Searching for the Plum Pox Virus

lum Pox, also known as Sharka, is a viral disease of stone fruit trees such as plum, peach and apricot. It has been a devastating disease in Europe since the early 1900s, where it was first reported in Bulgaria, then spread throughout Europe. In recent years the disease has spread to the Americas, first being found in Chile in 1992, then in the orchards of Adams County, PA, in 1999, and in Ontario and Nova Scotia. Canada in 2000.

The disease remains localized at this time and it is hoped that it will be contained and

eradicated before it has a chance to spread to the other parts of the North American continent. New York State Agriculture & Markets and Cornell University have established an extensive survey program to survey about 15,000 trees during the 2003, 2004 and 2005 growing seasons.

No Plum Pox virus was detected during the 2003 and 2004 growing season. All samples were processed using the Durviz ELISA kit. One replicate of each sample was cre-

ated and processed in adjacent wells of the ELISA plate. Plates were read using a plate reader set at 405nm. Samples were determined to be positive if their absorbance value reached 2.5 times the negative control value.

Additionally, a subset of approximately 300 random samples were selected to be processed using immunocapture-reverse transcription polymerase chain reaction (IC-RT-PCR) analyses. No positives have arisen to date. In 2005, the Plant Disease Diagnostic Clinic provided testing for Michigan growers wishing to ship plant material into Canada. Approximately 440 samples were tested.

We will continue to conduct these surveys due to our close proximity to the Pennsylvania and Canadian confirmed positives.

Karen L. Snover-Clift and Patricia Clement



Above: plum pox virus mottles a leaf of a plum tree.

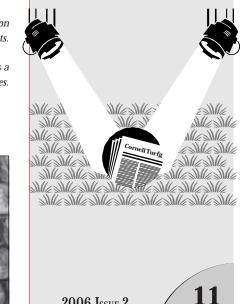
Below left: plum pox virus' effect on the stones of apricots.

Below right: plum pox virus affects a variety of fruits including peaches.

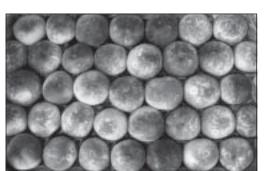


Plum Pox, a viral disease of stone fruit trees. has been a devastating disease in *Europe since the early* 1900s. It has spread to the Americas, first being found in Chile in 1992, then in the orchards of Adams County, PA, in 1999, and in Ontario and Nova Scotia. Canada in 2000.

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2006 Issue 2