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RESEARCH PAPER

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Screening of okra (Abelmoschus esculentus) cultivars for resistant against root-knot nematode, Meloidogyne incognita

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Abstract : The root-knot nematode (*Meloidogyne incognita*) is one of the major limiting factors affecting plant growth and yield causing an estimated \$100 billion loss per year worldwide. Synthetic pesticides, though instantaneously effective, are usually prohibitively expensive, not readily available, may cause hazards to both man and livestock and inflict injury to the environment. Notable among the alternatives to nematicides, use of resistant cultivars which are inexpensive and eco-friendly is the only and effective option available for its control. In the present studies, seventy one okra (*Abelmoschus esculentus*) cultivars were evaluated for resistant against *M. incognita* under screen house conditions. One week old okra plants of test cultivars were inoculated with 1000 freshly hatched second stage juveniles of *M. incognita*. Results clearly revealed that all the cultivars showed varying degree of susceptibility against *M. incognita*. One cultivar (EC 306703) showed resistant and seven cultivars (EC 306697, EC 306700, EC 359891, EC 305718, IC 014018, BB-1, Hisar naveen and Hisar unnat) were rated as moderately resistant reaction against *M. incognita*. Rest of the cultivars exhibited either susceptible or highly susceptible reaction against *M. incognita*. No any single cultivar has been found as highly resistant. Cultivar, EC 306703 was rated as resistant and showed less damage by nematode as compared to susceptible cultivars and their planting could provide a useful tool to control root-knot nematode.

Key Words: Meloidogyne incognita, Okra, Resistant, Screening, Cultivars

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