

# Happy Halloween

We all expect some ghoulish activities and terrifying tricks in October, but have you considered the frightening prospect of a Halloween celebration without pumpkins or chocolate? We get chills just thinking about it, too! Thankfully, today's farmers use crop protection to ensure Halloween is filled with more treats than tricks.

## Apples



Bobbing for apples this Halloween? Apple scab, caused by the fungus *Venturia inaequalis*, is one of the most damaging apple diseases. When the disease is not managed, losses can approach 100 percent. Coupled with monitoring the trees, fungicides are the primary means of managing apple scab in commercial orchards.

Powdery mildew is one of the simplest diseases to diagnose in pumpkins but can result in serious losses. To effectively manage powdery mildew, fungicides are needed on the lower surface of leaves where the plant is most susceptible.

## Pumpkins



From the creepily named witch's broom fungus to the pod borer moth, there are many threats to cocoa trees. The biggest danger, however, is black pod disease. Black pod disease, or *Phytophthora megakarya*, causes cocoa pods to blacken, shrivel and die, reducing cocoa crops by 20 to 30 percent annually. Farmers can do several things to reduce the spread of black pod disease, including using fungicides.

## Chocolate



Whether you use garlic as a tasty ingredient for dinner or a tool to ward off vampires, it is susceptible to the same pest problems as onions, such as onion thrips. If onion thrips are not controlled, damage can routinely reduce bulb yields by 30 percent to 50 percent. An integrated pest management (IPM) approach consisting of planting border crops and insecticides reduces thrips infestation and increases yields.

## Garlic

