

OSU MG Study Group Diagnostic Show-and-Tell Highlights: October 2, 2017

Prepared and photographed by Elizabeth Price

Join our friendly OSU MG Study Group on the first Monday of each month from 1 to 3 pm for Diagnostic Show-and-Tell. Have fun while learning! We explore bugs, diseases and more. Below are a few samples of what MGs brought to our last session. For more information contact Elizabeth Price: llgmicroeap@mindspring.com

Impatiens (*Impatiens walleriana*)

with downy mildew

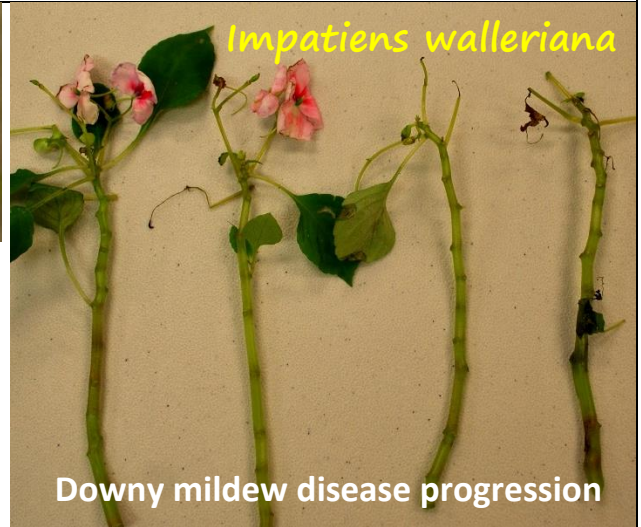
Margaret brought in samples of shade-loving impatiens in all stages of decline from downy mildew. The light-colored fruiting bodies can be seen on the underside of the leaves (as opposed to powdery mildew, which occurs on the upper leaf surface). Under wet and humid conditions, downy mildew can spread with great speed and can cause total collapse of the plant. It overwinters in the soil and may be able to survive there for years without a host. New Guinea impatiens are resistant to powdery mildew but do best with morning sun.

For more information:

http://msue.anr.msu.edu/news/impatiens_downy_mildew_a_curse_and_opportunity_for_your_garden



Lower leaf surface



Impatiens walleriana

Downy mildew disease progression

Grape leaves with erineum mite blisters

Jean brought in grape leaves infested with the very small, worm-like erineum mites. The blisters are masses of enlarged leaf hairs on the lower leaf surfaces--the plant's response to the mite feeding. The blisters age from white to rust colored. Ironically, the mites find shelter beneath the leaf hairs, which protect them from predators. Though dreadful looking, the plants tolerate the damage well and fruit is not affected. The mites overwinter on bud scales.

(NOTE: The image of earlier season damage is from the Study Group archives.)

For more information:

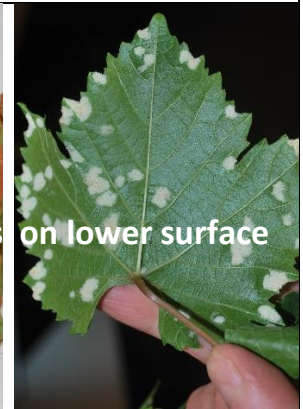
<https://pnwhandbooks.org/insect/small-fruit/grape/grape-grape-erineum-mite>



Upper leaf surface



Late season damage



Early season damage

Silk moth caterpillar and pupa

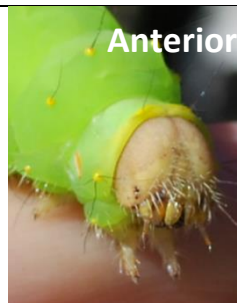
(*Antheraea polyphemus*)

Elizabeth brought in the pupa of the large silk moth caterpillar, which should emerge in spring as a 4-6" moth with striking eye spots. She collected the caterpillar from a lawn a few days earlier; by morning it had pupated. Remember, all caterpillars have 3 pair of true legs and 2-5 pair of prolegs.

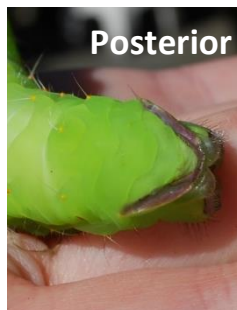
This caterpillar experiences 5 larval instars (moltings); the one here was the final, 5th instar (3"). The larva's appearance changes dramatically as it develops; the 1st instar is just ¼" long with eye-catching red, yellow and black markings on a white background, and is much more bristly. They feed on the leaves of a number of trees, including maple and oak.

For more information:

http://entnemdept.ufl.edu/creatures/MISC/MOTHS/polyphemus_moth.htm



Anterior



Posterior



Caterpillar
(actual size)

3 pair of true legs
5 pair of prolegs



Pupa, 2" long

Silk moth should emerge in spring