



## **Arkansas Plant Health Clinic Newsletter**

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### **Blue Spruce**

Cytospora Canker, caused by the fungus *Leucostoma (Cytospora) kunzei*, is a disease of both Colorado and Norway spruce. The disease is found mostly on stressed trees that have been planted outside their normal range. Heat, drought stress, and injury predispose spruce to infection by Cytospora Canker. Trees do not usually begin to show symptoms until they are ten to fifteen years old. The first symptoms of Cytospora Canker are the browning of needles and the dying of the lower branches of affected trees. As the disease advances, it spreads to higher branches. Sometimes branches high in the tree are attacked even though lower ones are healthy. The cankers may be discolored, sunken or swollen. They often exude sap, which is a bluish-white when dry. Over time, affected trees become ugly and lose their value for ornamental purposes. The progression of Cytospora Canker can be slowed by supplying additional water during dry weather and pruning infected branches. Pruning should be done when the tree is dormant. Disinfect pruners or limb loppers with 70% rubbing alcohol or a 10% bleach solution (nine cups water to one cup bleach) between cuts to reduce the chance of

spreading the disease. There are no chemical controls for Cytospora Canker.

### **Spruce Cytospora Canker- *Leucostoma kunzei***



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

### **Spruce Cytospora Canker- *Leucostoma kunzei***



Photo by Michelle Buchanan, former county agent for University of Arkansas Cooperative Extension

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Sherrie Smith  
Ricky Corder

## Rose of Sharon

Rose of Sharon is one of our most reliable hardy shrubs for the sunny shrub border. Rose of Sharon will flower continuously in late summer to fall when few other shrubs are in bloom. They grow 8-12 feet (2.4-3.7m) tall and 6-10 feet (1.8-3.0m) wide. Flowers may be single or double and come in a range of pretty colors, including pink, red, lavender, purple, blue, and white, depending on the variety. For small gardens, the dwarf Rose of Sharon, Lil' Kim, is available. It grows only 3-4 feet (0.9-1.2m) tall and wide. Rose of Sharon grows best with full sun to light shade and moist, well-drained soil. They have very few pests. However, homeowners may be startled by the appearance of large numbers of the Scentsless Plant Bug, *Niesthrea louisianica*. These bugs do not damage the plant itself. They feed mostly on seed pods. They are considered a beneficial insect because they feed on a noxious field weed called Velvetleaf.

## Rose of Sharon Scentsless Plant Bug-*Niesthrea louisianica*



Photo by Ricky Corder, University of Arkansas Cooperative Extension

## Rose of Sharon-*Hibiscus syriacus*



Photo by David Stephens, Bugwood.org

## Rose of Sharon Scentsless Plant Bug-*Niesthrea louisianica*



Photo by Ricky Corder, University of Arkansas Cooperative Extension

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**Sherrie Smith**  
**Ricky Corder**

## Pumpkin

The Plant Health Clinic has been receiving many samples of pumpkin and squash with Downy Mildew, caused by *Pseudoperonospora cubensis*. This is a devastating fungal disease of cucurbits including cucumber, pumpkin, squash, and watermelon. On all hosts, upper leaf symptoms begin as chlorotic flecks or spots on the surface of the leaves. Gray-brown to purplish-black downy sporulation occurs on the corresponding spots on the underside of the leaves. Downy Mildew can progress extremely rapidly within a field, causing the leaves to turn brown and necrotic and to curl upwards. Affected leaves become burned looking, shrivel, and die. Older leaves are infected first. Although rare, fruit and blooms are occasionally infected. However, it is the leaf loss that results in reduced yields, misshapen fruit, and damaged fruit from sunburn as the leaves die and the fruit lose their protective shade. It's important to begin control measures as soon as Downy Mildew is confirmed in your field. Homeowners may use Bonide Mancozeb Flowable w/ Zinc in rotation with a vegetable fungicide containing chlorothalonil. The use of resistant cultivars helps delay infection.

## Pumpkin Downy Mildew (leaf underside)-*Pseudoperonospora cubensis*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## Pumpkin Downy Mildew sporangia and spores-*Pseudoperonospora cubensis*



Photo by Ricky Corder, University of Arkansas Cooperative Extension

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Sherrie Smith  
Ricky Corder

## Pumpkin Downy Mildew (leaf top)-*Pseudoperonospora cubensis*



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.

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