





Issue 28-October 19, 2012

Arkansas Plant Health Clinic Newsletter

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Sweet Potato

Scurf

Scurf of sweet potato, caused by Monilochaetes infuscans, produces symptoms on the outer surface of the storage root that makes the tuber unmarketable. Symptoms are dark brown to black spots that develop on the potatoes during the growing season. Copper-skinned sweet potatoes usually have brown lesions, and redskinned cultivars have almost black lesions. The spots grow and may eventually cover most of the surface of the potato. The infected areas may be easily scraped off and do not affect the flesh of the potato. Losses however result from buyers avoiding the discolored tubers. infections result from using infected potatoes as propagating material. The pathogen also survives in the soil for 1-2 years. Severity is greater in fine textured soils and in soils that have been manured. Two simple measures will give good control of Scurf. Practice a 3-4 year crop rotation, and do not use symptomatic potatoes for propagation.

Sweet Potato Scurf-Monilochaetes infuscans



Photo by Sherrie Smith University of Arkansas Cooperative Extension

Mottle Necrosis

Mottle Necrosis, caused, by *Pythium* ssp., is a decay of the tuber in the field. Symptoms are slightly-sunken, brown, circular to large-andirregular spots on the outside of the tuber. Islands and channels of dry, crumbly, dark-gray to brown dead tissue may be seen inside the tuber. At soil temperatures below 64°F, a soft, cheesy rot occurs. There is also a band type of rot which resembles Ring rot caused by Rhizopus. In this case, lesions are shallow and generally restricted to the cortex by the vascular ring. Tissue remains firm and turns a chocolate brown. Lesions of Mottle Necrosis often begin where feeder roots attach to the Losses are most severe in late harvested fields that have had cool, rainy weather. Sweet potatoes should be harvested before the occurrence of wet, cool weather. Crop rotation helps avoid the build-up of inoculum. There appears to be some field resistance among cultivars, with Jersey types being the most susceptible. There are no current chemical controls.

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Sweet Potato Mottle Necrosis-



Photo by Sherrie Smith University of Arkansas Cooperative Extension

Viburnum

Viburnums are wonderful landscape plants. They offer texture, form, attractive flowers, berries, and in many cultivars good fall color. They do not have many serious disease issues as a rule but may develop fungal leaf spots caused by Cercospora viburnicola when under overhead irrigation or when planted in a location with poor air circulation and moist conditions. Symptoms are small, circular, reddish-purple blotches with a lighter gray center. The lesions may coalesce, blighting large portions of the leaf and causing premature defoliation. Control consists of prompt removal of all fallen leaves and the application of fungicides. **Products** containing chlorothalonil gives good results if applied at the onset of disease.

Viburnum Cercospora Leaf Spot-Cercospora viburnicola



Photo by Sherrie Smith University of Arkansas Cooperative Extension

Hickory

We see several types of insect galls on hickory caused by midges belonging to the genus *Caryomyia*. The Hickory Bullet Gall, caused by *Caryomyia tubicola*, and the Hickory Purple Gumdrop Gall, caused by *Caryomyia purpurea* (named for the purple larval cell lining), are two types of galls commonly found on hickory. Insect galls are abnormal plant tissue growths seen on many species of plants, including hickory. They are caused by a reaction between chemicals produced by an insect or a mite and plant hormones. They usually do not

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seriously affect plant health but can be alarming to homeowners. The gall structure protects the insect and/or its eggs from predators, insecticides, and provides food. Leaves and twigs showing galls may be pruned and destroyed when practical. This reduces the insect population and provides some relief for the following season. If chemical control is attempted, sprays apply insecticides at bud break the following spring.

Hickory Bullet Gall-Caryomyia tubicola



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.

Hickory Purple Gumball Gall-Caryomyia purpurea



Photo by Sherrie Smith University of Arkansas Cooperative Extension

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