

Bioecological and Faunistic Investigation of Insect Taxa in Patato Agricultural Areas and Surroundings of Derinkuyu District

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Abstract

Insects (Arthropoda: Insecta) are among the most important organisms of our planet in terms of biodiversity, ecological balance and economic effects. Our country has a rich insect fauna thanks to its location between the Asian and European continents, different climatic conditions and diverse vegetation. However, studies on insect diversity in Turkey are limited to certain regions, and there is a lack of taxonomic information on the insect fauna structure of arid and semiarid ecosystems and agricultural areas, especially in Central Anatolia. This research was conducted in the areas where potato farming is carried out and their surroundings in Derinkuyu district of Nevşehir province, which is located in the Central Anatolia Region and has great importance in terms of the regional economy, and aims to determine insect species diversity and ecological roles. Field studies were carried out between March and November 2022-2023. In the study, ecological and faunistic characteristics of Arthropoda: Insecta taxa were examined and the effects of environmental factors (temperature, humidity, precipitation) on insect populations were evaluated.

Keywords: *Insecta, Ecology, Biodiversity, Fauna, Derinkuyu, Potato plant*

