

Entomopathogenic Nematodes from the Coastal Belt of Sri Lanka and their Efficacy in Controlling Termites

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ABSTRACT

The present study was carried out to assess the availability of entomopathogenic nematodes in the north-western coastal belt around Puttalam lagoon, three selected agricultural lands in Gampaha district of Sri Lanka and from the coastal belt along the city of Colombo. Nematodes could only be recovered from the coastal belt along the city of Colombo belonging to *Heterorhabditis* and *Steinernema* spp. One common isolate was identified as *Heterorhabditis indicus* (Poinar). Attempts were also made to examine the relationship between the presence of entomopathogenic nematodes and the texture of the soil. Statistical analysis showed that percentage clay and soil moisture are inversely relate to the recovery of entomopathogenic nematodes. The potential use of *H. indicus* to control two species of subterranean termites, *Odontotermes horni* and *Odontotermis redemanni* (Isoptera: termitidae) was tested in the laboratory. LD₅₀ for *O. horni* was 2.8×10^2 or 2.2×10^2 after four or five days of exposure (LD₅₀ for *O. redemanni* was 2.3×10^2 or 1.8×10^2) to infective nematodes, respectively.
