

INTER RELATIONSHIPS BETWEEN CERTAIN BANANA CULTIVARS AND *MELOIDOGYNE INCOGNITA* UNDER STRESS OF DIFFERENT INOCULATION LEVELS

A.M. KHEIR, A.W. AMIN, H.H. HENDY* AND M.S. MOSTAFA*

*Department of Zoology and Agriculture Nematology,
Faculty of Agriculture, University of Cairo, Egypt*

**Plant Protection Department, Desert Research Institute, Nematology Unit, Cairo, Egypt*

Abstract

The influence of four inoculation levels (100, 1000, 5000 and 10,000 J₂/plant) of *Meloidogyne incognita* on the nematode behavior and growth response of four banana cultivars were studied under greenhouse condition. In general, the nematode final population proportionally increased with the initial inoculation. On the other hand, the rate of build up of the nematode negatively correlated with its population initials. Comparatively, banana cv. Grande-Naine had remarkable final population when inoculated with 100 or 10,000 juveniles of the root-knot nematode; while Maghraby sustained high populations with all tested inocula. Basrai harboured the lowest nematode final population at any of the inoculum levels. Also, the nematode population was in low or moderate counts on banana cv. Williams when inoculated with the above-mentioned inocula.