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Pathogenicity of local isolation of bacteria Bacillus thurengiensis Berliner from great wax moth: Galleria mellonella (Lepidoptera, Gelechiidae)

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Abstract

Galleria mellonella is one of the most important pest on bee hives in Syria. Five bacterial strains were isolated from infected larvae of G. mellonella. They identified as Bacillus thuringiensis. using various morphological, microscopic test and biochemical characteristics. Their pathogenicity were evaluated during 2011- 2013 on larvae of G. mellonella using different concentration of mixture of crystals and spores. The highest mortality was obtained after 72 h from the isolate B2(66.67%). The LC₅₀ was evaluated for the strains which showed differences value on tested instars, and ranging from 1.62X10⁷ cfu/ ml for B2 strain, to 5.93X10¹⁰ cfu/ml for B4 strain. Our result indicated that the strains of B. thuringiensis isolated from Syria will be valuable as biological control agents to G. mellonella

Biography:

Mahaba Ghannam has completed his PhD at the age of 42 years from Agricultural Faculty, Damascus University, Syria. She is the reasearcher in General Commission for Scientific Agricultural Research. She has published more than 10 papers in reputed journals.