Greenhouse Pest Message 4/1/2022 Leanne Pundt, Extension Eductor, UConn Extension

Continue to scout for **aphids** on their favorite hosts such as ageratum, basil, begonia, calibrachoa, Cole crops, dahlia, dianthus, eggplant, geraniums (ivy and zonal), gerbera daisy, herbs (many), fuchsia, garden impatiens, *Ipomoea*, pansy, pepper, portulaca, primula, salvia, sempervivum, snapdragon, tomato, verbena, zinnia, etc. See greenhouse pest message of March 25, 2022, for more information on controlling aphids with insecticides.

Biological control agents do not always work against aphids, especially on calibrachoa, because the small parasitic wasps spend their time cleaning themselves because of the sticky residues instead of searching for aphids. However, for green peach aphids on pepper transplants, preventive weekly releases of *Aphidius colemani* work well according to one grower I visited.

Fungus gnats and **shore flies** are present especially in more humid propagation houses.

Continue keeping a close eye on **geraniums**, see pest message of March 21, for photos of bacterial blight. See Bacterial Blight on Geraniums, again, e-Gro Alert, http://e-gro.org/pdf/2020-11-19.pdf

Calibrachoa can be a challenging crop to grow. They are, of course, an aphid magnet, but are also susceptible to cultural issues (iron chlorosis) as well as many diseases. Botrytis stem canker can occur, especially on the weaker varieties.

Powdery mildew starts as a yellowing on the lower leaves, sometimes with a gray mottling, and gradually the lower leaves turn brown and die. Often the characteristic powdery mildew colonies may not be seen. See E Gro Alert: Update and Review: Powdery Mildew on Calibrachoa http://e-gro.org/pdf/2020_912.pdf

Some varieties are also prone to root rots especially **black root rot**, but Pythium root rot can also occur.

Calibrachoa Disease Guidelines by Colleen Warfield from 2018 https://www.growertalks.com/Article/?articleid=23512

Calibrachoa is also susceptible to viruses such as calibrachoa mottle virus (causes a mottled leaf), and tobacco mosaic virus (TMV) causing mosaic, mottling, and stunting.



Yesterday, there was a new E Gro Alert published on **chili pepper mild mottle virus** on calibrachoa by Margery Daughtrey and Nora Catlin. http://e-gro.org/pdf/2022-11-20.pdf

If you received a letter about this virus from your supplier/broker and are looking for photos of symptoms, please review this article. Look for vivid flower breaks (irregular flower color patterns) especially on dark purple or yellow flowers, necrotic spots, mottling and general stunting. (Unlike with TMV on petunia, leaf strapping does not seem to be as common a symptom). Little is known about this virus, but it is related to tobacco mosaic virus (TMV), so you need to follow strict TMV sanitation protocols. It can easily spread by workers hands, and tools, but not by insects. We are the vector! Watch other Solanaceae family members especially peppers, tomatoes, and eggplant transplants.

Botrytis continues geraniums, million belles, petunia, etc. and I am starting to see some Botrytis stem canker on warm loving angelonia. Continue to heat and vent, space, and apply preventive fungicides or biological fungicides.



Figure 1 & 2: Botrytis Stem Cankers. Photos by L. Pundt

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