

**EFFICACY OF THE BACTERIAL CELL SUSPENSIONS FROM
ENTOMOPATHOGENIC NEMATODE *STEINERNEMA ABBASI*
AGAINST LARVAE AND PUPAE OF *SPODOPTERA EXIGUA*
AND *GALLERIA MELLONELLA***

A.N. MAHAR*, S.A. ELAWAD, S.R. GOWEN AND N.G.M. HAGUE

*Department of Agriculture, the University of Reading, P. O. Box 236,
Earley Gate, Reading RG6 6AT, UK*

**Z.A. Bhutto, Agriculture College, Dokri, Larkana, Sindh, Pakistan*

Abstract

The bacterium *Pseudomonas putida* from entomopathogenic nematode *Steinernema abbasi*, applied as an aqueous broth suspension of cells, was lethal to larvae and pupae of beet army worm, *Spodoptera exigua* and the greater was moth *Galleria mellonella*. The bacterial cells were able to penetrate into the haemocoel of the larvae and pupae, but the method by which the cells gained entry to the haemocoel was not determined. The bacterial cells were most effective when applied under moist conditions. Applying suspensions of bacterial cells may provide a strategy for controlling the insect pests on foliage or in soil. Such applications are likely to be subject to normal registration procedure for bio-pesticides.