

EVALUATION OF SOME BIOCIDES AND LATEX-BEARING PLANTS FOR CONTROLLING THE RENIFORM NEMATODE, *ROTYLENCHULUS RENIFORMIS* ON CHAMOMILE (*MATRICARIA CHAMOMILLA*)

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Abstract

All the evaluated biocides and latex-bearing plants significantly ($p \leq 0.05$ and / or 0.01 levels) decreased the number of *Rotylenchulus reniformis* juveniles in soil, females and egg-masses on root, total final nematode population and consequently the rate of nematode build-up, and improved the growth and yield of chamomile plants as compared to untreated control. The reduction in the developmental stages and build-up of the nematode or increase in all plant growth and yield parameters greatly varied according to the type of the tested material. *Bacillus thuringiensis karastaki* (the major component of Dipel 2x product) seemed to be the most effective biocides in controlling *R. reniformis* followed by *Bacillus subtilis* (the major component of Rhizo-N product) while, application of the active ingredient of Plant-Guard product, *Trichoderma harzianum* was least effective. Also, chopped shoots of *Pedilanthus rithymaloides* gave highest reductions in numbers of juveniles, females, egg-masses and consequently the rate of build-up (92.6, 84.9, 82, 92.2 and 91.3%; respectively) followed by *Cryptostegia grandiflora*, *Calotropis procera* and *Euphorbia pulcherrima*. These materials also showed significant ($p \leq 0.05$ and / or 0.01) improvement in growth and yield of chamomile plants as compared to untreated control.