Sherrie Smith

Issue 24-August 15, 2014

Arkansas Plant Health Clinic Newsletter

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Asparagus

Purple Spot

Asparagus is a high value crop grown extensively for its delicious spears. One of the most damaging diseases of asparagus is Purple Spot, caused by the fungus *Stemphylium vesicarium* (sexual stage: *Pleospora allii*). Cool, wet weather during spear emergence is ideal for disease development. Disease incidence is most severe where fern debris from the previous year's crop has been left on top of the ground. Up to ninety percent infection may occur during conditions favorable for disease. Reddish-purple, elliptical, slightly sunken lesions with tan centers, 0.03-0.06 inch wide by up to 0.125 inch long, appear on the spears. Defoliation may occur, weakening the plant. The lesions are superficial and do not affect the internal spear tissue. None-the-less, the lesions make the spears unmarketable. Purple Spot subsides when dry weather conditions develop. Good sanitation is critical for managing Purple Spot. Last year's fern growth should be destroyed by burning, be chopped and turned under, or be removed from the field. All volunteer asparagus within 400 yards of the field should be removed. The fungicide Flint is labeled for treatment of Purple Spot in Arkansas. Homeowners must rely on sanitation.

Asparagus Purple Spot-
Stemphylium vesicarium

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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Asparagus Purple Spot spores-*Stemphylium vesicarium*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Asparagus Spear Rot

Asparagus Spear Rot can be a serious problem in Arkansas during warm, wet weather. *Phytophthora megasperma* is a soil-borne pathogen that is active in continuously wet/heavy soils. Symptoms begin as soft, water-soaked spots on the spears slightly above or below the soil line. The spots expand as they age, girdling the stem which eventually collapses and shrivels. This collapse may cause the spear to bend like a shepherd's crook. The internal tissues become discolored, turning brown to black as the crown rots. Severely rotted stems become blackened and fibrous. The extent of the damage depends on environmental conditions such as amounts of rain and/or irrigation, and soil drainage. Growers should avoid planting in fields with poor drainage. Ridomil Gold SL and Aliette are labeled for control of Phytophthora in asparagus.

Asparagus Spear Rot-*Phytophthora megasperma*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Boxwood

The Boxwood Leafminer, *Monarthropalpus flavus,* is a common pest of boxwood. The adult Leafminer is a small fly accidently introduced from Europe. The fly prefers American boxwood, but also attacks Japanese and English boxwood. The adult is a yellow to orange-red fly that resembles a mosquito. When boxwoods begin to show new growth in the spring, the female mates, then inserts her eggs into the underside of the leaves. The maggot hatches and feeds in the protected space between the upper and lower leaf layer. They overwinter as partially grown larvae and emerge in the spring to begin the cycle again. One generation occurs per year. Signs that boxwood has Leafminers are pale yellowish

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blisters on the leaves along with smaller than normal leaves. Boxwoods with heavy infestations may have thin foliage and poor color. Apply insecticides such as Sevin or Malathion in the spring when the new leaves are fully formed. Apply a second application 6-8 weeks later. Orthene may be used to control the larvae in the mines. Merit or Bayer Advanced Insect Control for Trees and Shrubs may be applied in February to early April. Infested leaves may be handpicked and destroyed.

Boxwood Leafminer-
Monarthropalpus flavus

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Boxwood Leafminer-
Monarthropalpus flavus

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Corn

The Plant Health Clinic has received several samples recently of corn with Banded Sheath Blight, caused by *Rhizoctonia solani*. In severe infections, stalk breakage may occur, but we do not recommend fungicides as a rule.

Corn Banded Sheath Blight-
Rhizoctonia solani

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Corn Banded Sheath Blight-
Rhizoctonia solani

Photo by Sherrie Smith, 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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