The Ohio State University

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

BOTRYTIS GRAY MOLD

IN PROTECTED CULTURE

Scientific Name Botrytis cinerea

Greenhouse/High Tunnel Host Crops Tomato, pepper, lettuce, cucumber

Identification

Leaves

- Young infected leaves first appear as brown with blighted areas, often V-shaped
- Abundant gray-brown mycelial growth with conidia appears on dead or dying tissue

Stems

- The stems turn white and develop cankers
- Infected stems girdle and wilt

Flowers

- Gray conidiophores producing conidia cover the dying flowers and the calvx of the fruit
- Mycelium spreads from the flowers to the fruit and back toward the stem

Fruits

- Fruits turn light brown or gray and develop a soft rot
- Fruits may also develop ghost spots, or necrotic flecks surrounded by whitish halos
- Gray mold may be visible on the fruit calyx

Often Confused With

Sclerotinia white mold, Rhizopus rot

Thresholds

Currently, no threshold information is available.



Favorable Environmental Conditions

Favorable conditions are wet (high humidity >80%) with moderate temperatures of 65 – 75°F.

Scouting Notes

Periodically monitor for disease symptoms of Botrytis in wounded tissues (e.g., broken stems,

leaves damaged by mechanical or chemical injury) and fading flowers, especially in spring and fall.

Management Notes

Follow Sound Cultural Practices – Remove and destroy all infected tissue. Discard any faded flower blossoms and fallen petals to prevent germination of overwintering structures. Sanitizing tools will aid in preventing further infections of Botrytis gray mold.



Maintain Healthy Plants – Plant health can be maintained through proper fertilization, irrigation, and pruning practices. Maintaining soil moisture optimum for plant growth and nutrients will keep the plant healthy and less susceptible to Botrytis gray mold infections.

Increase Air Circulation – Maintain adequate ventilation by using wide spacing and timely pruning to promote drying and increasing air circulation. Also, avoid excess water on the surfaces of plants by not using overhead irrigation systems, especially during times of high humidity.

Avoid Damaging Plants – Botrytis cinerea best colonizes healthy plant tissues through wounds is present. Once the pathogen enters the host, it colonizes very rapidly leading to further spread of the disease. Use good pruning techniques to avoid damaging the plants.

