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RESEARCH ARTICLE

Bioefficacy of *Beauveria bassiana* (Balsamo) against third instar larvae of *Spodoptera litura* (Far.)

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SUMMARY

Among the microbial agents, the first diseases in insects were cause by fungus that has conspicuous macroscopic growth on the surface of their host. All most all insects order is susceptible to fungus diseases. Entomopathogenic fungi are associated with insects living in diverse habitats, including fresh water, soil, soil surface and aerial locations. Laboratory studies were undertaken to evaluate the bioefficacy of *Beauveria bassiana* against 3rd instar larvae of *Spodoptera litura*. *B. bassiana* was identified, isolated and maintained from field collected cadaver of lepidopteron larvae. White colour spore were taken in sterilized plate and white colonies from these plates were transferred aseptically in culture slant containing PDA media. *Spodoptera litura* was reared in artificial diet. Spore suspension of three different concentrations 0.1, 0.125 and 0.2×10^8 were prepared by serial dilution. When these concentrations of spores were applied on 3rd instar larvae of *S. litura*, it increases the percentage of mortality. The fungal preparation @ 0.2×10^8 spore/ ml caused 80% (maximum) mortality of *Spodoptera litura* followed 0.125×10^8 spore/ ml (73.3%) and 0.1×10^8 spore/ml (46.6%). The minimum mortality was observed under control *i.e.* 23.3%. Thus, as the number of spore increased, per cent mortality also increased. Hence, fungal spore were developed with a strong emphasis on protecting the environment and consumers from harmful effects of poisonous chemical pesticide.

Key Words : Bioefficiency, Larvae, Instar

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