

Garden Update

For Week of August 3, 2020

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Cedar Apple Rust of Ornamental Pear

Cedar apple rust is a fungal pathogen that gets its name from a life cycle infecting cedar trees, then plants in the Rose family and back again. This year, spring weather conditions promoted the development of cedar apple rust on ornamental pears, such as 'Bradford' and 'Cleveland Select.' As rust has developed, symptoms are more easily recognized with yellow-haloed orange spots on leaves and early leaf drop. Tree owners' questions center on "What is this and how do I treat it?"

It's important to note that fungicides applied now to ornamental pear will not control rust. Instead, fungicides work best when applications are targeted for early spring, as a preventative. While rust is not attractive, it doesn't kill ornamental pear. More about timing of fungicide applications may be found on the Back Yard Farmer website: <https://byf.unl.edu/cedar-apple-rust> .

Rust damage to cedar (otherwise known as juniper) is negligible to nonresistant. Rust causes brown, lumpy galls to form on twigs and branches. In the spring, these galls develop gelatinous orange projections (called telial horns) that release spores to be carried on wind currents, depositing on susceptible species of the Rose family. Treatment of cedar apple rust on cedar is not only unnecessary but treating them proactively to forestall infection on susceptible pear and apple trees isn't effective, since juniper isn't just in yards, but also grows in pastures, fence rows and creek banks.

For the alternate host--plants in the Rose family—the species of rust will manifest as spots on leaves or lesions on the fruit and sometimes twigs. There are more than one species of rust and what Rose family member is affected determines which rust it is:

- Hawthorn (cedar hawthorn rust);
- Apple, crabapple and pear (cedar apple rust); and
- Quince (cedar quince rust).

Unlike cedars, rust on plants of the Rose family can have its downside. While rust usually doesn't kill pear and apple, it does affect the plant's ability to fruit well. Dealing with rust needn't be a yearly thing—there are plant varieties less susceptible to rust, such as 'Liberty' and 'Enterprise' apples. While reduced susceptibility never means these selections are always 100% rust free, disease-resistant cultivars are healthier, have a better plant appearance, and fruit more productively than their susceptible counterparts.