Study of the Biodiversity of Entomofauna in Relation to Vegetation Distribution and Environmental Factors in Saltwater Wetlands (Sebkhet Bazer, Algeria)

Djamila MOUHOUBI [1], Mustapha BOUNECHADA[2] and Redha DJENIDI.[3]
[1] Dept. of Basic Sciences, Faculty of Life and Natural Sci., Lab. Res. (LADPVA), Univ. of Setif 1, Algeria
[2] Dept. of Biology and Animal Physiology, Faculty of Life and Natural Sci., Lab. Res. (LADPVA), Univ. of Setif 1, Algeria
[3] Faculty of Life and Natural Sci. and Universe and Earth Sci., Univ. of Bordj Bou-Arreridj, Algeria
bounechadam@yahoo.fr

Aim of the study: The present study aims at assessing entomofauna biodiversity in the Saline wetlands (Sabkhats) located in the northeast of Algeria in the Sebkhat Bazer. To determine the environmental factors their predominant the distribution of insects (Entomofauna).

Material and Methods: An inventory was carried out to study the entomofauna, diversity and distribution in three stations were selected of Sebkhat Bazer, during September 2015 to August 2016. The selected stations in the study area were divided to 9 transects according to distribution of plant and according to the soil salinity in each of stations.

Results:A Total of 7563 insects belonging to 8 orders, 40 families, 56 genera and 62 species were collected from the Sebkhat Bazer. The Highest abundance was noted in Coleoptera species (46.77%) while lowest abundances were noted in Collembola and Orthoptera species (03,23%) respectively. Highest number of (3286) individuals was found in station 2, while the lowest number (1883) individuals was obtained in station3. The Highest abundance of insects (56) were recorded in transect I station 2 and lowest abundance of species were recorded in transectIII station 3. Seasonally changes showed the highest count of species was existence in spring, while the lowest count of species in winter. Diversity and Equitability indices showed highest values in station 2 (H= 3.172; E= 0.781), while lowest values in station 2 (H= 2,87; E= 0,729). Similarity Jaccard index (J) showed highest similarity was between station1 transect I and station2 transect I (0,894). There were no significant correlation between the soil salinity and abundance of species and between the abundance of species and distribution of plants in all the 9 transects species / habitats.

Keywords: Entomofauna, Vegetation, Wetlands, Sebkhat Bazer, Ecological Indices, Algeria.