

## DIVERSITY, STRUCTURE AND COMPOSITION OF SCALE INSECTS POPULATIONS (HOMOPTERA: COCCOIDEA) ON CITRUS IN KABYLIA, ALGERIA

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### ABSTRACT

Ten species of mealybugs (Homoptera, Coccoidea) were inventoried in Kabylia on various citrus species, which are: lemon, Clementine, Thomson orange and washingtonorange during two-years, from March 2014 to March 2016. They belong to the four families: the Diaspididae, the Coccidae, the Pseudococcidae and the Margarodidae. This study allowed us to demonstrate the presence of a new species of cochineal (Coccidae: *Coccus pseudomagnoliarum* Kuwana) in Algeria and also to report for the first time in Algeria the presence of *Ceroplastesrusci* on citrus. The relative abundance calculated for the families and the inventoried species showed a strong dominance of the Diaspididae family with (90.3%) and *Parlatoriaziphi* is the pest species that predominates in Kabylia with an average of 76.3% followed by *Aonidiellaaurantii* with an average of 7.3%. The application of ecological concepts on the populations of mealybugs in our study is the first in Algeria. Equal distribution of cochineal species is minimal, which shows that *Parlatoriaziphi* is an omnipresent or dominant species and that *Ceroplastesrusci* is a very rare species on citrus and sometimes accidental.

**KEYWORDS:** Diversity, Coccoidea, Distribution, Citrus, Orchard, Kabylia