

## FIELD APPLICATION OF A COMMERCIAL FORMULATION CONTAINING AN ISOLATE OF BACILLUS THURINGIENSIS FOR MANAGING TYLENCHULUS SEMIPENETRANS ON NAVEL ORANGE TREES

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### Abstract

Effect of a commercial formulation (AgerinR) containing an isolate of *Bacillus thuringiensis* (sub sp. *aegypti* strain C18 and C129 spores and crystals) on citrus nematode, *Tylenchulus semipenetrans* on navel orange trees was studied under laboratory and field conditions. Under laboratory, the standard solution (S) prepared from ½ g agerinR in 100 ml distilled water caused the highest percentage of nematode mortality (56.7 %) followed by those caused by S/2 (55.0 %) and S/10 (36 %). Under field conditions, agerin at intermediate rate of 2 kg / feddan proved to be most effective against the citrus nematode as it caused percentages reduction 46.0 and 40.5% for number of juveniles in soil and females in roots, one month after application, respectively; followed by those of the highest one (3kg / fed.) at the same time. Accordingly, the intermediate rate of AgerinR achieved the highest percentage increases for fruit number and weight per tree and fruit yield per feddan as they were 180, 180 and 181 %, respectively followed by those of the highest one. The nematicide carbofuran achieved 30, 30 and 31.3 % reduction only for the respective criteria..