



by Brian E. Whipper  
bwhipker@ncsu.edu

## New Guinea Impatiens: Ringspots and Mottling

*Mottled leaves and ringspots on New Guinea impatiens are common signs of a virus infection. Tomato spotted wilt virus (TSWV) was confirmed on the plant sample.*

Impatiens necrotic spot virus (INSV) and tomato spotted wilt virus (TSWV) are the two most common viruses reported on New Guinea impatiens. It is not unusual to observe a few problems each year. The severity of the virus outbreaks varies from being minor with only a few plants infected to being a major problem if western flower thrips are present.

### Plant Symptoms

At one greenhouse I visited last week, the grower asked if I would look at his New Guinea impatiens plants. Scattered plants along a bench containing multiple cultivars were

stunted, had mottled leaves (Fig. 1&2), purple ringspots (Fig. 3,4&5), or black ringspots (Fig. 6). In scouting for western flower thrips, none were found.



Figure 1. Mottled leaves with a TSWV infection.

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### CONTRIBUTORS

Dr. Nora Catlin  
Floriculture Specialist  
Cornell Cooperative Extension -  
Suffolk County  
[nora.catlin@cornell.edu](mailto:nora.catlin@cornell.edu)

Dr. Chris Currey  
Assistant Professor of Floriculture  
Iowa State University  
[currey@iastate.edu](mailto:currey@iastate.edu)

Dr. Kristin Getter  
Floriculture Outreach Specialist  
Michigan State University  
[getterk@msu.edu](mailto:getterk@msu.edu)

Dan Gilrein  
Entomology Specialist  
Cornell Cooperative Extension -  
Suffolk County  
[dog1@cornell.edu](mailto:dog1@cornell.edu)

Dr. Brian Krug  
Floriculture Ext. Specialist  
Univ. New Hampshire  
[brian.krug@unh.edu](mailto:brian.krug@unh.edu)

Dr. Joyce Latimer  
Floriculture Extension & Research  
Virginia Tech  
[jlatime@vt.edu](mailto:jlatime@vt.edu)

Dr. Roberto Lopez  
Floriculture Extension & Research  
Purdue University  
[rglopez@purdue.edu](mailto:rglopez@purdue.edu)

Dr. Neil Mattson  
Greenhouse Research & Extension  
Cornell University  
[neil.mattson@cornell.edu](mailto:neil.mattson@cornell.edu)

Dr. Paul Thomas  
Floriculture Extension & Research  
University of Georgia  
[pathomas@uga.edu](mailto:pathomas@uga.edu)

Dr. Brian Whipker  
Floriculture Extension & Research  
NC State University  
[bwhipker@ncsu.edu](mailto:bwhipker@ncsu.edu)

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The plants were tested for both Impatiens necrotic spot virus (INSV) and tomato spotted wilt virus (TSWV). TSWV 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/>).

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 INSV or TSWV, 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. Mottled leaf still attached to the plant.



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Figure 3. Purple ringspots caused by a TSWV infection.



Figure 4. Close up of ringspots.





Figure 5. Ringspots on impatiens leaf caused by a TSWV infection.



Figure 6. Black ringspots on a young impatiens leaf caused by a TSWV infection.