



Integrated Pest Management Program

Department of Plant Science and Landscape Architecture
UConn Extension

Greenhouse Pest Message, January 14, 2022

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A few IPM Scouting Decision Making and Diagnostic Resources for You

The **UConn Greenhouse IPM Website**

<https://ipm.cahnr.uconn.edu/greenhouse/>

Has been updated and revised. If you go to publications, you will see the heading scouting tips, and then the series of photo ID guides. Current and past Greenhouse Pest Messages are also listed under pest messages.

The **New England Greenhouse Floriculture Guide** available online at:

<http://negfg.uconn.edu/>

To purchase hard copies of the 2020-2021 New England Floriculture Guide place your order online at [Lulu](#)—a print-on-demand service. The printed guide costs \$35 (plus tax & shipping).

The **New England Vegetable Management Guide** is online at:

<https://nevegetable.org/>

I just finished updating the section on Vegetable Transplants, including adding more on organic production of vegetable transplants.

I often get questions on what tools are helpful to better see and identify the characteristics needed to identify small insects and mites.

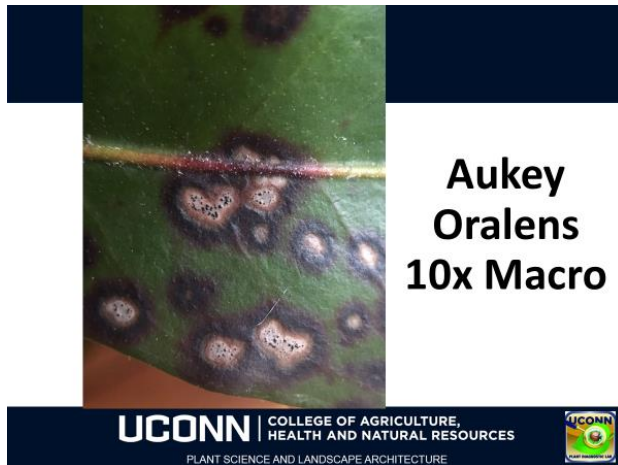
A Digital Microscope is often helpful for a close-up view of smaller insects and to take photos and videos to help educate your staff. Dino-Lite has an excellent reputation. <https://www.dinolite.us/en/>

This is the digital microscope I have, that a grower recommended to me:

<https://www.amazon.com/Dino-Lite-Digital-Microscope-10x-200x-Magnification/dp/B00B1FDCYO>

When using your smart phone, a phone clip magnifying device with a macro lens that can be clipped over your camera is very helpful especially when taking photos of smaller insects (less than ½ inch).

Here is a macro lens that can be placed over your cell phone camera that seems to work well: **AUKEY Oralens 10x Macro Lens**



If you are not sure what you are viewing, taking digital photos for diagnosis may be a beginning step before sending samples to a diagnostic laboratory.

When taking photos, it is important to take clear photos that tell the whole story. When taking photos of insects, they are often moving which makes it difficult. You can put aphids in the fridge for a few minutes to slow them down or put thrips in the fridge for 4 to 5 minutes.

How to Take a Photo for Crop Diagnostics by Elizabeth Buck, Cornell Vegetable Program, is an excellent color fact sheet on taking photos in the field, with a lot of useful tips:

https://rvpadmin.cce.cornell.edu/uploads/doc_868.pdf

Some Tips When using your smart phone to take photos:

- Make sure the camera lens is clean
- Include a size reference (ruler, coin, pencil etc.).
- Get closer to the subject instead of using the zoom feature which can result in a grainy photo. Try to get closer to the subject instead
- Avoid using flash and use natural light
- If it is sunny, shade the camera with your hat
- To take clearer photos, use an object or small stand to steady your hand
- To take clearer photos, tap on the subject plant or insect itself on the screen to focus on it instead of the background
- Always take several photos from different perspectives

If taking photos of insects, take photos from multiple angles, (back, underside, front of head and sides), plus where you are finding the insect, and what damage the insect is causing.

For plant pathogens, take photos of the whole plant, plus a closeup of the symptoms on the leaves, flowers, or stems. Take a photo of neighboring plants and the context of the situation to try and tell a story. Are you seeing only a few diseased plants, or is it the entire field or greenhouse?

For foliar pathogens, taking photos of the upper and lower leaf surface is often needed.

Keep in mind that digital photos are often just a starting point for diagnostics to help you determine what laboratory you need to send samples to.

For example, from the photo below, one could only tell the roots are not healthy and there are very few white root tips. They could be damaged by high salts, excess moisture, or by several different root rot pathogens, and laboratory diagnosis is needed to determine which pathogen, so you know the most effective management strategy.



UConn Nutrient Analysis Laboratory www.soiltest.uconn.edu

Email: soiltest@uconn.edu

When submitting samples from soilless media, it is helpful to write

“Greenhouse Sample: on your mailing envelope or email them to let them know that you will be sending samples for greenhouse testing. Please note that there was a recent price increase and SMEs will be \$20 instead of \$10.

If you are a retail garden center and providing information to home gardeners, encourage them to go to the website for sampling directions and forms and to email the soil testing lab if they have any questions.

UConn Plant Diagnostic Laboratory: <https://plant.lab.uconn.edu/>

Image identification Send images with a description of the host plant, symptoms you’re seeing, and any relevant site history (date of your last soil test, number of affected plants, planting date, etc.) to PlantDiagnosticLab@uconn.edu.

The Plant Disease Information Office at CAES:

<https://portal.ct.gov/CAES/PDIO/PDIO-Home/PDIO-Home>

Insect information Laboratory at CAES: <https://portal.ct.gov/CAES/Insect-Office/Insect-Office/Insect-Information-Office-New-Haven-and-Windsor-Valley-Laboratory-Information-and-Diagnostic-Office>

Bug guide Net <https://bugguide.net/node/view/15740>

Bug Guide collects photographs of bugs from the United States and Canada for identification and research. If you have an image of something from North America, that you would like identified, you may submit an image for identification.

Looking for Sedum Root Aphids

An expert on the taxonomy of aphids is looking for sedum root aphids. They were reported to be causing trouble several years ago. She received some specimens from a colleague and would like to figure out if we are all finding the same creature.

A few years ago, they were an issue on sempervirens. If you are seeing any root aphids on sedum, let me know.

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