

## Summary of MRP for Website

UGC Reference No **47-1090/09**

Title of research project Study of “**Bio efficacy of *Paecilomyces lilacinus* for the management of Root Knot Nematode in Brinjal**”

Name of the Principal Investigator **Dr. Mrs. Rina Sharad Saha**

The experimental study was done in the potted plants in controlled environment as well as at the experimental farm provided by “Go Vigyan Anusandhan Kendra” Devlapur on Jabalpur Road. Seeds were treated as per the dose given below.

The fungal bioagent *Paecilomyces lilacinus* were applied both in laboratory and field condition to study the efficacy in controlled and natural environment.

Nematodes feed damage the plant roots and reduce the water and nutrient uptake which result in reduction in yield. In addition, the infested plant becomes more vulnerable to other stress factors such as heat, water, nutritional deficiencies and disease-causing organisms. It is difficult to control the nematodes with common chemical pesticides

In the experiment, the potential of fungi, the facultative egg-pathogenic fungus *Paecilomyces lilacinus* for control of plant parasitic nematodes *M. incognita* was evaluated. Studying the mode of infection of a biocontrol agent is important in order to assess its efficiency. The mode and severity of infection of nematodes by a soil saprophyte *Paecilomyces lilacinus* were studied under laboratory conditions using microscopy. Different *P. lilacinus* doses against *M. incognita* in brinjal in pots was tried and reported 75 g dose to be most effective giving 90% nematode control