

## **Species Diversity of Empididae (Diptera) in Siirt Province**

Mustafa Cemal Çiftçi<sup>1</sup>

<sup>1</sup>*Siirt University, Agriculture Faculty, Department of Plant Protection, Siirt, Turkey*

*Corresponding author: e-mail: empididae@gmail.com*

**Introduction:** Empidid adults are usually small to medium-sized species whose bodies are usually black and shiny or densely grey dusted. They are flower visitors, because of this, they are very important in pollination. Pollination is a mechanism that guarantees the seeds and development of plants. For this reason, knowing the insect fauna in a region does not only represent a faunistic value, but also contributes to the continuity of plant diversity in the region. Siirt province is very poor in terms of forest but it is rich in steppe. The summers are quite hot and arid but it also has a variable elevations and this affects species diversity in a positive way. Until now, there is only one study about the fauna and biodiversity of Empididae of Siirt. This study aimed to reveal the Empididae fauna of Siirt Province, to contribute to the fauna of Turkey and to reveal species diversity.

**Material and Methods:** This study was carried out as a result of field studies in Siirt between 2014-2016. Specimens were collected from different habitats by sweep method using hand net. Captured specimens were killed in killing jars with ethyl acetate. Specimens were made into standard museum material, then placed in collection boxes and diagnosed using related literature.

**Results:** As a result of the field studies conducted between 2014 and 2016, 16 species from Empididae were determined in Siirt province. Eleven of these species belong to the genus *Empis* and five to the genus *Hilara*.

**Discussion:** Southern of Turkey acts as a gateway to Anatolia for species spreading in Syria, Iraq and Israel. From a zoogeographical point of view, most of the species identified at this study have distributed in the areas where Turkey, Iraq, Syria and Israel are located. In Siirt province, summer temperature is very high and stagnant, but the difference in altitude and the presence of various flowering plants in the steppes have positively affected Siirt empidid species diversity. It's a fact that the number of empidid species in the region will increase with the studies to be carried out in Siirt province and its vicinity in the future. The number of species belonging to Empididae, known from Turkey, is relatively low in proportion to species numbers in the World and Europe, thus constituting the idea that Turkey should be better screened with local faunistic studies.

**Keywords:** Empididae, *Empis*, *Hilara*, Siirt, Fauna

**Acknowledgment:** This work was supported by Siirt University Scientific Research Projects Coordinator (BAP, 2015-SİZİR-04).