

## Entomological Study of Pests of Olive Trees in the Region of Batna - Algeria

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**Abstract :** Our work aims to study the insect diversity based on bioclimatic levels of pests in olive cultures (*Olea europea* L.) in the area of Batna (arid and semi arid north eastern Algeria) during the period from January 2011 to May 2011. Several sampling techniques were used, those of hunting on sight, visual inspection, hatches traps, colored traps, Japanese umbrella and sweep net. We have identified in total, 2311 individuals with results in inventory 206 species divided to 74 families and 11 orders, including Coleoptera order is quantitatively the most represented with 47.1%. The most dominant diet in our inventory is the phytophagous. Between the herbivorous insects that we have listed and which are the main olive pest of olive cultivation; we quote the olive fly (*Bactrocera oleae*), cochineal purple olive (*Parlatoria oleae*) the psyllid olive (*Euphyllura olivina*) and olive Trips (*Liothrips oleae*). The distribution of species between stations shows that Boumia resort with the most number of species (113) compared to other resorts and beetles are also better represented in three groves. Total wealth is high in Boumia station compared with the others stations. The values of ( $H'$ ) exceeding 3.9 bits for all the stations studied indicate a specific wealth and diversity of ecological nests in insect species. The values of equitability are near the unit; that suggests a balance between the numbers of insect populations sampled in the various stations.

**Keywords :** entomology, olive, grove, batna, Algeria

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