

Abstract

The aim of the research was to compare the natural sand dune grassland habitat with the surrounding, non-natural habitats (sand dune grassland with invasive plant species, agricultural field, black pine plantation, and black locust plantation) in the Great Hungarian Plain. A total of 1437 ant individuals were identified, and 32 species were detected in the 5 habitat types in this study. Most species were identified at the natural sand dune grassland habitat (26 species). 10 species were detected in the sand dune grassland infested with invasive plants, 4 in the agricultural field, 17 in the black pine plantation, and 8 in the black locust plantation. The highest organic matter content was measured in the sand dune grassland habitat. In the black pine plantation, the ant fauna has been adapted to the habitat type over the years, and to a large extent, a new ant community with different species has been formed. In my research I was able to detect *Tetramorium ferox* and *Temnothorax turcicus* species, which have been published from only 3-3 locations in Hungary.