

# Botrytis

*Botrytis cineria*

## Damage:

Botrytis (gray mold) is one of the more common and damaging fruit pathogens in strawberries. Any plant part can be infected at any stage, but it is most common for ripening fruit to succumb to botrytis infection.

## Identification:



Infected tissue first turns brown, then quickly develops masses of grey/brown spores. Fruit is often infected from the calyx end, where a latent infection from the blossom becomes active as cell walls soften and sugars increase during ripening.

## Spread:

Botrytis is ubiquitous, willing to rot almost any plant material that is dead or dying, but it will colonize healthy tissue under favourable conditions. At warm (15-25°C) and moist conditions (13 continuous hours of leaf wetness) it will go from initial infection to making more spores in 3–5 days, but it can also grow slowly at temperatures just above freezing. It can colonize healthy tissue and remain dormant until the plant part starts to senesce, at which time the fungus starts to grow. Spores move easily on the wind.

## Control:

Plant production	Start with healthy, vigorous transplants. Firmer fruited varieties tend to get less botrytis. Heat treatment of transplants can eliminate latent botrytis infections.
Pre-flower	Covered cropping systems get far less botrytis than outdoors, by reducing flower wetness. Planting at lower density can reduce botrytis fruit infections late in the growing season when plants are full sized, but doesn't make a difference early on when plants are small.

Flowering and fruiting	<p>Managing water and nitrogen to grow "generative" plants also creates plants with slower vegetative growth, tougher cell walls and less dense canopies that are more resistant to botrytis. Avoid overwatering and excessive nitrogen, especially ammonium forms. Keep humidity low and avoid leaf wetness, especially going into evening, whenever possible. If plants are low in calcium, applying foliar calcium (with wetting agent) could help toughen cell walls, but is not always effective at reducing botrytis. Avoid damage to fruit laterals; fruit on kinked laterals often succumb to botrytis. Apply appropriate fungicides with good spray coverage, especially targeting flowers, to prevent latent fruit infections.</p>
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