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.

**Pansy**

Black root rot, caused by the fungus *Thielaviopsis basicola*, is a common and serious disease of many crops including field crops and ornamentals. Cotton, soybean, peanut, begonia, fuchsia, cyclamen, geranium, gerbera, gloxinia, holly, pansy, petunia, phlox, poinsettia, sweet pea, verbena, and violets are some of the crops commonly infected. *Thielaviopsis basicola* is a soil-borne pathogen that can survive in the soil for many years because the fungus forms thick walled survival spores called chlamydospores. Above-ground symptoms are stunting, wilting, yellowing, and plant death. When roots are examined they have small black flecks containing the chlamydospores. When infection is severe, the entire root may look black. Sanitation in the greenhouse is essential for control of Black root rot. Soil and pots should not be re-used. Monthly drenches of fungicides such as Cleary’s 3336 are helpful in control if the disease is not too severe.
Peony

Peonies are a long lived, reliable and beautiful perennial. They grow best in full sun, planted in well-drained soil with a pH of 6.5-7.0. Occasionally the Plant Health Clinic receives a peony sample with bead-like swellings or galls on the roots. The galls closely resemble galls produced by root knot nematodes. However, examination of the galls reveals no nematodes. This disease of peony is known as Lemoine Disease, and is thought to be caused by an unidentified viroid, vector unknown. When one of the galls is cut in half, yellow inclusions are found within the gall. Some affected varieties show stunting, reduced flowering, and pitting in the roots. Other peony cultivars show little to no decline, in spite of having numerous root galls. There is no cure for these plants. They should be discarded. Excellent sanitation should be observed. Since it is possible that this disease is sap transmitted, tools should be kept clean and sanitized between plants, using either a 10% bleach solution or 70% rubbing alcohol.

Willow

A common leaf disease of willows is Cercospora leaf spot, caused by Cercospora salicina. The spots are 0.5 - 5 mm in diameter and round to slightly irregular in shape. The centers of the lesions are with brown, but become whitish-gray with age and have purple-brown margins. Numerous lesions cause the leaves to turn yellow and fall from the tree. In severe cases, dieback of the branches can occur. All infected twigs and leaves should be removed from the planting. Maneb, Daconil, and Captan have been used as chemical controls, but the large size of willows makes this impractical for most homeowners.
Oak

Oak Wooly aphids, *Stegophylla quercifolia*, are sap feeders that are often found on oaks already under stress from factors such as drought or herbicide injury. Heavy infestations can weaken already distressed trees. Yellowing and browning of foliage can occur, along with black sooty mold from aphid excretions. The common name “Wooly aphid,” comes from the waxy, white secretions that cover the aphids. Adult aphids are small insects, 3/10 to 7/10 inch long, with yellowish or greenish bodies covered in “wool.” Eggs laid the previous fall hatch into females which give birth to only females. Several generations of all females are born during the summer. In the fall both males and females are produced. They mate and the females lay the eggs which overwinter, thus completing the cycle. If the tree is small enough to make spraying practical, insecticidal soaps are very effective against aphids.

Willow Cercospora leaf spot - *Cercospora salicina*

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Request for help from Dr. Robbins: Root knot nematode populations are needed for our Arkansas species study. I am a nematologist in the department of Plant Pathology in Fayetteville. My student and I are trying to amass populations of as many species of Root knot nematode (Meloidogyne sp.) as possible for species identification using molecular techniques. At present no root knot species in Arkansas have been identified using molecular technology. We are interested in...
receiving populations from home gardens, shrubs, flowers, trees and grasses. For samples we need about a pint of soil and feeder roots in a sealed plastic bag that is plainly identified by plant host, location (City County, physical address, collector and date of collection). Please send samples to us at the follow address:

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