Current Nematology, **28**(2) : 195–200, 2017 http://biovedjournal.org/

Screening for resistance of some rice cultivars against root-knot nematode, *Meloidogyne graminicola*

Dalel Singh and R.K. Singh

Received September 19, 2017 and Accepted November 23, 2017

ABSTRACT : *Meloidogyne graminicola* has been considered as a serious pest of rice causing an annual yield loss of 25-30%. This study was carried out for screening resistance of fifteen rice cultivars against root-knot nematode (*Meliodogyne graminicola*). The cultivar "Ajay" was found to be resistant against *M. graminicola*. The cultivar recorded maximum plant growth parameter *i.e*, shoot length (24.20 cm), root length (15.56 cm), fresh weight of root (0.433 g) and shoot (2.320 g) and found minimum number of root galls per seedling as (8.00), population of eggs per seedling (341.33), number of juveniles per seedling (2.33) and number of females per seedling (5.33), followed by CSR-30, NDR-359, Jaya and cultivar of HR-12. Among the cultivars "Sarjoo-52" was found to be the most susceptible cultivar against root-knot nematode and recorded shoot length (18.36 cm), root length (8.90 cm), fresh weight of root (0.114 g), and shoot (0.115 g), and found maximum number of root galls per seedling (32.00), population of eggs per seedling (957.66), number of juveniles per seedling (24.66) and number of females per seedling.

Key Words : Rice (*Oryza sativa*), juvenile, screening, *Meloidogyne graminicola, M. graminicola.*