

New host record of root-knot nematode (*Meloidogyne graminicola*) in Pakistan

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A survey of rice growing areas in two districts of Punjab, Faisalabad and Chiniot was conducted during September 2014-15 for root-knot nematode, *Meloidogyne graminicola* Golden & Brichfield, 1965. During survey, typical symptoms of hook like galls on roots were observed not only in rice plants but also in weeds. Root samples were examined in plant nematology laboratory in Department of Plant Pathology, University of Agriculture, Faisalabad. Roots of different weeds; *Cyperus rotundus*, *Dactyloctenium aegyptium*, *Echinochloa crusgalli*, *Eclipta alba*, *Paspalum distichum* from rice field and *Avena fatua*, *Phalaris minor* and *Rumex dentatus* from wheat field were collected during summer and winter 2014-15, respectively. Heavy galling on roots indicated the root-knot nematodes infestation. Roots of each plant were separated according to gall structure and mature nematode females were isolated under stereomicroscope through dissection. From each plant, five samples of roots and ten nematode females were examined. Impression of perineal patterns of each female were prepared and identified. Mixed population of nematode was found in *A. fatua*, *R. dentatus* and *P. minor*. It was observed that more than one type of root galls in a single plant root system were present and differentiated on the basis of gall shape and egg-mass positions. All weed plants showed clear symptoms of *M.*

graminicola on their root that was confirmed through perennial pattern (Eisenback *et al.*, 1981). The other root-knot species confirmed was *M. arenaria* (Neal, 1889) Chitwood, 1949. These are new host records of root-knot nematode from Punjab, Pakistan.

References

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