

Plant Pest Surveys Funded Under the 2008 Farm Bill

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2010 Farm Bill Pest Surveys

- Food, Conservation, and Energy Act of 2008, aka **Farm Bill**
- **Section 10201:** "Plant Pest and Disease Management and Disaster Prevention"
- **Goals:**
 1. Survey
 2. Domestic Inspections
 3. Diagnostics
 4. Nursery Safeguarding
 5. Outreach and Education
 6. Mitigation



Michigan's Risk Profile

- Eight ports-of-entry; world's busiest commercial border crossing
- Industrial economy; 5th largest manufacturing sector
- 2nd most diverse agriculture; 200+ commodities
- Top-five producer of 22 specialty crops
- 5th largest nursery industry
- 5th most timberland; largest public forest system in East
- History of exotic pests; epicenter of EAB infestation



Blueberry Virus Survey

- **Pests:** blueberry scorch and shock, quarantined diseases discovered in 2008.
- **Goal:** sample and test 150,000+ plants for both diseases.
- **Time frame:** May - July.
- **Staffing:** PPPM temps and Conservation Districts.
- **Impact:** Michigan is #1 blueberry producer. Survey supports eradication and/or management through plant removal, aphid control, and sanitation.



Plum Pox Virus (PPV) Survey

- **Pest:** PPV, federally quarantined disease discovered during 2006 CAPS survey
- **Goal:** sample and test 28,000+ stone fruit trees.
- **Time frame:** July - August.
- **Staffing:** PPPM temps and Conservation Districts.
- **Impact:** PPV is the most significant stone fruit disease worldwide. Michigan is #1 cherry, #3 plum, and #6 peach producer. Survey supports eradication and facilitates export of propagative material.



Forest Commodity Survey

- **Pests:** 30 of the most significant exotic pests of oak and pine not known to occur in Michigan.
- **Goal:** conduct in-depth trapping and sampling at 110 oak and pine stands statewide.
- **Time frame:** May - October.
- **Staffing:** Conservation Districts.
- **Impact:** Oak and pine are components of 5.1 million of Michigan's forests. The importance of early detection is obvious in the wake of EAB.



Grape Commodity Survey

- **Pests:** 10 of the most significant exotic pests of juice and wine grapes not known to occur in Michigan.
- **Goal:** conduct trapping and collect samples at 50 vineyards in the northeastern and southeastern L.P.
- **Time frame:** June - September.
- **Staffing:** Conservation Districts.
- **Impact:** Michigan ranks 4th or 5th in the nation for production of grapes. Survey supports eradication or management, facilitates export of propagative material and helps to support and maintain this important industry.



Warehouse Survey

- **Pests:** Exotic woodboring insects of regulatory significance.
- **Goal:** Conduct trapping, inspections, and outreach at high-risk warehouses and industrial firms dealing with solid-wood packing material of foreign origin.
- **Time frame:** November - March.
- **Staffing:** PPM Inspectors.
- **Impact:** Solid-wood packing material is the primary introduction pathway for exotic woodboring insects like EAB. Forest resources will be protected by detecting pests prior to their establishment in the environment.



Barberry and Black Stem Rust Survey

- **Pest:** black stem rust (BSR) of wheat, susceptible barberry cultivars.
- **Goals:** 1. confirm trueness to cultivar for barberry nursery stock, 2. survey for black stem rust in small grains, 3. survey for common barberry in wheat production areas.
- **Time frame:** June - December.
- **Staffing:** PPPM Inspectors, MCIA.
- **Impact:** Reduce potential economic impacts of BSR/Ug99 through early detection and eradication. Assurance of cultivar ID to preserve marketability of barberry in both interstate and international trade.



Sudden Oak Death Survey

- **Pest:** *Phytophthora ramorum*.
- **Goals:** survey for *P. ramorum* in high-risk nursery stock from the West Coast.
- **Time frame:** May - June.
- **Staffing:** PPPM Inspectors.
- **Impact:** Keeping *P. ramorum* out of nursery production will protect the state's nursery industry and the vast oak resource of the U.S.



Honeybee Pest Survey

- **Pests:** several diseases and parasites, especially *Tropilaelaps*.
- **Goals:** sample bees at 25 yards statewide as part of national pilot project.
- **Time frame:** August - September.
- **Staffing:** PPPM Inspectors.
- **Impact:** Help USDA scientists to determine the prevalence of parasites and disease-causing microorganisms that may be contributing to the decline of honey bee colonies nationwide.



Cooperative Ag Pest Surveys (CAPS)

Other surveys funded through USDA's CAPS program

- Sirex Woodwasp
- Potato Cyst Nematode
- Giant Hogweed
- Oak and Pine Supplemental
- Plum Pox Virus Supplemental



Importance of Plant Pest Surveys

- Exotic pests continue to be a growing threat to the state's agricultural and natural resources.
- The establishment of exotic pests such as emerald ash borer continue to have tremendous economic and environmental consequences.
- Survey for early detection is the critical first step for successful control of exotic pests!

