



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.

Sweet gum

Anthrachnose of sweet gum, caused by the fungus *Gloeosporium nervisequum*, produces brown to black blotches on the leaves. The necrotic areas often follow the veins. Defoliation and twig death may occur when the disease is severe. Leaf infections results from spores produced in twig cankers. The spores are mainly water dispersed, and settle in the nodes, branching, and growing points of the leaves. The leaves become infected as they begin to unfold in the spring. Tiny black fruiting bodies of the fungus may be found on the leaf lesions later in the season. Healthy trees are little affected by the disease, but repeated severe infections year after year weaken a tree and can cause branch dieback and death. Good sanitation is the best method of control, especially on trees too large to easily spray. All fallen leaves should be raked up and destroyed. Adequate water during dry periods and fertilizer applications during the dormant period help trees maintain vigor. When fungicide applications are necessary, the first spray should be at bud break, then when leaves are half grown, and again when leaves are fully expanded. Fungicides which contain chlorothalonil, or propiconazole, or thiophanate methyl, or copper may be used.

Sweet gum anthracnose- *Gloeosporium nervisequum*



Sherrie Smith University of Arkansas Cooperative Extension

Sweet gum anthracnose- *Gloeosporium nervisequum*



Sherrie Smith University of Arkansas Cooperative Extension

Potato

Common scab of potato, caused by a bacterium, *Streptomyces* spp., is found in most potato production areas of the world. Other common names for this disease are "Russett scab", "Erumpent scab", and "Pitted scab". Symptoms are usually confined to the tubers. Young tubers are infected through lenticels and stomata. Lesions are circular to irregular in shape and often coalesce into large areas on the surface of the tuber. As the tuber matures, the lesions become rough, cracked, and tan to dark brown. Superficial lesions are called Russett scab, slightly raised (Erumpnt scab), and sunken (Pitted scab). The type of lesion is dependent on potato cultivar, aggressiveness of the streptomyces strain, and the environment. Control of Common scab is difficult. The most critical control measure is planting only scab free seed tubers. A crop rotation of 3 to 4 years is helpful. High soil moisture should be maintained for 4 to 6 weeks after swelling of stolon tips. Soil pH is important in scab control. Potatoes are commonly grown in soils with a pH of 5.0 to 5.2 for control of common scab. Avoid alkaline organic fertilizers such as ashes, poultry/fresh farmyard manure. Most important, there are cultivars with some resistance.



**Potato- Common Scab-
Streptomyces spp.**



Sherrie Smith University of Arkansas Cooperative Extension

**Potato- Common Scab-
Streptomyces spp.**



Sherrie Smith University of Arkansas Cooperative Extension

Cucumber

Cucumber Scab, caused by the fungus *Cladosporium cucumerinum*, can attack most cucurbit crops. Losses in susceptible cultivars may be severe, exceeding 50%. Lesions on the leaves begin as pale green water-soaked spots that are irregularly shaped. The lesions enlarge as they age and turn gray to brown in color. The center of the lesion eventually falls out leaving a shot hole or ragged tears in the leaves. The newest leaves may be deformed and twisted by the numerous lesions. Lesions on petioles are more elliptical, but otherwise look like leaf lesions. Fruit lesions begin as minute greasy looking sunken specks. These enlarge, becoming circular to oval and gray colored. Sometimes the fruit lesions ooze sticky exudates. Spots may merge causing large scabby areas on the fruit. Fungicides are helpful if applied prior to fruit infection. Quadris, Cabrio, Bravo Weathstik, Bravo Ultrix, Equus, Mancozeb, and Maneb are labeled for scab. Practice crop rotation so that 2 or more years pass between susceptible cucurbit crops. Avoid using overhead irrigation as this makes more favorable conditions for disease. There are resistant cultivars available.

**Cucumber Scab-*Cladosporium
cucumerinum***



Sherrie Smith University of Arkansas Cooperative Extension



Sherrie Smith

Cucumber Scab-*Cladosporium cucumerinum*



Sherrie Smith University of Arkansas Cooperative Extension

Apple Lygus bug damage-*Lygus* spp.



Sherrie Smith University of Arkansas Cooperative Extension

Apple Lygus bug damage-*Lygus* spp.



Sherrie Smith University of Arkansas Cooperative Extension

Apple

Lygus bugs attack many field and vegetable crops, small fruits, and fruit trees. They also feed on alfalfa, sweet clover, mullein, Russian thistle, smotherweed, horseweed, mustards, and ragweed among others. The Tarnished plant bug (*Lygus lineolaris*) is the most common species attacking apples, but the Brown lygus bug (*Lygus hesperus*), and the Green lygus bug (*Lygus elisus*) may also be found in orchards. Damage is most severe in orchards that have a permanent cover crop or are next to crops or vegetation that hosts lygus bugs. Damage occurs when lygus bugs feed on blooms and young fruit in the spring. Feeding on flower buds causes them to shrivel and die. The damaged buds sometimes exudes a clear drop of liquid. The most serious damage occurs when they feed directly on the fruit. Their feeding activity kills some of the cells in the fruit, leaving the fruit deformed with deep pits. Stink bug damage causes similar damage. Control can be difficult. It is important not to mow cover crops or weeds when lygus bugs are present or they will move into apple trees. Monitoring should begin in the spring around bloom near the borders of the orchard. Cover crops containing non-hosts such as grasses help with control, as lygus bugs do not reproduce on tree crops. Insecticides such as Adjourn, or Asana, or Battalion, or Mustang Maxx are a few of the recommended chemical treatments. See MP 144 for complete list. Pyganic and Surround are labeled for organic production.