

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

# Diseases of Ornamental Plants

## • 1. Powdery Mildew of Rose

### • Symptoms:

- The disease first starts on the young leaves as raised, blister like areas that soon become covered with a grayish, white, powdery fungus growth.
- The infected leaves are usually more purplish than healthy ones.
- Distortion of new shoots occurs.
- The unopened buds become white after mildew attack.
- Infected buds remain unopened and in developed flowers the infection leads to discoloration.

# Powdery Mildew Symptoms on leaves of Rose



# Powdery Mildew Symptoms on Rose Bud



- **Factors Favouring:**

- The disease appears whenever the days are warm and nights are cool.

- **Mode of Spread**

- The primary mode of perennation of fungus is by infection of dormant buds.
- The pathogen produces conidia in chains which are readily dispersed by air and spread the disease.

# Management

- 1. Phytosanitation should be ensured.
- 2. Spray of Topsin M @ 1 gm / liter of water.

# Marigold Damping Off

- **Symptoms:**
- Symptoms appear as brown necrotic spots, girdling the radical which later on extend to plumule and cause pre-emergence mortality.
- Post-emergence symptoms appear on lower part of hypocotyls as water soaked necrotic ring leading to collapse of seedling.
- The root system shows decaying symptoms.
- **C.O. *Rhizoctonia solani***

# Rhizoctonia Damping Off on Chrysanthemum





# Root Rot of Chrysanthemum

- **Symptoms:**
- Roots and stems are affected.
- Diseased plants are stunted and appear pale yellow.
- The infected plants can be pulled out easily.
  
- **C.O.**
- *Pythium aphanidermatum*
- *Phytophthora chrysanthemi* Naher, Watanabe, Chikuo, & Kageyama

# Pythium Stem Rot on Chrysanthemum



# Attack of *Pythium aphanidermatum* on Chrysanthemum



# Management

- Application of Ridomil MZ-72 @ 2 gm/ liter of water.

# Phoma Root Rot on Chrysanthemum

- The infected plants show stunting symptoms.
- Yellowing of lower leaves and cracking of the main stem occurs.
- C.O. *Phoma chrysanthemi*

# Management

- Soil drenching with Copper oxychloride @ 3 gm / liter of water preferably two weeks before planting.

# Foot and Tuber Rot of Tuberose

- **Symptoms:**
- Initial symptoms of the disease are manifested as drooping of leaves.
- Brown spots are formed on leaves.
- Yellowing and drying of the plant occur.
- Humid conditions favour the development of a coarse mycelial mass at the base of the infected plant.
- Sclerotia also develop on the mycelial growth.
- **C.O. *Sclerotium rolfsii***

# Management

- **1. Cultural control:**

- Proper spacing of the plants should be adopted.
- Unnecessary soil wetness should be avoided.
- Fertility of soil should be ensured.

- **2. Chemical Control:**

- Application of Bavistin @ 2 gm / liter of water.



# \*Sources

- 1. Recommended books.
  - 2. Latest research articles downloaded from Google.
  - 3. Google images.
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- \*Solely for academic purpose and guidance of students.