

United States Department of Agriculture  
Progress Report

<b>Title:</b> Vermont IPM Extension Implementation Program (VT EIP): 2024-2027	
<b>Sponsoring Agency</b>	NIFA
<b>Funding Source</b>	Non Formula
<b>Accession No.</b>	1033057
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<b>Reporting Period End Date</b>	08/31/2026
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**Program Code:** EIP

**Program Name:** Extension Implementation Program

**Project Director**

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**Recipient Organization**

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**Performing Department**

{NO DATA ENTERED}

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Plant & Soil Science  
{NO DATA ENTERED}  
Agriculture, Landscape, and Environment

**Non-Technical Summary**

Agriculture is essential to Vermont's economy, generating an estimated \$11.3 billion annually. Over the past two decades, Vermont's agriculture has become more diverse. Currently 75% of farms produce crops other than the agronomic crops supporting the dairy industry. New and existing farms have expanded production of fruit crops, ornamentals, high tunnel vegetables, soybeans, and organic grains, all key to maintaining Vermont's agriculture and a healthy working landscape.

With the changes in Vermont's agriculture sector (increased numbers of dairy cows and increased diversified acreage), we are seeing new pests requiring integrated pest management (IPM) strategies. Emerging arthropod pests, invasive weeds, and diseases require IPM tactics to minimize crop loss and the unnecessary use of pesticides. Current IPM strategies for established pests must also be adapted to changing climatic conditions like warmer temperatures, longer growing seasons, significant rain events, and droughts now common in the state. The changes in Vermont's agriculture sector also includes beginning farmers who don't often come from farm backgrounds and are eager for information. This new audience needs to build confidence in pest and disease identification and learn how to successfully incorporate IPM tools into their operations.

The VT EIP team has expertise aligned with the IPM needs of the diverse crops and audiences in the state and includes the Priority Areas of IPM Implementation in: Agronomic Crops, Specialty Crops (Tree Fruit/Grapes, Greenhouse/High Tunnel), Animal Agriculture, and Communities; IPM for Pesticide Applicators; and IPM Support for Pest Diagnostic Facilities. The UVM Extension Plant Diagnostic Clinic supports all VT EIP programs by providing timely and accurate pest identification as the critical first step of IPM. The UVM Extension Community Horticulture Program (Master Gardener) serves as a hub for all VT EIP program consumer-targeted IPM information outreach.

VT EIP strives to advance the goals of the National IPM Roadmap, USDA Strategic Plan, Northeastern IPM Center priorities and address CPPM program focus areas by introducing IPM awareness and strategies to increase knowledge and adoption among both new and established stakeholders in addition to fostering established networks to introduce new IPM tactics,

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emerging high consequence pests and climate change. VT EIP recognizes the impacts on IPM programs and stakeholders due to decreasing numbers of relevant faculty and technical positions throughout the Northeast and the need to foster next generation IPM scientists and educators. A key component of VT EIP will foster next generation IPM scientists and educators.

## Accomplishments

### Major goals of the project

The goals of VT EIP are to develop and provide effective IPM education and outreach programs for both new and established growers and consumers in addition to promoting next generation IPM educators and scientists. The VT EIP Priority Area efforts focus on the following three objectives to promote new IPM tools and tactics for established practitioners, increase IPM awareness and adoption for new audiences, and develop the next generation IPM scientists and educators.

Objective 1. Promote New IPM Tools and Tactics for Established Practitioners

Objective 2. Increase IPM Awareness and Adoption for New Audiences

Objective 3. Develop the Next Generation of IPM Scientists and Educators

### What was accomplished under these goals?

Each facet of the VT EIP is increasing the adoption of IPM practices in a variety of crops and settings to reduce the amount of pesticides used and lower costs while protecting the environment and human health. Agronomic cereal and dry bean farmers were provided with seed quality testing results for managing seedborne diseases. 70% of orchards have changed management practices to decrease pesticide use to protect pollinators. Greenhouse/High Tunnel interns learned how to scout for natural enemies and pests in habitat plantings around high tunnels. Grazed Pasture IPM assessments and beneficial invertebrate monitoring trainings were conducted on farms in VT. 67% of Master Gardener Helpline clients implemented the IPM strategies recommended and 69% reduced or avoided the use of pesticides, saving \$86 per client on pesticide costs. Annual pesticide certification meeting participants are likely to use pesticides more safely and adopt IPM practices, "Great reminder to remain steadfast in IPM instead of relying on chemicals too much!" 99% of Plant Diagnostic Clinic clients implemented recommended IPM strategies and 94% reduced their use of pesticides, saving \$476 per client on pesticide costs. Please see the following accomplishments for more details.

Objective 1. Promote New IPM Tools and Tactics for Established Practitioners

#### Seed Quality Testing:

- Farmers provided with seed quality assessment, cereal grain or dry bean seedborne disease factsheet on lifecycles, symptoms, identification, and management

#### Tree Fruit/Grape Workshops:

- Vermont Tree Fruit Growers Assoc. Annual Meeting
- 73-100% knowledge of Plant Growth Regulators, Apple Disease Management, Bitter Pit Management, New and Emerging Diseases of Tree Fruit
- 78% likely to adopt at least one new IPM practice
- 70% changed an IPM management practice to decrease pesticide use to protect pollinators
- "Mowing less, leaving brush pile on orchard edges"

#### Tree Fruit/Grape Extension Outreach Education Outputs:

- New England Fruit Consortium webinar series
- 98% learned new information
- 84% would change management decisions on their farm

#### Greenhouse/High Tunnel Winter Conferences:

- High Tunnel Production Conference
- 18.6% knowledge increase of cucumber & winter greens production, environmental control, diagnosing abiotics and soil health issues, irrigation technology, habitat and trap plants
- 85.5% likely to adopt a new IPM practice to improve airflow and ventilation, use trap and habitat plants, new resistant cucumber varieties, environmental monitoring
- Tristate Greenhouse IPM Workshop
- 62% knowledge of Pesticide Use, How Pesticides Work, Solving Greenhouse Weed Problems, Craze Mite, IPM Frontiers
- 74% likely to adopt a new IPM practice to scout, submit specimens to diagnostic clinics for ID, release biocontrol agents, biocontrol quality assessment, use plant-mediated IPM systems, improve sanitation, use of a mask when applying pesticides, reduce chemical pesticide use

#### Master Gardener Advanced Training:

- UVM Extension Master Gardener Annual Conference
- 63% plan to implement learned practices in their gardens or community education efforts

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**Pesticide Applicator Recertification Meetings, Online Courses:**

- Pest Management Professionals Meeting
  - 78-100% knowledge about Pesticide Storage and Transportation, Bed Bugs and Wood Destroying Organisms, Tick and Mosquito Management, Rodent Exclusion Prevention, Drone Use in Pest Management
  - 92% likely to use pesticides more safely
  - 85% likely to adopt at least one new IPM practice
  - "I did not know blower diffusers effect droplet size. This will help me manage drift."
  - "I learned more about the IPM of bed bugs and what to look for and to plan for."
- Back to Basics CORE Essentials Webinar Series
  - 98% knowledge about IPM, Pesticide Movement in the Environment, Protecting Pollinators, Labels, Formulations, Equipment Calibration, Mixing, Loading, Storage, Transportation, Security, Emergency Response, Regulations, Personal Protection Equipment
  - 98% likely to use pesticides more safely
  - 85% likely to adopt at least one new IPM practice
  - "This was helpful for a review of basic operations that often get forgotten about or overlooked."
  - "Great reminder to remain steadfast in IPM instead of relying on chemicals too much!"
- Pesticide Applicator Education Winter Webinar Series
  - 82-98% knowledge about Endangered Species Act, PFAS and Pesticides, Pesticide Disposal, Insects & Mites in Trees & Shrubs, Tree Diseases
  - 81% likely to use pesticides more safely
  - 75% likely to adopt at least one new IPM practice
  - "Understanding more about the bulletins will feed into our organization's IPM policy."
  - "Useful info on key insect pests helping to better understanding how to control them with and without pesticide intervention"
- Introduction to FieldWatch Webinar
  - 90% knowledge about FieldWatch
  - 85% plan to create a FieldWatch account
  - 88% likely to use pesticides more safely
  - 71% likely to adopt at least one new IPM practice
  - "Very useful to see how tech can benefit the applicator, land owners and environment."
  - "This was a very informative meeting; I gained access to information that I didn't know existed."

**Pesticide Applicator Extension Outreach Education Outputs:**

- The Pesticide Applicator newsletter
  - 448 pesticide credits administered @1 credit each (224 individuals)

**Northeast Vegetable IPM Working Group:**

- Education, research, and regulatory priorities published on NE IPM Center website

Objective 2. Increase IPM Awareness and Adoption for New Audiences

**Master Gardener Course:**

- 97% knowledge about IPM
- 95% unlikely to rely on pesticides as a first response
- 83% said they made changes to their gardens
- "Now I understand the importance of science-backed information and how it can impact the environment."
- "I will definitely change some of my gardening practices after the knowledge I have gained from this course!"

**Master Gardener Helpline:**

- 100% helped to identify pest problem
- 95% received information on IPM strategies
- 67% implemented recommended IPM strategies
- 69% reduced or avoided pesticide use
- \$86 average per client estimated cost savings by reducing pesticide use

**Pesticide Applicator Certification Meetings, Online Courses:**

- Initial Pesticide Certification Meeting
  - 84% pass rate (in-state average 66%)
  - 100% prepared to take the exam
  - 100% likely to use pesticides more safely
  - 94% likely to adopt at least one new IPM practice
  - 89% likely to adopt at least one new IPM practice to protect pollinators
  - "This meeting made the info easier to understand for me"
  - "Very useful vs. studying core manual alone"

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- Online study courses
- 81-100% prepared to take the exam
- 89-100% likely to use pesticides more safely
- 88-100% likely to adopt at least one new IPM practice
- "Good information"

#### **Plant Diagnostic Clinic Diagnostics:**

- 99% implemented recommended IPM strategies
- 94% reduced or avoided pesticides
- \$476 average per client estimated cost savings by reducing pesticide use
- "Considering time and materials, easily [saved] over \$1,000. Able to correct course with helpful IDs"

#### Objective 3. Develop the Next Generation of IPM Scientists and Educators

#### **IPM and Pesticides Course:**

- ALE3990C: Pesticide Application Training
- 100% knowledge about IPM and how pesticide use fits into an IPM program; Federal and state regulations that govern pesticide use; Potential environmental and human hazards; Transport, storage, waste disposal, emergency planning, pesticide security; Calibration and calculations that improve pesticide delivery; Career opportunities in pesticide-related fields
- 100% likely to use pesticides more safely
- 100% likely to adopt at least one new IPM practice
- "Learned many topics in depth that I would not have been able to learn on my own"
- "Feel more equipped for an agricultural career having this knowledge"

#### **What opportunities for training and professional development has the project provided?**

{Nothing to report}

#### **How have the results been disseminated to communities of interest?**

**Agronomic Crops:** IPM information is distributed through field days, winter meetings, blogs, websites, webinars, Facebook posts, YouTube videos, phone calls, emails and social media. Conference proceedings and meeting videos will be posted to our website.

**Tree Fruit/Grapes:** IPM information is distributed through website, blog posts, factsheets, on-farm workshops, one-on-one consultations, and presentations at regional grower meetings. Information collected in surveys will remain confidential.

**Greenhouse/High Tunnel:** IPM information is distributed through workshops, conferences, presentations, site visits, factsheets, websites, Facebook page and a listserv.

**Animal Agriculture:** IPM information is distributed through workshops, on-farm visits, webinars, factsheets, guides.

**Communities:** IPM information is delivered through the Master Gardener Course, Master Gardener Helpline, advanced training, newsletter, state reports, website, and emails.

**Pesticide Applicators:** IPM information is distributed through newsletters, online courses, presentations, factsheets, website, emails, and phone calls.

**Pest Diagnostic Facility:** IPM information is distributed through sample diagnosis, website, meetings, presentations, webinars, newsletters, television, radio, press releases, factsheets, emails, and phone calls. Northeast Small Fruit and Vegetable IPM Working Group education/research priorities will be shared on the NE IPM center website.

#### **What do you plan to do during the next reporting period to accomplish the goals?**

**Agronomic Crops:** Two IPM field days highlighting pest scouting, pollinator protection, and weed management; two IPM winter conferences covering seed quality, seedborne diseases, variety selection, scouting, management of early season crop pests, weed management in no-till systems, and emerging threats (i.e. corn leafhopper); agronomic pest management demonstrations; continued seed quality testing; pest management updates will be provided throughout the year through blog posts, social media, and newsletters; a VT soybean pest survey will be conducted and a Guide to Soybean Pests will be created for New England farmers; continued reporting to NEERA and REEport, VT EIP team meetings to discuss impacts and evaluation

**Specialty Crops-Tree Fruit/Grapes:** Six on-farm workshops demonstrating IPM practices; twenty-five IPM e-bulletins to fruit grower listservs; continued support of the NE Tree Fruit IPM Working Group; one IPM fact sheet; thirty one-on-one consultations; continued work with student interns and graduate students on IPM issues in fruit, coordinate VT state NEWA network; continued reporting to NEERA and REEport, VT EIP team meetings to discuss impacts and evaluation

**Specialty Crops-Greenhouse/High Tunnel:** Tristate Greenhouse IPM Workshop; regional High Tunnel Conference; High Tunnel Farm tour; two regional IPM factsheets; three High Tunnel newsletter IPM articles; ten IPM farm visits; continued work on IPM education materials and impact assessments with program Post Doc; continued reporting to NEERA and REEport, VT EIP team meetings to discuss impacts and evaluation

**Animal Agriculture:** completed. Post doc is no longer at UVM.

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**Communities:** Two online presentations (through webinars or annual conference) to train EMG volunteers on IPM; one factsheet on IPM strategy; annual Master Gardener course and evaluation of impacts; four Ask-an-EMG Information Stations at events in Vermont; Master Gardener Helpline service; continued reporting to NEERA and REEport, VT EIP team meetings to discuss impacts and evaluation

**Pesticide Applicators:** Two category-specific recertification meetings; one four-part online recertification webinar series; biannual newsletter publication; one annual new applicator certification training; continued new applicator on-demand online training; Master Gardener Course IPM module; two-credit pesticide applicator certification training undergraduate course; continued reporting to NEERA and REEport, VT EIP team meetings to discuss impacts and evaluation

**Pest Diagnostic Facilities:** Assess regional impacts of Northeast Veg Working Group meeting; four IPM articles for landscape industry; six press releases for the public; ten IPM presentations at grower meetings and public; contribute to regional and state veg and small fruit listservs; continued analysis of samples with IPM recommendations; Master Gardener Course pest diagnostic module; continued training of Post Doc and intern; continued reporting to NEERA and REEport, VT EIP team meetings to discuss impacts and evaluation

**Participants**

**Actual FTE's for this Reporting Period**

Role	Non-Students or faculty	Students with Staffing Roles			Computed Total by Role
		Undergraduate	Graduate	Post-Doctorate	
Scientist	4.2	0	0.3	0.4	4.9
Professional	0.2	0	0	0	0.2
Technical	0.1	1	0	0	1.1
Administrative	0	0	0	0	0
Other	0.1	0	0	0	0.1
Computed Total	4.6	1	0.3	0.4	6.3

**Student Count by Classification of Instructional Programs (CIP) Code**

Undergraduate	Graduate	Post-Doctorate	CIP Code
2	1	2	01.00 Agriculture, General.

**Target Audience**

Commercial grain and soybean growers, livestock producers, apple and grape growers, greenhouse and high tunnel operators, vegetable and berry growers, landscapers, pesticide applicators, Master Gardeners, home gardeners, and general public

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**Products**

{Nothing to report}

**DR 1020-006 Certification Statement**

N/A, this project/program did not produce any scholarly publications and data assets as defined by DR 1020-006 during the reporting period.

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## Other Products

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### Type

Other

### DOI or Other Persistent Identifier

### Associated Publication DOI(s)

### Author ORCID(s)

## Description

Objective 1. Promote New IPM Tools and Tactics for Established Practitioners

Agronomic Field Days and Winter Conferences:

- No-Till & Cover Crop Conference. Managing Weeds and Pests in No-Till & Cover Crop Systems. Burlington, VT 2/19/26 (210)
- Farmers Watershed Alliance Annual Meeting. Neonicotinoid Research on Alternatives. St Albans, VT 2/12/26 (88)
- Champlain Valley Farmers Coalition Annual Meeting. Updates on Neonicotinoid Seed Treatment Research and Alternatives. Middlebury, VT 1/30/26 (84)
- Northern Grain Growers Conference. Managing Diseases in Cereal Grain and Dry Beans. Essex, VT 3/18/26 (138)
- Precision Agriculture Workshop. Robotic Autonomous Weeders. St. Albans, VT 3/12/26 (52)

Agronomic Pest Management Demonstrations:

- Two on-farm demonstrations installed to compare neonicotinoid treated seed and seed without treatment, BMPs for managing neonicotinoid dusts during planting. 4/30/25 & 5/01/25 (58)

Seed Quality Testing:

- 28 cereal grain and dry bean samples submitted from farmers in RI, CT, NY, VT, ME, NH, and MA included measurements of mycotoxins and a range of seedborne pathogens

Agronomic Extension Outreach Education Outputs:

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- 3 Outcroppings blog posts <http://blog.uvm.edu/outcropn> (311 subscribers)
- Seedborne Disease in Dry Beans: 8/25/25
- Vermont Pastures a Tick-ing Time Bomb? UVM Research To Identify Tick Risk to Livestock and Farmers 6/4/25
- Insights from the 2025 UVM Soybean Variety Trial. 12/3/25
- 5 IPM Week Webinars: Wild Bee Pollinators; Pests and Diseases; Emerging Technologies; Endangered Species Act and Pesticide Use; Neonicotinoids Updates. 1/26, 27, 28, 29, & 30/26 (207)
- 2 Dry Bean Short Course Webinars: Weed Control; Pest & Disease. 2/9 & 13/26 (118)
- Tree Fruit/Grape Workshops:
  - VT Tree Fruit Growers Assn Annual Meeting 2/20/26 (65)
- Northeast Tree Fruit IPM Working Group:
  - Northeast Tree Fruit IPM Annual Conference 10/21-22/25 (44)
- Tree Fruit/Grape Extension Outreach Education Outputs:
  - 39 UVM Fruit blog posts <http://go.uvm.edu/ogreu> (299 vermontgrape, 160 vtapplegrower)
  - 102 grower consultations
  - New England Fruit Consortium webinar series, Feb-March 2026 (409)
  - 1 Presentation: Getting the Most out of NEWA; Thinning the Multi-Cultivar Orchard; Managing your IPM Information with Farmable. UVM Apple Program & VT Tree Fruit Growers Assn Annual Meeting. Middlebury, VT 2/20/26. (65)
- Greenhouse/High Tunnel Winter Conferences:
  - 8 presentations, 3 pesticide credits. High Tunnel Production Conference. West Lebanon, NH 12/10-11/25 (155)
  - 7 presentations, 4 pesticide credits. Tristate Greenhouse IPM Workshop 1/16&23/26 (75)
- Greenhouse/High Tunnel Pest Management Demonstrations:
  - Managing Pests in Your High Tunnels. Climate-Resilient Agriculture: Ensuring Farm Sustainability with Undercover Production and Diversified Risk Management Strategies. Northeast Extension Risk Management Education Ctr. Beverly MA 5/6/25 (15)
  - High Tunnel Habitat Planting Demo & Tomato Production Discussion. Honey Field Farm, Norwich, VT 7/30/25 (30)
  - High Tunnels for Year-Round Organic Vegetable Production On-Farm Twilight Session. Intervale, Burlington, VT 10/14/25 (40)
  - Biological control for greenhouse ornamentals. UNH demonstration at D.S. Cole Greenhouses. Loudon, NH 2025 (24)
  - Grower to Grower Tour. Claussen's Florist and Greenhouses, Colchester, VT 4/9/26 (30)
- Greenhouse/High Tunnel Extension Outreach Education Outputs:
  - 35 insects identified for growers and seed sellers and suggested management options for economically important pests
  - 4 issues of the online High And Dry high tunnel newsletter. Summer 2025, Fall 2025, Winter 2025, Spring 2026 (4,000 subscribers) <https://go.uvm.edu/owb4z>
  - 1 factsheet: Alyssum Habitat Hedges to Attract Beneficial Insects for High Tunnel Pest Management. <https://go.uvm.edu/z4r6o>
  - 1 report: Survey of High Tunnel Practices in New England 2025 Results Summary. <https://go.uvm.edu/l29fh>
  - 1 article: Laurel Wilt and It's Partner, the Redbay Ambrosia Beetle: Is it a Cause for Concern in Vermont? The Dirt, Green Works Newsletter, Fall Issue, VT Nursery & Landscape Assn
  - 12 presentations
    - Managing Pests with IPM in High Tunnels. High Meadows Farm, Putney, VT 6/12/25 (15)
    - Honing In On High Tunnel Habitat & Trap Plants. High Tunnel Production Conference. West Lebanon, NH 12/10-11/25 (155)
    - Managing Pests in Your High Tunnels. Climate-Resilient Agriculture: Ensuring Farm Sustainability with Undercover Production and Diversified Risk Management Strategies. Northeast Extension Risk Management Education Ctr. Online. 2025 (80)
    - Identification of fungus gnat & shorefly natural enemies; Identification of aphid natural enemies; Thrips natural enemies; Some critical questions to consider while scouting greenhouse ornamentals; Communicating scouting information; How to make scouting

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easier; Identification of mite natural enemies; Whitefly natural enemies; Other natural enemies. Greenhouse IPM Scout School Greenhouse Scouting Certificate Course (collaboration among Cornell, UVM, UMAINE). Online. 7 sessions 1/22/26-3/5/26 (45)

Animal Agriculture Extension Outreach Education Outputs:

- 5 one-on-one trainings in beneficial pasture invertebrate monitoring, sampling techniques for beneficial dung insects, dung beetle identification, livestock IPM as part of dung beetle conservation practices. Orange County VT 5-9/25
- Dung Beetle Identification Pocket Guide published, available online, 500 printed to distribute
- 3 Presentations
  - Grazed pasture IPM. Entomological Society of America Conference. Oregon 11/26 (XX)
  - Pastured Dairy and Beef IPM Webinar, Dairy and Beef Internal Parasites. Cornell IPM Series Webinars. 2/26. Available on YouTube
  - Manure Matters: Dung Ecology and Pasture Insect Management. Cornell Academic Series Webinar. 3/26. Available on YouTube

Master Gardener Advanced Training:

- Plant Disease Webinar provided public outreach recommendations, 6/25/25 (51)
- UVM Extension Master Gardener Annual Conference provided research-based information to gardeners on managing plant diseases in the garden, introduced jumping worms, legumes, and seed sovereignty, 11/22/25 (200)
- Pushed Up the Mountain Film Screening provided education on introduced species, 3/6/26 (35)
- The Extraordinary Caterpillar Film Screening provided education on IPM, 3/13/26 (69)

Pesticide Applicator Recertification Meetings, Online Courses:

- Pest Management Professionals Meeting, in-person 10/14/25 (146)
- Back to Basics CORE Essentials Webinar Series. 10/28/25, 11/4/25, 11/11/25, 11/18/25 (115)
- Pesticide Applicator Education Winter Webinar Series. 3/3/26, 3/10/26, 3/17/26, 3/24/26, 3/31/26 (214)
- Introduction to FieldWatch Registries & DriftWatch Webinar. 4/21/26 (29)

Pesticide Applicator Extension Outreach Education Outputs:

- 2 issues The Pesticide Applicator newsletter <http://go.uvm.edu/psep> (1381 subscribers)
- 2 presentations
  - Practical Pesticide Use. Tri-State IPM Series: Practical Solutions for Greenhouse IPM. 1/16/26 (75)
  - Low Risk Pesticides. Extension Master Gardener Helpline Spring Training. 3/17/26 (XX)

Pest Diagnostic Extension Outreach Education Outputs:

- 2 EMG Advanced Training IPM webinars
- 7 presentations addressed current/emerging pests in commercial crops in the region: VT Veg and Berry Conference (250), the Tri-State Greenhouse IPM Workshop (75), High Tunnel Production Conference (155), UVM ALE 2240 (30), Claussen Greenhouse Grower Tour (40), Ft Ticonderoga Garden Symposium (100), Blueberry Twilight meeting (XX)
- 5 press releases for general public
- Seasonal weekly contribution to regional and state-wide vegetable listservs
- Update of disease info for NE Management Guides <https://nevegetable.org/>, <https://www.umass.edu/agriculture-food-environment/fruit/ne-small-fruit-management-guide>

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**Type**

Other

**DOI or Other Persistent Identifier**

**Associated Publication DOI(s)**

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**Description**

Objective 2. Increase IPM Awareness and Adoption for New Audiences

Soybean Disease Survey:

- 10 soybean growers identified and participated scouting fields monthly June to October; one field scouted twice per month. Scouting information will be used to generate an IPM Guide for Soybean Growers. Scouting will continue in 2026.

Greenhouse/High Tunnel IPM First and Forever:

- 85 one-on-one consultations (on-farm, phone, email, text)

Animal Agriculture On-Farm IPM Assessment:

- 6 Grazed Pasture IPM Assessments conducted on farms in VT, reports shared with farmers. May-September 2026

Master Gardener Course:

- 2025 EMG Course, 1/31/2025-5/14/2025, 189 students

- Ongoing in 2026 (184), evaluation pending

Pesticide Applicator Certification Meetings, Online Courses:

- 2026 Initial Pesticide Certification Meeting. 4/7/26 (35)- Rutland (7), Brattleboro (10), St. Johnsbury (6), Burlington (12), VT

5 online courses, on-demand <http://go.uvm.edu/pseponline> (67)

Plant Diagnostic Clinic Diagnostics:

- 582 samples diagnosed, IPM information provided

Master Gardener Course Pest Diagnostic Module:

- Plant Pathology and IPM online lecture and Q&A session (189)

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Objective 3. Develop the Next Generation of IPM Scientists and Educators

Tree Fruit/Grapes Program Intern, Program Graduate:

- 5 students (3 undergraduate, 1MS, 1 PhD) trained in orchard/vineyard IPM practices and Extension systems
- 3 department seminar presentations
- 4 professional meeting presentations
- 27 IPM bulletins authored or co-authored
- 12 apple growers trained on insect monitoring and delivered IPM traps for 2025 growing season
- Maintained VT-NEWA network which facilitates real-time on-farm IPM implementation
- Administered pesticide credits for New England Fruit Consortium webinar series

Greenhouse/High Tunnel Program Post Doc:

- 6 undergraduate student interns received IPM training in how to recognize and scout for natural enemies and pests in habitat plantings around high tunnels and from sticky card traps, laboratory techniques in fungal biopesticide development and testing against arthropod pests

Animal Agriculture Program Post Doc:

- Conducted one-on-one IPM assessment training with farmers and students. Carried out grazed pasture IPM assessments shared reports with farmers. Created outreach materials and presented in-person and online educational presentations and webinars

IPM and Pesticides Course:

- ALE3990C: Pesticide Application Training. Burlington, VT 1/14/26-4/29/26 (10)

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Pest Diagnostic Program Intern, Program Post Doc:

- 2 Interns, 1 Post Doc: Assisted in Plant Diagnostic Clinic diagnostics, preparing IPM educational materials, presentations, preparation of IPM grants, and participation in farm visits

**Changes/Problems**

- Animal Agriculture program area activities completed. Post doc is no longer at UVM.
- No changes of note for other program areas