ASSESSMENT OF FABA BEAN DAMAGE CAUSED BY *MELOIDOGYNE INCOGNITA* ROOT-KNOT NEMATODE INFECTION

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Abstract

Under greenhouse conditions, faba bean (*Vicia faba* L.) plants inoculated with 0, 10, 100, 1000 and 10,000 larvae of *Meloidogyne incognita* root-knot nematode per pot showed significant reduction in plant growth and yield under the highest inoculum (p≤0.05 and/or 0.01). Number of nematode galls was greatly affected by the initial nematode population. Cellular alterations of faba bean root infected with the *Meloidogyne incognita* root-knot nematode showed that 2nd stage nematode larvae penetrated the roots of faba bean by puncturing action of the stylet and inter-intra cellular migration into the cortex and endodermis layers causing damage to the cells. Mature females and thick-walled multinucleate giant cells with dense and granular cytoplasm were formed in the cortex, endodermis and stele regions.