e-GRO Alert
Volume 4, Number 26 April 2015

by Brian E. Whipker
bwhipker@ncsu.edu

Reiger Begonia:

Mottling and Ringspots

Mottled leaves and brown ringspots on Reiger begonias were observed. Tomato spotted wilt virus was confirmed on the plant sample.

At the same greenhouse that had the confirmed tomato spotted wilt virus (TSWV) infected New Guinea impatiens (see e-GRO Alert 4.25), the grower also had leaf mottling and ringspots on Reiger begonias. A few plants along the bench were observed with yellow and green mottling (Fig. 1) and necrotic ringspots (Fig. 2). Luckily no western flower thrips were found on the plants to spread the disease.

A plant was tested for tomato spotted wilt virus (TSWV) and it was confirmed with an enzyme-linked immunosorbent assay (ELISA) test from the NC State University Plant Disease and Insect Clinic (*http://www.cals.ncsu.edu/plantpath/extension/clinic/*).

Figure 1. Mottled leaves with a TSWV infection on Reiger begonias.

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

If you suspect a virus problem, have the plants tested by a diagnostic clinic. You can also conduct in-house testing with ELISA kits from Agdia (*http://www.agdia.com/*).

Management

Once a plant has TSWV or INSV, it cannot be cured. So discarding infected plants is the only option. Note some plants may be asymptomatic but still have INSV or TSWV. Thus with the primary method of spreading these viruses is by Western Flower thrips (*Frankliniella occidentalis*) feeding, it is critical to keep them under control. *See e-GRO Alert 4.18 for management options.*

Figure 2. Brown ringspots caused by a TSWV infection.

Cooperating Universities

Cornell University
Cooperative Extension
of Suffolk County

PURDUE UNIVERSITY

THE UNIVERSITY OF GEORGIA
COOPERATIVE EXTENSION
College of Agricultural and Environmental Sciences
College of Family and Consumer Sciences

IOWA STATE UNIVERSITY
Extension and Outreach

NC STATE UNIVERSITY

CORNELL

VirginiaTech
Invent the Future

MICHIGAN STATE UNIVERSITY

UNIVERSITY of NEW HAMPSHIRE
Cooperative Extension

In cooperation with our local and state greenhouse organizations

Indiana FLOWER GROWERS Association

Metropolitan Detroit Flower Growers Association

Virginia Flower Growers Association
Since 1954

lifga

NC FLOWER POWER

NEW HAMPSHIRE Plant Growers
QUALITY GARDEN CENTERS & GROWERS