

RESEARCH ON ROOT-KNOT NEMATODE, *MELOIDOGYNE* BY PAKISTANI SCIENTISTS: A REVIEW WITH DESCRIPTION OF SPECIES PREVALENT IN PAKISTAN

F. SHAHINA***, B. ZARINA, K. FIROZA, M.H. SOOMRO*
AND N. JAVED**

*National Nematological Research Centre,
University of Karachi, Karachi-75270, Pakistan*

***Corresponding author's e-mail: shahinaku@yahoo.com

Abstract

Root-knot nematodes (*Meloidogyne* spp.) are important plant pathogens and have a wide distribution in Pakistan. A lot of research work has been done on different aspects of root-knot nematodes (RKN) except the taxonomic studies. An attempt is therefore made to document taxonomic information of the genus *Meloidogyne* including characteristics of the family, subfamily, and brief description of the five RKN species reported so far with their diagnostic features and illustrations. So far five species of root-knot nematodes viz., *Meloidogyne arenaria*, *M. graminicola*, *M. hapla*, *M. incognita* and *M. javanica* have been reported from Pakistan. The information generated so far is presented in the form of a bibliographic list comprising over 600 references. Host association of the reported species is also provided. Moreover, the work published on geographical distribution, susceptibility, pathogenicity, differential host tests, histopathology, host records, environmental effects and various control strategies of *Meloidogyne* species have been incorporated in the manuscript. It is hoped that this information will be of significance to the young scientists and students working in the field of Nematology.