

DISEASE CONTROL

Disease	Symptom	Control
1.ROSE		
Powdery Mildew <i>Sphaerotheca pannosa var. rosae</i>	The disease first appears on the young leaves, blister like areas that soon become covered with a grayish, white, powdery fungus growth.	The fungal antagonist <i>Sporothrix flocculosa</i> , spray Bavistin or Benlate (0.1%) at 30 days interval regularly. Wettable sulphur (0.2%), propiconazole (0.1%) and Karathane (0.05%) may be used at 7-10 days interval
Die Back <i>Diplodia rosarum</i>	The pathogen gets entry into the host tissue through the minute injuries caused by digger wasp . The disease causes death of the plant from tip downwards.	Cut away the infected plant part and burn it. Cut ends immediately coated with chaubatia paste containing 4 parts of copper carbonate, 4 parts of red lead and 5 parts of linseed oil.
Black Spot <i>Diplocarpon rosae</i>	Spotting and etiolation of the leaves followed by defoliation. Dark brown to black spots, circular or sub circular and usually separate and distinct.	Spray of Bavistin (0.1%) followed by Benlate (0.1%) at 15 days interval; Dithane M-45 and Dithane Z-78 (0.2%) are also useful for control.
Alternaria leaf spot <i>Alternaria alternata</i>	Small oval to irregular, dull brown to black scattered spots are first noticed on the margin of leaves which later enlarge and cover the entire leaf surface.	Infected leaves should be collect and burnt. Four sprays with Benlate (0.06%) , Captan (0.25%) or Mancozeb (0.25%) at 10 days interval during December-January can effectively check the disease.
Rust <i>Phragmidium spp.</i>	Reddish-orange pustules on leaflets and petioles. The colour of these pustules changes to black when teleuto-spores are formed.	Spring pruning and dormant spray of Copper oxy chloride (0.3%) or spraying Dithane M-45 (0.2%), Vita vax (0.1%) or Benodonil (0.1%) three times at 15 days interval during March-April.
2.MARIGOLD		

Damping Off <i>Rhizoctonia solani</i>	Brown necrotic spots, girdling the radical cause pre-emergence mortality. Post-emergence symptoms appear on lower part of hypocotyls as water soaked, brown, necrotic ring leading to collapse of seedling.	Follow crop rotation, prepare raised nursery beds and soil drenching with Carbendazim (0.1%).
Powdery Mildew <i>Oidium sp., Leveillula taurica</i>	Whitish, tiny, superficial spots appear on leaves which later on coverage of whole aerial parts of plants.	Spray Karathane @ 0.05% or Sulfex (3g/l of water) at fortnightly intervals.
3.GLADIOLUS		
Fusarium Rots and Yellows (core rot, vascular disease) <i>Fusarium oxysporum</i> f. sp. <i>Gladioli</i>	Curving, bending, arching, stunting, yellowing or drying of leaves associated with root and corm rot in field as well as in storage.	Dipping of corms in 0.1 per cent Carbendazim before planting. Heat treatment of cormels 57.2 °C up to 30 minutes
Core or Spongy Rot <i>Botrytis gladiolorum</i>	Small spots appear on leaves and develop into large spots covered with mould, soon killing the leaves.	Spray Mancozeb sprays @ 0.2% and hot water treatment of corms at 52 °C
Dry or Neck Rot <i>Stromatinia gladioli</i>	The leaves turn brown from the tips downward and at bases they decay causing neck rot but corms remain attached to the stem firmly.	Follow crop rotation and corms treatment with Thiram or Dichloran (0.3%).
4.CHRYSANTHEMUM		

Bacterial Blight <i>Erwinia chrysanthemi</i>	The stem tips turn brown, brittle and collapse, hollow stem with brownish streaks	Destruction of affected plants, soil sterilization, using healthy plant material, spray of Streptocycline (0.01%).
Bacterial Leaf Spot <i>Pseudomonas cichorii</i>	Dark brown to black slightly sunken spots having concentric zonation on leaves.	Using healthy plant material and spray of Streptocycline (0.01%).
Foot rot <i>Rhizoctonia solani</i>	Very common in warm moist conditions, mushy brown rot of stem and leaves.	Use biofungicide (<i>Bacillus subtilis</i> and Kaslin) and spray Benomyl (0.2%).
Powdery Mildew <i>Erysiphe cichoracearum</i>	White powdery growth on the upper surfaces of the leaves, flower and stem.	Spraying with Karathane (0.025%), Bavistin (0.1%) or sulphur based fungicide (0.2%).
Flower Bud Rot <i>Erwinia</i> sp.	Rotting of the buds with brown scorched necrotic discoloration of peduncles.	Infected plant debris should be destroyed and burnt. Trips are vector, spray rog0r @ 2ml /l.