

CHILLI



DISEASES OF CHILLIES

- 1. Damping-off : *Pythium aphanidermatum*
- 2. Powdery mildew : *Leveillula taurica*
- 3. Fruit rot and Die-back : *Colletotrichum capsici*
- 4. Leaf spot : *Cercospora capsici*
- 5. Bacterial spot : *Xanthomonas Campestris*

Damping-off: *Pythium aphanidermatum*



- **Symptoms:**

- water soaked lesions on the collar region.
- Browning and shrivelling of stem tissues
- seedling collapse and topple over.



- **The fungus:** Produce sporangia, zoospores, and oospores.



- **Mode of spread and survival:**

- Spread: Soil-borne-Through irrigation water, implement during cultural operations etc.
- Survival: oospores in the soil.



- **Favourable conditions:**

- Excessive soil moisture
- High humidity
- Over crowding of seedling

- **Management:**

- Use light soil –Nursery
- Raised seed bed
- Light & frequent irrigation
- Proper drainage
- Soil drench with copper fungicide



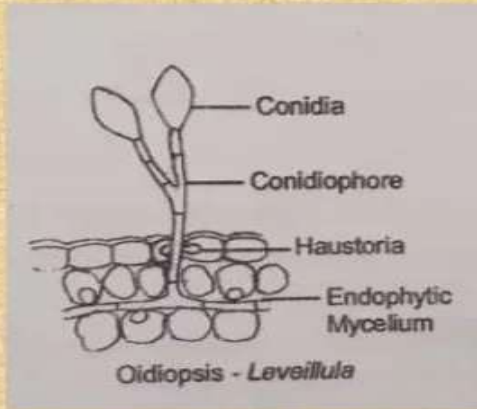
Powdery mildew: *Leveillula taurica*

- **Symptoms:**

- White powdery coating on the lower surface ,also on the upper surface.
- Upper surface yellow patches are seen
- Severe infection - drying and shedding of affected leaves.



- **Etiology:** Fungus
- **Oidiopsis** type-produce single celled, hyaline conidia.
- **Mode of spread and Survival:**
- Spread: air-borne conidia
- Survival: As dormant mycelium in crop debris



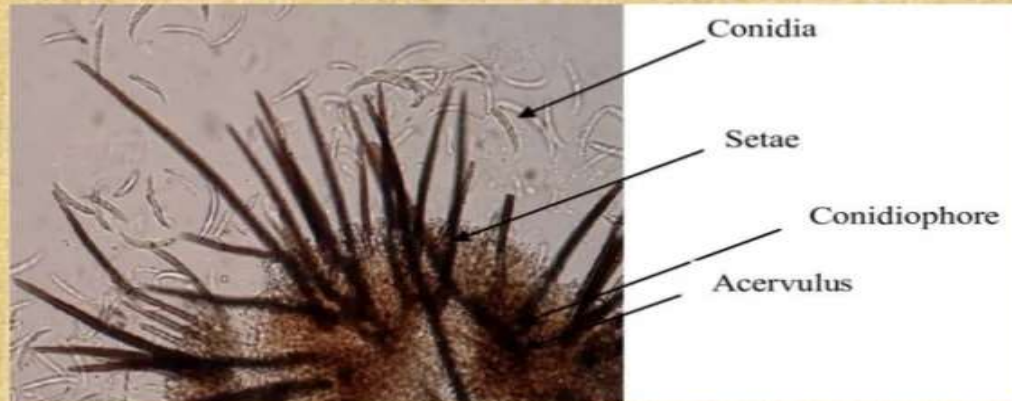
- **Favourable conditions:**
 - warm & cloudy weather favours
- **Management:**
- Spray Karathane 0.07% or
- Wettable sulphur 0.25%

Fruit rot and Die-back: *Colletotrichum capsici*

- **Symptoms:**
- Shedding of flowers due to the infection at pedicel
- die-back of branches.
- **Fruit infection:**
- Ripe fruits are more attack than the green ones.
- Severe infection result in the shriveling and drying of fruits.
- fruits become white in colour and lose their pungency.
- minute black dot - fruiting bodies called 'acervulli'
- The affected fruits - fall off



- **Etiology** : *Colletotrichum capsici* – Produces hyaline, single celled sickle shaped conidia.
- **Mode of spread and survival:**
- Spread: Through infected seeds (Externally seed-borne) and air-borne conidia.
- Survival: On the infected fruits.



- Optimum temp. 22-25°
- Humid weather with rainfall at frequent intervals.
- **Management:**
- Collect seeds only from fruits without infection.
- Crop debris - collect and destroy.
- Seed treatment with captan or Thiran 4g/kg
- Spraying mancozeb 0.25%

Bacterial spot : *Xanthomonas Campestris Pv. vesicatoria*

- **Symptoms:**
- Small circular to irregular water soaked areas on the lower surface of the leaves.
- The spot bulges & it turn purple with a black centre.
- A narrow yellow halo may surround the spots.
- The leaves dries and whole leaf dies.
- Green fruits are also infected and it turn brown to black



- **Mode of spread and survival:**
- Primary spread – seed borne bacteria
- Spread by rain flash.



- **Management:**
- Seeds should be collected from healthy fruits,
- Seed treatment with copper oxychloride 2g/kg seed.
- Spraying Agrimycin 100 at 100 ppm.