

New Hampshire
Department of Agriculture,
Markets, and Food

Shawn N. Jasper, Commissioner



Division of Pesticide Control
 David J. Rousseau, Director

September 2, 2026

Her Excellency, Governor Kelly A. Ayotte
 and the Honorable Council
 State House
 Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the New Hampshire Department of Agriculture, Markets, and Food, Division of Pesticide Control (DAMF) to grant funds and enter into a Cooperative Project Agreement, in the amount of \$79,584, with the University of New Hampshire Sponsored Programs Administration, (VC #315187 B083), Durham, NH for the advancement of agricultural research and to assist in the promotion of integrated pest management practices in New Hampshire, effective upon Governor and Council approval through December 31, 2027. **100% Other Funds.**

Funding is available in Fiscal Year 2027 and is anticipated to be available in Fiscal Year 2028 in account, Integrated Pest Management, upon the continued appropriation of funds in the future operating budget with the authority to adjust encumbrances in each of the State fiscal years through the Budget Office, if needed and justified.

02-18-18-183010-21820000, Integrated Pest Management

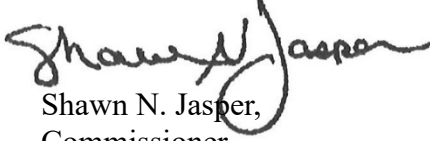
	<u>FY 2027</u>	<u>FY 2028</u>	<u>Total</u>
075-500590 - Grants and Subsidies	\$19,896	\$59,688	\$79,584

EXPLANATION

The New Hampshire Department of Agriculture, Markets & Food (DAMF), Division of Pesticide Control in fulfilling its responsibilities under the Integrated Pest Management (IPM) Program, RSA 430:50; to promote the principles of IPM to pesticide applicators and persons whose activities are governed by the Pesticides Controls statute, has reviewed the project, "*2026 IPM program for Fruit and Vegetable Crops On-Farm Monitoring*", and finds it supports the purpose of the IPM statute. The research and educational aspects associated with this project and the efforts of the University of New Hampshire Cooperative Extension identify and establish the presence and treatment methods for pests common to sweet corn and vine crops. Experience and results of this project serve to benefit citizens of New Hampshire.

In the event Other Funds become no longer available, General Funds will not be requested to support this contract.

Respectfully submitted,



Shawn N. Jasper,
Commissioner

COOPERATIVE PROJECT AGREEMENT

between the

STATE OF NEW HAMPSHIRE, **Department of Agriculture, Markets & Food**

and the

University of New Hampshire of the UNIVERSITY SYSTEM OF NEW HAMPSHIRE

- A. This Cooperative Project Agreement (hereinafter "Project Agreement") is entered into by the State of New Hampshire, **Department of Agriculture, Markets, and Food**, (hereinafter "State"), and the University System of New Hampshire, acting through **University of New Hampshire**, (hereinafter "Campus"), for the purpose of undertaking a project of mutual interest. This Cooperative Project shall be carried out under the terms and conditions of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, except as may be modified herein.
- B. This Project Agreement and all obligations of the parties hereunder shall become effective on the date the Governor and Executive Council of the State of New Hampshire approve this Project Agreement ("Effective date") and shall end on **12/31/27**. If the provision of services by Campus precedes the Effective date, all services performed by Campus shall be performed at the sole risk of Campus and in the event that this Project Agreement does not become effective, State shall be under no obligation to pay Campus for costs incurred or services performed; however, if this Project Agreement becomes effective, all costs incurred prior to the Effective date that would otherwise be allowable shall be paid under the terms of this Project Agreement.
- C. The work to be performed under the terms of this Project Agreement is described in the proposal identified below and attached to this document as Exhibit A, the content of which is incorporated herein as a part of this Project Agreement.

Project Title: **2026 IPM Program for Fruit and Vegetable Crops On-Farm Monitoring**

- D. The Following Individuals are designated as Project Administrators. These Project Administrators shall be responsible for the business aspects of this Project Agreement and all invoices, payments, project amendments and related correspondence shall be directed to the individuals so designated.

State Project Administrator

Name: Sarah C.D. Conley
Address: New Hampshire Department of
Agriculture, Markets, and Food
1 Granite Place South
Suite 211
Concord, NH 03301
Phone: 603 271-7788

Campus Project Administrator

Name: Gretchen Swain
Address: University of New Hampshire
Sponsored Programs Administration
51 College Road
Durham, NH 03824
Phone: 603 862-4565

- E. The Following Individuals are designated as Project Directors. These Project Directors shall be responsible for the technical leadership and conduct of the project. All progress reports, completion reports and related correspondence shall be directed to the individuals so designated.

State Project Director

Name: David J. Rousseau
Address: New Hampshire Department of
Agriculture, Markets, and Food
1 Granite Place South
Suite 211
Concord, NH 03301

Campus Project Director

Name: Amber Vinchesi-Vahl
Address: UNH Cooperative Extension
Kendall Hall
129 Main Street
Durham, NH 03824

Phone: 603 271-3640

Phone: 508 254-4490

- F. Total State funds in the amount of **\$79,584** have been allotted and are available for payment of allowable costs incurred under this Project Agreement. State will not reimburse Campus for costs exceeding the amount specified in this paragraph.

Check if applicable

☐ Campus will cost-share _____ % of total costs during the term of this Project Agreement.

☐ Federal funds paid to Campus under this Project Agreement are from Grant/Contract/Cooperative Agreement No. _____ from _____ under CFDA# _____. Federal regulations required to be passed through to Campus as part of this Project Agreement, and in accordance with the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, are attached to this document as Exhibit B, the content of which is incorporated herein as a part of this Project Agreement.

G. Check if applicable

☐ Article(s) _____ of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002 is/are hereby amended to read:

- H. ☒ State has chosen **not to take** possession of equipment purchased under this Project Agreement.
☐ State has chosen **to take** possession of equipment purchased under this Project Agreement and will issue instructions for the disposition of such equipment within 90 days of the Project Agreement's end-date. Any expenses incurred by Campus in carrying out State's requested disposition will be fully reimbursed by State.

This Project Agreement and the Master Agreement constitute the entire agreement between State and Campus regarding this Cooperative Project, and supersede and replace any previously existing arrangements, oral or written; all changes herein must be made by written amendment and executed for the parties by their authorized officials.

IN WITNESS WHEREOF, the University System of New Hampshire, acting through the **University of New Hampshire** and the State of New Hampshire, **Department of Agriculture, Markets, and Food** have executed this Project Agreement.

**By An Authorized Official of:
University of New Hampshire**

Name: Dianne Hall

Title: Manager, Pre-Award Compliance

Signature and Date: Dianne Hall Digitally signed by Dianne Hall
Date: 2026.08.21 15:57:29 -0400

**By An Authorized Official of: the New
Hampshire Office of the Attorney General**
Name: Vasiliios Manthos - Attorney

Title:

Signature and Date: Vasiliios Manthos 9/4/26

**By An Authorized Official of:
Department of Agriculture, Markets &
Food**

Name: Shawn N. Jasper

Title: Commissioner

Signature and Date: Shawn N. Jasper 9/27/26

**By An Authorized Official of: the New
Hampshire Governor & Executive Council**
Name:

Title:

Signature and Date:

EXHIBIT A

- A. Project Title:** 2026 IPM Program for Fruit and Vegetable Crops On-Farm Monitoring
- B. Project Period:** Upon Governor and Council Approval through December 31, 2027
- C. Objectives:** The objectives of the University of New Hampshire are to assist the Department of Agriculture, Markets & Food in the promotion and advancement of Integrated Pest Management in New Hampshire.
- D. Scope of Work:** A detailed scope of work is on file with the Department of Agriculture, Markets & Food and described in Attachment A of this agreement.
- E. Deliverables Schedule:** A detailed description with schedule for each project is on file with the Department of Agriculture, Markets & Food and described in Attachment A of this agreement.

Major Project Components:

On Farm Monitoring: October 2026 through October 2027

Insect/Crop: European Corn Borer/sweet corn

Corn Earworm/sweet corn

Fall Armyworm/sweet corn

Western Bean Cutworm/sweet corn

Squash Vine Borer/vine crops

Brown Marmorated Stink Bug/fruit and vegetables

Spotted Wing Drosophila/fruit

Final Report: December 31, 2027

- F. Budget and Invoicing Instructions:** Campus will submit an invoice on regular Campus invoice form for \$19,896 at the time of Governor and Council approval for state fiscal year 2027; and a subsequent invoice for \$59,688. State will pay Campus within 30 days of receipt of an invoice. Any unused funds must be returned to the State after the project end date.

Budget Items	State Funding	Cost Sharing (if required)	Total
1. Salaries & Wages	\$41,044	0	\$41,044
2. Employee Fringe Benefits	9,408	0	9,408
3. Travel	8,710	0	8,710
4. Supplies and Services	4,000	0	4,000
5. Facilities & Admin. Costs	16,422	0	16,422
In Kind Contribution		0	0
Total Project Costs			\$ 79,584

G. Other

A representative of the Department of Agriculture, Markets & Foods reserves the right to attend seminars and audit any work performed by the grant recipient.

Attachment A: Project Proposal - "2026 IPM Program for Fruit and Vegetable Crops On-Farm Monitoring"

I. Itemized Budget

Funding can only be used for items detailed in your budget. Requests for the purchase of non-consumable equipment that may serve a broader purpose than the IPM project will be rejected. Itemized budget must be specific.

Expense Account	TOTAL
Extension State Specialist 0.13 FTE (or 1.5 months)	\$ 10,664
Extension Field Specialist 0.13 FTE (or 1.5 months)	\$ 8,160
Additional Labor 110 days @ 8 hours/day, \$25.25/hr.	\$ 22,220
Fringe Benefits	\$ 9,408
Mileage: 100 miles/day @ 130 days @ \$0.70/mile	\$ 8,710
Supplies (traps, pheromones, printing, publication)	\$ 4,000
Subtotal:	\$ 63,162
Indirect Costs at 26%	\$ 16,422
Total	\$ 79,584

Personnel: \$41,044

UNH Extension State Specialist (Entomology and IPM), Amber Vinchesi-Vahl and UNH Extension Hillsborough County Field Specialist, Liza DeGenring, will be co-managing the grant (each at 0.13 FTE, 1.5 months). All recommendations that are given to the farmers will be approved by either Amber or Lisa and may be delivered through the IPM Scout hired for the project. Both grant managers will make follow-up farm visits when problems occur with the IPM scouting during the growing season.

Additional Labor:

IPM Scout for Insect Monitoring and Scouting

One IPM Scout will be hired for insect monitoring and scouting from April through November for various fruit and vegetable insect pests; 110 days for the IPM scout at \$25.25 per hour. The IPM scout, with participating growers/farmers/orchardists, will set up traps, check traps, and monitor the crop weekly to record and collect data throughout the growing season. The scout will collect the traps at the end of the season, clean and inventory the good traps and dispose of the traps that are no longer usable. The scout will also administer and collect the end of season grower/farmer/orchardist surveys.

Fringe Benefits : \$9,408

The University's fringe benefit rates are charged according to our federally negotiated rate agreement.

The current applicable rates are 40.3% for full fringe benefits (Extension Specialists, A. Vinchesi-Vahl and L. DeGenring), and 8.2% for partial fringe benefits for non-student hourly wages (IPM Scout, L. Kunhardt).

Travel: \$8,710

Over the previous years, the IPM scout averaged approximately 100 miles per day conducting the weekly farm visits for checking traps and monitoring crops. The total mileage is based on 100 days of labor (IPM Scout) and 30 days for UNH Extension Field Specialists and/or State Specialists. Mileage expenses will be reimbursed at the current federal rate (0.70 cents/mile). Travel expenses will include in-state travel to participating farms in the IPM program and attending planning sessions and events/meetings/workshops related to this IPM program.

Supplies & Services: \$4,000

This application is requesting \$4,000 for the purchase of project supplies/services related to the support of this project. Funds will be used for purchasing traps (projected at \$2,750) since many of the traps need to be replaced prior to the 2026 growing season, trap supplies (i.e., cups, tops, wires, fasteners, etc.), attractants/lures (projected at \$500) and paper, ink, ink cartridges, and printing for forms used by the IPM scout and the PIs (Principal Investigators) (projected at \$250), and publication costs to publish 20 years of historic data related to this project in a peer-reviewed journal (\$500).

Facilities and Administrative Costs Rate: \$16,422

Facilities & Administrative (indirect) costs are calculated according to UNH's current negotiated rate agreement. The applicable rate, as shown in our federal agreement, is 26%. The US Department of Health and Human Services is UNH's cognizant federal agency.

Total Budget Request: \$79,584

II. Project Description (3 lines or less, to be used for publicity purposes):

Selected insect pests of fruit and vegetables will be trapped and monitored on a minimum of eighteen (18) farms weekly through the summer of 2026, plus work with a minimum of four (4) additional self-reporting farms to provide traps and lures and weekly check-ins via email or text message on trap catch numbers and to give recommendations.

III. Project Objectives (be sure to include how this project serves the concepts of IPM):

The IPM on-farm monitoring program directly benefits participating growers and supports farmers outside of the program who rely on our reports to guide their spray decisions. By monitoring pests on-farm, growers can make informed, science-based pest management decisions that save time and money while improving yields. The adoption of these IPM practices enhances the economic, environmental and social outcomes for farmers across NH and the residents they serve

Sweet corn

- Monitor European corn borer (ECB), corn earworm (CEW), fall armyworm (FAW), and western bean cutworm (WBC) with pheromone traps to determine need, frequency, and timing for insecticide control applications. ECB, CEW and FAW are the major sweet corn pests in New Hampshire. WBC is a

newer pest to our region that we have been monitoring since 2014.

- Reduce damage caused to sweet corn by ECB, CEW, FAW, and WBC by application of properly timing insecticide applications.
- Reduce insecticide applications by applying chemicals only when needed based on trap thresholds.

Vine crops

- Monitor squash vine borer (SVB) with pheromone traps to determine need, frequency, and timing for insecticide applications and to determine when SVB is active on vegetable farms in New Hampshire. This was especially useful in 2024, since we saw a 2nd generation of SVB for the first time since 2013.
- Reduce damage caused to cucurbit crops, including pumpkins, summer squash, and winter squash, by SVB through properly timed insecticide applications.
- Provide timely data to growers to better utilize cultural control methods, such as exclusion fabrics (row covers) for managing SVB.

Brown Marmorated Stink Bug (BMSB)

- Monitor Brown Marmorated Stink Bug (BMSB) with sentinel traps (4-foot pyramid trap and/or sticky trap with an attractant lure) on a minimum of five (5) fruit and vegetable farms weekly through the summer of 2026.
- Determine seasonal activity and relative abundance of BMSB to develop an effective IPM strategy. We are still trying to understand the economic impacts of high BMSB populations on fruit and vegetable crops.

Spotted Wing Drosophila (SWD)

- Monitor spotted wing drosophila (SWD) with sentinel traps on a minimum of five (5) small fruit farms weekly through the summer of 2026. SWD was detected in traps 3 weeks earlier than expected in 2024, so monitoring is key for timely protection of small fruits.
- Determine seasonal activity and relative abundance of SWD to develop an effective IPM control strategy if SWD numbers are over the action threshold of one male fly per trap.
- Provide timely data to growers to reduce damage to small fruit by properly timed insecticide applications. This data can also reduce the number of insecticide applications by applying chemicals based on trap thresholds. For example, SWD counts were low in June 2025 and slowly increased in July 2025 compared to the 2024 season, likely due to the high heat (over 90°F).

IV. Economic and Environmental Impact

Sweet Corn

In 2025, 24 growers participated in the sweet corn insect pest IPM program. The IPM trapping program proved that catches vary widely by site. Twenty-four farms had 27 sets of European corn borer (ECB) traps, including one trap for each of the two strains of ECB (IA & NY). Twenty-four farms

had 27 corn earworm (CEW) traps. Twenty-three farms had 26 fall armyworm (FAW) traps. Seventeen farms had 19 western bean cutworm (WBC) traps.

The 21 participating growers in the IPM program that responded to the end of year survey planted 513 acres of sweet corn and harvested 447 acres (87% of the planted acreage). Comparing the acreage planted and harvested to the 2024 USDA NASS statistics data, the participating farms in the IPM program represented 57% of the sweet corn acreage planted and harvested in the state of New Hampshire.

Based on our weekly trap captures, ECB and WBC populations in 2025 were substantially lower than in 2024 and 2023. CEW followed a similar pattern, with the first sustained captures occurring one to two weeks later than in the previous two seasons. FAW counts were comparable to 2024; however, initial detections occurred a week later and persisted later into the season. These trend shifts highlight the value of annual monitoring of sweet corn pests, as consistent monitoring enables growers to make informed, science-based pest management decisions that save time and money while protecting yields. With milder winters, increased spring storm activity, and warmer summers, many migratory pests are arriving earlier and may be completing more generations than historically expected. Ongoing monitoring is therefore essential to ensure growers are aware of changing pest dynamics and are not caught off guard by unexpected pest arrivals or pressure. In 2025, CEW trapping began earlier than usual to determine whether early-season moths were migrating into NH or potentially overwintering, an occurrence previously limited by New England winter temperatures. These early captured moths were sent to Cornell University for analysis, and results are pending.

Our 2025 sweet corn impact data is still being calculated, but in 2024, growers using the IPM program applied 3 fewer sprays on average by using a monitoring program to make knowledge-based insecticide spray decisions compared to a calendar spray program. Fewer insecticide applications mean lower exposure risk to the applicators, farm workers, consumers, and the environment. These savings equaled 408 gallons of pesticides that were not applied, saving \$29,397 in pesticide expense, and \$40,829 for labor and equipment costs. Total cost savings for sweet corn due to the IPM program for the 2024 season was \$70,226. With sweet corn selling at an average of \$5.02 per dozen over the last five years in New Hampshire, and average New Hampshire yield estimated at 753 dozen/acre over the last five years (USDA NASS New England Vegetable Report February 2024), we estimated the overall impact of the IPM program in 2024 was eliminating more than 178.1 dozen culled ears (or 23.65%) per acre on 492 acres harvested. This reduction in culled corn due to insect damage equated to an additional value of \$439,879 total savings over all farms and an average of \$894 per acre saved.

Vine Crops

In 2025, 22 growers trapped for squash vine borer (SVB) in pumpkins and squash (winter and summer). The 22 participating growers in the IPM program harvested 98 acres of pumpkins, 36 acres of summer squash, and 54 acres of winter squash. Comparing the acreage harvested to the 2022 USDA NASS statistics data, the participating farms in the IPM program represented 25% of the pumpkin acreage, 41% of the summer squash acreage, and 38% of the winter squash acreage harvested in the state of New Hampshire.

We have not been able to measure reduction in crop losses from SVB monitoring and neither have the growers, but observation indicates it is effective, especially on bush-type crops of *Cucurbita pepo* or *Cucurbita maxima*. In 2025, SVB trap numbers were similar to those observed in 2023, while our 2024 trap SVB numbers were higher overall compared to 2023 and 2025. Sixty-three percent of participating growers reported they sprayed less due to the IPM Program.

Our 2025 SVB impact data is still being calculated, but in 2024, growers saved an average of 4 sprays by using a monitoring program to make knowledge-based insecticide spray decisions compared to a calendar spray program. These savings equaled 209 gallons of pesticides that were not applied, saving \$12,518 in pesticide expense, and \$20,863 for labor and equipment costs. Total cost saving due to the vine crop program for the 2024 season was \$33,381. Fewer insecticide applications mean lower exposure risk to the applicators, farm workers, consumers and the environment.

Brown Marmorated Stinkbug (BMSB)

The brown marmorated stink bug (BMSB), is an invasive stink bug, which is now well established throughout the mid-Atlantic region of the United States. BMSB is a polyphagous species, meaning it can feed on a wide range of hosts and has the potential to be a pest of many crops including tree fruit, vegetables, shade trees, and legumes. Because BMSB is a newly established invasive species, management programs for this pest are still being developed.

In 2025, higher numbers of BMSB were observed than in 2024 and 2023. Additionally, captures remained high late into the season as was expected because BMSB numbers tend to be higher in dry years. BMSB damage on fruit does not become visible until 2 to 4 weeks after feeding occurs, so relying on fruit damage as a monitoring technique could result in detecting BMSB presence too late to prevent economic losses.

Maintaining a network of pheromone-baited traps is the most efficient means of monitoring this insect, which spends a lot of time in the canopy of forest and shade trees. The traps also tell us where BMSB population buildup is occurring before agricultural damage begins. We anticipate more damage will occur in NH in future years. Our IPM scout manages 10 sentinel BMSB traps at six farms throughout the season.

By monitoring BMSB within the growing season, UNH Extension will be able to inform farmers of when it begins to arrive in their regions, and we hope to help them prepare to manage this pest using the minimum number of insecticide sprays. Work is currently being done by researchers in New York and Mid-Atlantic States to help farmers learn which pesticides are most effective, along with determining if there are any cultural or biological options effective for controlling this pest.

Spotted Wing Drosophila (SWD)

The spotted wing drosophila situation is relatively new to not only New Hampshire (2011), but also the United States (2008). Results of grower surveys conducted from 2012-2015 showed losses were greatest in later-maturing crops (mainly small fruits). Our trapping network allows growers to make management decisions and to take control measures only once SWD is present, preventing unnecessary sprays while also preventing crop losses.

In 2025, UNH Extension and our IPM scout maintained a network of 27 sentinel traps on six farms in Hillsborough and Merrimack counties. The range of fruiting crops monitored for SWD trap captures included blueberry, summer and fall-fruiting raspberries, June-bearing strawberries, grapes, and cherries. These monitored crops represent a total of 105 acres of fruiting crops known to be susceptible to SWD damage. In 2025, SWD trap numbers were higher overall compared to 2024, but numbers were slower to increase likely due to the high heat seen in July.

In 2025, only one grower reported damage over 5% due to SWD in their grapes (7%) and fall brambles, (25%). The growers participating in the program experienced little to no loss due to SWD, because they were monitoring and able to implement control measures at the correct time.

Beyond dollar savings, reduced insecticide spraying can help protect populations of beneficial insects: predators, parasitoids, and pollinators. Fewer sprays also reduce farm worker exposure to pesticides, particularly those involved with spraying, pesticide mixing, and loading. Reduced spraying also reduces the likelihood of drift, and the risk of environmental contamination. It can help keep farms in business, growing locally produced food to meet the rising demand for fresh, local products.

V. How will your goals be accomplished? (i.e., experimental design)

- One IPM scout will be hired to conduct weekly on-farm monitoring and scouting.
- We will work with at least 18 farmers in New Hampshire on weekly monitoring of insect pests, and check traps to determine need, frequency, and timing for insecticide control applications. Also, we will work with at least 4 additional self-reporting farms, provide traps and lures, and check-in weekly via email or text message on trap insect numbers and recommendations.

Sweet Corn

- o European Corn Borer - two Heliothis traps with Scentry E-strain or 'New York' type pheromone lures and the Scentry Z- strain or 'Iowa' type pheromone lures changed every four to six weeks from May through October.
- o Corn Earworm - Heliothis trap with Hercon pheromone lure traps changed every two weeks from June through October.
- o Fall Armyworm - bucket or canister trap with Scentry FAW four component pheromone lures changed every four to six weeks from June through October.
- o Western Bean Cutworm - bucket or canister trap with Trece pheromone lures changed every four to six weeks from May through October.

Vine Crops

- o Squash Vine Borer - Heliothis trap with the SVB pheromone lures changed every four to five weeks from June through September.

Brown Marmorated Stink Bug

- o Brown Marmorated Stink Bug - 4-foot-tall pyramid trap with an attractant lure and/or sticky trap with an attractant lure will be used. The lures are changed according to recommendations (10-week lure) from the manufacturer (May-October).

Spotted Wing Drosophila

- o Spotted Wing Drosophila - drowning traps will be utilized for 2026 (June-October), but the trapping protocol is evolving and will be updated as needed.
- We will check traps throughout the 2026 growing season. Some insects migrate into NH from the south on wind currents, so farmers do not know when the insects arrive until damage appears, which

could lead to the farmers applying unnecessary sprays for prevention.

- A weekly report will be published throughout the growing season (beginning in late May and ending in October) and made available through UNH Extension marketing channels. The weekly reports are emailed to participating farmers, posted on UNH Extension (<https://extension.unh.edu/resource/vegetable-ipm-reports>), and sent out via a text subscription service. These avenues provide trapping data to other growers in the state which they can use to make pest management decisions. The trapping data is also reported to other extension field specialists throughout New England on weekly calls, allowing other states to alert their growers with timely pest information. If there are major insect outbreaks, we will consider disseminating alerts through additional means, including the Weekly Market Bulletin.
- At the end of the season, farmers participating in the program will complete a survey/evaluation to measure impact. Through this evaluation, we have been able to measure impact since 2006.

VI. Sampling Methods (if applicable):

- On-farm monitoring for insect pests will be conducted during the 2026 growing season on a minimum of 18 operations in New Hampshire with UNH Extension personnel assisting. Also, we will work with at least 4 additional farms providing traps and lures and weekly check-ins via email or text message on trap catch numbers and recommendations. In 2025, we had 9/10 counties represented in this program.
- Trap counts will be reported to growers every week. Growers are encouraged to participate in monitoring to gain knowledge and skills needed to best utilize and interpret data for informed pest management decision-making.
- Any pheromone lures or baits used in the trap will be changed according to manufacturer's recommendations.
- Working with the farmers, some traps will be moved according to crop conditions and maturity. For example, corn earworm (CEW) is attracted to silking corn, and traps are moved to field with silking corn as needed throughout the season.
- Depending on how the traps are used in the field, material breakdown of the traps during growing season, and storage of the traps, a lifespan of two or more years can be expected prior to the need for replacement.

VII. How will your data be evaluated?

- At the end of the season, farmers in the program will complete a program evaluation survey to be reviewed by UNH Extension personnel. The number of sprays applied per sweet corn field will be compared to trap counts. The growers' perspective of the amount of sweet corn ears damaged due to insect damage will also be evaluated. The growers' perspective of pesticide applications saved by participating in SVB monitoring in vine crops and SWD monitoring in small fruit is also part of the evaluation.
- Based on the monitoring counts collected during the season, UNH Extension can decide if additional educational programming needs to be developed for fruit and vegetable growers in the state.

- Program evaluation reporting for 2026 will be conducted by March 1, 2027, to allow time to compile grower survey results and process program impact data from the 2026 season. Program evaluation reporting for 2027 will be included in the final report due December 21, 2027. This report will be provided to NHDAM&F, as well as partner organizations who may benefit from the data.

VIII. Explain how the results of your project will be shared/publicized.

All published literature (papers, presentations, publications, advertisements, etc.) must contain a statement attributing funding to the New Hampshire Department of Agriculture, Markets, and Food IPM Grant Program. Publications must be submitted with the final report.

- A weekly visit to each grower will be made by the IPM scout to monitor trap counts where the grower will be provided information on need, frequency, and timing for insecticide control applications. For participating call-in growers, communication with each grower will occur weekly to gather trap count information and respond to any questions.
- Weekly scouting and trapping data will be emailed to participating growers, posted online for program participants, as well as non-participating growers, researchers, agricultural consultants, etc., to view and utilize in making pest management decisions. We also implemented a text subscription service to disseminate the Vegetable IPM Reports and any other relevant information like pest alerts and UNH Extension events.
- Updates on insect pest situations will be given at scheduled grower twilight meetings throughout the growing season.
- If major insect outbreaks occur, warranting special alerts, we will disseminate this information through media channels, including the Weekly Market Bulletin.
- Trap data is shared with other extension specialists from New England, New York, and Pennsylvania on weekly calls during the growing season.
- A presentation on the results of this project will be developed and presented to vegetable growers and at regional meetings upon request.
- In 2027, UNH Extension specialists plan to compile the historical data from this project and analyze trends in trap capture numbers to be published in a peer-reviewed journal.

IX. Detail how other groups may adopt some of the information you learn or develop:

- The UNH Extension specialists will be available to present the information described above. Additionally, UNH Extension specialists participate in weekly calls with Extension representatives from all northeastern. Here, our weekly trapping data and pest management recommendations are shared to benefit growers, researchers, and Extension specialists in the region. Vegetable pest information from other northeastern states also helps inform our weekly Vegetable IPM Reports.
- Dr. Vinchesi-Vahl is also a collaborator on a submitted USDA proposal to develop a predictive model for European corn borer and test effective pheromone trap lures. This was prompted by our statewide trapping network since we caught so few ECB in 2025 but did observe damage in the corn, suggesting that the lures may no longer be as effective. If this grant is funded, results from this project will

directly inform the lures used for our statewide trapping network and benefit sweet corn growers in New Hampshire.

Provide a complete list of all persons involved in the proposed project; include the names, addresses and phone numbers of the individuals.

Amber Vinchesi-Vahl, Ph.D.
Entomology & IPM Extension State Specialist
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Durham, NH 03824
508-254-4490
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