

Botrytis Blight Symptomology, Scouting and Management

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Botrytis blight is can damage a variety of floricultural species including roses, gerbera, and petunia. Disease management requires active monitoring of crops, rogueing diseased plants, and managing the environmental factors that lead to fungal growth such as temperature and humidity.



Diagnosing Symptoms and Signs

- Lesions in flower petals can be caused by abiotic and biotic factors.
- At the earliest stages of infection, *Botrytis* can not easily be distinguished from many other fungal pathogens.
- Botrytis causes small necrotic or discolored (beige) rounded to irregular-shaped lesions that expand as the fungus invades the tissue.
- Diagnosis of Botrytis can be confirmed by placing infected tissue into a sealed plastic bag or moist chamber. The fungus will produce spores and be more easily identified in 3-7 days.



Scouting

- Frequently walk though your greenhouses and remove symptomatic tissue.

Management

- Environmental management:
 - The optimal temperatures for Botrytis germination and growth are very similar to the optimal conditions for plant growth and development (e.g. 60-77 °F (16-25 °C), therefore cultural practices to manage Botrytis should focus on humidity control.
 - Relative humidity >94% or continuous periods of leaf wetness for over 12 hours promote Botrytis spore germination, therefore reducing greenhouse moisture, humidity and condensation can effectively reduce disease development.
 - Remove humidity from the plant canopy with horizontal airflow fans and remove humid air from the greenhouse with exhaust fans.
 - Keep air temperature above the dewpoint to prevent water condensation on plant surfaces.
- Cultural practices:
 - Frequently remove decaying plant material.
 - Strengthen plants with calcium applications.
- Disease management:
 - Apply conventional and biorational fungicides as part of an integrated disease and resistance management program.
 - Proper canopy coverage is critical for disease management success.

