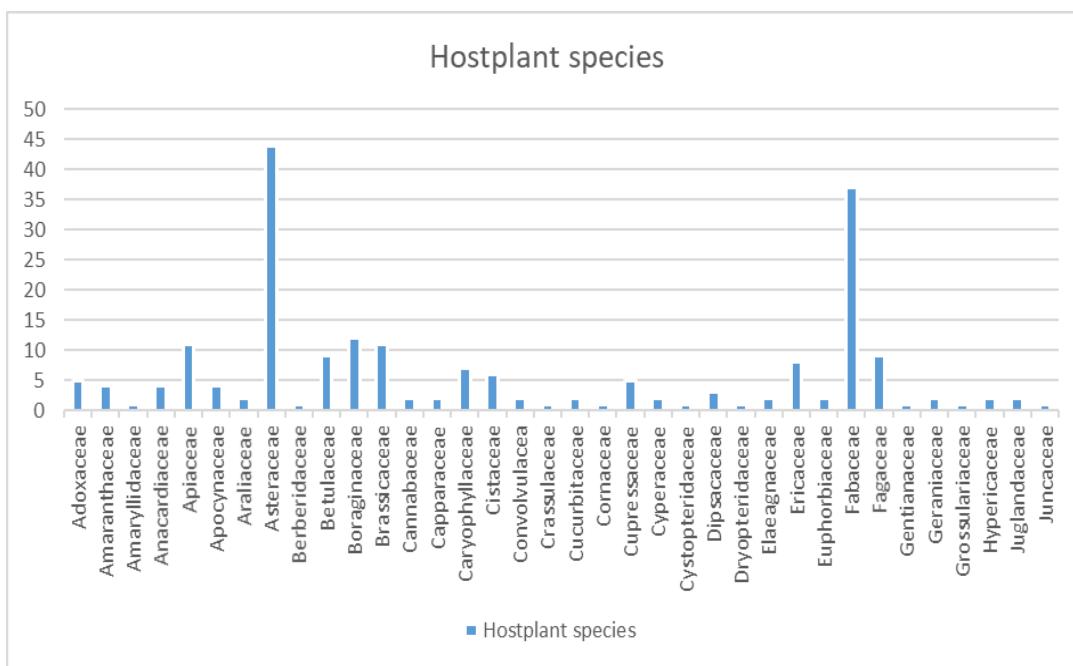


Figure 1. Distribution of Lygaeoidea species numbers by families of hostplants in Turkey.

Table 3. The number of hostplant species in Turkey.

Hostplant Families		Number of Hostplant species	Hostplant Families		Number of Hostplant species
1	Adoxaceae	5	19	Cucurbitaceae	4
2	Amaranthaceae	4	20	Cornaceae	1
3	Amaryllidaceae	1	21	Cupressaceae	5
4	Anacardiaceae	4	22	Cyperaceae	2
5	Apiaceae	11	23	Cystopteridaceae	1
6	Apocynaceae	4	24	Dipsacaceae	3
7	Araliaceae	2	25	Dryopteridaceae	1
8	Asteraceae	44	26	Elaeagnaceae	2
9	Berberidaceae	1	27	Ericaceae	8
10	Betulaceae	9	28	Euphorbiaceae	2
11	Boraginaceae	12	29	Fabaceae	37
12	Brassicaceae	11	30	Fagaceae	9
13	Cannabaceae	2	31	Gentianaceae	1
14	Capparaceae	2	32	Geraniaceae	2
15	Caryophyllaceae	7	33	Grossulariaceae	1
16	Cistaceae	6	34	Hypericaceae	2
17	Convolvulacea	2	35	Juglandaceae	2
18	Crassulaceae	1	36	Juncaceae	1

**Figure 2.** Hostplants species of Lygaeoidea species in Turkey.

CONCLUSION AND DISCUSSION

In this study are confirmed 222 taxa as a host plants of Lygaeoidea from Turkey; they are belonging to 36 families. Of these 77 of 222 plant taxa of them are only genera level host, also 145 of them are species level. In this part of the study were Lygaeoidea species found on 36 host plant family in Turkey given. The most host plant species belong to Asteraceae (44 species), Fabaceae (37 species), Boraginaceae (12 species), Apiaceae (11 species), Brassicaceae (11 species) and Fagaceae (9 species) families (Table 3, Fig. 2).

It is uncertain how much of which Lygaeoid species are experts in plants, with the exception of some species where research is concentrated. Reliable data on the preferred habitats and nutrition of Lygaeoid species are not available for many species. However, according to some studies, it has been found that many lygaeoid species are found or fed on species from one or more plant families. (e.g. Aysev, 1974; Çağlar, 1992; Çakır, 1988; Hoberlandt, 1955; Kiyak, 1990; Kiyak, 1993; Lodos, Önder, Pehlivan, Atalay, 1978; Lodos et al., 1999; Stichel, 1957-1962). For this purpose, this article about the host plant species on the list of Turkey lygaeoid species in this study has been submitted.

When looking at this list, it can be seen that various species are present on one or more hosts. For example, *Lygaeus equestris* (Linnaeus, 1758) in 41 different hosts, *Macroplax fasciata fasciata* (Herrick-Schaeffer, 1835) in 24 different hosts, *Nysius graminicola graminicola* (Kolenati, 1845), *Nysius ericae ericae* (Schilling, 1829) and *Metoplax origani* (Kolenati, 1845) in 22 different hosts were detected. In this respect, they are considered as "non-specific" because they are not limited to any plant species.

On the other hand, in this study; only "one species" was found in the host of 8 plant families, limited to any lygaeoid species. And in two plant taxa only "two species" were found, limited to any lygaeoid

species. Only "three species" were found in four plants, limited to any lygaeoid species. In three plant taxa only "five species" or "more species" were found, limited to any lygaeoid species. (Table 2, Figure 1).

Most Lygaeoidea species were found in Fabaceae (69 species), Asteraceae (55 species), Fagaceae (41 species) Anacardiaceae (29 species) and Cupressaceae (25 species) in plant families. Number of recorded Lygaeoidea species each host plant family were given Table 2 and Figure 1.

Other host plants family will be in next paper published.

Based on the aforementioned findings, it has been found that some species (such as *Lygaeus equestris*), *Macroplax fasciata fasciata* and *Nysius graminicola graminicola* prefer many host plants and feed on a large number of plant families. This preference spectrum can help to explain the harmful role of some lygaeoid species for economically loss related to them.

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