

# High and Dry

## Growing Vegetables in Northern New England High Tunnels



University  
of Vermont

Extension  
College of Agriculture and Life Sciences

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**WELCOME TO THE FIFTH ISSUE** of *High and Dry: Growing Vegetables in Northern New England High Tunnels*, a quarterly newsletter linking growers, researchers, and agricultural service providers to enhance protected crop production. This seems to have been one of the colder and snowier winters in recent years, and that will make Spring even more special when it arrives. Now is the time to plan ahead for the growing season. This newsletter focuses on pest and disease issues that may occur in your high tunnel crops this year. We also report on the latest, greatest biological control agents to consider releasing to manage aphids and other high tunnel pests. A proactive approach to managing your crop is essential to ensure a bountiful yield this year. Now is the time to get ready.

This online newsletter is a collaborative effort among the University of Vermont (UVM), the University of New Hampshire (UNH), and others to support high tunnel growers — especially new ones who are still gaining experience with this technology. Our goal is to provide information and resources to help your high tunnel crops thrive! Don't hesitate to reach out to the team listed on the last page with any questions or ideas for future topics. This work is funded by the Northeast Sustainable Agriculture Research and Education (NE-SARE) program and the UVM and UNH Extension programs.



### Organic High Tunnel Growers Needed!

The University of MN/University of NH High Tunnel Cover Crops Trial is recruiting organic high tunnel growers to receive cover crop seed and participate in cover crop planting in spring and summer 2025. Our project aims to enable organic high tunnel growers to reduce their dependence on purchased composts and manures by using nitrogen-fixing legume cover crops.

Upcoming planting time slot options are:

#### Early spring cover crops

*(planted between February 1 – April 15)*

Grown before your transplanted or late-seeded warm-season vegetable crops (e.g. tomato or fall broccoli).

#### Summer cover crops

*(planted between May 15 – July 15)*

Grown in midsummer between your cool-season or overwinter vegetable crops (e.g. spinach).

Participating farmers will receive seed of “best bet” legume cover crops for your chosen timeslot, as well as a free soil test. To learn more about participating in the trial or to sign up, please fill out our interest form.

If you have any questions, please reach out! Thanks so much in advance!

Becky Sideman (UNH)  
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# Russet Mites: A Tiny Threat to Greenhouse Tomatoes

W. Garrett Owen, Assistant Professor of Sustainable Greenhouse and Nursery Systems, The Ohio State University, Dept. of Horticulture and Crop Science

Margaret Skinner, University of Vermont Entomology Research Laboratory

AS THE GROWING SEASON APPROACHES in New England, greenhouse and high tunnel tomato growers should be on the alert for a microscopic menace that can wreak havoc on their crops: the tomato russet mite (*Aculops lycopersici*). These minuscule, wedge-shaped, yellowish or translucent pests, just 0.007 inches (0.17 mm) long, are barely visible to the naked eye (FIG. 1). However, the damage they wreak on tomatoes and other crops can be devastating (FIG. 2). Only a few mites can quickly lead to severe plant damage if not addressed promptly. Despite their size, the impact of russet mites on greenhouse and high tunnel tomatoes can be substantial, making early detection and effective management crucial to maintain healthy, productive plants.

## Biology and Hosts

This species of russet mites feed mostly on solanaceous plants, such as eggplant, pepper, potato and tomato, though tomato is its preferred host. It is likely that they also feed on various nightshade weeds. They lay eggs on the undersides of leaves, twigs and plant stems. The eggs hatch into tiny nymphs that tend to remain in the vicinity where they were laid. Russet mite populations can increase quickly. One adult female can lay up to 53 eggs and lives 22 days. The entire life cycle can be completed in 1 week in warm weather. Russet mites can have multiple generations over the season, depending on environmental conditions. High tunnels and greenhouses offer great conditions for this pest. Russet mites can be present throughout the year, but are more common during hot, dry periods.



Fig. 1. Russet mite greatly magnified. (Photo: M. Gulesci, 5598507, Bugwood.org)

## Symptoms

Like other pest mite species, russet mites have piercing-sucking mouthparts and suck sap from the leaves and stems of the plant. Symptoms of a russet mite infestation often begin subtly but can escalate rapidly. Initially, growers may notice browning on the stems near the soil surface, often accompanied by a slight curling of leaves and a silvery sheen on their undersides (FIG. 3). As the infestation progresses, a characteristic bronzing or “russetting” appears on stems, leaves, and fruits. Leaves may yellow and curl, eventually turning brown and brittle, while losing their trichomes.

The damage typically moves upward as mites migrate to higher parts of the plant. In severe instances, stems can turn a rusty brown color and may even break under severe stress. Fruits aren’t spared either, often developing a rough skin with a reddish-brown hue and possible deformities. Overall plant vigor, health and flower production can be significantly reduced as infestations progress.

## Management

To combat russet mites effectively, growers should implement an integrated pest management (IPM) approach. The first step is to regularly scout for the pest. If using starter plants from other propagators, make sure they are mite-free. Growers should inspect their plants frequently, starting from the lower portions and gradually moving upward. Given the mites’ tiny size, a loupe or hand lens with at least 14× magnification is necessary for spotting these elusive pests.

Biological control can be highly effective to combat russet mites, but only if an infestation is detected early. The predatory mites, *Amblyseius swirskii* and *A. cucumeris* are commonly recommended. These beneficial predators should be released regularly, along with additional



Fig. 2. Damage from russet on green and red tomatoes.





Fig. 3. Russet mite symptoms on stems and plants, images by M. Gulesci, Bugwood.org.

breeding prey to ensure their sustained presence and efficacy. Because of the rapid reproductive rate of russet mites, biocontrol releases will not work well against established high pest populations.

Chemical control options include sulfur-based products and horticultural oils, though these should be avoided during flowering. Azadirachtin (neem)-based sprays can be useful during vegetative growth phases. Refer to the New England Vegetable Management Guide for specific products, <https://nevegetable.org/crops/tomato-outdoor/insect-control>.

Cultural practices play a crucial role as well; maintaining proper sanitation by removing plant debris and infected material, along with optimizing environmental conditions, can help deter mite populations. Some growers may also consider planting tomato varieties with fewer sticky trichomes, which can facilitate better establishment of predatory mites.

As we move through this growing season, staying informed and proactive about pest management will be key to maintaining a healthy greenhouse tomato crop. By combining vigilant monitoring with a multi-faceted control approach, greenhouse tomato producers can effectively manage russet mite populations and safeguard their crops from significant damage.

### Useful references

Schuster, D. Tomato Russet Mite. Chapter 4. Univ. of Florida Extension. [https://ipm.ifas.ufl.edu/resources/success\\_stories/T&PGuide/pdfs/Chapter4/Russet\\_Mite.pdf](https://ipm.ifas.ufl.edu/resources/success_stories/T&PGuide/pdfs/Chapter4/Russet_Mite.pdf)

Vegetable IPM Advisory. 2021. Tomato Russet Mites, Spider Mites, Tomato Spotted Wilt Virus, and Melon Aphids. Utah State Univ. Extension. <https://pestadvisories.usu.edu/2021/07/21/tomato-russet-mites-spider-mites-tomato-spotted-wilt-virus-and-melon-aphids/>

## Please Complete the High Tunnel Survey

Collaborating researchers at the University of Vermont and University of New Hampshire, want to learn more about the practices you use and challenges you face in your high tunnel production. Your responses will help us design our future research and outreach programs to provide the best resources for improving nutrient and pest management. The survey should take about 10 to 15 minutes to complete and responses are anonymous.

Please go to the following link to complete the survey: <https://go.uvm.edu/ht-survey>

Thank you for your help with gathering this critical information. If you have additional questions, please email Cheryl Sullivan at [cfrank@uvm.edu](mailto:cfrank@uvm.edu).

# Reap the Rewards of Improved Summer Tunnel Fertility Management

Becky Maden  
UVM Extension Vegetable Nutrient Management Specialist

HIGH TUNNELS CREATE A DISTINCT growing environment with altered soil health characteristics due to the intensity of production, high inputs, and lack of rainfall — which makes managing tunnel soil year after year challenging. Furthermore, many growers are limited in their ability to implement fundamental soil health practices such as crop rotation and cover cropping due to production pressures of year-round growing. Many tunnel growers have instead relied on a long-term soil building approach, with high applications of compost, mulches, and other amendments. Over time, these practices lead to high soil organic matter levels and soils that are highly buffered with excellent water and nutrient retention, but can also have excessive/ unbalanced nutrients and high salt levels.

Since high tunnel soils behave quite differently than field soils, they should be tested and managed differently. Standard soil tests often underestimate the nutrient needs

of tunnel crops and can lead to deficiencies. Fortunately, both the University of Maine Soil Testing Service and UNH Soil Testing Service offer analysis specific to high tunnel soil.

Meeting the nutrient demands of summer tunnel crops can be achieved with amendments through a combination of preplant fertilizing, sidedressing, and fertigating. Tomato, pepper, cucumber, and eggplant transplants going in tunnel soils are typically big plants that are ready to grow—but they need the available nutrients to do so. Nitrogen (N) and potassium (potash, K<sub>2</sub>O) are key amendments for a successful crop. Phosphorus and other nutrients are also critical, but these are often in abundance through additions of compost. However, these nutrients are not to be ignored, so recommendations from soil tests are important to pay attention to.

Tunnel crops need abundant N during the vegetative phase of growth to support a healthy plant and moderate levels of N during fruiting. The amount of N applied should be adjusted based on yield expectations. The charts included in this article are specific to tunnel tomatoes, showing four different fertility rates based on expected yield; vigorous and longer season crops (like a grafted hybrid) require more than shorter season crops (like a determinate). In organic systems, about ⅔ of the recommended N can be applied in the form of a seed meal

N APPLICATION RATE BASED ON YIELD GOAL						
Yield Goal	Yield Goal (lb/acre)	Yield (lb/ft²)	Yield lb/stem (4 ft²)	Approx. plant height	N need lb/acre @90% recovery	Total N need lb/1,000 ft²
Low	40,000	1	4	8'	100	2.3
Medium	80,000	2	8	12'	200	4.6
Good	120,000	3	12	16'	300	6.9

High tunnel tomato fertility recommendations from the New England Vegetable Management Guide

(Source: <https://nevegetable.org/crops/tomato-green-house-and-high-tunnel>)

K <sub>2</sub> O APPLICATION RATE BASED ON MODIFIED MORGAN'S SOIL TEST RESULT AND YIELD GOALS								
Yield Goal	Low		Medium		High/optimum		Excessive	
	(<400 lb/A = < 200 ppm K)		(400-800 lb/A = 200-400 ppm K)		(800-1200 lb/A = 400-600 ppm K)		(>1200 lb/A = >600 ppm K)	
	lb/acre	lb/1,000 ft²	lb/acre	lb/1,000 ft²	lb/acre	lb/1,000 ft²	lb/acre	lb/1,000 ft²
Low Yield Goal	300	6.9	200	4.6	100	2.2	0	0
Medium Yield Goal	450	10.3	300	6.9	150	3.4	0	0
Good Yield Goal	600	13.8	400	9.2	200	4.6	0	0
High Yield Goal	750	17.2	600	13.8	300	6.9	0	0



(soybean, alfalfa, peanut) when the soil is warm and moist about two weeks before planting. This allows time for the N in the fertilizer to mineralize into plant available forms. The seed meals will continue to mineralize and provide the plants with N for many weeks.

Similarly, K<sub>2</sub>O rates for tunnel tomatoes should be applied in alignment with the yield expectations of the crop, but it is important to note that even at the “low” yield goal, K<sub>2</sub>O tunnel rates are higher than typical field rates. 100% of the K<sub>2</sub>O can be added before planting, although using a blend of potassium sulfate “fines” and standard potassium sulfate is a good technique to ensure long term availability. Water is critical for uptake, so make sure plants have adequate drip lines (up to 4 per plant, especially on sandy soils). Many growers don’t notice deficiency until the fruit is nearly ripe and this can dramatically reduce marketable yields.

The remaining ⅓ of recommended N and additional K can be applied via drip irrigation, or “fertigation” 4-6 weeks after transplanting. Many organic growers fertigate with fish emulsion (2-4-1) on a regular basis, which provides the plants with a steady low dose of N. This can cause clogging of drip tape, so be sure to check lines and flush regularly if this is a preferred material. Low-cost

choices many growers use are dissolved sodium nitrate (15-0-2) and potassium sulfate fines (0-0-51). These products are immediately available for plant use when delivered through the drip but can contribute to soil salt levels. The fertilizer industry is offering more choices for soluble fertilizers, so check with your supplier for options. A weekly dose of 0.25 lb each of N and K per 1000 sq feet is a good starting point for growth maintenance. If fertigation is not possible, it is also useful to sidedress with the remaining ⅓ of the N in a granular form 3-4 weeks after transplanting. Again, be sure adequate water is available to help mineralize nutrients for plant uptake. Tissue tests are a good way to assess and refine mid-season nutrient management.

Paying attention to soil test results and fertility in organic high tunnel tomato production can lead to vastly better yields and fruit quality. A recent benchmarking study by Vern Grubinger and Becky Maden at UVM Extension with 48 growers demonstrates that growers with highest yields conduct the UMaine High tunnel soil tests and follow nutrient recommendations. At a time when there is a lot of uncertainty in farming, managing nutrients carefully in high tunnels is a good strategy to ensure a reliable, profitable crop. ∞



# Pesticides in High Tunnels: What is legal and what is safe?

Heather Bryant  
UNH Extension

IN THE ENVIRONMENT, PESTICIDES BREAK DOWN with exposure to rain and UV light. However, rainfall is blocked in the high tunnel, and UV light changes as it moves through the plastic. This prompts the question, when it comes to pesticides in high tunnels, what is safe and effective? And the next question is what is legal? Pesticide labels offer guidance on these topics, but for high tunnels it is a little complicated.

The EPA sets federal regulations for pesticides and approves labels for individual products. States can add additional regulations if they choose. Whether a high tunnel is considered a greenhouse or an open field for the purposes of interpreting a pesticide label can vary from state to state, and I encourage you to direct any questions to your state agency. In New Hampshire, with regards to pesticide use, high tunnels are considered greenhouses.

There are three labeling options regarding greenhouses. First, a pesticide label may explicitly state that a product cannot be used in a greenhouse. Second, it may specify that the product can be used in the greenhouse and provide a separate set of instructions for greenhouse crops compared to outdoor crops. In this case, the product must be used in greenhouses according to the instructions in the greenhouse section with no exceptions. And finally, the label may be silent on the use of a product in a greenhouse. In that case, the EPA's current position is that a product can be used in a greenhouse even if the label does not specify greenhouses so long as it does specify the crop. Of course, the risk to workers and crops may increase if we use a product in a greenhouse when the label does not mention greenhouses. Finally, please note that to use a smoke generator or fumigant in a greenhouse, all crops in that greenhouse must be listed on the product label.

In the interest of safety, the New England Vegetable Management Guide recommends that high tunnel producers treat their tunnels like greenhouses when choosing and applying pesticides. And of course using IPM practices to maximize effective pest control while minimizing the need for pesticides or the risks associated with them is always a good choice! 🌱

## Free Educational Opportunities

A program called the “New Entry Sustainable Farming Project”, led by specialists at Tufts University, has been offering expert-led webinars called “Farming Under Cover Workshop Series” for intermediate and advanced growers, covering key high tunnel topics like soil health, season extension, crop selection, and more. These webinars are designed to take your tunnel management to the next level. Webinars are offered on the second Tuesday of each month until May. They are free and open to all.

To register to take part future sessions, go to the new entry website: <https://nesfp.nutrition.tufts.edu/events>

The link to view the whole series is here: <https://youtube.com/playlist?list=PLpusX4u3tJpJNvBUcTjMIMWMo5zsvhK-m3&si=i7LRBdruDyg7qOPw>

Or here are a few recent sessions:

### Strategic Crop Planning and Variety Selection for High Tunnels



<https://youtu.be/OA0d2wBphFk?si=kSpWj5WLHwzaliPV>

### Watch the recording on Climate Control in High Tunnels by Jonathan Ebba (UNH)



<https://youtu.be/U48eEjem44I?si=ZJyblGhVpUjhiTzO>



# The Crazee Mite: A New Biological Control Agent for High Tunnels

Somaiyeh Ghasemzadeh and Margaret Skinner  
University of Vermont Entomology Research Laboratory

THE CRAZEE MITE OR WHIRLIGIG MITE, *Anystis baccarum* (Acari: Anystidae), is a predator found throughout the world (FIG. 1). Its erratic, twirling movement has earned it the nickname. It has a reputation as an impressive destroyer of common agricultural pests in greenhouse ornamentals. At least 18 species of *Anystis* mites exist, but crazee mite is the best known and is considered an important generalist predator in cereals, orchards and protected agricultural settings. It recently cleared regulatory hurdles allowing its sale in many states in the U.S.



Fig. 1. Crazee mite.

Photo credit: Applied Bio-nomics, <https://appliedbio-nomics.com>

## Biology

Crazee mites pass through six life stages: egg, larva, protonymph, deutonymph, tritonymph, and adult (FIG. 2). They are all female and reproduce parthenogenetically (without males). Adults are relatively large (0.04–0.6 inch diameter) and roughly twice the size of an adult *Phytoseiulus persimilis*. They are bright orange-red and have long legs. If you see a bright orange speck running around madly, it is likely a crazee mite. The tiny yellow/brown spherical eggs are laid in clusters under loose bark, in soil or leaf litter. Each female lays 45–60 eggs over her life. Nymphs and adults have four pairs of legs which appear to arise from a single point, which facilitates their whirling movement. All mobile stages are predatory. The life cycle from egg to adult takes around 4 weeks at 77°F, with 60% RH. In cooler temperatures, the life cycle takes longer: at 72°F, it takes 7 weeks to complete a generation, and half

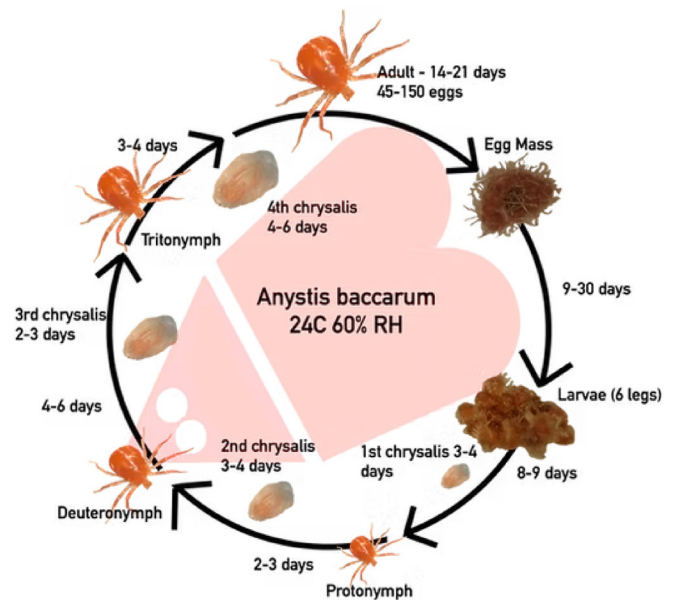


Fig. 2. Crazee mite life cycle.

From The Bug Lady, <https://www.thebuglady.ca/about-3>

of this time is spent in an inactive state during molting. Optimal conditions are 75°F with 60-70% RH. Eggs and larval stages prefer moist, warm conditions but will still develop in temperatures as low as 50°F. Adults live 2–3 weeks and continuously feed during this period. Crazee mites are most active and abundant in the spring and can be hard to find in winter. It is speculated they overwinter as adults or eggs in a resting state in soil or other protected places. They have at least two generations per year.

## Habitat & Environmental Conditions

In nature, crazee mites are found in a wide range of habitats, including, on trees, shrubs, woody vines and in soil and leaf litter. They are also mass produced for commercial sale. They are well-suited for both outdoor environments such as gardens, nurseries, orchards and field crops, as well as in greenhouse crop production, including cannabis and ornamentals. However, it may not establish well in tomatoes due to their granular trichomes or in plants with smooth and slippery stems, such as roses and poinsettias.

## Target Pests & Feeding Behavior

Crazee mites are highly effective generalist predators, feeding on a wide range of pests, including thrips (both larvae and adults), aphids, leafhoppers, spider mites, whiteflies, fungus gnats, psyllids, springtails and mealybugs. Adults can consume about 40 spider mites or 6 leafhopper nymphs per day. It is not discouraged by many of the toughest pest natural defenses, such as wax and webbing. For larger prey like thrips, they can eat 5 adults or up to 10 larvae daily. For



Fig. 3. Crazee mite feeding on an ivy aphid and winged aphid.  
Photo credits: (top) F. Piednoir. <https://www.inaturalist.org/photos/169358340>;  
(bottom) I. Tuunainen. <https://www.inaturalist.org/photos/214985470>.

aphids, they consume between 1–7 daily, depending on size (FIG. 3). All motile stages of the crazee mite are predatory, and they primarily target adult prey, leaving larvae for smaller predatory mites. It bypasses larvae of *Aphidoletes*, the predatory midge aphid predator, and appears to ignore *Encarsia* (parasitic wasp) and *Amblyseius fallacis* (predatory mite). While it does attack *Amblyseius cucumeris* mites, this may be beneficial, as *A. cucumeris* serves as a supplementary food source, making this combination a cost-effective solution. Crazee mites have a voracious appetite and spread out quickly in search of prey. Without sufficient food they may resort to cannibalism or move out.

## Application Considerations

Crazee mite was released to the U.S. market in 2023 and is now available in many New England states and beyond. As a new biocontrol agent, research is ongoing to determine how to maximize its effectiveness. It is best to consult with your biocontrol supplier to determine if this is the right tool for your situation. Application rates vary depending on the environment, plants, and prey density. A general rule of thumb is to release 250 per 1,000 sq. ft for prevention and 1,000 or more for outbreak situations. Pairing crazee mite with other biocontrol agents may enhance results, as it feeds on different pest stages and switches between prey types. The effectiveness of craze mites for IPM in high tunnels is a work in progress. Time will tell if this is the next best thing for biological control in high tunnel vegetable production. Growers play a key role in building a base of knowledge for what works and what doesn't in terms of biological control, particularly with this new predator.

## Useful References

Video: New Biocontrol Agents: Generalist Predators for Canadian Greenhouse Production: <https://www.youtube.com/watch?v=oGSEfjTX70Q>

Applied Bio-Nomics Ltd. Crazee Mite (*Anystis baccarum*), Predatory (Whirligig) Mite. <https://www.appliedbio-nomics.com/wp-content/uploads/Anystis-baccarum-Technocal-Manual.pdf>

Packer, K. 2022. Bringing the Crazee Mite to the Canadian market. <https://www.fruitandveggie.com/bringing-the-crazee-mite-to-the-canadian-market/>

Cuthbertson, A.G.S., Qiu, B.L. & Murchie, A.K. 2014. *Anystis baccarum*: An important generalist predatory mite to be considered in apple orchard pest management strategies. *Insects*. 5: 615–628. <https://doi.org/10.3390/insects5030615>

UC IPM. *Anystis Whirligig Mites*. <https://ipm.ucanr.edu/natural-enemies/anystis-whirligig-mites/#gsc.tab=0>

## Resource Shoutout

The Bio-Control Handbook from Applied Bio-nomics is a great reference on various biological control agents used in high tunnel production. The handbook has great pictures of our friends and provides recommended release rates. Applied Bio-nomics is a company, which mass produces various natural enemies, and they are interested in selling their products, but the information is useful even if you choose to purchase your bio controls from a different source.

<https://www.appliedbio-nomics.com/wp-content/uploads/The-Bio-Control-Handbook-Second-Edition.pdf>



# What's That Bug? Parasitic Praon Wasps

Cheryl Sullivan, UVM Entomology Research Laboratory

HAVE YOU EVER SEEN AN APHID PLACED ON A PEDESTAL? Although farmers don't typically see aphids worthy of such admiration, *Praon* wasps deem otherwise. Most wasps that parasitize aphids belong to the Braconidae and Aphelinidae families and several species may show up in high tunnels from the wild. Unlike the golden brown or black aphid 'mummies' caused by *Aphidius/Aphelinus* parasites, *Praon* wasps produce mummies raised on silken cocoons. There are many species that occur and *Praon volucre* is [commercially produced](#) for use in aphid biocontrol in Europe. Visit [our project webpage](#) for other wild beneficials that visited our alyssum habitat plantings and high tunnel crops last summer. ♡



*Aphid mummy from being parasitized by a Praon wasp*  
(Photo: Cheryl Sullivan, UVM)



*Praon wasp adult*  
(Photo: Wikimedia [https://commons.m.wikimedia.org/wiki/File:220621\\_0730\\_Praon.jpg](https://commons.m.wikimedia.org/wiki/File:220621_0730_Praon.jpg))

## Join These Informative E-mail Lists!

### VT-TIC

UVM Tick Information Center. Stay up to date with Tick Topics including news, research, and more from around the region.

### Tunnel Vision

Receive the hottest new high tunnel info, stay in the loop about upcoming events, be informed when newsletters become available, and more.

Email Cheryl Sullivan at [cfrank@uvm.edu](mailto:cfrank@uvm.edu) with the subject line "subscribe" to join either or both lists. ♡

# Check out the Proceedings and Presentations from the 2024 New England Vegetable and Fruit Conference

*Held December 17–19, 2024 in Manchester, NH.*

<https://go.uvm.edu/nevfc2024>

There are several presentations available that deal with high tunnel production. Examples include:

## Avoiding Aphid Outbreaks on High Tunnel Tomatoes

CHERYL FRANK SULLIVAN, UVM

<https://go.uvm.edu/aphid-outbreaks>

## Tweaking Your Tomato High Tunnel

VERN GRUBINGER, UVM EXTENSION

<https://go.uvm.edu/tomato-tunnels>

## Winter Spinach Production & Pests

GENEVIEVE HIGGINS, UMASS

<https://go.uvm.edu/hightunnel-spinach>

and more...



## Events

UNH Extension 2025 Webinar Series for Greenhouse, Nursery and Garden Center Professionals

This series features a monthly webinar on a variety of topics related to IPM in greenhouses and nurseries.

Each webinar is from 6:30 p.m. – 8:00 p.m., costs \$10 and will award one New England pesticide applicator recertification credit. Register for as few or as many as you like!

More info and registration here:

**<https://go.uvm.edu/unh-webinar>**

- MARCH 25 | An integrated approach to diagnosing plant problems in-house
- APRIL 29 | “Other” thrips in the greenhouse: an overview
- JUNE 24 | Choosing and navigating better greenhouse climate control options
- JULY 29 | Bacterial leaf spots: diagnosis and management
- AUGUST 26 | Ultra low volume sprayers: Are foggers right for you? Selecting, calibrating and mixing
- SEPTEMBER 30 | How to choose pesticides and build effective spray regimens
- OCTOBER 28 | How to train employees to water
- NOVEMBER 25 | A biocontrol starter pack
- DECEMBER 16 | In-house root zone testing



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