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Study of the Toxic Activity of the Entomopathogenic Fungus Beauveria bassiana on the Wistar Rat Rattus norvegicus

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Abstract : The use of a biopesticide based on a microorganism scale requires particular care including safety against the useful auxiliary fauna and mammals among other human beings. Due to its persistence in soil and its apparent human and animal safety, Beauveria bassiana is a cryptogram used for controlling pests organizations, particularly in the locust where its effectiveness has been proven. This fungus is also called for greater respect for biotic communities and the environment. Indeed, biopesticides have several environmental benefits: biodegradability, their activity and selectivity decrease unintended non-target species effects, decreased resistance to some of them. It is in this sense that we contribute by presenting our work on the safety of B. bassiana against mammals. For this we conducted a toxicological study of this fungus strain on Wistar rats Rattus norvegicus, first its effect on weight gain. In a second time were performed histological target organ is the liver. After 20 days of treatment, the results of the toxicological studies have shown that B. bassiana caused no change in the physiological state of rats or weight gain, behavior and diet. On cuts in liver histology revealed no disturbance on the organ.

Keywords: B. bassiana, entomopathogenic fungus, histology, Rattus norvegicus

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