

The background of the slide is a close-up photograph of ginger roots. The roots are light brown, knobby, and have a rough, fibrous texture. They are piled together, filling the entire frame.

DISEASES OF GINGER

COURSE-DFHCM
CREDIT HOUR-2+1

RHIZOME ROT/SOFT ROT OF GINGER

Symptom:

- Yellowing is noticed on the top leaves, gradually spreading downwards of the leaf blade and leaf sheath along the margin.
- Later leaf become dry and withers and hangs down along the stem till shoot becomes dry.
- On stem, a translucent brown lesion develop at collar region and later becomes water soaked and soft, extends to whole shoots and can be easily pulled out from this point.
- Soft rot extends from the collar region to rhizomes which first become discoloured and gradually decompose; forming a watery mass of putrifying tissues enclosed by tough ring of rhizome.
- Roots arising from affected rhizome undergo rotting and softening.
- Rotting is also noticed in rhizomes collected from infected crop during storage.

RHIZOME ROT/SOFT ROT OF GINGER



Infected plants and rhizome

Causal organism: *Pythium sp.*

Sub-division: *Mastigomycotina*

Disease cycle

- **Primary infection:** Oospores survive in soil and infected rhizome.
- **Secondary infection:** Spreads through irrigation water as zoospores.

Favourable conditions

- *Mimegralla* flies play a role in the spread of the pathogen

Management

- Crop rotation for 3-5 years with non-host crops
- Avoid water stagnation
- Collect the seed from disease free plots.
- Treating the seed with suitable seed protectant like Metalaxyl @ 6g/kg of seeds.
- Soil drenching with Metalaxyl + Mancozeb (Ridomil Gold) @ 0.2% gives good control
- Control the *Mimegralla* insects by 0.05% methyl parathion