

The background of the slide is a collage of images related to finger millet. On the left, there are tall, slender plants with dense, reddish-brown panicles against a blue sky with light clouds. On the right, there are close-up images of the grain panicles and a large pile of dark brown, round grains. The text is overlaid on these images.

DISEASES OF FINGER MILLET

Eleusine coracana

COURSE-DFHCM-I
CREDIT HOUR-2+1

BLAST

Symptoms

- Infection may occur at all stages of plant growth.
- Young seedlings may be blasted or blighted in the nursery bed as well as developing young plants in the main field.

There are three stages in disease development.

- ***Leaf blast:*** It is more severe in tillering phase. The disease is characterized by spindle shaped spots on the leaves with gray centres surrounded by reddish brown margins.
- ***Node blast:*** Infection on stem causes blackening of the nodal region and the nodes break at the point of infection. All the parts above the infected node die.
- ***Neck blast:*** At flowering stage, the neck just below the ear head is affected and turns sooty black in colour and usually breaks at this point. In early neck infections, the entire ear head becomes chaffy and there is no grain set at all. If grain setting occurs, they are shrivelled and reduced in size.

BLAST OF FINGER MILLET



Causal organism: *Pyricularia grisea* (Deuteromycotina)

Disease cycle

- **Primary infection** – Seed
- **Secondary infection** – Conidia

Favourable condition

- Application of high doses of nitrogenous fertilizers, low night (20⁰C) and day (30⁰C) temperatures with high relative humidity (92-95%) and rain or continuous drizzles favour the disease development.
- Presence of collateral hosts like bajra, wheat, barley and oats also favour disease development.

Management

- Destruction of collateral hosts and infected plant debris
- Treat the seeds with Carboxin + Thiram (Vitavax Power) @ 2g/kg of seeds.
- Grow resistant varieties like Ratnagiri, Padmavati, Gowtami and Godavari
- Spray with Tricyclazole @ 0.1%.

CERCOSPORA LEAF SPOT

Symptoms

- Small dark lesions on leaves which are usually oval in shape but may be oblong to rectangular in shape.
- centres of lesions are gray to tan in color with visible black dots; lesions may be covered in spores during wet weather.
- Lesions may also be present on the stems and are slightly longer than those on the leaves.

CERCOSPORA LEAF SPOT



Causal organism: *Cercospora penniseti* (*Deuteromycotina*)

Disease cycle

- **Primary infection** – Infected plant debris
- **Secondary infection** – Conidia

Favourable condition

Low temperature and high humidity favours the disease development.

Management

- Spray Carbendazim + Mancozeb @ 0.2%.