PLUM POX VIRUS STATUS REPORT
2008 SUMMARY
AS OF 8/5/08

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Plum Pox Survey: With the discovery of Plum Pox Virus in Pennsylvania in September of 1999, a survey and eradication program was put in place that has evolved and intensified through nine years of survey, research, and control action. After three years of all negative survey nationwide (2000-2002), the national survey (outside Pennsylvania) has focused in on higher-risk areas of the country. In 2006, for the first time, this national survey detected positive trees in states other than Pennsylvania: 3 positive trees in New York and 1 in Michigan.

Because of a PPV nursery find in 2003, roughly five miles from any quarantine boundary, nursery quarantine restrictions were expanded and enhanced in an area around the primary PPV quarantine zones, via Pennsylvania regulations put in effect January 2005. The expanded nursery quarantine zone covers all primary quarantine areas for three years after the primary quarantine has been rescinded. It also covers any additional area that may be outside a primary quarantine zone but that lies within 11.5 km of a PPV-positive found in the previous three years. In this expanded area, the sale of *Prunus* from retail sites that buy-in their nursery stock is permitted, but propagation or long-term grow-out of *Prunus* near primary quarantine areas is prohibited, to lessen potential exposure of nursery stock to aphids that may carry PPV, and subsequent movement of that stock to areas where it could be the source of a new PPV infection focus.

With the destruction of the positive orchard block identified in 2006, total PA orchard acreage removed since the beginning of the program stands at 1,614 acres. Compensation to growers was distributed using the same criteria as in previous years.

Four-County Sample Numbers by Year
(Adams, Cumberland, Franklin, and York Counties)

Year	Orchard Samples	Homeowner Samples	Other Samples	Total Samples	Total Positives	% Positive
2000	51,429	547	586	52,562	399	0.776
2001	80,012	5,556	1,326	86,894	27	0.034
2002	90,388	15,748	1,913	108,049	7	0.008
2003	155,970	36,530	6,845	199,345	11	0.006
2004	166,306	42,730	2,059	211,095	4	0.002
2005	213,005	51,158	3,280	267,443	5	0.002
2006	166,568	45,702	4,418	216,688	6	0.002

Pennsylvania Status Report

BACKGROUND:
This is the 9th year of the PPV eradication effort in Pennsylvania since the detection of PPV in an orchard in Adams County in the fall of 1999. Follow-up surveys in the US and Canada in 2000 resulted in further detections of the virus in 3 additional counties in Pennsylvania and also in the Province of Ontario, Canada. USDA APHIS PPQ conducted national detection surveys for PPV from 2000 – 2002 in up to 36 peach producing states in cooperation with State Departments of Agriculture and Universities. From 2003 – 2005, surveys were conducted in various states based upon their potential for infection due to trade practices and history, proximity to known infections, production volume, budget, and follow-up information. No other detections of the virus were made until 2006 when the virus was discovered in both NY and MI. Positive detections in PA remained at levels of 6 or less every year from 2002 through 2006. These surveys are a cooperative effort between APHIS PPQ, PDA, and Penn State University with each supplying infrastructure, equipment, and personnel. The regulated areas during that time have decreased from a high of 349 square miles in 2003 to 51 square miles in 2008. The 2007 survey produced negative results for the first since the detection of PPV in 1999. Two small areas in Adams County and one small area in Cumberland County remain under regulation for PPV. Three consecutive years of negative survey are required to rescind the remaining quarantines that prohibit growers from resuming establishment of Prunus orchards. The nursery propagation quarantine will remain effect for an additional 3 years after formerly infected areas are released from regulation.

DATA SUMMARY OF THE 2008 PROGRAM:

PA Activity	Weekly Total		Cumulative Total	
Number of Samples Collected	22,073		165,504	
Number of Samples Processed	17,533		182,892	
Number of Positive Samples	0		0	
Destruction Orders Issued	0		0	
Acres Removed	0		0	
Homeowner Properties Visited	2,346		25,193	
Homeowner Samples Collected	576		8,800	
Number of weed samples collected + processed*	1,272		14,939	
Number of positive weed samples	0		0	
Number of bait plants processed**	212		2,920	
Number of positive bait plants	0		0	
Employee data	*FT*	*Temp*	*Max # FT*	*Max # Temp*
Number of State Employees on Project	4	76	4	83
Number of Federal Employees on Project	5	7	5	10

- Number of different weed species = 108

** Bait plants were Peas (1587), Red Clover (326), Zinnias (737) and African Daisy (270

MAJOR EVENTS OR CHANGES SINCE LAST REPORT:

The program continues to operate efficiently. No positive or suspect samples to report.
Notes: The PDA ELISA grinding lab began working Saturdays on May 31. All samples are being processed within one week of collection. There is less area requiring survey with the deregulation of 43 square miles last fall. The homeowner survey protocol was also changed to reduce the number of cherry samples generated.

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

New York Status Report

BACKGROUND:
PPV was confirmed at two sites in Niagara County, New York, in 2006. The first site was in a plum orchard a short distance east of the Niagara River. Two trees tested positive for the virus at the end of June. The second site was located in a peach orchard near Olcott, NY, roughly 11 miles to the east of the first site. Survey in 2007 generated 87,876 samples that resulted in the detection of an additional 20 positive trees in five orchards. Four of the sites were located in Niagara County within 5 miles of a 2006 positive site. The fifth orchard was located 22 miles to the east of the closest Niagara County positive in Orleans County. A total of 26.7 acres of orchards were destroyed in 2007 because of the positive detections in 2006 and 2007. NY is currently using minimum 50-meter removal buffer around any positive detection due to the close proximity of the infections to the Canadian PPV infected area and the uncertain risk of reinfection via the natural movement of aphids between the two areas.

DATA SUMMARY OF 2008 PROGRAM:

NY Activity	Weekly Total		Cumulative Total	
Number of Samples Collected	8,084		83,753	
Number of Samples Processed	7,695		82,808	
Number of Positive Samples	0		3	
Destruction Orders Issued	0		1	
Acres Removed	0		0	
Homeowner Properties Visited	1,019		5,007	
Homeowner Samples Collected	523		3,210	
Employee data	*FT*	*Temp*	*Max # FT*	*Max # Temp*
Number of State Employees on Project	4	23	4	24
Number of Federal Employees on Project	2	10	2	10

MAJOR EVENTS OR CHANGES SINCE LAST REPORT:
A site in Wayne County produced an additional suspect sample last week that was forwarded to Beltsville for confirmation. Results are still pending. A site located in Niagara County produced a suspect positive at the end of last week. This sample is from a site that was positive last year. The sample was forwarded to Beltsville for confirmation Monday, August 5.

A suspect sample from Wayne County sent to Beltsville lab for confirmation on July 14 tested negative. Numerous subsequent resamples from the original trees in the original sample tested positive or had elevated background readings in ELISA at the Geneva lab. This material resulted in inconclusive results at the Beltsville lab. This block will be resampled in September. If there are positive trees in this block, the virus titer levels should be higher making confirmation easier at that time.

Homeowner crews sampled the two suspect properties from the 2007 survey in Lewiston Township again this year in early June with negative results.

Michigan Status Report

BACKGROUND:
On July 27, 2006, the Animal and Plant Health Inspection Service (APHIS) was notified that a single tree located at the Southwest Michigan Research and Extension Center near Benton Harbor, Michigan, tested positive for PPV at the end of July. Every Prunus tree on the site was immediately sampled and tested along with a sister block located near Hart, Michigan by Michigan Department of Agriculture and USDA personnel. No other positive trees were detected in the 54,000 samples generated in Michigan in 2006. Trace back investigations conducted by APHIS Investigative and Enforcement Services in WA, OR, and CA were not able to find a source of infection from the parent stock used to create the infected tree. Survey work done in ten counties in southwestern Michigan by

MDA during 2007 generated 84,726 samples from orchards and included a limited homeowner survey done by PPQ personnel. All samples tested negative. All susceptible Prunus hosts within 500 meters of the positive tree were destroyed by the research station in the spring of 2007.

DATA SUMMARY OF 2008 PROGRAM:

MI Activity	**Weekly Total**		**Cumulative Total**	
Number of Samples Collected	2,782		23,918	
Number of Samples Processed	2,990		24,656	
Number of Positive Samples	0		0	
Destruction Orders Issued	0		0	
Acres Removed	0		0	
Homeowner Properties Visited	919		4,852	
Homeowner Samples Collected	374		3,575	
Employee data	*FT*	*Temp*	*Max # FT*	*Max # Temp*
Number of State Employees on Project	4	8	4	8
Number of Federal Employees on Project	1	4	1	4

MAJOR EVENTS OR CHANGES SINCE LAST REPORT:

All samples continue to test negative. MDA is working with USDA to extend sampling beyond the planned 25,000 samples agreed to in the cooperative agreement. The homeowner survey operation is projecting completion of the planned survey area this year.

Retesting of the 12 suspect trees at the MDA lab tested negative.