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ADDITIONS TO THE HOST RECORDS OF ROOT-KNOT NEMATODES AMONG THE MEDICINAL AND AROMATIC PLANTS

by

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Summary. Eight medicinal and aromatic plants belonging to seven botanical families, are reported for the first time as hosts for *Meloidogyne* species.

Root-knot nematode (*Meloidogyne* spp.) have only recently been recognised as causing economic damage to medicinal and aromatic plants (Haseeb *et al.*, 1984, 1985; Haseeb and Pandey, 1987). Therefore, a survey was undertaken of the medicinal and aromatic plants grown in the crop museum of CIMAP, Lucknow to identify those species that constitute new hosts for root knot nematodes and assess the level of infestation.

Species identification was made from the perineal patterns of mature females that were

dissected from galled root tissue. Perineal tissue was cut out and stained in hot acid fuchsin (0.01%) and mounted in lactophenol. Host reaction to infestation was assessed as light, moderate, heavy or severe based on the extent of galling with the root system galled for up to 1/4, 1/2, 3/4, or over 3/4, respectively; the average size of root galls on each plant was also recorded (Table D). New host records of *Meloidogyne incognita* (Kofoid *et* White) Chitw. and *M. javanica* (Treub) Chitw. are listed in Table I.

TABLE I - *New host records of Meloidogyne incognita and M. javanica.*

Plant species	Family	Root infestation	Gall size	Nematode species
<i>Abelmoschus moschatus</i> Medic.	Malvaceae	severe	large	<i>M. incognita</i>
<i>Artemisia annua</i> L.	Asteraceae	light	small	<i>M. incognita</i>
<i>Artemisia nilgarica</i> (Clarke) Pamps.	Asteraceae	heavy	medium	<i>M. incognita</i>
<i>Bacopa monnieri</i> Wettst.	Scrophulariaceae	moderate	medium	<i>M. javanica</i>
<i>Jasminum humile</i> Auct. non. L.	Oleaceae	moderate	medium	<i>M. javanica</i>
<i>Paederia scandens</i> (Lour.) Merr.	Rubiaceae	light	small	<i>M. incognita</i>
<i>Tribulus terrestris</i> L.	Zygophyllaceae	light	small	<i>M. javanica</i>
<i>Valeriana wallichii</i> DC.	Valerianaceae	heavy	medium	<i>M. incognita</i>

Literature cited

HASEEB A. and PANDEY R., 1987. Incidence of root-knot nematodes in medicinal and aromatic plants- new host records. *Nematropica*, 17: 209-212.

HASEEB A., PANDEY R. and HUSAIN A., 1984. Some new

host records of the root-knot nematode, *Meloidogyne incognita* (Kofoid and White, 1919), Chitwood, 1949, *Current Science*, 53: 1151-1152.

HASEEB A., PANDEY R. and HUSAIN A., 1985. New host records of the root-knot nematode, *Meloidogyne javanica*. *FAO Plant Prot. Bull.*, 33: 123.