

Peach X-disease phytoplasma

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Synonyms

- peach X-disease virus
- peach western X MLO (mycoplasma-like organism)
- peach yellow leafroll MLO

Plant hosts

Peaches (*Prunus persica*) are the primary host of peach X-disease phytoplasma, but the disease is also significant on cherries (*Prunus avium*, *P. cerasus*, and *P. salicina*). The wild species *P. virginiana* is an important natural reservoir of peach X-disease phytoplasma in the eastern United States.

Symptoms

The first symptoms of infection of peaches are yellow spotting and rolling of the leaves. Shortly after, the whole tree becomes chlorotic and its leaves fall prematurely, leaving a few rosettes at the tips of the shoots. Young trees die 1-3 years after first symptoms appear. Chronically infected older trees may survive several years but will yield little or no fruit. Infected cherry trees on *Prunus mahaleb* rootstocks die rapidly because the rootstock is immune to the disease and this immunity is mediated by a hypersensitive reaction that occurs at the graft union after exposure to the pathogen.



Symptomatic leaves of peach X-disease phytoplasma
Courtesy of F. Dosba

Transmission

Phytoplasmas are intracellular parasites located in the phloem cells of infected plant hosts or the salivary glands of their insect vectors. Several species of leafhoppers are known to transmit peach X-disease phytoplasma. The disease is also spread by infected planting material.

Geographic distribution

Peach X-disease phytoplasma is found in Canada (British Columbia, New Brunswick, and Ontario) and the USA (but not in South Carolina, Georgia, Arkansas, or Texas)

Applicable regulations

[603-052-0116](https://www.oregon.gov/ODA/pests/603-052-0116), Quarantine; Peach Phytoplasma