

Pear Trellis Rust in the Home Garden



Introduction

Pear trellis rust is a fungus that attacks junipers and pears. It is common in Europe, causing damage to the pear crop. In North America it has been known to occur only in the Lower Fraser Valley, on southern Vancouver Island and in one county in California. In 1997, it was found in one area of Washington State.

The disease can be spread across great distances by transporting infected plants or within a local area through wind-blown spores. It increases in severity and distribution in a local area when pear trees and junipers are planted close to one another.

All pear trees and most species of junipers in the coastal area can be affected by the disease. *Juniperus horizontalis*, *J. communis* and *J. squamata* are resistant species. Consult a professional landscaper, arborist or nursery if you do not know what kind of junipers you have.

What to Look For

The disease is easily detected on pear leaves which become covered with orange spots in early summer and grey, fuzzy growth in the fall. Thus, it is usually the pear grower who first notices the disease. Infected junipers will continue to grow and appear healthy.

On Pears

The first signs on pear are bright orange spots on the leaves in late May. The spots enlarge during the summer reaching a diameter of one to two cm. By late June, the centers of the spots (on the upper leaf surface) exhibit numerous black dots. In July and early August, the infected area of the leaf becomes thickened as spore-producing structures push out from the lower surface. From late August through to leaf drop in October or November, grey hair-like projections resembling trellises emerge from the lower surface and release spores. These spores are capable of infecting junipers.

Crop Protection **FACTSHEET**



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On Junipers

The only time that infections are obvious on junipers is during wet weather in April and early May. At that time, swellings on the juniper branches release an orange jelly-like mass of spores. These spores are capable of infecting nearby pear leaves which are just starting to grow. After the spores are released, the infection on juniper remains dormant until the next spring.



Control Measures

- Plant junipers and pears as far away from one another as possible. Consider your neighbour's plants, as well as your own. If the two hosts are separated by at least 100 feet (30 meters), there will be minimal damage to the pears.
- If leaf infections are seen on pear, carry out a neighbourhood survey to determine the number of pear trees and the likely location of infected junipers. If an agreement between neighbours

can be reached, a neighbourhood with many pears but few junipers would benefit by removing the junipers and replacing them with other ornamentals. In neighbourhoods with few pear trees and many junipers, further spread of the disease can be prevented by removing the pear trees.

- To minimize damage on pear trees, remove the nearest infected junipers before April 1. Don't leave the juniper brush piled in your yard as the fungus will sporulate on it and spread to the pears.

- To prevent spread of the disease from your pear tree to your own or your neighbour's junipers, pick the infected leaves before mid-August each year. No special disposal of these leaves is required. The fungus will die out in a few days when the leaves shrivel up.

- Severely infected pear trees may develop gall-like growths at the base of twigs. These should be pruned out as they will serve as a perennial source of infection on the pear tree.

- Fungicide sprays for this disease are not usually worthwhile on pears or junipers.

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