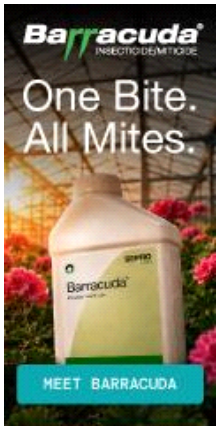
Invasive Pests & Phytotoxicity of Fungicides



Research and News on the latest pest management techniques

GROWERTALKS MAGAZINE greenPROFIT MAGAZINE

WEDNESDAY, MAY 6, 2026







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Pest Talks

COMING UP THIS WEEK:

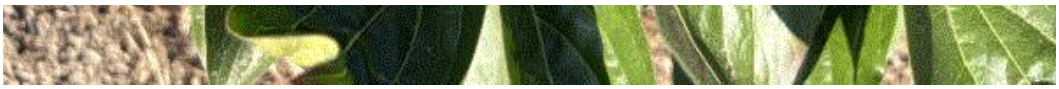
What the ... ?
BTM Quarantine in VA
SLF in Canada?
Fungicide Phyto, Part 1
Women in Hort Week



What the ... ?

A series of pictures came to me from central North Carolina via Ben Keyes, SePRO's Southeastern Technical Specialist. The picture below is part of that series and shows diebacks on the terminals and the bottom canopies of field-grown peonies.





I assume the peonies were grown as cut flower crops, which are gaining popularity in the Carolinas and elsewhere. The Carolinas aren't typically thought of as suitable places to grow peonies—we simply don't have enough chilling hours or the right soil (except for some corners of the state) and we have too much heat and humidity to grow peonies right. But that doesn't stop folks from trying. The folks that tried—oh boy, they're doing a blooming business!

This week's mystery isn't a difficult one to solve if you mess around with peony for any length of time. In fact, this issue is perhaps the most common one I'd have seen on peonies in the central and coastal parts of the Carolinas. Instead of giving y'all the answer at the end of this newsletter, I'd like to ask you to send me your answer or guesses via email. Just to change things up a little, you know. I'll share the guesses and what I think might be happening in the next issue.

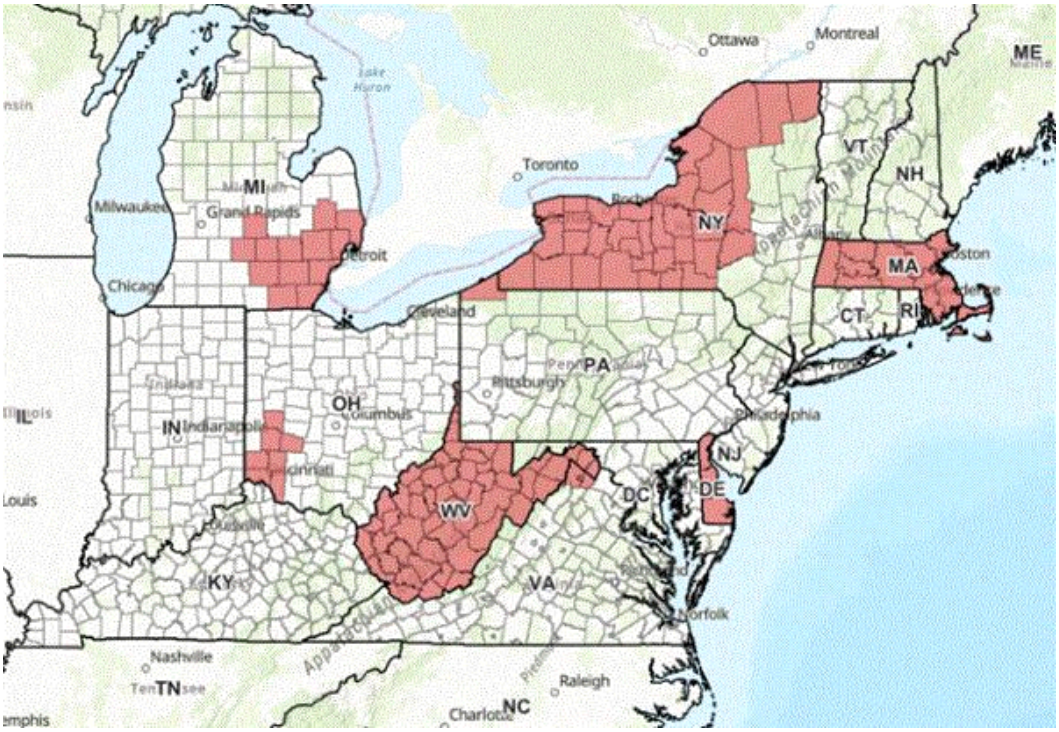


BTM Quarantine in VA

A federal quarantine against the box tree moth (BTM) has been established in Virginia, announced USDA-APHIS. Clarke County, Frederick County and the independent city of Winchester were added to the list of quarantined areas. The Virginia Department of Agricultural & Consumer Services (VDACS) has already established a state quarantine for the area. Now, that's been elevated to a federal quarantine. This addition followed the establishment of quarantine in the entire state of West Virginia in December last year.

Clarke County, Frederick County and the city of Winchester are in the beautiful Shanandoah Valley, bordering West Virginia. I had the pleasure of attending a meeting at the USDA-ARS's Appalachian Fruit Research Station in Kearneysville in early March and the drive through the countryside was simply one of the most enjoyable experiences.

BTM was confirmed in the area since July 2025. The newly established federal quarantine will add regulations, and inspection and certification requirements to the movement of regulated items. Growers who intend to move boxwood plants and other regulated items out of the quarantined areas must enter into a compliance agreement with USDA and VDACS.



Counties with an active federal BTM quarantine are shaded in this map. (Source: USDA-APHIS)

An example of a compliance agreement for BTM is available HERE. The compliance agreement includes requirements on trapping, scouting, inspection, certification and treatment. Pre-shipment treatment and treatment while plants are in production areas have two separate lists of approved insecticides. The listed insecticides include Bt, bifenthrin, chlorantraniliprole, cyantraniliprole, lambda-cyhalothrin, methoxyfenozide, permethrin and spinosad. Growers should check with VDACS officials for specific or additional requirements for Virginia.

One more interesting thing about this announcement: I'd never heard of the term "independent city." What makes Winchester independent? Thanks to the ever-helpful Wikipedia, I learned that independent cities are a quirk of local governance in Virginia. Independent cities are incorporated cities that aren't a part of any counties and operate as separate entities under the Commonwealth of Virginia. An independent city may serve as the county seat of an adjacent county even if the city isn't part of the county.

What does the concept of "independent city" have to do with today's news? Nothing. This is just the result of my curiosity and rambling mind. Welcome to my wife's world!



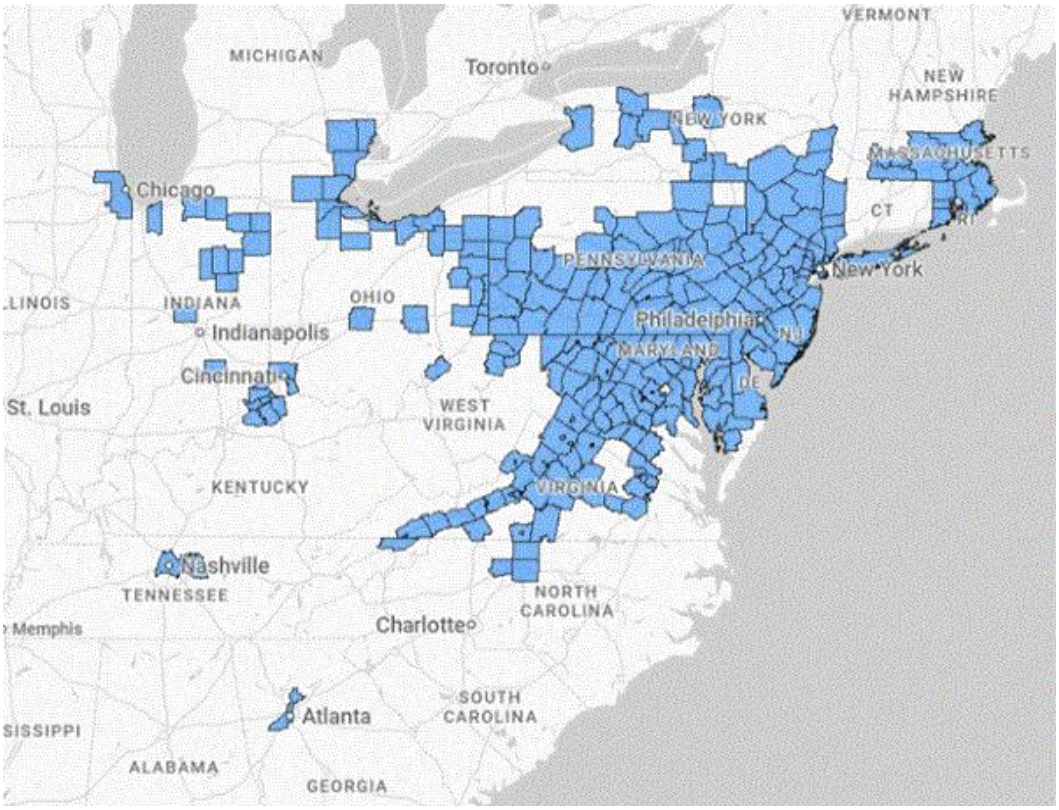
SLF Found in Ontario

Here's another piece of news about invasive species, via our very own Jen Polanz: spotted lanternflies (SLF) were found in St. Catharines, Ontario, Canada! Luckily, all SLF were dead when found. There's no confirmed establishment of SLF in Ontario at this time, and for Canada's sake, not for a while longer.

According to the Canadian Broadcasting Corporation, Ontario resident Aidan Dagg found a dead SLF in mid-March. Aidan uploaded an image of the SLF to iNaturalist and called the Canadian Food Inspection Agency (CFIA). Now, most folks wouldn't just look at an SLF and go, "I need to report this." But Aidan did because he professes to be a "huge bug nerd" and works as an inspector at a nursery in St.

Catharines. Who better to have an interest and know what to do? Aidan is my kind of guy!

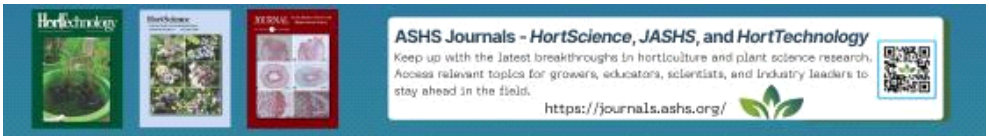
Inspectors from CFIA showed up the same day Aidan called and found 30 more SLF in planting pots imported from Pennsylvania. These SLF had been dead for a while since the pots had been sitting there since last fall. All dead, crisis averted, nothing to see here, stay calm and move on.



Counties where SLF infestations have been detected are shaded blue in this map. (Source: New York State IPM Program)

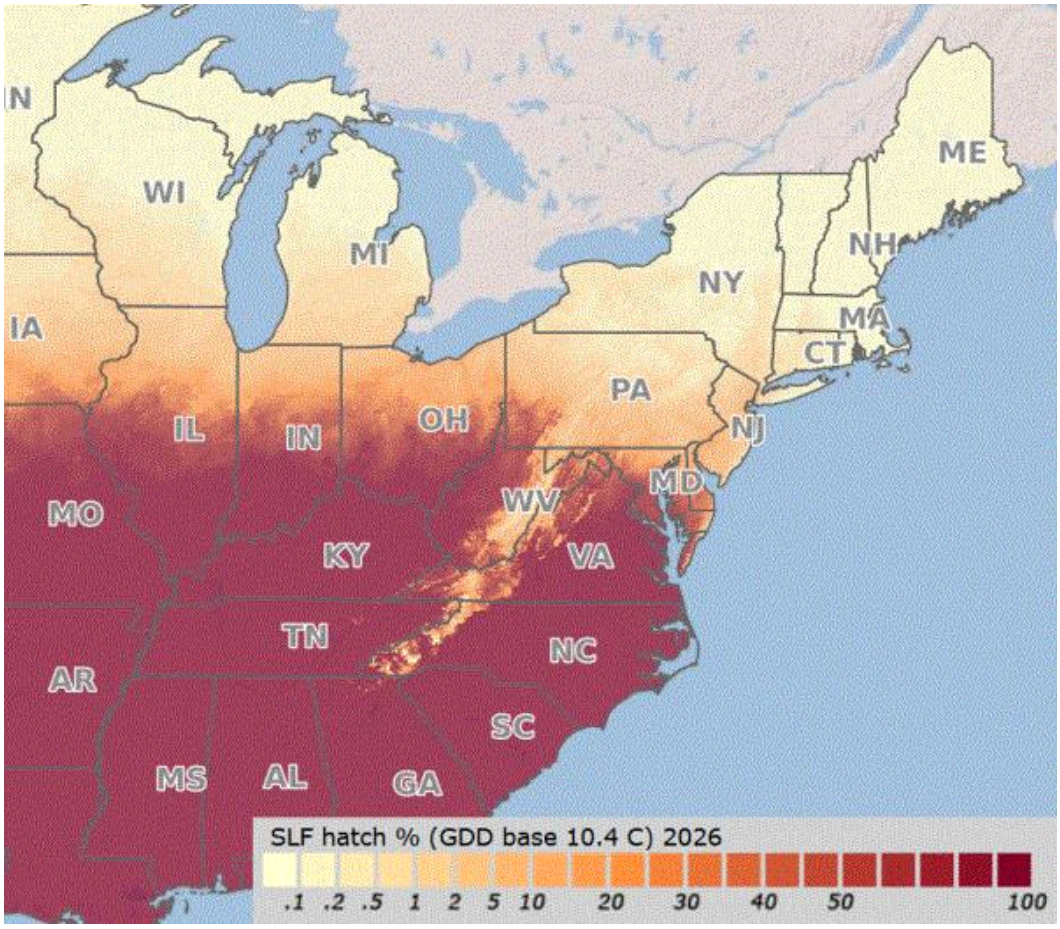
So, currently, SLF is only established in 19 states in the United States (see the map above). Not in Canada yet. State quarantine and other regulations against SLF are in place in Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia and West Virginia.

Now, here's the irony: St. Catharines isn't far across the river from Youngstown, New York, where the first confirmed establishment of BTM in the United States was found in 2021. BTM established itself in Ontario in 2018. It's suspected that the moths flew across the river and set up shop in Youngstown. Now, we might be sending an invasive species back to Ontario. That's a reminder to us that invasive species are truly a global gift that keeps on giving. We all love each other so much that we share often!



Where Are We on SLF Egg Hatch?

This is the time when SLF egg hatch occurs or is about to occur in the epicenters of the infestation. According to the prediction model from Penn State University, egg hatch had likely already happened for folks near Atlanta, Nashville, Greensboro, Lexington and Cincinnati. Y'all can stomp or squash the nymphs as they move about if you've got nothing more fun to do.



Probability of SLF egg hatch, with darker shades of red indicating greater percentage of egg hatch. (Source: Penn State University)

For other folks in the Mid-Atlantic region, watch out for egg hatch. Egg hatch is beginning for Maryland and will start occurring in Delaware, New Jersey, Pennsylvania and onward in the coming weeks.

Keep an eye on the predicted egg hatch by going HERE. Do what you can to control the eggs before they hatch or the nymphs soon after they hatch.

Phytotoxicity of Fungicides, Part 1

I summarized phytotoxicity information of insecticides in the last two issues of this newsletter. I'll summarize fungicide phytotoxicity information in this and the next issue. Again, use what I'd summarized as a quick reference. I recommend that you read the fungicide labels carefully to confirm the information I've gathered here. Do a trial on your own whenever you're using a fungicide on your crops for the first time.

In the list below, you'll find plant species or genera that may exhibit phytotoxic responses to each product:

26/36 Fungicide (thiophanate-methyl + iprodione): Spathiphyllum and New Guinea impatiens are explicitly prohibited. Impatiens, petunias and pothos cannot be drenched, and chrysanthemum shouldn't receive repeat applications at high drench rates. Residue may be noticeable on foliage of cyclamen and poinsettia "if plants are treated prior to sale when in bloom." (I put quotation marks on the last part because I don't really know how to interpret that …)

3336 F (thiophanate-methyl): Swedish ivy (*Plectranthus australis*), Boston fern (*Nephrolepis exhalta*) and

easter cactus (*Hatiora gaertneri*).

Affirm WDG (polyoxin-D salt): New leaves of herbs and spices. Seventy-five plant species or genera evaluated by IR-4's Environmental Program's crop safety trials didn't exhibit phytotoxic reactions to this active ingredient (in the product Endorse).

Avelyo Fungicide (mefentrifluconazole): Caution against plants stressed by heat, cold or drought. The label also warns that tank-mixing with 100% formulated organosilicone products may be injurious to plants, but commercial blends may be safe. IR-4 trials didn't detect phytotoxicity on 35 plant species or genera.

Banner MAXX II (propiconazole): African violet, begonia, Boston fern and geranium.

Broadform Fungicide (fluopyram + trifloxystrobin): Leatherleaf fern and Concord grape. IR-4 crop safety trials reported that certain petunia cultivars may be damaged.

Camelot O (copper octanoate): Copper toxicity may occur on some sensitive plant species, such as grapes (vinifera and French hybrid varieties), citrus seedlings and some rose varieties.

Chipco 26019 FLO (iprodione): Spathiphyllum and drench on impatiens or pothos.

Compass Fungicide (trifloxystrobin): Leatherleaf fern and drench on pansy. Caution noted for gerbera daisy with open flowers.

Concert II (propiconazole + chlorothalonil):African violet, begonia, Boston fern, geranium, pittosporum (variegated or green) and schefflera. Knock Out and Double Delight Roses can be sensitive.

CuPRO 5000 (copper hydroxide): Can cause discoloration on some varieties of azalea, carnation, chrysanthemum, English/Algerian ivy and Easter lily. Some iris and hosta cultivars may be sensitive. Don't use on hibiscus when in bloom.

Daconil Zn Flowable Fungicide, Daconil Ultrex and **Daconil WeatherStik** (chlorothalonil): Ferns, blue spruce and multiple applications on topittosporum (green or variegated) and schefflera. Knock Out and Double Delight Roses may be sensitive.

Decree 50 WDG (fenhexamid): Caution and test before use on mature poinsettia bracts.

Eagle 20EW (myclobutanil): Restrictions on carrotwood, abutilon, maple, walnut, sunflower and chokeberry. Many of these restrictions are due to prohibition for uses on food and feed crops, and may not be related to crop safety.

Empress Intrinsic Fungicide (pyraclostrobin): Grape (multiple varieties), ninebark and wintercreeper.

Fame SC (fluoxastrobin): Leatherleaf fern and other ferns grown under natural or artificial shade.

Fenstop (fenamidone). The label doesn't list any sensitive species, but IR-4 trials detected minor and transient leaf damage on larkspur.

Fosphite (mono- and bipotassium salts of phosphorous acid): Dormant plants and heat- or moisture-stressed plants.

Heritage Fungicide (azoxystrobin): Apple, crabapple, flowering cherry, leatherleaf fern and other ferns grown for cut foliage and privet. Seventy-seven plant species or genera, including a privet species, was identified as safe in IR-4's crop safety summary for this active ingredient.

Junction Fungicide/Bactericide (mancozeb + copper hydroxide): Pachysandra and French marigold.

KleenGrow (didecyl dimethyl ammonium chloride): Flowers in full bloom and young seedlings or tender young growth.

Medallion WDG (fludioxonil): Leatherleaf fern, impatiens and New Guinea impatiens (when used in drench or at-seeding applications) and geranium (foliar or drench applications).

MilStop SP (potassium bicarbonate): Avoid use on pansies at early stages of growth on poinsettia with weekly applications at rate that are greater than 0.5 lb. per 4,350 sq. ft., and on impatiens/New Guinea impatiens when blossom buds are visible.

Mural Fungicide (azoxystrobin + benzovindiflupyr): Apple, crabapple (Flame, Brandywine and Novamac varieties), flowering cherry (Yoshino), leatherleaf fern and other ferns grown for cut foliage, and privet. None of the 27 species or genera evaluated by IR-4 exhibit significant phytotoxic responses to this combination.

MycoStop Biofungicide (*Streptomyces* K61): Dusty miller and melon seeds.

No Phyto Noted for These Fungicides

- Actinovate SP (*Streptomyces lydicus* WYEC 108)
- Adorn Fungicide (fluopicolide); IR-4 trials didn't detect phytotoxicity on 24 species or genera
- Aliette (aluminium tris(O-ehyl phosphate))
- Alude Fungicide (mono- and bibasic sodium, potassium and ammonium phosphites)
- Astun (isofetamid)
- Banol Fungicide (propamocarb hydrochloride)
- BotryStop WP (*Ulocladium oudemansii*)
- Cease (*Bacillus subtilis* QSR 713)
- EcoSwing (extract of *Swinglea glutinosa*)
- Micora (mandipropamid)

Women in Horticulture Week Returns

Last piece of news for today: The Women in Horticulture Week returns for its 7th annual celebration from May 24 to 30. And according to Katie Dubow of the Garden Media Group, this year's celebrations are "bigger than ever!"

Women in Horticulture Week celebrates the leaders, mentors, role models, investors and changemakers, and recognizes the contributions of these women to our industry. Women-owned businesses are a major economic engine, making up 40% of all business and generate $3.3 trillion in revenue in the United States.

Here are some ways y'all can participate in the 2026 Women in Horticulture Week:

- Motivate others by sharing your story or stories of inspiring women in business.
- Mentor or volunteer to support aspiring female horticulturists and entrepreneurs.
- Attend the New Jersey Nursery & Landscape Association's Women in Horticulture meeting (the theme is "Rooted in Strength: How Women can Thrive in the Green Industry") to be held Wednesday, June 3 at Timothy Center for Gardening in Robbinsville, New Jersey. Go HERE to register.
- Attend the AmericanHort-hosted Women in Horticulture series (which includes a luncheon) at Cultivate'26 on July 13. Go HERE for more information.
- Join the new LinkedIn community WiH group led by Megan Morrison.
- Support the movement on social media by updating your profile picture and using #WomenInHort to share stories and recognition.

See y'all later!



JC Chong
Editor-at-Large
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