





Arkansas Plant Health Clinic Newsletter

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Squash

The squash bug is one of the most troublesome pests attacking squash and pumpkin plants throughout the United States. Both nymphs and adults suck sap from the leaves and stems of cucurbits. This can be mistaken for cucurbit bacterial wilt. After wilting, vines and leaves turn black and crisp, and become brittle. Small plants may be killed entirely, while larger plants may have several runners affected. Sometimes no fruits are formed. Squash bugs are difficult Commercial growers may use to control. Brigade 2 EC, or Sevin, or Ambush 25 W. Homeowners may use Sevin. Crushing the eggs when found is very helpful.

Squash Bug Eggs-Anasa tristis



Photo by Rebecca Barocco University of Arkansas Cooperative Extension

Squash Bug Nymph-Anasa tristis



Photo by Rebecca Barocco University of Arkansas Cooperative Extension

Squash Bug Adult-Anasa tristis



Photo by Rebecca Barocco University of Arkansas Cooperative Extension



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Squash Bug Damage-Anasa tristis



Photo by Rebecca Barocco University of Arkansas Cooperative Extension

Squash Bug Damage-Anasa tristis



Photo by Whitney Cranshaw, Colorado State University, Bugwood.org.jpg

Sorghum by Rebecca Barocco

Sooty Stripe is a foliar blight disease caused by the fungus Ramulispora sorghi and is limited to Sorghum spp. Leaf lesions begin as reddish brown or tan circular spots that grow into spindle-shaped lesions with tan centers and reddish-brown margins. The margins will also be surrounded by a yellow halo. Leaf blighting can result from the merging of these lesions. R. sorghi prefers a warm and moist environment, and under such conditions a gravish cast from masses of hyphae and conidia will form in the lesion centers. Given time, black dots will also form as the masses become sclerotized. This process causes the sooty appearance. The sclerotia serve as the survival mechanism of the fungus, so management should involve removing crop residue. Alternative hosts such as Johnsongrass and Shattercane should also Crop rotation is the most be removed. beneficial method to remove inoculum sources from the soil. Resistant varieties are available. Fungicides may not be economically feasible.

Sorghum Sooty Stripe-Ramulispora sorghi



Photo by Rebecca Barocco University of Arkansas Cooperative Extension







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Fig

Figs are among the oldest cultivated crops, predating even cereals such as wheat and barley. They are excellent plant sources of calcium and fiber. Figs are grown easily in warm, dry climates around the globe. However. in humid climates such as Arkansas disease Anthracnose fruit rot problems can arise. results in a soft rot and dropping of the fruit. The disease is caused by the fungus Glomerella cingulata/Colletotrichum gloeosporoides. First symptoms appear as small sunken and discolored areas on fruit. The areas increase in size and pink masses of spores become visible. Immature fruit may mummify and remain on the branches in a dried condition. Older fruit may drop to the ground. Symptoms on leaves are slightly sunken spots surrounded by a dark brown edge. The center of the spot may also have pink spore masses. Often, large areas on the leaf turn brown, dry out along the leaf margins, and eventually the leaf drops off. Sanitation and good cultural practices are the best defense. Fallen leaves should be cleaned up. Dried and diseased fruit should be removed from the trees and the ground since these will harbor the fungus. There are no fungicides labeled for figs in Arkansas.

Fig Anthracnose-Glomerella cingulata/Colletotrichum gloeosporoides



Photo by Rebecca Barocco University of Arkansas Cooperative Extension

Corn

Two types of rust infect corn in Arkansas. Common corn rust caused by Puccinia sorghi is seen nearly every year but doesn't usually cause serious vield loss. Common rust development requires relatively cool temperatures (54 to 82 degrees F) and nearly 100% relative humidity for about six hours. Young leaf tissue is more susceptible to infection than emerged leaves. After tasseling, leaves should be relatively immune further common development. to rust Common rust has cinnamon-brown colored round to elongated pustules that frequently form in bands on the lower part of the leaf. Common rust pustules form on both upper and lower sides of an individual leaf, distinguishing Common from Southern rust. which predominately sporulates on the upper leaf







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surface. Unlike Common rust, Southern rust, Puccinia polysora, is favored by high temperature. The pustules are smaller, rounder and more orange in color than common rust. Unlike Common rust they develop primarily on the upper surface of the leaf. Southern rust can cause serious yield losses as heavily infected leaves are killed. resistant hybrids available. There are Fungicides labeled for rust control in Arkansas are Tilt, Quilt, Propimax, Stratego, and Headline. Quadris is labeled for Common rust, but not Southern rust. The clinic received its first southern rust sample this season from St. Francis County 7/13.

Corn Southern Rust Spores-Puccinia polysora



Photo by Sherrie Smith University of Arkansas Cooperative Extension

Top: Common Corn Rust spore-Puccinia sorghi, Bottom: Southern Corn Rust spore-P. polysora



Photo by D.G. White, APS Image Library

Corn Southern Rust-Puccinia polysora



Photo by Rebecca Barocco University of Arkansas Cooperative Extension







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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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