

Diseases of Ornamental Plants

1. Powdery Mildew of Rose

•Symptoms:

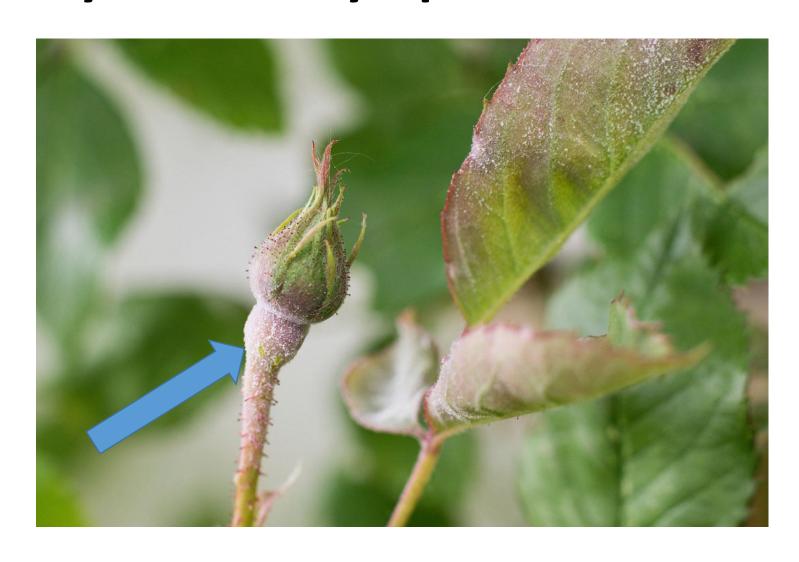
- The disease first starts on the young leaves as raised, blister like areas that soon become covered with a grayish, white, powdery fungus growth.
- The infected leaves are usually more purplish than healthy ones.
- Distortion of new shoots occurs.
- The unopened buds become white after mildew attack.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

- 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



• 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

 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 course mycelial mass at the base of the infected plant.
- Sclerotia also develop on the mycelial growth.
- C.O. Sclerotium rolfsii

•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.

*Solely for academic purpose and guidance of students.