

# Prune Dwarf Virus (PDV)

## Illarvirus

### Synonyms

- cherry chlorotic ringspot virus
- peach stunt virus
- sour cherry yellows virus

### Plant hosts

- Major hosts: *Prunus amygdalus*, *Prunus armeniaca* (apricot), *Prunus avium* (sweet cherry), *Prunus besseyi* (bessey cherry), *Prunus cerasifera* (myrobalan plum), *Prunus cerasus* (sour cherry), *Prunus domestica* (plum), *Prunus dulcis* (almond), *Prunus mahaleb* (mahaleb cherry), *Prunus persica* (peach), *Prunus salicina* (Japanese plum), *Prunus serotina* (black cherry), *Prunus serrulata* (Japanese flowering cherry), *Prunus tomentosa* (Nanking cherry tree)
- Wild hosts: *Crataegus* spp., *Prunus padus* (bird cherry), *Prunus spinosa* (blackthorn)

### Symptoms

Infected sweet cherry leaves are normal in color and vigor but narrower and longer than usual. Although the virus is distributed throughout an infected tree, symptoms may be restricted to one limb or section of the tree. Blind wood also occurs and is frequently seen in trees 25-years or older. Fruit production, although reduced, is on the exterior of the tree. Fruit grown on the exterior of the tree is usually larger and firmer than fruit grown toward the interior of the tree.



Leaves showing symptoms of prune dwarf virus

### Transmission

It has been reported that virus is present in the pollen of cherry, almond, plum and apricot (Digiario, 1992b). Seed and pollen constitutes the main method of natural transmission (Cation, 1949; Cochran, 1950; Johnsen, 1984; Digiario et al., 1992b; Mink, 1993) especially in *Prunus avium*, *P. cerasus* and *P. mahaleb* (Gilmer et al., 1976; Savino et al., 1997). Prune Dwarf Virus (PDV) occurs in the pollen grains of almond (Kelley and Cameron, 1986; Digiario 1992b), peach, plum and apricot, both externally and internally. The attachment of virus particles to the pollen surface appears to be relatively stable. PDV was also found in the ovules of plum and apricot, supporting the notion that the disease is seed transmitted. The virus is also transmitted by mechanical inoculation and by grafting. It is not transmitted by contact between plants.

### Geographic distribution

Prune dwarf virus is most likely distributed worldwide.

### Applicable regulations

Prune dwarf virus is a pathogen of concern to Oregon's interstate and international customers. [Virus testing](#) is available through the Commodity Inspection Division for this virus. Please visit [OAR 603-051-0855 through -0859](#) for more information.