



## **Arkansas Plant Health Clinic Newsletter**

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### **Tomato**

Tomato spotted wilt virus, (TSWV), is appearing across the state. More than 176 plant species are susceptible to TSWV, including tomato and pepper. Symptoms include stunting, wilting, and sometimes a one-sided growth habit. Young leaves often turn a bronze or black color with numerous dark spots. Growing tips may die back. Young plants with these symptoms will usually not produce fruit. Older plants will fruit, but the fruit will have chlorotic rings and necrotic spots. Potatoes, peppers, and eggplant are among the many plant hosts that are vulnerable to TSWV. There is no cure or treatment for any viral disease. Pull up all affected plants and destroy or remove them to prevent the disease from spreading to new plants by thrips. A few resistant tomato cultivars are available, but are mostly determinate:

- **Amelia (determinate)**
- **Red Defender (determinate)**
- **Dixie Red (determinate)**
- **Health Kick (determinate)**
- **Mountain Merit (determinate)**
- **Sophya (indeterminate)**
- **Baby Cakes (determinate)**

- **Bella Rosa (determinate)**
- **Red Bounty (semi-determinate)**
- **Crista (determinate)**
- **Talladega (determinate)**
- **BHN 444 (determinate)**
- **Redline (determinate)**
- **BHN 602 (determinate)**
- **Top Gun (determinate)**
- **Tycoon (determinate)**
- **Tribeca (determinate)**
- **Mountain Glory (determinate)**
- **Fletcher (determinate)**
- **Finishline (determinate)**
- **Nico (determinate)**
- **Tribute (determinate)**
- **BHN 640 (determinate)**

### **Tomato Spotted Wilt Virus- Tospovirus**



Photo by Sherrie Smith, University of Arkansas  
Cooperative Extension

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### **Tomato Spotted Wilt Virus- Tospovirus**



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

### **Pepper with Tomato Spotted Wilt Virus-Tospovirus**



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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### **Pepper with Tomato Spotted Wilt Virus-Tospovirus**



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## Bell Peppers Resistant to TSWV:

- Declaration
- El Jafe
- Heritage
- Magico
- Monarcha
- Plato
- Stiletto

## Peach/Nectarine

Peach Anthracnose causes dramatic fruit rot on peach, nectarines, plums, and sour cherries. Symptoms on fruit are circular, sunken, tan to brown, necrotic spots with concentric rings. Ripe fruit is the most susceptible. Lesions are large, and firm to the touch. Masses of orange-colored spores occur in the center of the lesions... Two species of *Colletotrichum*, *Colletotrichum acutatum*, and *Colletotrichum gloeosporioides* have been found to cause Peach Anthracnose. Warm, wet weather favors disease development. Spores are primarily disseminated by rain and wind. Captan is the fungicide of choice for control of Peach Anthracnose. Captan can be used in combination with Abound, Quadris Top, Pristine, or Adament. Do not allow Abound to drift onto any nearby apple trees. The orchard floor and nearby environs should be kept free of weeds and wild prunus.

## Peach Anthracnose-*Colletotrichum* sp.



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## Peach Anthracnose-*Colletotrichum* sp.



Photo by Sherrie Smith, University of Arkansas Cooperative Extension



## **Peach Anthracnose Spore Mass- *Colletotrichum gloeosporioides***

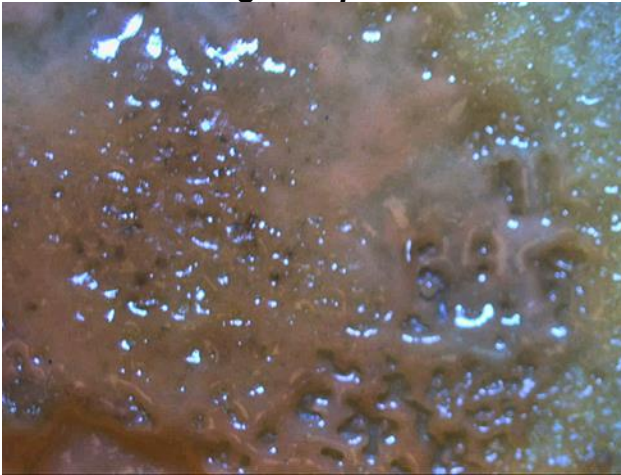


Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## **Peach Anthracnose Spores- *Colletotrichum gloeosporioides***

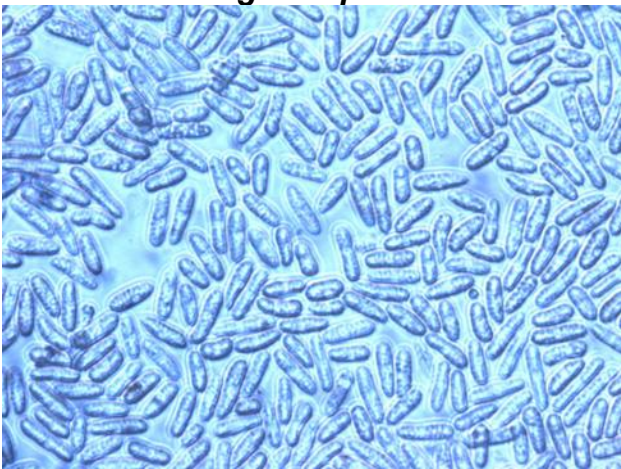


Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## **Oak**

Several types of insects cause galls on oak trees. Vein Pocket Gall, caused by the larval stage of tiny flies in the Cecidomyiidae family of gall midges is one that we see frequently in oak leaf samples. Galls are elongate, pocket-like swellings along veins and midribs of the leaves. The female gall midge lays eggs on the newly emerging leaves in the spring. After the eggs hatch, the maggots move to the leaf veins where they begin to feed. The feeding causes the plant to start forming galls around the feeding sites. Within a few days the maggots are entirely enclosed within the galls, where they remain protected from predators until they emerge as mature larvae about mid-spring. Upon emergence, the larvae drop to the ground and remain there until next spring when they fly up to the newly emerging leaves as adult flies and begin the cycle again. Control is difficult and not usually necessary. However, since the mature larvae spend most of the summer in the ground, lawn insecticides may reduce the population.

## **Oak Vein Pocket Gall-*Macrodiplosis quercusoruca***



Photo by Sherrie Smith, University of Arkansas Cooperative Extension





**Oak Vein Pocket Gall-*Macrodiplosis quercusoruca***



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**Oak Vein Pocket Gall-*Macrodiplosis quercusoruca***



Photo by Sherrie Smith, University of Arkansas Cooperative Extension



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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.

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