





## **Arkansas Plant Health Clinic Newsletter**

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#### **Dogwood Spot Anthracnose**

Dogwood **Spot** Anthracnose is an altogether different fungal disease of dogwood than Dogwood Anthracnose. It is more a cosmetic problem than serious, as it does not kill branches or trees. Spot Anthracnose, caused by Elsinoe corni, attacks dogwood blooms and White cultivars appear leaves in the spring. more susceptible than pink ones. The fungus causes uniform, tiny circular lesions with purple borders and almost white centers. The center of the spots falls out later in the season giving a shot hole effect. In wet seasons the lesions become so numerous that leaves or bracts may become puckered and distorted. With severe infection, buds may fail to open. Anthracnose may be controlled with Daconil or Mancozeb. Spraying should begin when buds begin to open and be repeated when the bracts have fallen, four weeks after bracts have fallen. and again in late summer after the flower buds for next season have formed.

### Dogwood Spot Anthracnose-Elsinoe corni



Photo by Sherri Sanders, University of Arkansas Cooperative Extension

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Issue 8-April 19, 2021

### Dogwood Spot Anthracnose-Elsinoe corni



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

### **Apple**

We are getting a few questions concerning abnormal growths on the trunks of apple trees. Growers are often stumped when trying to figure out why their apple tree has developed strange knotty growths on the main trunk or limbs. Apple Burr Knot is a common, genetic physiological disorder of apples. Differentiated root tissue starts from root initials and becomes a highly branched dwarf root system above the These growths take on the soil line. appearance of rough, raised gall-like areas, usually at nodes. These structures are sometimes mistaken for crown gall, which they superficially resemble. Low light, high humidity, and high temperature can work together to stimulate development of the root initial. Severe Burr Knot problems can cause trees to become stunted, girdled, or weakened at the site of the knot. A tree with a heavy fruit load and many Burr Knots may break during windy conditions. Organisms such as dogwood and plum borers, woolly apple aphids, fire blight bacteria, and wood-rotting fungi can attack the tree through the knots. Burr Knot is common on many of the popular rootstocks such as M7, M9, M26, MM111, and Mark. They also occur on scion cultivars such as Springdale, Empire, and Gala. The best solution to the problem is to plant rootstocks that are not genetically disposed to Burr Knot The knots can sometimes be formation. removed by cutting them out. Burr Knots can also be treated with naphthaleneacetic acid (NAA).







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**Apple Burr Knot-Abiotic** 



Photo by Randy Forst, University of Arkansas Cooperative Extension

## Apple Burr Knot-Abiotic



Photo by Grant Beckwith, University of Arkansas Cooperative Extension







### **Strawberry**

Powdery mildew of strawberries, caused by Sphaerotheca macularis f. sp. fragariae, is a serious problem when environmental conditions are right for infection. Blooms, fruit, leaves, and stems can all be infected. Leaves which are severely damaged by powdery mildew have a reduced ability to photosynthesize. This in itself reduces the over-all vigor of the plant. Infection of flowers and fruit can significantly reduce yield. Symptoms are white patches of mycelium on the undersides of leaves. As the amount of powdery mildew increases, the leaf edges roll upward. Purplish blotches also may occur on the affected leaves. Young fruit may be infected during bloom and become covered with powdery mildew mycelia. Severely infected new fruit may die and dry up. Older fruit develop dark, watery areas on the fruit with sunken lesions. The powdery mildew mycelia eventually become apparent on the injured fruit. Strawberries grown in high tunnels and greenhouses are especially vulnerable. Cultivar susceptibility, low light intensity or short days, high humidity, and low temperatures are factors There are many in disease development. cultivars with decent resistance to powdery mildew. Commercial growers may use Abound, or Quadris Top, or Pristine, or Switch 62.5 WG, or Inspire Super, or Fontelis, or Cabrio EG, or Homeowners must rely on resistant cultivars and good sanitation.

# Strawberry Powdery Mildew on lower leaf-Sphaerotheca macularis f.

sp. fragariae



Photo by Elizabeth Bush, Virginia Polytechnic Institute and State University, Bugwood

# Strawberry Powdery Mildew conidia-Sphaerotheca macularis f. sp.

fragariae



Photo by Sherrie Smith, University of Arkansas Cooperative Extension







Strawberry Powdery Mildew on mature fruit-Sphaerotheca macularis f.

sp. fragariae

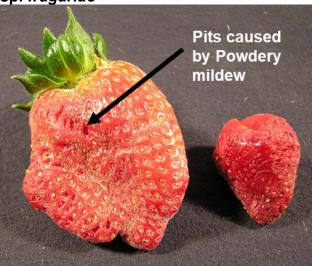


Photo by Sherrie Smith, University of Arkansas Cooperative Extension

### Iris Roundup damage

In some parts of the state, early iris varieties are starting to bloom. Homeowners should be very careful about spraying weeds in and around their iris beds with Roundup. Heavy exposure can cause twisted stems and deformed blooms. Plants may have symptoms for 3 or 4 years.

### Iris Roundup Damage-Abiotic



Photo by Allen Bates, formerly University of Arkansas Cooperative Extension







Sherrie Smith Keiddy Urrea

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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