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INCIDENCE AND DISTRIBUTION OF CITRUS NEMATODE *TYLENCHULUS SEMIPENETRANS* IN CITRUS ORCHARDS OF PUNJAB

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Abstract

Citrus nematode, *Tylenchulus semipenetrans* is one of the major pests of citrus crop and is responsible for causing slow decline in citrus nurseries and orchards. Surveys were conducted to assess the incidence and distribution of citrus nematode in major citrus growing areas of the Punjab province of Pakistan viz., Sargodha, Faisalabad, Sahiwal, Jhang, Toba Tek Singh and Pattoki districts. Soil and root samples were collected from different citrus varieties including mandarin (feutrells and kinnow, *Citrus reticulat*), sweet oranges (malta, musambi and orange, *Citrus sinensis*), grapefruit (*Citrus paradise*), lemon (*Citrus limon*) and mitha, sweet lime, *Citrus limettioides*). Among the surveyed areas, the incidence of *T. semipenetrans* in all citrus varieties varied from 56 % for mandarin, followed by 40 % for lemon and orange and 35% for kinnow and musambi. The minimum incidence was observed in grapefruit (20 %). Apart from *T. semipenetrans* the following genera of plant parasitic nematodes were also encountered viz., *Belonolaimus, Helicotylenchus, Hoplolaimus, Longidorus, Paratylenchus, Psilenchus, Radopholus, Trichodorus, Tylenchorhynchus, Xiphinema* and *Zygotylenchus,* while the saprophytic nematode genera were *Alaimid* sp., *Araeolaimid* sp.,*Cephalobid* sp., *Diplogastrid* sp., *Monhysterida* sp., *Mononchi d* sp., *Plectus* sp., and *Rhabditid* sp., in citrus varieties of all the districts.