

**Altitude and Habitat Preferences of Zerconid Mites (Acari: Zerconidae)
in Afyonkarahisar Province (Turkey)**

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Aim of the study: Zerconid mites represent with many endemic species in Turkey. Until now, more than one hundred species were recorded from Turkey. This study was aimed to research about altitude and habitat preferences of zerconid mites in Afyonkarahisar province.

Material and Methods: This study based on materials which collected from various forestland areas in Afyonkarahisar province between February 2014 and August 2016. Litter, soil and moss samples were collected from research areas and transferred to laboratory. During the field studies, habitat types (*Acacia* sp., *Acer* sp., *Astragalus* sp., *Cedrus libani*, *Cistus* sp., *Crataegus monogyna*, *Cupressus* sp., *Cydonia oblonga*, *Elaeagnus angustifolia*, *Euphorbia* sp., *Juglans regia*, *Juniperus* sp., *J. oxycedrus*, *Melia* sp., *Morus alba*, moss, *Paliurus spina-christi*, *Pinus* sp., *P. brutia*, *P. nigra*, *Platanus orientalis*, *Populus* sp., *Prunus* sp., *P. dulcis*, *Pyrus* sp., *P. elaeagrifolia*, *Quercus* sp., *Q. cerris*, *Q. coccifera*, *Q. infectoria*, *Q. ithaburensis*, *Q. pubescens*, *Q. vulcanica*, *Rosa* sp., *Rosa canina*, *Rubus* sp., *Salix* sp., *Salvia* sp., *Urtica* sp., *Verbascum* sp., *Vitex agnus-castus* and *Vitis* sp.) and height zones (between 800-2100 meters) of collected samples were noted.

Results: After identification processes, 24 different zerconid species were found in research area (1 species belong to genus *Prozercon* and 23 species belong to genus *Zercon*). Distribution features of zerconids were revealed according to detected habitat types and altitude zones. When informations are compared which about height zones of detected zerconids, specimens of *Z. mehmeturhani* and *Z. osmaneliensis* spread at only low altitudes (800-900 m). Otherwise, specimens of *Z. arslani*, *Z. tefenniensis* and *Z. yusufi* spread at only high altitudes (over 1400 m). Remaining species range from 800 to 2100 meters. Also, only specimens of *Z. colligans* were detected at all height zones. Additionally, in *Quercus* sp., *Juniperus* sp. moss, *Paliurus spina-christi*, *Pinus* sp. habitats, species richness is highly. However, in *Acer* sp. *Cupressus* sp., *Cydonia oblonga*, *Euphorbia* sp., *Melia* sp., *Platanus orientalis*, *Quercus pubescens*, *Rosa* sp., *Salvia* sp., *Urtica* sp., *Verbascum* sp., *Vitex agnus-castus* and *Vitis* sp. habitats, specimens of only one species were detected. With all these informations, it is predicted that zerconid mites have different habitat and altitude preferences and it is considered that distributions of zerconids closely related with these parameters.

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