



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.

Pine

Pitch canker is considered to be endemic in the south-eastern United States. Slash pine is a favorite host along with Longleaf and loblolly pine. Pitch canker is a fungal disease caused by *Fusarium subglutinans f. sp. Pini*. It is seed borne and may also be transmitted by insects, principally bark beetles and beetles which feed in cones. Symptoms are large flows of pitch around the canker of an infected tree. If the tree's bark around the infected area is removed, resin-soaked wood is exposed. Loss of shoots, crown dieback, dying needles, and stunted growth, deformed crowns and shoots, are additional symptoms. Avoid wounding trees, especially from July to November. Be careful when mowing or weed-eating around the tree. Reduce stress by watering during drought periods. Many trees will recover, but trees with large trunk cankers may die. Dying and dead trees should be removed from the landscape to protect nearby healthy trees.

Pitch canker



Mike McClintock University of Arkansas Cooperative Extension

Pitch canker



USDA Forest Service - Region 8 Archive, USDA Forest Service, Bugwood.org

Soybean by Amanda Greer

Arkansas has its first case of *Neocosmospora* stem rot in Soybean. The disease was detected by Amanda Greer, Plant Pathology Program Technician, at the Southeast Research and Extension Center at Monticello. The disease was verified by Cliff Coker, and finally by the Plant Health Clinic. To date, *Neocosmospora* has been identified in Drew, Desha, and Poinsett Counties in a total of seven locations. Symptoms of *Neocosmospora* stem rot, *Neocosmospora vasinfecta*, are interveinal chlorotic spots on upper leaves of individual or small groups of plants. The spots expand and become necrotic. The plants may terminate prematurely. The foliar symptoms resemble those of Sudden death Syndrome or Stem



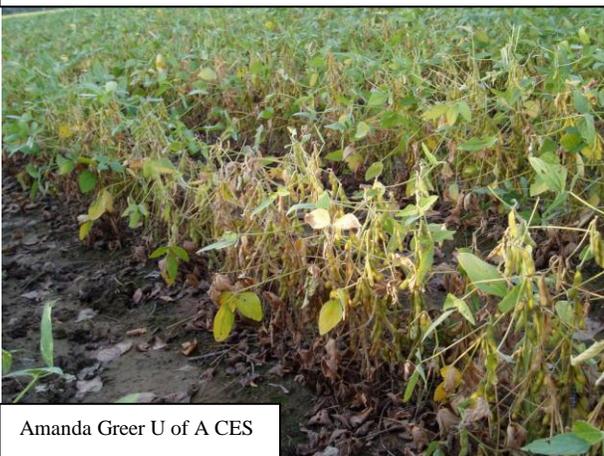
canker. Defoliation can occur in as little as two weeks after foliar symptoms begin. Red-orange perithecia develop on the lower stems near or below the soil line and on roots and nodules. The stem may be red colored without the perithecia. Mycelium may be present in the pith tissue. Because *Neocosmospora* stem rot closely resembles Red Crown Rot *Cylindrocladium crotalariae*, suspect plants require laboratory examination for diagnosis. Control measures have not yet been established for soybeans.

Neocosmospora Foliar Symptoms



Cliff Coker, U of A CES

Neocosmospora Foliar Symptoms



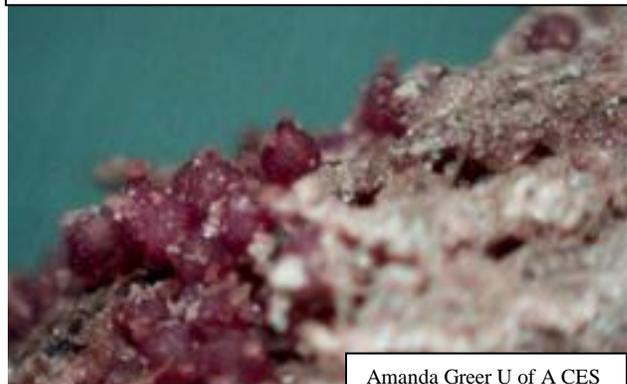
Amanda Greer U of A CES

Neocosmospora Root Symptoms



Cliff Coker U of A CES

Neocosmospora Perithecia



Amanda Greer U of A CES

Neocosmospora Perithecia



Sherrie Smith U of A CES



Milo

The clinic is seeing samples of grain sorghum with midge damage. Scouting should be done at bloom time and pesticides applied at that time. It is at bloom that the adult midge lays its eggs. The adult is a small, mosquito-sized, orange-colored insect that blends in with sorghum flower parts. "The first two or three generations often develop in Johnson grass. As they move into grain sorghum, numbers increase during flowering. Damage occurs when larvae feed on newly fertilized ovaries, preventing normal kernel development.

Midge damage



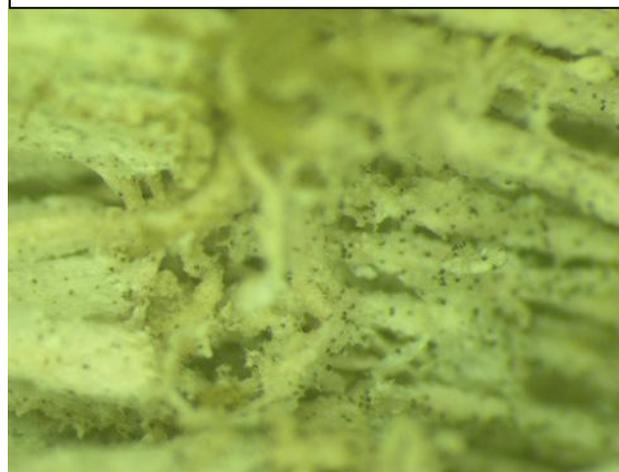
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Fusarium rot



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Charcoal rot



Sherrie Smith University of Arkansas Cooperative Extension

Charcoal rot, Anthracnose rot, and Fusarium root and stalk rot are also present in milo fields at this time. These diseases can cause early senescence and lodging. Charcoal rot may be diagnosed by splitting crowns open, and looking for tiny black microsclerotia of the charcoal rot pathogen. Crowns with red discoloration may be Fusarium or Anthracnose rots.



Anthracnose stalk rot



Sherrie Smith University of Arkansas Cooperative Extension

susceptibility, tree vigor, and psylla numbers. The most important control measure is to use decline-resistant or decline tolerant root-stocks. In pear orchards, psylla control reduces the incidence of pear decline.

Pear psylla



<http://www.viarural.com.ar/viarural.com.ar/agricultura/aa->

Pear decline



Jim Robbins University of Arkansas Cooperative Extension

Pear

Pear samples from several locations are currently being tested for the presence of a disease caused pear decline. The results of the testing will be issued in a news bulletin if positive. Pear decline is a serious disease caused by a phytoplasma-like organism. It is transmitted by an insect, called the pear psylla. Psyllas look like tiny cicadas. It also can be transmitted by grafting and budding. Poor shoot and spur growth, dieback of shoots, upper rolling of leaves, red leaves, reduced leaf and fruit size, premature leaf drop, and tree death are all symptoms of Pear decline. Pear decline is recognized in three forms: slow decline, quick decline, and reddening of the foliage. Symptoms of quick decline are sudden wilt and death of the tree, sometimes preceded by slow decline. It is more common when trees are stressed by hot, dry weather. Slow decline is a progressive weakening of the tree. Symptoms are reduced terminal growth, smaller, fewer, leathery leaves that are light green and have slightly rolled edges. Premature reddening of the foliage in late summer and autumn is the mildest form of Pear decline. This form occurs on trees with more tolerant rootstocks. The expression of the disease depends on rootstock