

Project Title: Sustainable Fruit Production and Marketing

Project Leader: Sonia Schloemann

Project Overview

Fruit farms and vineyards provide open space and scenic vistas that add significantly to the quality of life in Massachusetts. The lands surrounding agricultural production provide buffer zones for native species of plants and animals and corridors for their movement or expansion. To remain a vital part of the Massachusetts economy, both new and established growers must learn to produce crops sustainably and to adapt production systems to market opportunities. New varieties provide fruit farmers with opportunities for enhancing production, quality, sales and consumption.

Situation & Priorities:

UMass Extension provides farmers with access to current research information on new and alternative species and varieties, advanced horticultural management techniques, marketing and business management strategies, pest ecology, and pest-management procedures. Research on pest ecology and management informs approaches that optimize control, reduce chemical use and increase fruit quality. The knowledge and resources provided by Extension forge successful partnerships with Massachusetts' fruit producers that in turn foster a more secure, diverse and healthful food supply for the Commonwealth.

Integrated Pest Management - the small fruit program delivers current IPM information and training via publications (i.e., New England Small Fruit Pest Management Guide, Massachusetts Small Fruit Pesticide Applicator Study Manual), newsletters (e.g., Massachusetts Berry Notes, New England Grape Notes), twilight meetings, educational programs (e.g., New England Veg. and Fruit Conference), and other outputs.

Environmentally Sustainable Food Production - the small fruit program delivers information and training in environmentally sustainable production practices (beyond IPM), with particular attention to organic practices, via publications (i.e., New England Small Fruit Pest Management Guide, Massachusetts Small Fruit Pesticide Applicator Study Manual), newsletters (e.g., Massachusetts Berry Notes, New England Grape Notes), twilight meetings, educational programs (e.g., New England Veg. and Fruit Conference), and other outputs.

Safe, Local Food - the small fruit program delivers information and training in food safety, including for Good Agricultural Practices (GAP) certification, via publications (i.e., New England Small Fruit Pest Management Guide, Massachusetts Small Fruit Pesticide Applicator Study Manual), newsletters (e.g., Massachusetts Berry Notes, New England Grape Notes), twilight meetings, educational programs (e.g., New England Veg. and Fruit Conference), and other outputs.

Activity Summary - 2016

- Berry Notes Newsletter (12)
- Cold Hardy Wine Grape - Research and Demonstration (2)
- eXtension Apples - Community of Practice (CoP) (1)
- Fact Sheets- key insect, disease, weed id and management recommendations for fruit crops (6)
- Fruit Notes (4)
- Grape Notes Newsletter (36)
- Healthy Fruit - Online Version (22)
- MA Farm Winery and Grower's Association Annual Meeting (1)
- Mass Aggie Seminars (8)
- Mass Fruit Growers Annual Summer/Winter Meetings (2)
- Master Gardener Trainings (2)
- Native Pollinator Conservation Demonstrations (2)
- NE Small Fruit Pest Management Guide - Online Version (1)
- NE Tree Fruit Management Guide - Online Version (1)
- NE Tree Fruit Management Guide - Print Version (1)
- NE-1020 Multi-state Evaluation of Winegrape Cultivars and Clones (1)
- New England Vegetable and Berry Growers Annual Winter Meetings (2)
- New Pest Reporting Network (2)
- Phone and email consultations (723)
- Spring Tree Fruit Twilight Meeting Series (5)
- UMass Cold Spring Orchard Blog - Jmcentman.blogspot.com (1)
- UMass Fruit Advisor Website (1)
- Vegetable/Fruit IPM Facebook Page Posts (13)

Total educational contacts

	Adult Contacts
In Person	1836
Indirect Contacts (Print, Web, etc...)	47028

Narrative Summary and Impact

Through its programming, the Sustainable Fruit Production and Marketing team addressed four main issue areas in FY2017. They were:

- Integrated Pest Management,
- Economically Viable Food Production,
- Environmentally Sustainable Food Production
- Safe, Local Food

In advancing these priorities, the team conducted programming in **Research & Demonstration**, and **Outreach & Education**.

Research & Demonstration activities included projects at the UMass Cold Spring Orchard Research and Education Center as well as at cooperating grower farms. Twenty projects were carried out at the UMass Cold Spring Orchard. These ranged from *Apple Variety and Systems Demonstration Plantings* and *Asian Pear Fire Blight Canker Study* to *Native Pollinator Conservation Habitat Project* and *Swing Arm Trellis Demonstration for Blackberry and Black Raspberry Production in New England*. Another 9 projects were conducted at over 12 cooperating grower sites. These were focused on:

- *Statewide Monitoring Of The Invasive Pests Spotted Wing Drosophila (SWD) And Brown Marmorated Stink Bug (BMSB)*,
- *NEWA Weather Data And Disease/Insect Modeling For Growers, Multi-level Extension Delivery to Support IPM for Diversified Massachusetts Farms*,
- *Geneva/Modi organic apple rootstock planting*; and
- *Refining an Attracticidal Sphere Management System for Spotted Wind Drosophila in Small Fruit Production*

Outreach & Education activities included hosting and maintaining websites, producing publications (print and online), publishing articles in professional and trade publications, organizing and conducting day-long and multi-day conferences, delivering educational presentations and trainings, and one-on-one consultations with growers (by email, phone and in person).

Research & Demonstration projects resulted in the publication of 33 journal articles/proceedings, 69 newsletter articles, 19 posters and technical reports and were the subject of numerous field day presentations and on-farm tours. For **Outreach & Education** Fruit Team members contributed significantly to organizing 7 conferences or symposia reaching 320 people, and delivered 17 papers at major professional conferences and meetings to over 1,100. The fruit program had primary responsibility for 2 websites and was key contributors to 7 additional sites or blogs. Members also delivered 25 practical presentations at twilight meetings and workshops to an audience of 1,650. *The New England Small Fruit Pest Management Guide* and *The New England Tree Fruit Management Guide* biennial revisions were organized by the UMass Fruit Team in collaboration with colleagues around New England. The NE Tree Fruit guide was only available electronically and registered 1,484 page view. The NE Small Fruit Guide was available in print (900 copies distributed), and also electronically with 1,668 page views registered. Four newsletters, *Fruit Notes* (4 issues; circulation 150), *Healthy Fruit* (22 issues; circulation 188), *Berry Notes* (12 issues; circulation 456), and *Grape Notes* (23 issues; circulation 146) were produced. Finally, 979 individual consultations were made either by phone, email or in person.

Collaborating Organizations:

- **Massachusetts Cultivated Blueberry Growers Association**
- **Massachusetts Department of Agricultural Resources**
- **Massachusetts Farm Winery & Growers Association**
- **Massachusetts Fruit Growers' Association**
- **Massachusetts Horticultural Society**
- **Massachusetts Master Gardeners Association**
- **New England Vegetable & Berry Growers Association**
- **Western MA Master Gardener Association**