



SEATTLE TREE CARE

PEAR TRELLIS RUST

Pear Trellis rust, induced by the fungal pathogen *Gymnosporangium sabinae*, is a plant ailment primarily impacting Pear (*Pyrus*) and Juniper (*Juniperus*) trees. This comprehensive technical report offers a profound exploration of Pear Trellis Rust, encompassing its symptomatic manifestations, intricate life cycle, host plant intricacies, and the strategies deployed for effective management.

INTRODUCTION

Pear Trellis rust, caused by the fungal pathogen *Gymnosporangium sabinae*, is a significant concern for pear growers, orchard managers, and private property owners. The disease exhibits a complex life cycle involving two host plants, Pear (*Pyrus*) and Juniper (*Juniperus*). In this report, we will explain the various aspects of Pear Trellis Rust to help provide a better understanding of how to manage it best.

**Treatments as low
as \$375**

FOR MORE INFORMATION, CONTACT US



206-789-0534



Arborist@SeattleTreeCare.org



SeattleTreeCare.org



SEATTLE TREE CARE

DISEASE SYMPTOMS

***Orange Lesions:** Infected Pear leaves, young stems, and fruit develop small, orange to rust-colored lesions or pustules

***Reduced Fruit Quality:** Fruit infections can lead to reduced fruit quality, rendering them unsuitable for eating

***Defoliation:** Severe infections may result in defoliation, which can weaken the tree and affect its overall health

LIFE CYCLE

Pear Trellis Rust has a unique life cycle that requires both Pear (Pyrus) and Juniper (Juniperus) hosts.

1. **Spore release (Pear Trees):** During the Pear tree's active growing season, spores (aeciospores) are released from the orange pustules on pear leaves. The wind, animals, or insects then disperse these spores.
2. **Infection (Juniper Trees):** Aeciospores that land on Juniper trees can infect them. The infection leads to the formation of galls on Juniper branches.
3. **Spore Release (Juniper Galls):** The galls on Juniper trees produce spores (teliospores) dispersed and carried by the wind, animals, or insects back to the Pear tree.
4. **Infection (Pear Trees):** When the teliospores reach Pear trees, they start new infections, which continue the cycle.

FOR MORE INFORMATION, CONTACT US



206-789-0534



Arborist@SeattleTreeCare.org



SeattleTreeCare.org



SEATTLE TREE CARE

HOST PLANTS

Pear Trees (*Pyrus spp.*): Pear trees are the primary hosts for Pear Trellis Rust, and they provide conditions for *aeciospore* formation on their leaves

Juniper Trees (*Juniperus spp.*): Juniper trees serve as the alternate host for this disease, and they support gall formation and the production of *teliospores*.

DISEASE MANAGEMENT

Effective management strategies for pear Trellis Rust involve a combination of cultural practices, chemical control, and monitoring:

***Pruning and Removal:** Pruning out infected branches on Pear (*Pyrus*) trees and removing Juniper (*Juniperus*) trees in the vicinity of Pear trees can limit disease spread

***Fungicides:** Fungicides can be applied to Pear trees during the active growing season to protect them from infection. Consult your local Seattle Tree Care arborist for recommended fungicides and treatment regimens.

***Monitoring:** Regular inspections of both Pear and Juniper trees for symptoms of infection are critical. Early detection enables prompt action to prevent further spread.

***Resistant Varieties:** Planting Pear tree varieties less susceptible to Pear Trellis Rust can be an effective long-term strategy.

FOR MORE INFORMATION, CONTACT US



206-789-0534



Arborist@SeattleTreeCare.org



SeattleTreeCare.org





SEATTLE TREE CARE

CONCLUSION

Pear trellis rust is a disease characterized by a distinct life cycle, necessitating the coexistence of both pear and juniper hosts. Recognizing its symptoms, comprehending its life cycle, and implementing suitable management strategies are crucial for reducing its effects on pear orchards. Effective management of pear trellis rust entails a comprehensive approach that includes cultural practices, chemical controls, and vigilant monitoring. Through proper management, growers can safeguard their pear trees from this harmful fungal disease.

Pear Trellis Rust on a Juniper



Prepared by:

Michael Moore

Arborist Project Manager

ISA Board Certified Master Arborist NJ-1162BT

Tree Risk Assessment Qualified

FOR MORE INFORMATION, CONTACT US



206-789-0534



Arborist@SeattleTreeCare.org



SeattleTreeCare.org