HISTOPATHOLOGY OF CHAMOMILE INFECTED WITH MELOIDOGYNE INCOGNITA ANDROTYLENCHULUS RENIFORMIS

A.E. ISMAIL, W.M.A. EL-NAGDI AND M.Y. YASSIN*

Plant Pathology Department, National Research Centre, Dokki, Cairo, Egypt *Nematology Research Centre, Faculty of Agriculture, Cairo University, Giza, Egypt.

Abstract

Histopathological responses in *Meloidogyne incognita* and *Rotylenchulus reniformis* infected roots of chamomile (*Matricaria chamomilla* L) were studied. *M. incognita* larvae entered into roots by a puncturing action of the stylet and inter and intracellular penetration and reached the stele region where cells were damaged. Hypertrophy and hyperplasia of the surrounding cells lead to the formation of galls on the roots. Reproduction of *M. incognita* was shown where egg-masses and eggs in gelatinous matrix were observed in infected roots. Nematode cause severe damage to the vascular tissues by xylem disruption. Histological alternations induced by *R. reniformis* revealed that the hypertrophied cells and / or syncytia were commonly associated with nematode infection.