

STUDY ABOUT THE EFFECT OF *BEAUVERIA BASSIANA* (VUILLEMIN IN 1912) ON THE AQUATIC STAGES OF *CULEX PIPIENS* (LINNÉ, 1758)

SONIA HAMID^{1,2}, FATMA HALOUANE¹, FATMA ZOHRA BISSAAD¹ & FARIDA BENZINA¹

¹Laboratory of Valuation and Conservation of Biological Resources, Faculty of Sciences, University of M'hamed Bougara,
Boumerdes, Algeria

²Microbiological Laboratory, Faculty of Biological Sciences, University of Sciences and Technology Houari Boumediene,
Bab Ezzouar, Algeria

ABSTRACT

The Culicidae are biting insects, the most harmful to people (Himmi, 1991), they are almost all bloodsuckers, and they are responsible of the spread of many important diseases such as malaria, yellow fever, and elephantiasis.

The Culicidae family is the most important; it includes three main kinds, pathogenic for humans: Anopheles, Aedes and Culex (Feuillet & al., 2006).

Chemical insecticides are increasingly considered as the last means of fighting against the pest populations. Because they greatly increase production costs and that their excessive use can cause adverse effects on human, animal and environmental health.

In this context, the search for alternative methods of fighting takes all its importance, to replace their employment with reduced risk tools.

Entomopathogenic microorganisms occupy an important place among the alternative methods of fighting against pests insect. The fungus *Beauveria bassiana* is an entomopathogenic agent naturally present in the ecosystems. It offers a very interesting potential for controlling populations of mosquitoes (Ziani, 2008)

The objective of this study is to measure the impact of the use of insecticides preparations of *B. bassiana* that we have recently isolated, on populations of the *Culex pipiens* mosquito.

The found results reveal that the used strain showed a satisfactory efficiency against the eggs and different larval stages treated, comparatively with witnesses of the same age.

KEYWORDS: Entomopathogenic, *Beauveria bassiana*, *Culex pipiens*, Mosquitoes, Anopheles, Aedes and Chemical Insecticides