



**Biodiversity of ground beetles community (Coleoptera : Carabidae) in a
RAMSAR site : chott Tinsilt, East of Algeria**

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Abstract

The current study treats the biodiversity and the structure of the carabid beetles taxocoenosis living in Chott Tinsilt, which is a salt lake situated in the East of Algeria, and belonging to the semi arid bioclimatic stage. The carabidofauna was bimonthly sampled from November 2016 to October 2017, using pitfall traps set up in two stations (48 trap for each) in the vicinity of the chott. The catches totalled 1121 individuals belonging to 42 species, 24 genera and 12 subfamilies. The most species rich subfamily was Harpalinae with 14 species (33.33 % of total), however, the most abundant subfamily is Brachininae with 469 individuals (41.83 %). The most abundant and dominant species were *Brachinus sclopeta* with 446 individuals (39.78%) followed by *Trichochlaenius chrysocephalus* with 214 individuals (19.09%). A variation in space and in time of the alpha diversity was revealed and the Bêta diversity was studied. The non parametric species richness estimator (Chao 1) indicated that there is a big difference between the observed species richness and the estimated species richness. The largest number of species was found in 2 chorotypes: W-Mediterranean (12 species, 28.57%) and Mediterranean (8 species, 19.05%).

Key words: Carabidae, RAMSAR wetland, Alpha diversity, Bêta diversity, East Algeria.