



KALRO/NAVCDP/ Pyrethrum No. 026 /2024

Integrated management of root Knot nematodes (*Meloidogyne spp*) in Pyrethrum

Introduction

Meloidogyne species can lead to significant crop loss of up to 100% due to nematode damage on pyrethrum roots. The direct and indirect damage caused by various *Meloidogyne* species results in delayed maturity, toppling, reduced yields and quality of crop produce, high costs of production and therefore loss of income.

Symptoms

- Above ground wilting of plants can be observed.
- The roots of infested plants are distorted, swollen and bear knots.
- The infested roots eventually rot and affected plants die.



Management

Cultural practices

- Plant clean / certified planting materials
- Remove and destroy infected crops
- Practise crop rotation with crops such as canola, cabbage and forage grasses for a period of at least 6-8 seasons
- Remove weeds that serve as alternative hosts and harbour the pest season after season



Root knot nematode (*Meloidogyne spp.*)
(Source: Miriam Otiya, KALRO)

- Intercrop with garlic/spider plant or with brassica crops (eg. kales and canola), then incorporate into the soil (at flowering) as they kill the pest
- Plough fields deeply to expose soil to drying for a month before planting
- Disinfect planting splits or seedlings before planting using hot water treatment (soak for 10 minutes in water at 50°C)
- Wash off soil on all farm tools and disinfect using approved chlorine based products.

Biological control

- Drench soil with Azadirachtin-based products (e.g. Neemark, Nemros, Achook or Nimbecidine).

Chemical control

- Use nematicides containing Abamectin (e.g. Adventure 5G Granular, Tervigo 20SC, Acoster 5 EC) or Abamectin + Fosthiazate (e.g. Foscap 105 GR) and Dazomet (e.g. Basamid Granular) around the root zone of plants. Be careful to follow manufacturers' instructions.



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Disclaimer: The content of this publication is for general information to farmers and technical staff only and no person should act, or fail to act on the basis of the information herein without professional advice from crop health experts.

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