

## Root and Crown Rot Diseases of Greenhouse Geraniums

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**G**eraniums produced from both seed and cutting are susceptible to a number of disease problems in the greenhouse. A brief summary of the most frequently encountered geranium disease problems follows.

**Damping-off**— Caused by *pythium* and *rhizoctonia*; is an occasional problem on geraniums. High temperatures (70°-75°F) in the germination bench will favor rapid, uniform germination and minimize damping-off.

**Pythium Black Leg**—A common disease problem on both cutting and seed geraniums. Cool temperatures and excessive moisture favor this root rot organism. Use well-drained media. Do not allow plants to stand in water and maintain root zone temperatures of 60°-65°F. The fungicides Truban, Banrot and Subdue can be used if *pythium* becomes a problem. Follow label recommendations and beware of possible sensitivity with some cultivars.

**Rhizoctonia Root and Crown Rot**—Symptoms similar to *pythium* but with a brownish color. Drought conditions and high soluble salt levels will favor this disease. Monitor salt levels and avoid excessively droughty conditions. Benlate can be used to fight this disease.

**Thielaviopsis Black Root Rot**—Black rot symptoms appear on the first few roots to form. Subsequent roots become infected but may appear symptomless. The disease is slow to develop. New cuttings placed on infected benches or in infected media are most susceptible. Crops produced on unsterilized benches following poinsettias are more likely to develop problems.

**Botrytis Crown Rot**—Most often associated with leaf and flower blight, crown rot can occur under cool, damp conditions. Sanitation is the best prevention. Keep plants free of fallen petals, flowers and old dying leaves. Benlate and Exotherm-termil can be used to combat this disease and prevent its spread.

**Sclerotinia Crown Rot**—A rapid moving disease characterized by cottony fungal growth over the lower part of the plant. In the advanced stages Black Sclerotial bodies will form (about 1/8" in diameter). The disease is favored by hot, humid conditions and crowded plant spacing. Control *Sclerotinia* Rot by starting with sanitary conditions and providing adequate plant spacing and air movement.

## References:

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