

Interaction of Cucurbitacin-Containing Phytonematicides and Biocontrol Agents on Cultivated Tomato Plants and Nematode Numbers

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Abstract : Interactive effects of cucurbitacin-containing phytonematicides and biocontrol agents on growth and nematode suppression on tomato (*Solanum lycopersicum*) had not been documented. The objective of this study was to determine the interactive effects of Nemafric-BL phytonematicide, *Trichoderma harzianum* and *Steinernema feltiae* on growth of tomato plants and suppression of root-knot (*Meloidogyne* species) nematodes. A 2x2x2 trial was conducted using tomato cv. 'HTX' on a field infested with *Meloidogyne* species. The treatments were applied at commercial rates. At 56 days after treatments, interactions were significant ($P \leq 0.05$) for selected plant variables, without significant interactions on nematode variables. In conclusion, results of the current study did not support the combination of the test products for nematode suppression, except that some combinations improved plant growth.

Keywords : cucumis africanus, cucurbitacin b, ethnobotanicals, entomopathogenic nematodes, natural enemies, plant extracts

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