This is the first bulletin from the Cooperative Extension Plant Health Clinic (Plant Disease Clinic), an electronic update about diseases and other problems observed in our lab each month. Input from everybody interested in plants is welcome and appreciated.

Wheat Viruses

Soilborne wheat viruses have started showing up in northeast Arkansas, but they are not expected to be as damaging as in most years due to the very dry conditions last fall. Infection of wheat roots by the soil fungus that transmits soilborne viruses is favored by moist conditions and early planting. It is important to understand which virus occurs in which fields so that you can select the best resistant variety next year, so please send in any suspicious samples for testing.

Other Wheat Diseases

It has been a very mild winter, and the Arkansas wheat crop looks very promising due to the dry conditions. Leaf rust and stripe rust have likely overwintered in the state, although the recent cold wave with ice and snow helped destroy some of these fungi that can only survive on living plants. For this reason, the rust fungi are called "obligate" parasites or pathogens. Their fate is tied to their host, although some rusts can survive on other plants besides their preferred host. Anyway, high yield potential wheat fields should be scouted between now and heading for foliar diseases. If stripe rust hot spots are noticed, the fields should be sprayed immediately with a fungicide otherwise applications should be delayed until booting to early heading if disease warrants. Check with the local county extension agent for additional fungicide information or check the MP154 http://www.uaex.edu/Other_Areas/publications/PDF/MP154/WheatFolFung.pdf and always read the fungicide label before use.

Pecan Problems

Last year (2005) was a near record drought year in Arkansas and thus was not a good year for pecans. Pecans do best in deep, rich, well-drained soils and young trees need 10-15 gallons of water a week, with mature trees needing 50-80 gallons per day or approximately 2000 gallons a month. Water is especially critical during late summer and early fall during nut filling. Drought may cause poorly filled wafer kernels; kernels with fuzz and air (hollow) centers; green or black sticktight pecans (see photo).

Scab (see next photo) is a serious annual problem for pecans in Arkansas. While resistant varieties have been developed, many existing trees and orchards are planted in susceptible ones. So a fungicide spray program is usually followed by commercial growers who own the high pressure sprayers capable of applying fungicides to large trees. Homeowners have a more difficult time using fungicides because of inadequate equipment and the very limited selection of small-package and legal fungicides. Therefore, homeowners should practice good sanitation to reduce the amount of the scab fungus surviving on old nuts, husks, limbs and leaves by periodically raking these up and hauling them off, burying them, composting or other disposal methods.
Stink bug damage to pecan kernels varies from season to season according to periodic buildup of this insect. Many stink bug species are hard to kill with insecticides and repeated applications may be needed. Product information is available through the local county extension office. Some growers have reportedly had success by planting nearby trap crops of speckled purple hull peas to attract stinkbugs away from the pecan orchard and then killing them while feeding on the peas (Weaver, 1999).

Roses
Black spot of rose (*Diplocarpon rosae*) (photo) is a frustrating and common problem for rose growers in Arkansas and one of the most common samples sent to the clinic. Very early spring is a good time to prune out diseased or weak canes and rake up fallen leaves that harbor the black spot fungus. A protectant fungicide such as Daconil or Immunox should be applied starting as soon as the first leaves start to develop (or as soon as possible during early leafing out) and repeated according to label directions on susceptible varieties throughout the spring and summer. In the past, we have also seen more symptoms of drought injury to roses than many other shrubs so adequate watering, especially during dry spells is very important. Rose experts advise that blooming roses may need 2 inches of water a week when growing and no rainfall is received.

Boxwood
Boxwood samples continue to come in with winter desiccation damage and drought damage. Evergreen shrubs should be watered year round if conditions are dry and this is especially true in drought years like 2005.

Juniper
We are also seeing drought injury to established junipers, sent in from various home landscapes. It takes several weeks to notice these plants may be under drought stress in years like 2005 so it is a good idea to establish routine watering practices during dry periods for all plants, yes even junipers.