

At your Service
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Rust on Cedar

Likely due to the abnormal summer weather patterns followed by the cool and wet fall, it seems that rust has exploded on cedar (juniper) trees this year. Many of you are asking, “what can be done about it?”

The first thing is to determine which rust is present. On juniper plants there are three types of rust; cedar apple rust, cedar quince rust and cedar hawthorn rust. In each case there is a primary host that provides growth for the disease during summer leaving the juniper as an alternative host for the disease in winter.

Cedar apple rust is a major pest issue for apple. The disease overwinters on juniper trees and then infects apples, producing spores that then infect the cedar. If you eliminate one of these two hosts within a 3 square mile range you will stop the disease. In most cases the rust will not kill a tree but can cause death of limbs from the rust gall outward.

Orange jelly-like galls form on juniper in spring after a rain when the temperature is between 46-75F. These spores are spread by wind and within 2 weeks of touching down on apple, produce lesions on tissue. Two months later spores are released from the apple host during dry conditions and return by air to a juniper. It usually takes two years for this infection to produce a mature gall that will then infest an apple host but will only be infectious for that year.

Cedar quince rust occurs on junipers and the primary hosts are apple, hawthorn, quince, rose, crabapple and serviceberry. This disease causes swelling in the limb that girdles the limb, killing it from the disease outward. On the juniper the growths swell after rain into bright orange, gelatin masses along the twig. They do not form a distinct round shape like cedar apple rust. This disease will also cause die-back on the primary hosts during the growing season. This rust is infectious on the same host for up to 6 years.

Cedar hawthorn rust occurs on juniper and the primary hosts are apple, crabapple and hawthorn. The disease appears as small reddish-brown round galls on needles throughout the tree that infect stems turning grey. After rain these will swell to reddish-brown jelly masses but will usually not cause death to stems. The disease infects primary hosts on both leaves and fruit, appearing different on each host. On hawthorn the lesions are yellow with black centers but on quince the spots are black with red halos. This disease may be infectious for multiple years.

In each of these cases management involves removing the disease (cut it off) and burn, removing debris from the ground, maintaining a healthy tree (watering) and removing the primary (apples, quince, roses and hawthorn) or alternative host (juniper) from the environment. When planting select varieties that are resistant to rust. Chemical control in the form of fungicides are applied to the primary host beginning in spring and continued through summer. These same fungicides may be applied to juniper hosts from June through September to prevent infection from occurring on the evergreen. Once an infection is present, it cannot be eliminated by using chemicals.

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