

Abstract

# Wildlife Parasitoids of *Citrus* Pest (Orange and Lemon Tree) in Mostaganem, Algeria <sup>†</sup>

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**Abstract:** *Citrus* fruits are considered, in Algeria, to be a strategic crop, given their importance in food and human health. They attract a phytophagous fauna, as well, as their natural enemies, which are quite remarkable in ensuring natural regulation. A parasitoid inventory was conducted in three *Citrus* orchards at the University of Mostaganem's experimental farm in Mazagan during the years 2018–2019, with a total of thirty *Citrus* trees studied. The parasitoid insects were identified in the laboratory using a binocular dissection microscope and direct inspection while processing the gathered leaves. This study enabled the identification of a group of distinct parasitoids that grow on harmful insects such as aphids and cochineal insects, and some of which have been found as adults, who belong to different families: Aphelinidae, Trichogrammatidae, Braconidae, Chalcidoidea, and Figitidae, among which we can quote: *Encarsia* sp., *Aphytis* sp., *Trichogramma* sp., *Lysiphlebus* sp., *Bracon* sp., *Aphidius matricariae*, *Praon* sp., *Alloxysta* sp., and several other parasitoids are yet to be identified. Natural enemies reflect the natural ecological integrity of ecosystems, and Elekçloğlu, 2007 have found natural enemies such as *Aphytis melinus*, *Chrysoperla carnea*, *Conwentzia* sp. *Chilocorus bipustulatus*, *Exochomus quadripustulatus*, and *Adonia variegata*. These findings may be sufficient as an effective first step in learning about auxiliary insects, in order to establish proper breeding methods and carry out biological control.

**Keywords:** *Citrus*; inventory; parasitoids; Mostaganem

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**Data Availability Statement:** The samples were taken from the Citrus orchard of the experimental farm of the Department of Agronomic Sciences at Mazagan. 35.8956; 0.071433; 35°53'44'' N, 0°4'17'' E, mostaganem with. Between December 2018 and January 2019, 15 leaves were collected from each tree, for a total of 450 leaves per sampling.

**Conflicts of Interest:** The authors declare no conflict of interest.



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