Phytophthora Blight in Pumpkins by Ron Becker and Sally Miller, Ohio State University

Phytophthora fruit blight has become a major concern with some fields of winter squash and pumpkins showing as much as 50% loss. If the fruit rot phase of phytophthora blight is starting to show up in a field, growers are advised to harvest mature, uninfected fruits NOW. These fruits need to be layed out individually (not touching, so bins are not acceptable) in a shaded area with good ventilation so that they can cure. A barn floor would be an ideal location since they would not get rained on, but outside under a tree (to prevent sunscald) would be better than nothing. If putting them outside, do NOT put them on a tarp or plastic that would tend to hold rainwater and spread the disease to the other fruits. If any of these fruits start to show signs of infection (discolored areas or white, cottony growth see photos below) remove them from the area immediately and discard them in an area away from the fields or curing location. Application of a clorox solution to
pumpkins by spraying (not dipping) may help preserve them, but removal of the fruit from the infected area is what is will have the biggest impact.

Dr. Meg McGrath of Cornell University has evaluated several post harvest treatments to manage phytophthora blight in pumpkins. She found that hosing them off first to remove soil (using a garden hose with a trigger spray nozzle) was the second most important step in reducing disease incidence (getting them out of the field being the most important). Dipping fruit in 10% clorox, GreenShield or Kocide was no better than just hosing them off.

A .Phytophthora blight on pumpkin fruit. B. Phytophthora blight on winter squash fruit.

Crop Reports by Ron Becker and Brad Bergefurd
Wayne County Report From August 17th
Phytophthora fruit blight was a major concern this week with some fields of winter squash and pumpkins showing as much as 50% loss. Powdery mildew is increasing in
vine crops and we are seeing more bacterial diseases showing up in tomatoes. Trap counts for European corn borer were 8 at Wooster and 9 at Copley. Corn ear worm trap counts were 19 for Wooster and there was no count for Copley as the trap was down. This puts sweet corn growers in our area on a 3–5 day spray schedule depending on their location and daytime highs. Recently hatched fall armyworms were also found to be in a few ears of sweet corn. Pepper growers should continue a 7–10 day spray program for control of corn borers in peppers. Cucumber beetles are also increasing in numbers with some fruit damage occurring on all vine crops. Corn rootworm adults are also causing some of this damage and are being sprayed for. Two spotted spider mites seem to have been washed off most plants, but the fields are being monitored to see if the spider mites move back into the field. Hornworm populations are starting to go down in tomatoes. Stink bugs have been found feeding on fruit. The presence of one stink bug per 40 plants is enough to warrant spraying for them, especially if the crop is to be used for processing tomatoes. Grasshoppers are causing damage to both leaves and fruit in tomatoes and may need to be controlled. White flies are being found on many crops in the fields, but at this time are not considered to be a problem as we are finding only adults. There is no threshold established for control of white fly in field settings. However, if their numbers are near 10 per plant in a greenhouse or tunnel setting,
Southern Ohio Vegetable and Berry Update– 8/20/07 Another very dry and hot week for the southern Ohio growing region with very little to no rainfall for the past 4 weeks. High temperature on Tuesday 8/14 was 87 making it the first day in the past 16 where the high temperature for the day was below 90. Temperatures soared back into the low 100's in the Cincinnati area on Thursday 8/16. Some southern growing counties closer to the Ohio river as well as the Chillicothe area did receive 2/10 to 5/10 inch of rain with storms that came through southern most growing regions the evening of 8/16. Needless to say irrigation systems continue to run almost non stop around the clock with growers reporting very low water levels in ponds and some deep wells going dry. Wholesale Sweet corn prices quickly climbed towards weeks end due to short supply from the drought with wholesale prices spiking to $3.50 to $4 per dozen with some worm damage being reported. Sweet corn even under irrigation is wilting and leaves have been curled daily from the excessive heat. Pumpkin and squash plants are aborting blossoms due to high temperatures. Downy Mildew and Powdery Mildew continue to spread rapidly across vine crops even under tight fungicide programs. There is some concern among vine crop growers of Downy Mildew disease resistance to some of the fungicides possibly showing up in fields even with fungicide control could be warranted.
rotations. This heavy disease pressure is resulting in vine crop shortages and very high wholesale market prices and demand for summer squash, cucumbers and fresh market pickles. Cantaloupe and watermelon prices wholesale remain strong considering high temperatures have sped up maturity, harvest and supply of these crops. The first Jack O lantern and pie pumpkins are being harvested and sold at wholesale produce auctions in southern Ohio with strong interest and demand in these crops. Where pumpkin vines are collapsing from the heat some reports of sunburn on the pumpkins are being reported. Harvest of hard winter squash, which began 3 weeks ago continues. Harvest of Ornamental corn began this past week with very high quality and tip fill being reported. The ornamental corn crop is quickly drying down in the field with the high temperatures, with some husks being almost too dry to pull back and bundle. Double cropped processing pickles in the Circleville area, replanted into pickle fields harvested on the 4th of July, are at vine tip with a projected machine harvest around Labor day weekend. Fresh market Tomato harvest continues strong with wholesale prices rebounding slightly this week with a strong and abundant and high quality supply available. Bacterial diseases of canker, spot and speck continue to be a problem for tomato growers even with tight fungicide programs. High tunnel tomatoes that have been harvested since June continue to be harvested. The high tunnel crops are showing much less disease pressure than crops
planted in the open field, probably due to dryer foliage. July planted high tunnel tomatoes for a fall harvest are growing well and are beginning to show signs of bloom, with little disease pressure being reported on these late tunnel crops. Harvest of green beans, half runner beans, bell peppers, hot peppers, sweet and mild onions, red and green cabbage continues.

**Pumpkin Field Day, August 23rd, – Jim Jasinski**

The 8th annual pumpkin field day will be held Thursday, August 23rd, 2007 at the Western Ag Research Station in South Charleston, Ohio. The field day will begin promptly at 6:00 pm and conclude around 7:30 pm. Ohio State University specialist's in attendance will be Jim Jasinski (IPM Program), Bob Precheur (Horticulture and Crop Science), Richard Riedel (retired, Plant Pathology), Lanny Rhodes (Plant Pathology), and Celeste Welty (Entomology).

Growers will be taken around the 420 acre station to various research and demonstration plots on wagons pulled by tractors. The tour stops will include a 5 treatment transplant media study and a large scale fungicide demonstration trial using 11 products. There are 15 commercial entries in this year's pumpkin variety trial, and a 19 entry Microdochium/Plectosporium resistance screening trial with plant materials from four other countries. At each stop, growers will be encouraged
to wander around the plots and ask questions of the specialists before boarding the wagons and heading to the next stop. At one of these stops, highlights of general insect management including seed treatment will also be given. A no-till zone tiller used to prepare several of the research trials will also be on display for growers to look at. Refreshments, water and pop, will be placed on each wagon, but no food will be served.

The Western Ag Research Station is located on SR 41, between I–70 and the town of South Charleston. Click on this link for a map with more directions http://oardc.osu.edu/branches/western.asp.

No CCA or PAT credits will be offered this year. Admission is $3 per person, no pre-registration is required. Contact Jim Jasinski for more information, 937–484–1526 or jasinski.4@osu.edu. Hope to see you out there!