

A close-up photograph of a castor plant (Ricinus communis) showing a cluster of developing, brown, spiky seed pods. The background is a soft-focus green, suggesting other parts of the plant or foliage.

DISEASES OF CASTOR

(Ricinus communis)

COURSE-DFHCM
CREDIT HOUR-2+1



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بذرة التينجيري

MAJOR DISEASES OF CASTOR

FUNGAL DISEASE	
RUST	<i>Melampsora ricini</i>
WILT	<i>Fusarium oxysporum f.sp. ricini</i>
GREY MOLD/GREY ROT/BLOSSOM BLIGHT	<i>Botrytis ricini</i> (P.s.- <i>Sclerotinia ricini</i>)
SEEDLING BLIGHT	<i>Phytophthora parasitica</i>
LEAF SPOT	<i>Cercospora ricinicola</i>

SEEDLING BLIGHT

SYMPTOMS

- ❑ The disease appears circular, dull green patch on both the surface of the cotyledon leaves.
- ❑ It later spreads and causes rotting.
- ❑ The infection moves to stem and causes withering and death of seedling. In mature plants, the infection initially appears on the young leaves and spreads to petiole and stem causing black discoloration and severe defoliation.

PATHOGEN

Phytophthora parasitica

- The pathogen produces non-septate and hyaline mycelium.
- Sporangioophores emerge through the stomata on the lower surface singly or in groups.
- They are unbranched and bear single celled, hyaline, round or oval sporangia at the tip singly.
- The sporangia germinate to produce abundant zoospores.
- The fungus also produces oospores and chlamydospores in adverse seasons.

FAVOURABLE CONDITIONS

- Continuous rainy weather.
- Low temperature (20-25°C).
- Low lying and ill drained soils.

DISEASE CYCLE

- The pathogen remains in the soil as chlamydospores and oospores which act as primary source of infection.
- The fungus also survives on other hosts like potato, tomato, brinjal, sesamum etc. The secondary spread takes place through wind borne sporangia.

Management

- Remove and destroy infected plant residues.
- Avoid low-lying and ill drained fields for sowing.
- Treat the seeds with thiram or captan at 4g/kg.



Dead seedling



Spot on older leaf



Leaf blight symptom