

Identification of an Entomopathogenic Nematode, *Steinernema monticolum*, and its Novel Symbiotic Bacterium

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Steinernema monticolum (Rhabditida: Steinernematidae) is a new entomopathogenic nematode isolated from Andong, Korea. The nematodes were identified by morphological characters of infective juveniles/adult males, and internal transcribed spacer (ITS) of rDNA. The comparison of ITS sequence with known sequences of other *Steinernema* spp. indicated the highest similarity (100% nucleotide identify) with that of *S. monticolum*. The symbiotic bacteria of *S. monticolum* were isolated by homogenizing the surface-sterilized infective juveniles and plating on tryptic soy agar medium (TSA). To identify the present isolate was used on the physiological and biochemical characters. The 16S rDNA of the bacteria was fully sequenced in a length of 1248 nucleotides and showed the similarity (94% nucleotide identify) with those of *Xenorhabdus* spp. These results report that new isolate of *S. monticolum* have a novel *Xenorhabdus* spp.