

NOTE: Molecular Identification of Three Entomopathogenic Nematodes from Turkey by PCR-RFLP of the ITS RegionsI. Alper Susurluk¹ and Umut Toprak^{*,2}

Molecular identification methods are widely used for the classification of organisms worldwide. Entomopathogenic nematodes are the most often isolated insect parasitic nematodes in the tropical and subtropical regions. In our investigation, PCR-RFLP (Polymerase Chain Reaction – Restriction Fragment Length Polymorphism) of the ITS region (Internal Transcribed Spacer) on the ribosomal (r) DNA of three entomopathogenic nematodes isolated from Ankara, Turkey, was analyzed for identification. The ITS region of rDNA was amplified by PCR and then digested with the following nine restriction enzymes: Alu I, Dde I, Hae III, Hha I, Hind III, Hinf I, Hpa II, Rsa I and Sau 3AI. The amplified and restricted sequences of the ITS regions were separated by agarose gel electrophoresis and the RFLP patterns of these three species were shown in this study. According to our results, these species were identified as *Steinernema feltiae*, *Steinernema carpocapsae* and *Heterorhabditis bacteriophora*.

KEY WORDS: *Heterorhabditis bacteriophora*; *Steinernema feltiae*; *Steinernema carpocapsae*; molecular identification; ITS region; PCR-RFLP; Turkey.

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