

SOME NEW HOSTS OF *MELOIDOGYNE* SPP. FROM PAKISTAN

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Abstract

One of the most important pests limiting agricultural productivity is the root-knot nematodes. Plants attacked by them show symptoms of root galling, retarded growth and yellowing of leaves. This condition results in lowering of the quantity and quality of crops. The problem of root-knot nematodes in Pakistan is widespread. Until now, for species of the root-knot nematodes, viz., *Meloidogyne incognita* (Kofoid & White, 1919) Chitwood, 1949, *M. javanica* (Treub, 1885) Chitwood, 1949, *M. arenaria* (Neal, 1889) Chitwood, 1949 and *M. hapla* Chitwood, 1949 have been recorded on several crops (Maqbool, 1981; Maqbool & Saeed, 1981). During a recent survey in Karachi and Quetta, heavily infested root-knot samples from turnip, bitter gourd, almond, hollyhock, antirrhinum, money plant, amaranthus and spinach were collected. The degree of infestation rated according to the scale of Taylor & Sasser (1978) was 4-5. From the swollen roots several pear-shaped females were dissected. The perinneeal patterns of females from turnip, bittergourd and almond had a rounded to flattened dorsal arch with distinct lateral lines and were identified as *M. javanica*. The perinneeal patterns of pear-shaped females from hollyhock, antirrhinum, money plant and amaranthus had an elongated, more or less flattened dorsal arch, wavy closely spaced striae with some forking at lateral lines and were identified as *M. incognita*. Spinach was infected by both *M. incognita* and *M. javanica*. Differential host tests also confirmed the identity of these species. The crops listed appear to be new host records in Pakistan.