STUDIES ON APHIDS SPECIES INFESTING "FABA BEAN" AND ITS CONTROL IN EGYPT AND THE SUDAN

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THESIS

Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of African Studies

Natural Resources, Animal Resources

Natural Resources Department

Faculty of African Postgraduate Studies

Cairo University

2021

ABSTRACT

Faba beans are used as a source of protein, calories, minerals and vitamins. They are considering as a major protein source especially where animal protein is expensive in developing countries. Controlling aphid in crops is very important to increase the quality and quantity of the products. Therefore, to plan a control program of this pest it is necessary to investigate some ecological and biological studies.

Survey studies were carried out to survey and identify aphid species infesting faba bean plants (*vicia faba* L.) Giza 77 variety was cultivated in Qaha,Qalubyia Governorate, Egypt, during the two seasons (2017/2018 and 2018/2019).The obtained data showed that there are four aphid species; it was obvious clear that *Aphis craccivora* counted the highest population density during the two seasons under study, followed by *Acyrthosiphon pisum*, then *Aphis fabae* and *Myzus persicae*

by Biological parameters of A. craccivora reared on faba bean seedlings,at 19°C and 35+60% R.H Data presented showed that there are four stages of the nymphal development before it reaches the adult of *Aphis craccivora* and It was evident that temperature 19 Co the optimal range for the population growth of *Aphis Craccivora* on faba bean plant.

When studying the efficacy of the Newnoctoide insecticide against the adult of Cowpea aphid *Aphis craccivora* laboratory strain. The treatment was implemented by using leaf-dip technique and the obtained results showed that the pesticide Imaxi against the cowpea aphid, *Aphis craccivora* adult indicate that the tested compound is promising toxic effect. Mortality percentages in this aphid species increased gradually with increasing the concentrations as well as the periods after exposing this species to the toxicant.

Key Words: Faba beans - Aphid - *Aphis craccivora* – Biology.

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