

FY22 Vegetable Extension Program

Status: NIFA REVIEW

Project Director

Susan Scheufele

Organization Project Number

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Accession Number

7002068

Start & End Date

10/01/2020

Organization

University of Massachusetts

To Project / Program

"Vegetable Extension Program"

Primary Critical Issue

Sustainable Agriculture and Food Systems

Fiscal Year

2022

In 2-3 sentences, briefly describe the issue or problem that your project addresses.

The UMass Extension Vegetable Program delivers research-based educational programming and conducts applied research to meet the needs of vegetable farmers statewide and to enhance the economic, human, and environmental health and sustainability of the vegetable industry in Massachusetts. Labor shortages, supply-chain disruptions, inflation, and cost increases added a tremendous burden to the vegetable industry this year, with the additional ongoing challenges of climate change (drought, flooding, extreme heat), high land value, and poor wholesale opportunities. This year, our program supported vegetable farmers by providing education, pesticide recertification credits, in-depth IPM training, technical assistance, and applied research on relevant topics.

Briefly describe in non-technical terms how your major activities helped you achieve, or make significant progress toward, the goals and objectives described in your non-technical summary.

This year we reached new audiences including established farms that were not well-connected to Extension, beginning farms, and socially disadvantaged farms, making at least 135 site visits and 203 phone and email consultations. We made special trips to more remote areas of the state (southeastern MA and Martha's Vineyard), hired two summer scouts and increase pest monitoring locations to provide more "boots on the ground" and get better state-wide coverage. This pest scouting and monitoring data is published weekly via our newsletter to 2,867 subscribers across the region, a resource that is recommended as a critical resource for any vegetable grower. We provided in-depth, regular IPM training to five farms, two primarily Spanish-speaking and one comprised of 125 immigrant and refugee farmers. We increased knowledge of crop and pest management practices and food safety risks to improve farm and environmental sustainability by organizing 11 educational events and delivering 19 presentations on critical topics. Furthermore, Scheufele chaired the regional vegetable and fruit conference online in 2021 and in-person in 2022, providing leadership for educational events that provide nearly 100 hours of informational sessions for over 600 attendees and 1,341 pesticide re-certification credits for 198 certified applicator.s We also conducted 5 applied research trials at the UMass Crop and Animal Research and Education Farm with funding from grants, industry, the IR4-project, and grower support to find solutions for critical pest management topics. Our success this year was due to our team's dedication to our mission of serving our commercial growers and the people of the Commonwealth.

Briefly describe how your target audience benefited from your project's activities.

The above listed activities technical assistance activities (scouting, training, monitoring, and consultations) led to increased knowledge of and confidence in applying integrated crop and pest management strategies to improve yield, quality, and profits. Growers adopted or improved practices like: choosing pest-resistant varieties, recordkeeping to reduce food safety risks, growing winter spinach profitably, properly identifying pests and physiological disorders, scouting for sweet corn pests, improving spray timing and coverage, choosing the right pesticide, post-harvest cooling and handling, taking pre-sidedress nitrate tests to use fertilizer more efficiently, connect with other government agencies (MDAR, NRCS) to secure grant-funding for farm projects, use of crop insurance, reduced tillage, and more.

Briefly describe how the broader public benefited from your project's activities.

Our newsletter is read by >1,000 home gardeners who are advocates for local food system and consumers of vegetables produced commercially in MA. In communicating directly with people of the Commonwealth we create better consumers and better customers, since they are educated about the issues facing farmers whether it is a new pest or a drought or a labor crisis. This helps improve relationships between growers and consumers, and neighbors. Our research and outreach programs result in more effective use of pesticides so that: less pesticide is lost to the environment via drift, there are fewer non-target impacts, and newer chemistries are chosen which are safer for users, bees, and the environment. Our program helps farms to be more profitable, so land can remain in agriculture instead of being developed, and the land is managed so as to reduce climate impacts (reduced tillage, use of cover crops, efficient use of water resources, etc) and protect pollinators (avoiding high-risk chemistries, planting pollinator habitat, reducing reliance on pesticides by utilizing cultural and biological control methods effectively). We saw during the pandemic that we are vulnerable to food shortages when we rely on places like California, Florida, and Mexico for our food and there has been continued support for preserving and expanding our local food economy which will hopefully translate into better support for vegetable growers who face myriad crop and business challenges.

Comments (optional)

- Articles published in refereed publications (Published Article (News, Professional, Trade) (2)
- Grants Awarded and Submitted (Grant Submission or Other Funding Proposal) (3)
- New England Vegetable Management Guide - Online (Websites or Other Electronic Delivery) (1) - 138897 Participants
- On farm consultation (Individual Consultations and Site Visits) (135) - 135 Participants
- Phone and Email Consultations (Individual Consultations and Site Visits) (203) - 203 Participants
- Presentations at Professional Conferences & Meetings (Presentation/Poster (Academic) (16) - 933 Participants
- Regional Pest Scouting Network (Direct - Other) (20) - 2897 Participants
- Research Trials (Research Project (Applied Research) (5)
- UMASS Food Safety Program Website (Websites or Other Electronic Delivery) (9098) - 7637 Participants
- Vegetable Educational Programming (Facilitated Group Meetings and Conferences) (11) - 962 Participants
- Vegetable Notes - Newsletter (Printed Material (newsletter, factsheet, field manual) (25) - 2867 Participants
- Vegetable Program Website (Websites or Other Electronic Delivery) (1) - 317684 Participants