Pak. J. Nematol., 23 (1): 141-148, 2005

SEASONAL POPULATION FLUCTUATIONS OF PLANT PARASITIC AND OTHER NEMATODES ASSOCIATED WITH *JASMINUM GRANDIFLORUM* AND *ARAUCARIA EXCELSA* IN RELATION TO SOIL TEMPERATURE IN GIZA, EGYPT

A.E. ISMAIL AND W.M.A. EL-NAGDI

Plant Pathology Department, National Research Centre, Dokki, Cairo, Egypt

Abstract

Studies on seasonal fluctuations of the most dominating plant parasitic and other nematode species associated with the rhizosphere of both jasmine and Christmas trees throughout a year indicated negative and positive correlations between the prevailing soil temperatures and the population densities of*Helicotylenchus exallus, Meloidogyne incognita, Rotylenchulus reniformis* and *Trichodorus* sp., onjasmine and *Ditylenchus* sp., *Helicotylenchus* sp., *M. incognita, Pratrylenchus* sp., *R. reniformis, Tylenchorhynchus*sp., and *Tylenchus* sp., on Christmas trees. The population densities of *H. exallus, M. incognita* and*Trichodorus* sp., associated with jasmine attained two peaks in both soil and roots, however, the population densities of *R. reniformis* attained three times of peaks in soil and one peak only in root. As for the population densities of *Helicotylenchus* sp., *M. incognita, Pratylenchus* sp., and *Tylenchorhynchus* sp., associated with Christmas trees showed two distinguishable peaks, but the population densities of *Ditylenchus* sp., *R. reniformis* and *Tylenchus* sp. attained peaks three time in a year.