

THE EFFECTS OF *BACILLUS SUBTILIS* BACTERIA ON *MELOIDOGYNE JAVANICA* (NEMATODE) INFECTION AND TOMATO PLANT GROWTH

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ABSTRACT

Root-knot nematodes (*Meloidogyne* spp.) are important pests of many cultivated plants. Recently the most efficient chemical control products of nematodes, (e.g. methyl bromide); have been restricted due to their toxic characteristics. This study was conducted in the area of tomatoes (*Lycopersicon esculentum* Mill), which have been grown commercially . in order to isolate *Bacillus subtilis* bacteria from the soil to be used in biological control of root knot disease which caused by nematode *Meloidogyne javanica*. this to eliminate the use of agrochemical and their hazard on human health and environment. the results showed that the application of *Bacillus subtilis* bacteria reduced *Meloidogyne javanica* galls information and number of juveniles in the soil either as a seed treatment, root dipping or as a soil drench application but seeds treatment showed a little better result than the other application methods.

Keywords: Bio-control , *bacillus subtilis* *M. javanica*.