



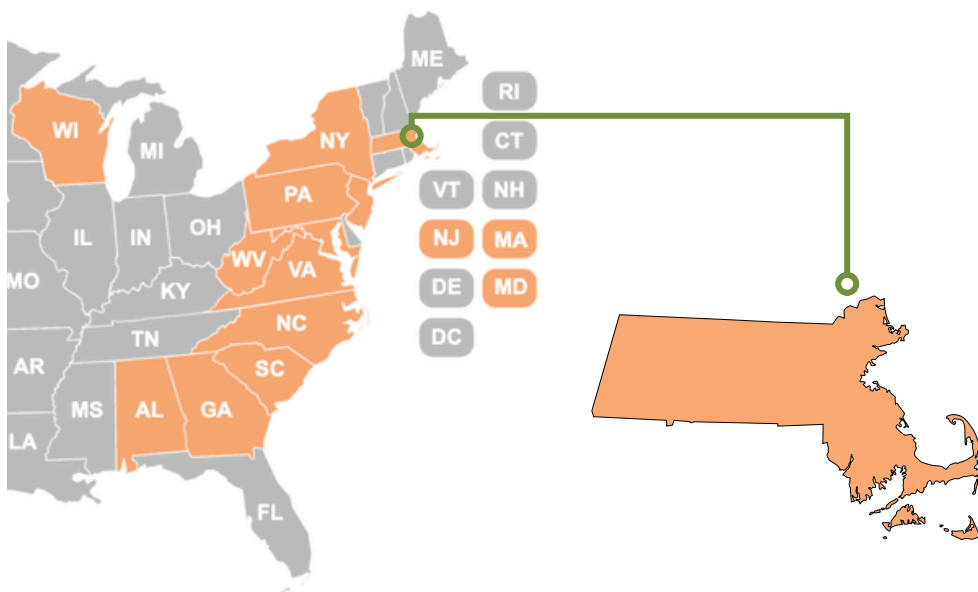
Alexa Lamm,
University of Georgia

Chin Ling Lee,
University of Georgia

Jaime Pinero,
University of Massachusetts

Listening Sessions on Eastern Tree Fruit Farms: Massachusetts

Seven listening sessions were held across various U.S. regions in early 2025 as part of a four-year USDA-funded project called, ***Cultivating Tomorrow's Orchard: Evolving and Enhancing IPM in Eastern Tree Fruit Systems***. Each session focused on gathering the experiences, challenges, and needs of orchard owners and managers regarding pest management, Integrated Pest Management (IPM) adoption, regulatory constraints, economic pressures, and weather pattern impacts. This fact sheet summarizes results from the listening session that took place at the University of Massachusetts on January 14, 2025 with 12 participants. Participants included both retail and wholesale fruit growers, as well as agricultural consultants and Extension professionals.



Key Pest Challenges

- **Scab**
- **Fire Blight**
- **Plum Curculio**
- **Codling Moth**
- **Oriental Fruit Moth**
- **Peach leaf curl**
- **Fungal diseases**
- **Secondary pests linked to weather patterns**

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in the listening sessions.

Pest Management Practices

- **Current Strategies:**

- Use of integrated pest management (IPM) principles, including predictive pest models based on degree days and weather monitoring.
- Frequent spraying using tailored "cocktails" of fungicides, insecticides, and plant growth regulators.
- Implementation of weather-based tools to optimize spray timing and efficacy.
- Practices like trap trees, border sprays, and lure-based attractants are used for specific pests like plum curculio.

- **Adoption Challenges:**

- Risk aversion limits the use of unproven methods, as failures can lead to seasonlong impacts.
- Resistance management is a growing concern due to over-reliance on specific chemical groups.

Social and Community Concerns

- **Public Perception:**

- Visual impact of spraying and misconceptions about pesticide use are common challenges.
- Farmers strive to balance transparency with educating the public about their practices.
- Organic and non-organic growers face distinct expectations, with organic methods often misunderstood as spray-free.

- **Community Relations:**

- Noise from spraying operations and proximity to residential areas create tensions, requiring careful scheduling and communication.

Research and Development

- **Priority Areas:**

- Decision-support tools for pests like plum curculio, including monitoring traps and degree-day models.
- Alternative management tactics for codling moth and oriental fruit moth, such as mating disruption and nematodes.
- Innovative approaches like behavioral deterrents and eco-stacking (valuing ecological services).

- **Barriers to Adoption:**

- Growers need robust research and data to ensure new methods are effective before risking adoption.
- Research must account for the localized nature of pest pressures and climatic conditions.

Erratic & Extreme Weather Impacts

- **Emerging Risks:**
 - Warm winters and erratic weather patterns (e.g., sudden frosts, heavy rains) increased susceptibility to pests and diseases.
 - Extended growing seasons and unpredictable conditions complicate the timing and effectiveness of pest control.

Economic Pressures

- **Cost Challenges:**
 - Rising costs of chemicals, labor, and equipment have eroded profit margins, especially for wholesale operations.
 - Retail operations benefit from higher pricing due to the "farm-to-table" experience but face risks from weather-dependent customer turnout.
- **Market Dynamics:**
 - Local growers compete against cheaper, mass-produced supermarket options, emphasizing the importance of freshness and the "buy local" movement.

Communication & Knowledge Sharing

- **Current Resources:**
 - Participants rely heavily on weather models, extension updates, and guides like the New England Tree Fruit Management Guide.
 - Many use private weather stations and advanced pest modeling systems to inform decisions.
- **Improvement Suggestions:**
 - Centralized platforms offering real-time updates and localized data could enhance decision-making.
 - Enhanced communication between researchers, extension services, and growers was emphasized as critical for future success.

Future Directions

- **Shifting Practices:**
 - Innovations in pest management, such as nematode-based controls or lures, are seen as promising but require further study.
 - Regulatory changes and market demands for sustainable practices will likely shape future strategies.
 - Growers stressed the need for accessible education and outreach to promote adoption of proven methods.
- **Collaboration Opportunities:**
 - Farmers expressed interest in partnerships with researchers to pilot new methods and evaluate their real-world impact.
 - Emphasis on translating research into actionable, user-friendly tools for practical application.