

NEMATODE: Facts and Notes | Control | Prevention

Facts and Notes

Nematodes (phylum Nematoda), also known as roundworms, are widely considered one of the most abundant and diverse phyla of invertebrates. Some nematodes are lemon- or pear-shaped. They are usually 0.4–5 mm (1/16–1/5 inch) length which are plant-parasitic nematodes. Most plant-parasitic nematodes attack roots, while some attack stems, buds, and leaves. Some root parasites dig into the root and feed on its interior, while others feed on its exterior. Root-knot nematodes (*Meloidogyne arenaria*, *M. incognita* and *M. javanica*), Sting Nematodes, and Lance Nematodes are the most common plant-parasitic nematodes found in KAUST.

Types of Nematodes Commonly Found in KAUST



Root-knot Nematodes



Sting Nematodes



Endoparasitic Lance Nematodes tunneling within a root.

Pest Control procedures in managing pests

1. Check the plants for signs of infestation. Patchy areas of wilting, thinning and decline occur where nematode populations are excessively high.
2. IPM-guided essential control mainly:
 - **Cultural Control** - Replace nematode-vulnerable plant species with nematode-tolerant plant varieties. Grass that has been adequately irrigated and fertilized can frequently withstand higher levels of nematode infestation than grass that has been subjected to drought or nutrient deficiencies.
 - **Mechanical Control** - Remove affected plants and grass and cultivate the soil until it loosens to naturally sanitize it. Keep soil unplanted until Nematodes are gone.
 - **Chemical Control** - If other methods fail, administer insecticides in a highly diluted mixture to the affected area in accordance with the label claim of the chemical product, such as Nema Stop (garlic biproduct 8%) .
3. Monitor the plants condition after the treatment. It is recommended to keep record for future evaluation.

What you can do to prevent Nematode in your garden

- Maintain good sanitary conditions. Nematode infected plants (including roots) should be removed from the garden and destroyed.
- Cultivate the infected area and expose to sunlight.
- Cooperate with the service provider during treatment activities by keeping yourself and your pets in a safe place.
- Report sightings or request assistance by contacting the Horticulture and Pest Control Department or via C&C Call center by calling 959 from any landline.