

INVENTORY OF ARTHROPODS FROM THREE DIFFERENT TYPES OF PALM GROVES IN THE REGION OF SOUF (EL OUED, ALGERIA)

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ABSTRACT

The current study aims to establish an inventory of arthropods from three types of palm plantations in the region of Souf (33°-34° N and 6°-8° E). Three sampling methods were used in this investigation. The pitfall trap technique was used in the traditional palm grove of Robbah, in the modern palm grove of Dhaouia and in Oued El Alenda. In the traditional palm grove of Robbah we collected 195 individuals belonging to 50 species. The Shannon-Weaver Diversity Index (H') ranged from 2.46 to 3.57 bits, and the evenness (E) from 0.82 and 1.07. In the modern palm grove of Dhaouia 638 individuals were captured, corresponding to a richness (S) of 69 species, H' between 0.95 and 3.69 bits and E from 0.25 to 0.88 bits. In the abandoned palm plantation of Oued El Alenda we collected 28 species, with S of 5,6 species, H' of 2.97 bits and E ranging from 0.47 to 0.85 bits. The use of the sweep net method allowed collecting 165 individuals belonging to 68 species: 87 individuals belonging to 26 species in the traditional palm grove of Robbah, 74 individuals belonging to 25 species in the modern palm grove of Dhaouia, and 40 individuals belonging to 17 species in the abandoned palm plantation of Oued El Alenda. Finally, 294 individuals representing 21 species, all of them belonging to the order Orthoptera, were collected using the method of the quadrats.

KEYWORDS: Souf, Inventory, Arthropods, Palms, Pots Barber, Sweep Net, Quadrats, Indices of Ecology

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