



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.

Iris

Iris rust is caused by the fungal pathogen *Puccinia iridis*. This rust occurs commonly on bearded and bulbous irises and also on the species irises *Iris fulva*, *I. missouriensis*, *I. tenax* and *I. versicolor*. Iris rust will spread from leaf to leaf and plant to plant. It overwinters in mild climates. Symptoms are reddish-orange pustules that appear on both sides of the leaf. The fungal lesions may be surrounded by yellow margins. If there are lots of rust spots, the leaves and stems will turn brown and die. Rusts are favored by humid climates and moderate temperatures. Rust is a common and serious problem in the southeastern United States. Dew, rain, fog, high humidity and overhead watering all encourage the development of Iris rust. The best way to control rust is to take measures to prevent it. Remove and destroy old foliage in the fall. Don't plant new healthy irises in a spot where you previously have had rust problems. If rust occurs, remove infected foliage. Fungicides containing Chlorothalonil, myclobutanil, and mancozeb will help control rust.

Iris rust



Puccinia iridis pustule



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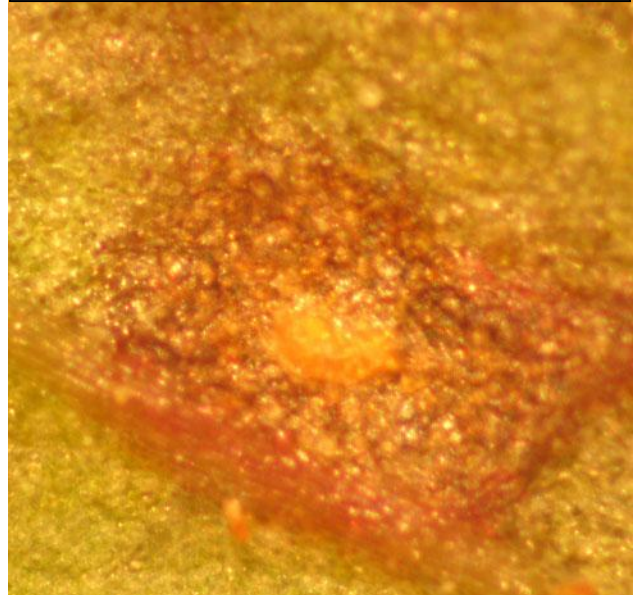
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Blueberry

Leaf rust on blueberry is caused by the fungus, *Naohidemyces vacinii*. In northern states, the alternate host is hemlock. In the southeastern United States, it overwinters on evergreen species of *vacinii*. The first symptom of leaf rust on blueberry is yellow spots on the upper surface of the new leaves. Spots later turn reddish-brown. Yellow-orange pustules appear on lower leaf surfaces. Spores from the pustules cause secondary infections. Severely infected leaves may turn brown and fall prematurely. Wet weather in the spring lasting 48 hours or more is ideal for infection. Leaf rust is considered a minor pest of blueberries. There are no fungicides labeled for control. Resistant cultivars are available. Bluecrop, Burlington, Collins, Dixi, Earliblue, Gem, Ivanhoe, Olympia, Stanley, and Weymouth are resistant. Jersey, Herbert, Berkley, Blueray, and Pacific are moderately susceptible. Coville, Pemberton, Washington, and Atlantic are susceptible.

Naohidemyces rust pustule



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Leaf rust on blueberry



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Clematis

Clematis grows best in well-drained, evenly moist soil amended with organic matter. They prefer a pH of 6.6-7.0, with six hours of full sun required for best bloom. When these needs are met, Clematis are hardy, carefree plants. The only disease problem regularly encountered in the lab is Clematis wilt, caused by *Phoma clematidina*, formerly *Ascochyta clematidina*. Often growers fail to notice anything wrong until a stem or stems suddenly turns brown and starts wilting. Although the fungus can cause leaf spots, the stem wilt is caused by the fungus entering at the node and shutting off the supply of nutrients. When a wilted stem is opened up it will appear black inside. Clematis wilt seldom kills the plant because the disease does not affect the roots. Plants will almost always immediately begin putting on new growth from the crown. The best management is to cut the wilted stems back to healthy looking tissue. This often means cutting them clear to the ground. The wilted stems and foliage should be disposed of off the property. Care should also be taken with tools such as lawn mowers and weed eaters so as not to damage clematis stems. Wounds can provide



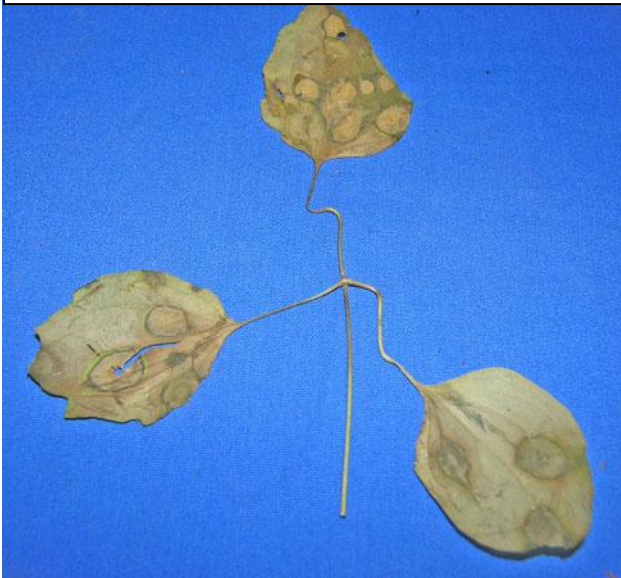
entry points for the fungus. The large flowered cultivars are more susceptible than species and small flowered cultivars.

Large flowered clematis



Charles T. Bryson, USDA Agricultural Research Service,
Buewood.org

Clematis wilt



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Clematis wilt



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Wheat

We are seeing a lot of wheat scab at this time. Prolonged rainy periods have provided ideal conditions for this disease. Scab or head blight occurs on all small-grain crops, and is especially prevalent in humid regions. One or more spikelets on a head appear bleached. If the rachis is infected the entire head is bleached. Pink or orange mycelium and dark fruiting bodies can be seen with a hand lens. Significant yield losses may result from floret sterility and poor seed fill. Fusarium species, particularly *Fusarium graminearum*, are the causal agents in nearly all cases of scab. Crop rotation with at least a one year break from cereal and grass cultivation is advised, although in bad years rotation makes little difference. Scab can be particularly damaging following corn. There is no real resistance to scab, although there are levels of susceptibility.



Wheat scab



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