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Full Length Research Paper

Survey of plant-parasitic nematodes associated with yams in edo, Ekiti and Oyo states of Nigeria.

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Abstract

A survey was conducted to determine the types, frequency and population of plant parasitic nematodes associated with the soils and roots of Yam (*Dioscorea* spp.) in all Local Government Areas of Edo, Ekiti and Oyo States of Nigeria using random sampling for soil and root and using pie pan modification of Baerman funnel for plant parasitic nematode extraction. Twelve, eleven and ten genera of plant parasitic nematodes were encountered in the three States respectively, while ten genera each were identified from root samples from the three States. Plant-parasitic nematodes recovered included *Meloidogyne* spp., *Pratylenchus* spp., *Scutellonema* spp., *Radopholus* spp., *Aphelenchoides* spp., *Trichodorus* spp., *Rotylenchus* spp., *Helicotylenchus* spp., *Aphelenchus* spp., *Longidorus* spp., *Xiphinema* spp and *Rotylenchulus* spp. *Pratylenchus* spp., *Scutellonema* spp., and *Meloidogyne* spp were most widely distributed with frequency rating of 70, 60 and 55% respectively in soil samples from Edo State and in the root samples the three genera predominated with 75, 60 and 60% frequency rating respectively. *Scutellonema* spp., *Meloidogyne* spp., and *Pratylenchus* spp were most widely distributed with a frequency rating of 75, 70 and 60% respectively in soil samples from Ekiti State and in the root samples the three genera predominated with 70, 65 and 50% frequency rating respectively while *Meloidogyne* spp., *Scutellonema* spp., and *Pratylenchus* spp were mostly widely distributed with a frequency rating of 70, 65 and 62.7% respectively in soil samples from Oyo State and in the root samples the three genera predominated with 65, 60 and 60% frequency rating respectively.

Key words: Yam (*Dioscorea* spp.), types, frequency, population of plant parasitic nematodes, *Meloidogyne* spp., *Pratylenchus* spp., *Scutellonema* spp., *Radopholus* spp.