





#### Sherrie Smith Rick Cartwright

# Arkansas Plant Health Clinic Newsletter

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#### Roses

Roses are extremely sensitive to herbicides. The most seen damage is caused by glyphosate drift (Roundup). The rose pictured below was 40 feet from the area sprayed with Roundup. The slightest amount of drift can cause stunted, twisted, cupped, curled, chlorotic foliage and even death to your plants. Injured plants that don't die may take months to recover. Great care must be taken with this herbicide. Spray only on windless days. Studies show that 14-78% of glyphosate can travel as far as 1300 feet downwind. Roses may be covered with a tarp while spraying. Be sure to remove the tarp immediately after the drift has had time to settle. Roundup injury resembles a virus called Rose Rosette Virus. You can tell the difference by examining the thorns. Plants with the virus have an excessive growth of unusually soft and pliable red or green thorns. Virus is not curable. Roses diagnosed with Rose Rosette Virus should be removed from the planting.

# Rose Roundup (glyphosate) Damage-Abiotic



Photo by Don Plunkett, University of Arkansas Cooperative Extension

Rose Roundup (glyphosate) Damage-Abiotic



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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## Rose Rosette Virus-Emaravirus



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

#### Rose Rosette Virus-Emaravirus



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

#### **Black Spot**

It is time to start spraying for Black Spot of This is the most common and Roses. persistent fungal disease of roses. Black Spot, caused by Diplocarpon rosae, is characterized by fuzzy edged rounded blackish or purplish spots on the rose leaf. On the canes it appears as raised dark reddish or black blotches. Leaves turn yellow and drop to the ground. The quickly become completely bush can Repeated defoliation during the defoliated. growing seasons weakens roses and makes them more susceptible to other diseases and to winter kill. Susceptible cultivars should be sprayed with a rose fungicide as soon as they leaf out. Applications should be repeated every 10-14 days and after every rain. Diseased leaves should be raked up and destroyed. For those who don't want high maintenance roses, there is good resistance to Black Spot available. Search online for lists of disease resistant roses, resistance.

# Rose Black Spot-Diplocarpon rosae



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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#### **House Plants**

**Rick Cartwright** 

Necrotic lesions and foliar tip burn are common on Parlor palms subjected to fluoridated water. Chinese Evergreen, Peacock Plant, Spider Plant, Ti Plant, Dracaena, Dragon Plant, Peace Lilies, Cast Iron Plants, Prayer Plants, Easter Lilies, and Spineless Yucca are also sensitive to fluoride. Superphosphate fertilizer, perlite, fluoridated water, and some peats are sources of fluoride. Fluoride toxicity is seldom fatal. It can be managed by ensuring that the soil pH is between 6.0-6.5 and avoiding the use of superphosphates.

#### **Parlor Palm Fluoride Toxicity-**Abiotic



Photo by Sherrie Smith, University of Arkansas **Cooperative Extension** 

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#### **Dracaena Fluoride Toxicity-**Abiotic









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#### Wheat

Barley Yellow Dwarf Virus (BYDV) occurs throughout North America and other wheat producing regions of the world. The disease is also known as Cereal Yellow Dwarf, Yellow Dwarf, and Red Leaf. Symptoms are yellow, stunted plants singly or in small groups among normal plants. The pattern of infection in the field is often circular. Leaves are typically discolored in shades of red, yellow, or purple. Some cultivars have no leaf discoloration but are stunted. Early infections slow plant growth and cause significant yellowing of older leaves. Later infections may have no symptoms except for a reddened or yellowed flag leaf on otherwise normal looking plants. Other symptoms are less flexible leaves and underdeveloped roots. Leaves are often stiff and erect. The virus is transmitted by aphids. Late seeding of fall wheat reduces barley yellow dwarf damage, because plants can emerge and grow through the highly vulnerable seedling stage while temperatures are too low for aphid activity. The clinic is now testing for BYDV.

# Wheat Barley Yellow Dwarf Virus (BYDV)-Luteovirus



Photo by herb Ginn, University of Arkansas Cooperative Extension

# Wheat Barley Yellow Dwarf Virus (BYDV)-Luteovirus



Photo by herb Ginn, 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.

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