

Nematodes on bananas

Radopholus similis and *Pratylenchus goodeyi*



Example of a banana nematode. (Miriam Otipa, KARI)



Toppling of severely affected plant. (Miriam Otipa, KARI)

Prevention	Monitoring	Direct Control	Direct Control	Restrictions
<ul style="list-style-type: none"> Use clean planting materials e.g. clean suckers or tissue cultured bananas Use tolerant varieties e.g. FHIA 17, FHIA 23 Apply heavy mulch with organic waste e.g. maize stover to reduce nematodes in the soil Clean farm tools and equipment after use to reduce movement of infested soil Construct soil conservation structures such as terraces and practice contour farming Rotate crops with legumes e.g. beans, peas and brassicas such cabbages, Kales etc. for at least 2 years. Avoid planting spinach, capsicum and eggplant during this period. Ensure that the field is weed free Before planting, solarise the soil using polythene paper (gauge 150) Dip suckers in hot water (50-55°C) for 20 minutes after trimming all the roots and pairing (cutting) 1 cm tissue around the corm until you get the white tissue 	<ul style="list-style-type: none"> Monitor for 1. Uniform yellowing or chlorosis of the lower leaves 2. Root-rotting, plant toppling and wilting of plants even if there is adequate moisture in the soil 3. Presence of small galls on the roots of the plant 4. Brown lesions and tunnels within rhizomes 5. Clumping of lateral roots on the plants Sample soils and test for presence of nematodes Initiate control measures when 1-2 plants show signs of infestation 	<ul style="list-style-type: none"> Apply green Tithonia or Mexican marigold (<i>Tagetes</i> spp.) as green manure. This is antagonistic to nematodes Drench the stools or suckers using Azadirachtin (eg Achook EC, Neem cake, Nematon, Nimbecidine) at the rate of 600 ml/20 L. (app. 200 ml/stool of the mixture) Peel the outer layer of diseased corms and coat with nematicides (Azadirachtin at a rate of 600ml/20Ltrs) coated in mud or left in the sun for 14 days Uproot the infected plants and destroy by burning or burying (1m deep) 	<ul style="list-style-type: none"> When using a pesticide (even a botanical home-brew), always wear protective clothing. Follow the instructions on the product label, such as dosage, timing of application, pre-harvest interval, max number of sprays, restricted re-entry interval. Do not empty into drains. 	<ul style="list-style-type: none"> Always consult recent list of registered pesticides (PCPB)
			<ul style="list-style-type: none"> Fumigate the field by using 32.7% Metam-sodium (Metam Sodium) 	<ul style="list-style-type: none"> Metham-sodium should only be applied by professionals such as agents of Jaunco company limited - WHO II (Moderately hazardous) - Maximum of 3 sprays - Wear protective clothing - Follow manufacturer recommendations on pre-harvest interval of 14 days during wet weather



Kenya

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