

CEDAR APPLE RUST

Cedar trees are native to Nebraska. Apple trees are a beloved fruit and tree choice for the area as well. These are very nice trees, apart, but too close together can lead to the development of a terrible disease called cedar-apple rust.

Cedar-apple rust is a fungal disease that affects both tree species in Nebraska. This fungus grows wherever apple trees are grown in close proximity to each other, which occurs in most places in Nebraska. Cedar-apple rust has to have both hosts to complete its lifecycle so it will not occur on one host if the other does not occur.

The first year of the disease cycle occurs on apple trees, including crabapples. It begins to show up as spores in a lesion on the upper surface of the apple tree leaves and will eventually work its way through the leaves to the bottom surface. The lesions on the bottom of the leaves are where the windblown spores are produced to move to the cedar trees and related species. Later in the season, you will see rust lesions on apple fruits.

We will begin to see the signs of cedar-apple rust on Junipers throughout the year, if we look closely we will see the brown, hard galls all over the trees. This is where the fungal spores are stored for eighteen months until they become mature. Cedar-apple rust is most commonly noticed during wet spring conditions when the spores become mature and are released from the gall. In May and June when Nebraska tends to see a lot of rainy days, we will begin to notice the orange telial horns on the cedar trees. These telial horns to look like orange, octopus shaped, slimy forms hanging all over the trees. Cedar-apple rust does not typically harm the cedar trees, slight dieback may occur if many galls exist on the tips of the branches.

Apples are more affected by cedar-apple rust than cedars are. Lesions will appear on the leaves and on the apples, usually it doesn't affect very much of the apple you eat, but it does cause decreased size, distortion, and decreased aesthetic quality.

The control for cedar-apple rust can be relatively simple. There is no need for control of this disease on cedar trees. As for the apple trees, it is easiest to plant resistant varieties. There are many cedar-apple resistant varieties, such as Liberty, McIntosh, Enterprise, Freedom, Red Delicious, Winesap and many more. There are also many varieties of apples that are susceptible to cedar-apple rust such as Fuji, Gala, Lodi, Golden Delicious, Honeycrisp, Jonagold and many more. Crabapple trees are also susceptible to cedar-apple rust, but there are many varieties that are resistant, such as Cardinal, Centurion, Camelot, Sugar Tyme, Coralburst, Adirondac, Lancelot, and many more. If you have an apple or crabapple tree that is susceptible to cedar-apple rust you must spray your tree with an insecticide containing Captan or a liquid copper fungicide in May and June to control the disease on your apple trees. If you have a tree that is resistant, no control for cedar-apple rust is necessary.

If you have any further questions please contact Nicole

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