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**BIOLOGICAL CONTROL OF SOME SUCKING  
PESTS**

**BY**

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## **ABSTRACT**

During this study, we used entomopathogenic fungi *Verticillium lecanii* as abiological control for *Aphis gossypii* Glover. The effect of physical factors as incubation temperature, incubation period, PH values, utilization of different media for fungal growth, nutritional factors, degrading enzyme activities and laboratory efficacy of *Verticillium lecanii* were studied. Survey and population density of certain insect pests infesting cucumber plants and their natural enemies were carried out in the newly reclaimed sandy area of El-Salhia district, Sharkia Governorate, Egypt. Field experiments were conducted during summer and autumn plantations during the two seasons of 2017 and 2018. Cucumber plant is subjected to be attacked by several major piercing-sucking insect pests which cause severe damage. The most dangerous pests are the two aphid species *Myzus persicae* Sulzer and *Aphis gossypii* Glover; whitefly *Bemisia tabaci* Genn. and thrips *Thrips tabaci* Lind. Insect predators associated with the above-mentioned cucumber insect pests had been surveyed and recorded as following: *Orius leavigatus* Fieb., *Orius albidipennis* Reut., *Coccinella septumpunctata* L., *Coccinella undecimpunctata* L., *Chrysoperla carnea* Steph., and *Metasyrphus corolla* F. The insect parasitoid species were the primary parasitoid *Diaeretiella rapa* M`Intosh., *Aphidius colemani* Viereck., and the hyper parasitoid *Aphidencertus* spp. were recorded. Effect of temperature and relative humidity on the population densities of insect pests and its associated predators and parasitoids on cucumber, were also recorded.

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