

OSU MG Study Group Diagnostic Show-and-Tell Highlights: November 6, 2017

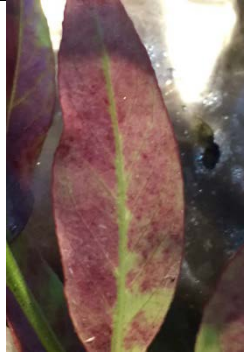
Prepared and photographed by Elizabeth Price

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

***Leucothoe axillaris* with powdery mildew or showing environmental stress?**

Eric brought it a *Leucothoe axillaris* sample with leaves that had turned a vermillion red. The *PNW Disease Handbook* cited powdery mildew as a possible cause and the leaves did appear to have sparse, white mycelium on the underside. But *Leucothoe* leaves are naturally fuzzy; so Eric did as Margaret suggested and placed a few in a plastic bag with wet paper towel to promote mycelial growth. But after 5 days at 70 degrees there was no growth. The conclusion is that the red leaves are the plant's reaction to the recent wet weather.

Note: Photo of the single leaf is by Eric Jacobson. For more information: <https://pnwhandbooks.org/plantdisease/host-disease/leucothoe-powdery-mildew>



Leaf above shows no mycelial growth



Leucothoe axillaris

Vermillion leaves due to environmental stress

Arborist chips rife with mycelium

Rhonda brought in a tub-full of arborist chips from a large pile that has been on her property for a couple of years. Recently, when she finally got around to using them, she discovered strange things intertwined among the chips. They looked similar to fibrous roots but in fact are the fine mycelial threads (masses of hyphae) of a saprophytic fungus that is decomposing the dead wood. These type of fungi are known for reducing organic matter into highly prized humus, which remains in the soil indefinitely. The chip-fungi mass had a deep, earthy aroma reminiscent of mushrooms. Rhonda's going to use it on her garden paths.

For more information:

<https://extension.illinois.edu/soil/SoilBiology/fungi.htm>



Mycelial threads weaving chips together



Close-up of mycelial threads

Pollen in the fall and winter: true cedar (*Cedrus*) and incense cedar (*Calocedrus*)

Have you wondered where all the pollen is coming from these days? Well, you can blame the true cedars. In the fall they set large male cones that are up to up to 2" long and that grow out of the tops of spur shoots. The cones and spur shoots are defining characteristics of the genus. You're liable to notice the cones after they drop in numbers great enough to cover the ground around the tree. The true cedar pollen will be followed shortly by incense cedar pollen (not a true cedar)--they are setting their bright yellow cones right now. The cones are very small but set in such large numbers that the entire tree is tinged in yellow. They are often used in holiday wreaths. All conifers are wind pollinated.

For more information:

<http://nwconifers.blogspot.com/2014/04/conifer-pollination.html>



Calocedrus decurrens



Deodor cedar (*Cedrus deodar*)

Male pollen cones

At right is pollen Elizabeth wiped off her deck.



Cedar pollen