

ADDITIONAL NOTES ON THE SOME APHROPHORID SPITTLEBUGS OF EASTERN ANATOLIA (HEMIPTERA: CERCOPOIDEA: APHROPHORIDAE)*

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scientific note

The study was carried out to determine Aphrophoridae species in Eastern Anatolia in 2018. Five species were collected by sweeping net on herbs. The collected specimens were identified as: *Aphrophora salicina* (Goeze, 1778), *Lepyronia coleoptrata* (Linnaeus, 1758), *Paraphilaenus notatus* (Mulsant & Rey, 1855), *Philaenus spumarius* (Linnaeus, 1758) and *Neophilaenus campestris* (Fallén, 1805). The species *P. spumarius* and *L. coleoptrata* were the most abundant species and the others were rather rare. The species of family Aphrophoridae are xylem feeders so they are considered as candidates for transmitting bacteria *Xylella fastidiosa*. Therefore, the role of the identified species in the agricultural ecosystems in the collecting sites needs to be studied.

Key words: Hemiptera, Aphrophoridae, Fauna, Eastern Anatolia

1 Introduction

The Aphrophoridae or spittlebugs are a family of insects belonging to the order Hemiptera. Nymphs of Aphrophoridae secrete a frothy saliva-like mass, which gives the name “spittlebugs” for insects in the superfamily. The species of family Aphrophoridae are xylem feeders so they are considered as candidates for transmitting bacteria *Xylella fastidiosa*. In this study were carried out to determine of Aphrophorid fauna in Eastern Anatolia of Turkey.

2 Material and Method

In this study, These species were collected in the herbs in May to August 2018 in Elazığ and Tunceli provinces. Specimens have been photographed withby a Olympus SZX 51 model stereo binocular microscope.

3 Results

Aphrophora salicina (Goeze, 1778)

Material examined: Elazığ, Günbağı village, Pagan location, 21.VI.2018, 3 exs., Arındık village, 28.VI.2018, 2 exs., Totally: 5 exs.

Note: The species is mostly associated with *Salix* species (Mozaffarian et al., 2015).

Lepyronia coleoptrata (Linnaeus, 1758),

Material examined: : Elazığ, Günbağı village, 19.V.2018, 15 exs., Arındık village, 28.VI.2018, 22 exs. **Totally:** 37 exs.

Neophilaenus campestris (Fallén, 1805)

Material examined: Elazığ, Aşağı Çakmak village, 18.V.2018, 3 exs.

Note: *N. campestris* prefer mostly grasslands, *Neophilaenus campestris* Fallén showed harbour the bacterium in their body (Elbeaino et al.,2014; Moussa et al., 2017).

Paraphilaenus notatus (Mulsant & Rey, 1855),

Material examined: Elazığ, Aşağı çakmak village, 18.V.2018, 6 exs.

Note: It was determined to potential vector of *Xylella fastidiosa*. This specimen was distributed to French mainland, South Russia, Ukraine, Eastern Palearctic, Near East. It is commonly found that in Poacea herbs (Anonymous, 2018)

Philaenus spumarius (Linnaeus, 1758)

Material examined: Elazığ, Günbağı village, 19.VI.2018, 22 exs.,Arındık village, 28.V.2018, 10 exs.,, Tunceli, Pertek, Akdemir, 12.06.2018, 12 exs. **Totally:** 44 exs.

Note: The most economically important species of this family in Turkey is *Philaenus spumarius* (L.), which is very widely distributed and found very abundantly (Lodos and Kalkandelen, 1981). *Philaenus spumarius* L. (Aphrophoridae) has so far been proven to transmit the CoDiRO strain (Saponari et al., 2014)

The majority of the species obtained by this study is the first record in terms of the locations. Because the vast majority of these species are *Xylella fastidiosa*'s vector, they are pests that need to be carefully considered.



Figure 1. Habitus of *Neophilaenus campestris* (Fallén, 1805)

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