

Eco-friendly management of shoot borer *Conogethes punctiferalis* (Guenee) infesting ginger (*Zingiber officinale* Rosc.) through entomopathogenic nematodes

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ABSTRACT: Infectivity of *Heterorhabditis indica* (NBAIL Hi 01) and *Steinernema abbasi* (NBAIL Sa 01) were tested against larvae and pupae of the shoot borer, *C. punctiferalis* and their multiplication in the hosts was assessed. Both species of tested EPNs were found pathogenic against shoot borer larvae and it brought about cent per cent mortality within 72 h. However, *H. indica* (NBAIL Hi 01) was the most virulent isolate against the shoot borer pupae, causing 33% mortality, followed by 17% mortality by *S. abbasi* (NBAIL Sa 01). In case of multiplication of IJs, both EPNs multiplied on the tested insect, but the level of multiplication varied significantly. Maximum number (18,277 IJs/ cadaver) of infective juveniles of *S. abbasi* (NBAIL Sa 01), whereas the lesser number juveniles (5,135 IJs/ cadaver) of *H. indica* (NBAIL Hi 01) multiplied on shoot borer larva. The infectivity of the above EPNs against shoot borer opens up a new hope of utilizing them in insect pest management in ginger.

Key Words: Entomopathogenic nematode, *Conogethes punctiferalis*, *Zingiber officinale*.