





# **Arkansas Plant Health Clinic Newsletter**

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### **Pumpkin**

When summer temperatures begin to rise, disease problems can develop on pumpkin. Choanephora Rot, caused by Choanephora cucurbitarum, attacks both the blossoms and fruit of cucurbits and other vegetable crops. Squash, pumpkin, melon, cucumber, southern peas, okra, and others may be affected. Choanephora Rot is favored by warm, wet weather. Temperatures of 77°F and above, coupled with wet or humid conditions can cause destructive outbreaks of the disease. fungus attacks blossoms near the ground first, causing a wet rot that continues into any fruit that is setting. The spores are easily spread by insects, wind, and splashing water onto nearby Good cultural practices help to prevent or limit the damage caused by Choanephora Rot. Plastic mulches or trellising to prevent blooms and fruit from contacting the ground are helpful. Raised beds have proven beneficial by decreasing excess moisture and improving air flow. Overhead irrigation should be strictly avoided. Any diseased fruit or blossoms should be immediately picked and removed from the planting. Fungicides have not proven to be very effective as susceptible blossoms are opening daily.

# Pumpkin Choanephora Rot-

Choanephora cucurbitarum



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

# Pumpkin Choanephora Rot-

Choanephora cucurbitarum



Photo by Sherrie Smith, University of Arkansas Cooperative Extension







### **Squash Choanephora Rot-**

Choanephora cucurbitarum



Photo by Jennifer Caraway, University of Arkansas Cooperative Extension

### **Pepper**

Charcoal rot, caused by Macrophomina phaseolina, affects a wide range of crop plants including tomato, potato, pepper, eggplant, beans, corn, and cucurbits. Temperatures above 82°F and dry conditions favor Charcoal rot. The disease gets its name from the dusty, black appearance of stems and root tissue, caused by the tiny black microsclerotia of the fungus. Above ground symptoms of Charcoal rot are yellowing of the foliage and wilting. This is a difficult disease to control. Fungicides are not generally helpful for most crop situations. Home gardeners should clean up all plant debris, including roots and stems. solarization and deep tilling can help reduce Maintaining adequate soil inoculum levels. moisture and fertility helps make crops less susceptible.

# Pepper Charcoal Rot-

Macrophomina phaseolina



Photo by Sherrie Smith, University of Arkansas Cooperative Extension







Pepper Charcoal Rot-Macrophomina phaseolina

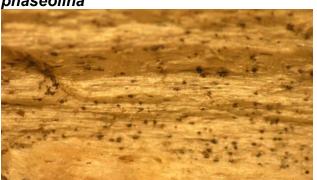


Photo by Sherrie Smith, University of Arkansas Cooperative Extension

### **Apple**

Two of the most common and aggravating diseases found on apples are Flyspeck caused by Schizothyrium pomi and Sooty Blotch caused by Gloeodes pomigena. These diseases grow superficially on the surface of the fruit causing the fruit to be unsightly and unmarketable. Most of the apple crop in the southeastern United States would be affected each year if not for the use of protective fungicides. Symptoms of Flyspeck are groups of a few to 50 or more shiny black, superficial pseudothecia on the surface of the fruit. The colonies are usually 1-3cm in diameter or larger, and round to irregular in shape. Sooty Blotch appears as colonies of olive green on mature fruit. The colonies may be discrete circular to large blotches with diffuse margins which are sooty in appearance. Sooty Blotch and Flyspeck colonies often occur on the same fruit. Fungicide sprays should be applied at 10-14-day intervals beginning at green tip in the spring to provide the best protection. Pristine, Ziram, Flint, Sovran, and Captan are some fungicides labeled for control of these diseases on apple. Good sanitation is also important. Clean up fallen fruit and leaves.

### Apple Flyspeck-Schizothyrium pomi



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## Apple Sooty Blotch-Gloeodes

pomigena

Photo by Sherrie Smith, University of Arkansas Cooperative Extension







### **Maple**

Maples are subject to several leaf and twig diseases. Bacterial leaf spot is caused by the Pseudomonas bacterium. syringae syringae. Red maples, Norway maples, and Japanese maples are all susceptible. spots vary from pinprick size to 1/4 inch in diameter. The spots begin as water-soaked chlorotic areas that turn brown to black, often with a yellowish halo. The spots may grow together, blighting large areas of the leaf. Vein blackening, tip dieback, and twig dieback may occur. During the dormant season, year old infected twigs turn black, then ash gray with a black band of tissue near the advancing lesion. Buds may be killed or leaf out and then die. Factors that predispose maples to bacterial leaf spot are frost damage, high nitrogen fertilization (especially late summer), and heavy rains. To minimize the risk of infection, pruning should be done only during dry weather conditions. All diseased twigs and fallen leaves should be removed from the area. Fungicide applications of fixed coppers applied in the fall and early in the spring at bud break are helpful.

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# Maple Bacterial Spot-Pseudomonas

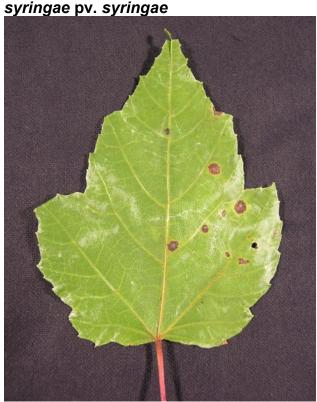


Photo by Sherrie Smith, University of Arkansas Cooperative Extension

This bulletin from the Cooperative Extension Plant Health Clinic (Plant Disease Clinic) is an electronic update about diseases and other problems observed in our lab each month. Input from everybody interested in plants is welcome and appreciated.