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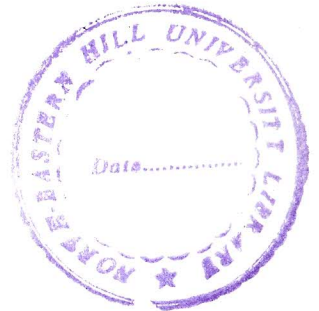
**FAUNAL COMPOSITION AND DISTRIBUTION OF
ENTOMOPATHOGENIC NEMATODES AND THEIR BIOEFFICACY
AGAINST MAJOR INSECT PESTS IN RI-BHOI DISTRICT OF
MEGHALAYA**

ABSTRACT

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ABSTRACT

Entomopathogenic nematodes (*Heterorhabditis* spp. and *Steinernema* spp.) are promising biological control agents for a variety of soil-dwelling insect pests. The present work deals with a study on ascertaining the faunal composition, distribution, ecological characterization and bioefficacy of entomopathogenic nematodes in the Ri-bhoi District of Meghalaya. The objectives of study were:

1. To ascertain the faunal composition and distribution of EPNs in Ri-bhoi District of Meghalaya.
2. To study the seasonal prevalence of EPNs.
3. To characterize the EPN species with respect to ecological parameters.
4. To test the bioefficacy of locally isolated EPN species against major insect pest in the area.

To study the occurrence and distribution of EPNs in the area, soil samples from different habitats (Dry land, Wet land, Jhum land and Forest land) were collected and baited by *Galleria* traps. Entomopathogenic nematodes were recorded from 89 samples (5.37%) out of 1656 samples collected from various habitats. Out of 89 positive samples, the frequency of occurrence of *Steinernema* spp. was recorded to be more (73.03%) than *Heterorhabditis* sp. (26.97%). All the EPN positive

