PLANT PARASITIC NEMATODES ASSOCIATED WITH CHAMOMILE (MATRICARIA CHAMOMILLA L.) IN EGYPT

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Abstract

Chamomile is one of the most important medicinal plants. An extensive survey conducted during the period from November, 2001 till May, 2002 for the occurrence and distribution of plant parasitic nematodes in major chamomile growing Governorates of Assiut, Beni-Suief, Fayoum, Giza, Menia and Sharkia in Egypt revealed the presence of fourteen genera of plant parasitic and other nematodes. Absolute and relative population densities (A.P.D. and R.P.D %), absolute and relative frequencies of occurrence % (A.F.O. % and R.F.O. %) and prominence values (P.V.) were calculated for each nematode genus. The stunt nematode. Tylenchorhynchus spp., fungivorous nematode, Tylenchus spp., root lesion nematode, Pratylenchus spp., and root-knot nematode, Meloidogyne spp. are the major nematode pests on chamomile showing an infection of 81.9 %, 63.3 %, 56 % and 45.5 %, respectively. A.P.D., R.P.D. %, A.F.O. %, R.F.O. % and P.V. of these four nematodes were consistently higher than those of the other nematodes. The presence of these genera inrelative abundance suggests that they may be of potential significance as pests of chamomile. Occurrence and densities of the surveyed nematodes associated with chamomile plant are recorded in relation to different localities.