



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.

Cucumber

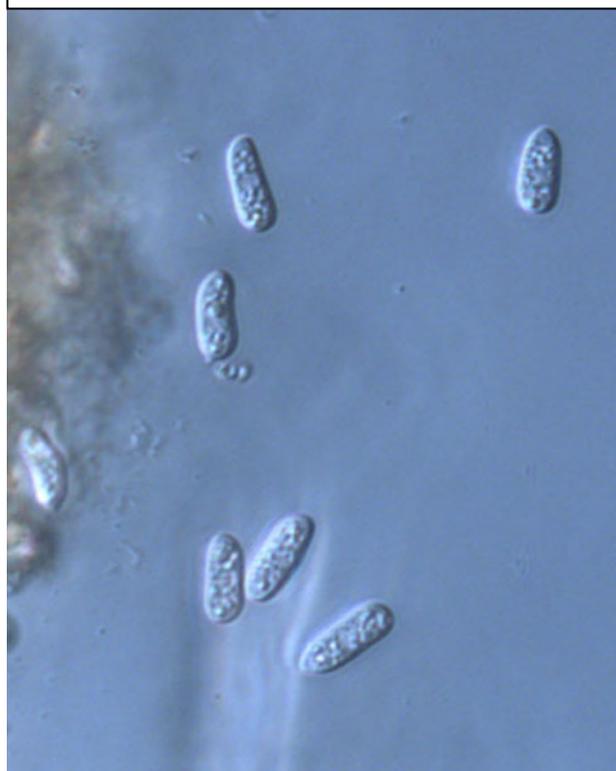
Anthrachnose caused by *Colletotrichum obiculare*, can be a serious disease on susceptible cultivars. All parts of the plant may be infected, including leaves, petioles, stems, and fruits. Lesions begin as yellowish water soaked spots that turn brown to black. The spots enlarge and dry out. The centers of older lesions fall out leaving a shot hole effect. Infected fruit have sunken circular black spots of different sizes. Crop rotation and destruction of old vines go a long way toward controlling this problem. Fungicide applications of Quadris Top, or Quadris 2.08FI, or Cabrio 20EC, or Quadris Opti, or Bravo Ultrex, or Bravo WeatherStik or Equus 720, or Mancozeb 80W, or Maneb 80W, or Pristine may be used by commercial growers. Homeowners may use products containing chlorothalonil, mancozeb, or maneb.

Cucumber Anthracnose- *Colletotrichum obiculare*



Sherrie Smith University of Arkansas Cooperative Extension

Cucumber Anthracnose-spores *Colletotrichum obiculare*



Sherrie Smith University of Arkansas Cooperative Extension

Cucumber Root knot nematode

Root knot nematodes, *Meloidogyne spp.*, have a wide host range, attacking over 2000 species of plants. Although a few nematodes do little noticeable damage, large numbers severely damage roots and prevent plants from utilizing water and fertilizers effectively. The results of Root knot nematodes infestations are poor growth, reduced quality and yield, and increased susceptibility to diseases and drought stress. Above ground symptoms include stunting, yellowing, wilting, and death. Below ground symptoms are roots with swollen galls and knots. Nematicides and soil fumigants are still available for commercial growers. Home owners must rely on crop rotation, sanitation, resistant cultivars, and soil solarization. When using soil solarization, clean



up crop debris and till the garden area. Thoroughly wet the area being treated. Lay clear plastic, (2-4ml), over the area and bury the edges to seal. Leave plastic on for at least 2 months. Soil solarization is most effective during the hot months of the year. Broccoli and cauliflower crops grown in the problem area and plowed under after harvest naturally inhibit nematodes, as do French marigolds.

frequently in oak leaf samples. Galls are elongate, pocket-like swellings along veins and midribs of the leaves. The female gall midge lays eggs on the newly emerging leaves in the spring. After the eggs hatch, the maggots move to the leaf veins where they begin to feed. The feeding causes the plant to start forming galls around the feeding sites. Within a few days the maggots are entirely enclosed within the galls, where they remain protected from predators until they emerge as mature larvae about mid-spring. Upon emergence, the larvae drop to the ground and remain there until next spring when they fly up to the newly emerging leaves as adult flies and begin the cycle again. Control is difficult and not usually necessary. However, since the mature larvae spend the majority of the summer in the ground, lawn insecticides may reduce the population.

Cucumber Root knot nematode- *Meloidogyne* spp.



Mike Hamilton University of Arkansas Cooperative Extension

Oak Vein Pocket Gall-lower leaf- *Macrodiplosis quercusoruca*



Sherrie Smith University of Arkansas Cooperative Extension

Oak

Several types of insects cause galls on oak trees. Vein pocket gall, caused by the larval stage of tiny flies in the Cecidomyiidae family of gall midges is one that we see



**Oak Vein Pocket Gall-upper
leaf- *Macrodidiplosis quercusoruca***



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**Oak Vein Pocket Gall-lower
leaf- *Macrodidiplosis quercusoruca***



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**Oak Vein Pocket Gall-maggot-
*Macrodidiplosis quercusoruca***



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Request for help from Dr. Robbins:

Root knot nematode populations are needed for our Arkansas species study. I am a nematologist in the department of Plant Pathology in Fayetteville. My student and I are trying to amass populations of as many species of Root knot nematode (*Meloidogyne* sp.) as possible for species identification using molecular techniques. At present no root knot species in Arkansas



have been identified using molecular technology. We are interested in receiving populations from home gardens, shrubs, flowers, trees and grasses. For samples we need about a pint of soil and feeder roots in a sealed plastic bag that is plainly identified by plant host, location (City County, physical address, collector and date of collection). Please send samples to us at the follow address:

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