



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.

## Artichoke

Lace bugs are very small insects, belonging to the Tingidae family of insects. They damage many plants including trees, shrubs, ornamentals, and vegetables. Adults are approximately 1/8 inch long. They often go unobserved because of their small size and preference for the undersides of leaves. They are called lace bugs because their elaborately sculptured thorax and forewings give them a lacey appearance. Nymphs are smaller, wingless, oval, and commonly have body spines. Adults and nymphs are found together in groups on the underside of leaves. Lace bugs have several generations a year. Females insert their tiny, oblong eggs in leaf tissue, which they often cover with their excrement. It takes about 6 weeks for newly hatched nymphs to reach adulthood. Lace bugs feed on plants by sucking sap from plant cells. Symptoms are leaf stippling, silvering, and bleaching. They produce diagnostic specks of dark, varnish-like excrement on the undersides of leaves. A few lace bugs do little real damage, but large populations can seriously weaken plants. Avoiding monoculture plantings, mulching with organic material, and planting in the proper location can greatly reduce lace bug populations. For example, azaleas planted with afternoon shade suffer less from lace bugs than those with afternoon sun. They have many natural enemies, including assassin bugs, lacewing larvae, lady beetles, jumping spiders, pirate bugs, and predator mites, to name a few. As long as plants are healthy and vigorous, natural predators keep lace bugs in check. When populations are large enough to do significant damage, insecticides may be used. Insecticidal soaps, neem oil, or spinosad (Conserve, Conserve SC Turf and Ornamental, Spinosad Home and Garden) sprays all kill lace bugs if the undersides of leaves are thoroughly covered. Applications may be needed at 2-week intervals to maintain control. Systemic insecticides containing imidicloprid are available for season long control. Bayer Advanced Garden Tree and Shrub Insect Control or Merit are options.

### Artichoke lace bug damage



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### Artichoke lace bug damage- underside of leaf (note dark specks of excrement)



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### Artichoke-lace bug colony- Tingidae spp.



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Fungicides have not proven to be very effective as susceptible blossoms are opening on a daily basis.

### Pumpkin Choanephora Rot- *Choanephora cucurbitarum*



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## Pumpkin

Pumpkin, as well as squash, melon, cucumber, southern peas, and okra may suffer from Choanephora Rot, caused by the fungus *Choanephora cucurbitarum*. Choanephora attacks the blossoms and newly forming fruit. The disease is favored by warm, wet weather during which outbreaks can be severe. Symptoms are a grayish fuzzy fungal mass on the blooms that causes a wet rot. Blossoms near the ground are usually the first affected. Once initial infection occurs, the spores are easily spread by insects, wind, and splashing water onto nearby blossoms. Good cultural practices help to prevent or limit the damage caused by Choanephora rot. Plastic mulches or trellising to prevent blossoms and fruit from contacting the ground are helpful. Raised beds have proven beneficial by decreasing excess moisture and improving air flow. Overhead irrigation should be strictly avoided. Any diseased fruit or blossoms should be immediately picked and removed from the planting.

### Pumpkin Choanephora Rot- *Choanephora cucurbitarum*



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## Soybean

Agents and growers are seeing a lot of Sudden Death Syndrome (SDS) in their soybean fields this season. However, some of these fields with SDS symptoms actually have an altogether different disease, called *Neocosmospora* stem rot, caused by *Neocosmospora vasinfecta*. Leaf symptoms resemble those of SDS, with interveinal chlorotic spots on the upper leaves of individual plants or small groups of plants. The leaf spots enlarge and become necrotic. Defoliation can occur in as little as two weeks after foliar symptoms are observed. Reddish-orange fruiting bodies (perithecia) resembling tiny beebees develop on and inside stems near or below the soil line, and on roots and nodules. Sometimes, the stem may be reddish-orange in color without the perithecia. Both the foliar symptoms and the perithecia closely resembles Red Crown Rot, caused by *Cylindrocladium crotalariae*, requiring microscopic examination to differentiate the two diseases. Control measures have not yet been established for soybeans.

### **Neocosmospora Stem Rot- (Field symptoms)***Neocosmospora vasinfecta*



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### **Neocosmospora Stem Rot- *Neocosmospora vasinfecta***



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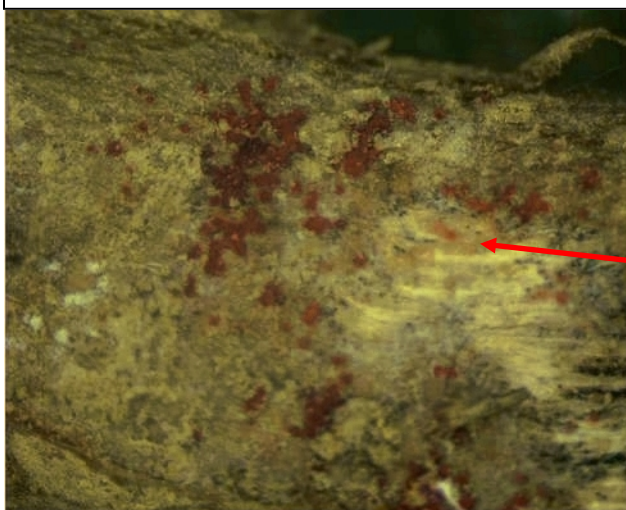
### **Neocosmospora Stem Rot (leaf symptoms)-*Neocosmospora vasinfecta***



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**Neocosmospora Stem Rot  
Perithecia-*Neocosmospora vasinfecta***



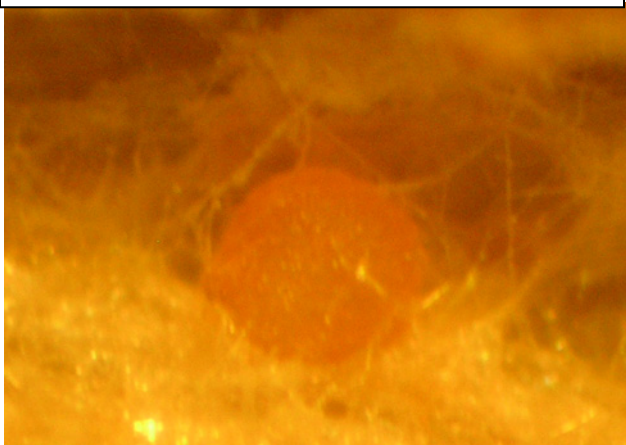
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**Neocosmospora Stem Rot  
(Perithecia on outside of stem)-  
*Neocosmospora vasinfecta***



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**Neocosmospora Stem Rot  
(Perithecia inside pith)-  
*Neocosmospora vasinfecta***



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