

BIOLOGICAL CONTROL OF INSECT PARASITIC NEMATODES USING GRASS MOLECRICKET

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ABSTRACT

Mole cricket, *Gryllotalpa Isfahan* is one of the major pests of plants in the soil, especially grass roots, burrowing into the ground, causing damage to the plants and fed. Mole cricket also has its own natural enemies such as the nematodes. In this study, deliberation the effect of the Insect parasite nematodes, including two nematode species *Steinernema carpocapsa* and *Heterorhabditis bacteriophora* on mole crickets population reduction method. Proven design used a randomized complete block. In this regard, the collectors collect mole crickets lab necessary, samples taken in the park polluted Shahinshahr on 90 and 91. A review of laboratory glassware filled with a mixture of sterile soil and manure and cover with piece of turf grass. Due to the nature of speculation mole cricket were examined live according to the number of each container. This study included 3 treatments, each treatment was performed in three replicates, each consisting were placed 8 mole cricket within 5 to 6 adults and 2 to 3 nymphs. The treatments were included control, nematode, *S. carpocapsa* and *H. bacteriophora* The results showed that the use of nematodes- was very effective and meaningful of reducing mole cricket population that order of the treatments, number of live mole crickets is $7.66 \pm SE$, $1.33 \pm SE$, $2.667 \pm SE$, which show the nematode *S. carpocapsa* is more effective than the *H. bacteriophora* on mole cricket population decreasing.

Keywords: biological control, nematodes, mole crickets, parasite



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