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ABSTRACT

Entomopathogenic nematodes are used in biological control of pests. The cry proteins from insect resistant cotton may affect their infectivity. The effect of *Bacillus thuringiensis* (Bt) cotton (06Z604D) on infectivity of *Heterorhabditis bacteriophora* and *Steinernema karii* was investigated in the green house. The nematodes were introduced into pots containing Bt cotton (06Z604D), isoline (99M03) and Hart 89M (local non Bt cotton cultivar). After 6 months, the nematodes were recovered from soil and their infectivity towards *Galleria mellonella* larvae was determined. The presence of Bt protein in roots and soil was determined at the end of the growing season by qualitative enzyme-linked immunosorbent assay (ELISA). Bt protein was present in the roots and soil of Bt cotton. No Bt protein was detected in HART 89M and isoline roots and soil. There was a significant species*time* treatment interaction and the nematodes collected from all the treatments caused >50% mortality.

Key words: *Bacillus thuringiensis*, entomopathogenic nematodes, virulence