

Plum Pox

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What is plum pox? Plum pox, also known as “sharka,” is a virus disease that affects stone fruits including plums, peaches, nectarines, apricots, and ornamental *Prunus* species. Cherries are resistant to most strains of plum pox, or at least do not show symptoms. The plum pox virus does not infect humans or animals. Plum pox occurs on stone fruit trees throughout Europe, in Chile, and was discovered in Pennsylvania in 1999. Plum pox doesn't kill trees, but it causes serious crop losses by making fruit tasteless, deformed and unmarketable. The virus is spread locally by aphids and over long distances on budwood and planting stock. The strain found in Pennsylvania (D strain) is not carried on seed.



Plum pox symptoms on immature plum fruits (left), and a plum leaf (right). (Photographs courtesy of R. Scorza and obtained from West Virginia University at <http://www.caf.wvu.edu/keameysville/wvufarm1.html>)

Why is plum pox important? Until its discovery in 1999 in peach orchards in two townships in Pennsylvania, the plum pox virus was unknown in North America. The discovery of a new stone fruit pest in a major stone fruit production region, and in the vicinity of at least one major fruit tree nursery, is cause for concern. Virus diseases of plants generally cannot be treated. Eradication of the virus would require destruction of entire orchards. In order to contain the disease, the affected area has been placed under quarantine, making it illegal to move stone fruit trees or budwood from the area. However, some spread of the virus may have already occurred in symptomless planting stock. Therefore, commercial growers and Extension personnel throughout North America need to be aware of plum pox symptoms in order to protect the stone fruit industry. Ornamental trees are an important reservoir for the plum pox virus. Extension personnel should be diligent when observing *Prunus* specimens whether submitted by commercial growers or homeowners.

What does plum pox look like? Symptoms vary depending on the host. On plum, leaves have pale green to yellow spots and blotches (see photo above). On peach, symptoms appear on the first leaves to expand as yellowish zones along veins. This symptom is difficult to distinguish from other causes of yellowing along veins such as nutrient deficiency. Plum pox is difficult to detect, because leaf symptoms are often restricted to only a few leaves per shoot, and infected trees are usually not stunted. On immature plum fruit, symptoms include green and yellow rings and blotches (see photo above). As fruit ripen, symptoms fade, but infected fruit drop from the tree prematurely. Symptoms on other *Prunus* fruits are similar to those on plum.

For more information or help in diagnosing plum pox: Contact Patricia McManus, Department of Plant Pathology, University of Wisconsin-Madison, 1630 Linden Drive, Madison, WI 53706-1598, phone: (608) 265-2047, fax: (608) 263-2626, email: psm@plantpath.wisc.edu, or contact your county Extension agent.