Fenugreek diseases

Introduction

- Fennugreek (*Trigonella graecum* L.) is an annual legume crop cultivated in India, Mediterranean region, China, Part of Africa, Europe, Australia and North America.
- Fennugreek traditionally used as a spice crop and forage crop.
- It have medicinal and nutraceutical properties.
- In India it grown as a spice crop and leafy vegetable.

Fenugreek diseases

- Powdery mildew Erysiphe polygoni
- Root rot *Rhizoctonia solani*

1. Powdery mildew

Symptoms:

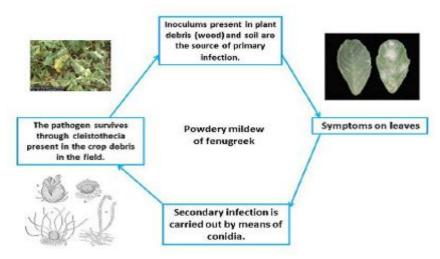
- The symptoms of the disease appear as white, floury patches on both sides of the leaves as well as on other green parts of the plant.
- The floury patches consist of the mycelium, conidiophore and conidia of the fungus.

Pathogen: Erysiphe polygoni DC.

Disease cycle and epidemiology:

Wherever the perithecia are formed they explain the mode of perrenation.

- In other areas the pathogen survives as mycelium and conidia on the host and on other annual and perennial hosts.
- The disease is more prevalent in dry weather and moderate temperatures.



Management

- Sow the crop by the end of the October.
- Use resistant variety like Prabha. Lines GC-39UM-32, GC-7, GC-20 and UM-34 have also been reported as resistant and can be utilized in breeding programme.

• With the initiation of the disease spray the crop with wettable sulphur (0.2%), or hexaconazole (0.05%) or dinocap (0.06%) or difenoconazole (0.04%) and repeat at 10-14 days interval.

2. Root rot

The disease was reported from Karnataka and also present inRajasthan, Gujarat and Tamil Nadu.

Symptoms:

- The symptoms of the disease appear in 30-45 days old plants as rotting of roots leading to yellowing of foliage.
- The affected plants wither and dry up

Pathogen:

- The disease is caused by *Rhizoctonia solani* Kuhn.
- The pathogen is described under French bean <u>diseases</u>.

Disease cycle and epidemiology:

- The fungus is soil borne and survives in the form of sclerotia.
- Disease cycle and epidemiology is described under French bean diseases.

Management:

- Follow 3-4 years crop rotation.
- Soil amendment with neem cake (1 t/ha) alone and in combination with Trichoderma reduces root rot.
- Seed treatment with carbendazim (0.2%) followed by drenching @ 0.1 per cent effectively controls this disease.