



by Brian E. Whipker bwhipker@ncsu.edu

Scented Geraniums: Proliferation of Basal Growth

A mass of growth with small leaves is the typical symptom of a leafy gall infection. Inspect your scented geranium stock plants now to avoid carrying over this bacterium.

During a spring 2015 extension trip, two stock plants of a citronella-scented geranium were observed with a mass of leafy growth at the base. These symptoms were the result of a leafy gall infection. Leafy galls are caused by the bacterium Rhodococcus fas-Nora Catlin wrote cians. an earlier e-GRO Alert #3-24 describing leafy gall symptoms on geraniums, wallflower and coreopsis. Her article also covered sanitation practices. Please refer to that Alert for additional details.

During grower visits this fall, I took the opportunity to inspect any scented

geraniums that were being held as stock plants. For many unique cultivars, this may be the only way to ensure cuttings will be

2015 Sponsors







fine



Scented geranium with leafy gall at base of plant.

e-GRO Alert

www.e-gro.org

CONTRIBUTORS

Dr. Nora Catlin
Floriculture Specialist
Cornell Cooperative Extension Suffolk County
nora.catlin@cornell.edu

Dr. Chris Currey Assistant Professor of Floriculture Iowa State University ccurrey@iastate.edu

Dr. Kristin Getter Floriculture Outreach Specialist Michigan State University getterk@msu.edu

Dan Gilrein
Entomology Specialist
Cornell Cooperative Extension Suffolk County
dog1@cornell.edu

Dr. Brian Krug Floriculture Ext. Specialist Univ. New Hampshire brian.krug@unh.edu

Dr. Joyce Latimer Floriculture Extension & Research Virginia Tech jlatime@vt.edu

Dr. Roberto Lopez Floriculture Extension & Research Purdue University rglopez@purdue.edu

Dr. Neil Mattson Greenhouse Research & Extension Cornell University neil.mattson@cornell.edu

Dr. Paul Thomas Floriculture Extension & Research University of Georgia pathomas@uga.edu

Dr. Brian Whipker Floriculture Extension & Research NC State University bwhipker@ncsu.edu

Copyright © 2015

Where trade names, proprietary products, or specific equipment are listed, no discrimination is intended and no endorsement, guarantee or warranty is implied by the authors, universities or associations. available of these older, non-patented plants.

Of the four operations that were holding scented geraniums for stock plants, two were found to have at least one cultivar with leafy gall. Nora Catlin pointed out that the bacterium is easily spread on propagation tools and during pruning. Once a plant is infected, the bacterium may survive in the plant for long periods of time before leafy gall symptoms even appear. There is no control for the disease

once a plant is infected. The reason for this, as pointed out by Melodie Putnam of Oregon State University, the bacteria are found within the plant cell (see link to Oregon St. Univ. website below). So pesticides applied to the plant surface will not eradicate the problem.

If you have infected plants, they should be discarded. During propagation and stock plant maintenance, hands and sanitation tools should be disinfected between each plant. Always



Leafy gall mass at the base of a scented geranium plant.

Cooperating Universities







IOWA STATE UNIVERSITY Extension and Outreach











Cooperative Extension

In cooperation with our local and state greenhouse organizations













isolate the production of scented geraniums separately from zonal geraniums to avoid the potential of spreading leafy gall or bacterial wilt (Xanthomonas campestris pv. pelargonii).

Photographs of leafy gall symptoms on specialty geraniums are provided in this Alert. The best way to ensure next year's crop is healthy is to start with clean stock. Growers are encouraged to inspect plants being held for stock now to help eliminate this disease from your greenhouse.

Additional Resources

e-GRO Alert 3-24. Leafy Gall (*Rhodococcus fascians*) on Geranium, Wallflower, and Coreopsis

Demystifying Rhodococcus fascians
http://c.ymcdn.com/
sites/www.oan.org/resource/resmgr/Digger2/
Digger_201402_pp33-37_
OSU.pdf

Oregon State University
Plant Disease Clinic Website (a resource center of information about *Rhodococcus* and *Agrobacterium*).
http://plant-clinic.bpp.oregonstate.edu/rhodococcus



Initial signs of a leafy gall mass at the base of a plant.







