

BIOCONTROL POTENTIAL OF ENTOMOPATHOGENIC NEMATODES AGAINST GRAM POD BORER, *HELICOVERPA ARMIGERA* (HÜBNER)

Rashid Pervez

Received June 11, 2010 and Accepted November 13, 2010

ABSTRACT: The effectiveness of three entomopathogenic nematode (EPN), *Steinernema masoodi*, *S. seemae* and *S. mushtaqi* against 2nd, 3rd, 4th instar and fully grown larvae of gram pod borer, *Helicoverpa armigera* (Hübner) were tested in the laboratory. The suitability of these different instar larvae of pod borer for the *in vivo* mass production of the nematodes was also estimated. Among the three species of EPN, *S. mushtaqi* was more pathogenic against all tested instar larvae followed by *S. masoodi* and *S. seemae*. Fully grown larvae was best host for the production of the infective juveniles of all tested species of EPN, followed by 4th instar, 3rd instar and 2nd instar larvae of pod borer. Variation of yield of IJs, percentage mortality and their ability to support large population can be correlated with the body size of tested insect. The present study gives a clue for 2nd instar larvae was more susceptible to EPN and fully grown larvae are best host for mass production of EPN.

Key Words: Entomopathogenic nematodes, *Steinernema*, efficacy, *Helicoverpa armigera*.