

# STRAWBERRY DISEASE FAST FACTS



## Gray Mold

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**What:** a fungal fruit rot, caused by *Botrytis cinerea*

**When:** The fungus overwinters primarily as microscopic fungal threads (mycelium) in infected or dead leaf tissue. It also overwinters in straw mulch as small, black, thick-walled fungal structures (sclerotia), mummified fruit, and weeds. Conidia are the principal inoculum source for fruit infections. These spores are dispersed by wind, splashing rain, and irrigation water. Infections occur whenever weather conditions are favorable from early bloom through the green fruit stage.

**Where:** Symptoms appear on blossoms, and green, white, and pink stage fruit. Infected petals and pedicels brown; entire blossoms and fruiting structures may die. Fruit infections typically occur at the calyx end of the fruit. Tissues turn light to medium brown. The rot progresses more rapidly as harvest approaches. Infected fruit are typically covered with a gray mass of mycelium and powdery masses of grey conidia. Young leaves and petioles may also be infected but visible infections do not develop until after leaves begin to senesce.

**How:** Infections are favored by extended periods of high relative humidity or surface wetness during flowering, and temperatures between 15 and 25 °C.

**What to do:**

Close mowing combined with **removal** of cut foliage at renovation can suppress gray mold incidence by 50% the following year.

Avoid nitrogen applications during the cropping season as they can increase gray mold incidence by 60-80%.

Gray mold infection may be accentuated by frost damage. Protect blossoms during periods of freezing temperatures with overhead irrigation.

Fungicide applications starting at bloom followed by 7-10 day intervals when conditions are favorable for disease development. Alternate pesticide chemistries to prevent resistance development.

Avoid overripe or infected fruit during harvest. Handle harvested fruit carefully to minimize injury. Whenever possible, promptly cool harvested fruit to near 0 °C to suppress fruit respiration and growth of gray mold.

**For more information:**

Check out the [Pest Management Guidelines for Berry Crops](#), [NYBN Vol. 3 No. 5](#), [NYBN Vol. 3, No. 4](#).

**Gray mold mycelium and spores (conidia)**



**Early stages of infections on green fruit**

