

SUSCEPTIBILITY OF THE MEALY PLUM APHID, *HYALOPTERUS PRUNI* (HOMOPTERA: APHIDIDAE) TO TWO ISOLATES OF *STEINERNEMA FELTIAE* (RHABDITIDA: STEINERNEMATIDAE) UNDER LABORATORY CONDITIONS

I. KEPENEKC I AND A. SUSURLUK*

Plant Protection Central Research Institute, Yenimahalle 06172, Ankara, Turkey

**Institute for Phytopathology, Department of Biotechnology & Biological Control, Christian Albrechts University-Kiel, Germany*

Abstract

The mealy plum aphid (MPA), *Hyalopterus pruni* (Geoffroy) (Homoptera: Aphididae) is the most severe pest of plum in Turkey, Entomopathogenic nematodes appear to be a candidate to control this pest. Two entomopathogenic nematode isolates viz., *Steinernema feltiae* (All type) and *S. feltiae* (S₃) (Rhabditida: Steinernematidae) were evaluated against the MPA adult using three doses [25, 50 and 100 infective juveniles (IJ) / 0.2 ml distilled water per adult insect] and at three different temperatures (10, 15 and 25°C). The mortality was recorded after 72 and 96 h of each incubation. According to the results of death ratio in MPA adults after 96 h application are; All type at 25 IJ / 0.2 ml water per adults; 41.6 % at 10, 15°C and 47.2 % at 25°C; for S₃; 38.8 % at 10°C; 41.6 % at 15°C and 47.1 % at 25 °C; All type at 50 IJ / 0.2 ml water per adults; 50 % at 10°C; 61.1 % at 15°C and 66.6 % at 25°C; for S₃; 55.5 % at 10°C; 63.8 % at 15°C and 69.4 % at 25°C; All type at 100 IJ / 0.2 ml water per adults; 58.3 % at 10°C; 72.2 % at 15°C and 74.9 % at 25°C; for S₃; 66.6 % at 10°C; 77.7 % at 15°C and 83.3 % at 25°C. These results suggested that entomopathogenic nematodes could be used in controlling MPA.