

EFFICACY OF BIO-RATIONAL INSECTICIDES AGAINST THE MANAGEMENT OF BRINJAL SHOOT AND FRUIT BORER

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Abstract: The field experiment was conducted at Research Cum Instructional Farm of Raj Mohini Devi College of Agriculture and Research Station, Ambikapur (C.G.) during Rabi 2018-19, for the efficacy of bio-rational insecticides against the management of brinjal shoot and fruit borer. Bio-rational insecticides such as Neem seed extract 5%, Karanj oil 1%, Eucalyptus oil 1%, Neem oil 1%, *Metarhiziumanisoplae* 2.8×10^6 and *Beauveriabassiana* 2.04×10^6 , *Bacillus thuringiensis* 2×10^8 , etc. were evaluated for their efficacy against *Leucinodes orbonalis* in field conditions. The overall per cent shoot and fruit infestation and number of larvae per plant in insecticidal treatments were seen to be significantly low over control. However, Neem seed extract 5% was found superior from rest of the insecticides. The Neem seed extract 5% against the shoot and fruit borer, *Leucinodes orbonalis* was found to be most effective chemical because it recorded the minimum per cent shoot and fruit infestation (22.92%). The second best treatment was *Beauveriabassiana* 2.04×10^6 (25.06%) followed by Neem oil 1% (23.81%), *Bacillus thuringiensis* 2×10^8 (25.05%) *Metarhiziumanisoplae* 2.8×10^6 (26.21%), Eucalyptus oil 1% (27.45%), Karanj oil 1% (29.53%). Whereas in control plot maximum per cent shoot and fruit infestation (54.42%) were observed.

Keywords: Brinjal, Bio-rational insecticides, Neem seed extract

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