

## **BIOLOGICAL CONTROL OF THE ROOT-KNOT NEMATODE, MELOIDOGYNE JAVANICA ON INFECTED TOMATO PLANTS**

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### **Abstract**

The effect of one isolate of *Bacillus subtilis* and two isolates of *B. thuringiensis subsp. aegypti*, the bioproducts Agarin® and Vertemic® and the chemical nematicide Vydate L 24 %, were evaluated on *Meloidogyne javanica* infection on tomato plants in the greenhouse using autoclaved and non-autoclaved soil. Treatment with Vydate L 24 % and 2 mg washed pellet of the tested *Bacillus* isolates caused the great reduction (66.9-96 %), followed by treatment with 10 ml of *Bacillus* isolates supernatant which showed (26.3-57.7 %) reduction in nematode infection and reproduction (numbers of nematode root galls, egg-masses / plant and number of 2nd stage juveniles / 250 cc soil) in both autoclaved and non-autoclaved soil. In another test, treatments with Vydate L 24 %, Agarin® and Vertemic® induced great reduction (66.3-91.8 %) in nematode infection and reproduction on infected tomato plants. Also, treatments with Vydate L 24 % and the tested bioproducts showed significant increase in the dry weight of the shoot and root systems in comparison with check treatment..