

A ROOT-KNOT NEMATODE PATHOGENIC TO COCK'S COMB, CELOSIA ARGENTEA L.

S. A. ANWAR*, A. ZIA AND Q. SHAKEEL

*Plant Pathology Department, University of Agriculture,
Faisalabad*

*Corresponding Author's email: Safdar_uaf2006@yahoo.com

Abstract

The presence of root-knot nematode, *Meloidogyne incognita* was assessed on roots and rhizosphere soil of cock's comb (*Celosia argentea* L.) planted in 5 lawns located at the campus of University of Agriculture, Faisalabad. The infected plants were stunted with galled and rotted roots. Four fungal pathogens including *Fusarium*, *Pythium*, *Rhizoctonia* and *Sclerotia* were isolated from nematode-fungal complex infected roots. Plant parasitic nematodes belonging to eight genera in addition to *M. incognita* were also found in root and soil samples. The number of root-galling, egg-masses, galling and egg-mass indices and J2 population on plants were variable among the lawns. They were highest in samples collected from extension and education division, intermediate in that of club rest house and lowest in that of dean faculty of agriculture, old campus and dean faculty of animal science. The mixed infection of roots by nematodes and fungi suggests that plant damage might be due to synergistic relationship of nematode and fungi, which needs further investigations to prove this relationship..