**Cedar Rust Differences - 2013**

by Jim Schuster retired University of Illinois State Extension Educator – Horticulture & Plant Pathology

|  |  |  |  |
| --- | --- | --- | --- |
|   | [**Cedar-apple Rust**](http://urbanext.illinois.edu/focus/cedarapplerust.cfm)  | [**Cedar-hawthorn Rust**](http://urbanext.illinois.edu/focus/cedarhawthornrust.cfm)  | [**Cedar-quince Rust**](http://urbanext.illinois.edu/focus/cedarquincerust.cfm)  |
| **Deciduous hosts**  | Apple/crabapple  | Hawthorn, apple/crabapple, sometimes pear, quince, serviceberry  | Many of the genera in the rose family. More common ones attacked in IL include mountain ash, hawthorn, flowering quince, and serviceberry.  |
| **Affected plant parts**  | Mostly leaves  | Mostly leaves occasionally fruit, stems and thorns  | Mostly thorns, new twigs and fruits. Sometimes petioles and veins of leaves  |
| **Leaf spot symptoms**  | Start as greenish yellow then yellow followed by orange (black spots[spore pustules] may form in orange), there is generally a reddish halo between infected lesion and healthy tissue  | Start as yellow spot followed by orange (black spots [spore pustules] may form in orange).  | Basically none except upon close inspection of veins and petioles that are swollen and occasional chlorotic spots on some rosaceae hosts.  |
| **Aecial spore release**  | As air dries out in a.m.  | As air dries out in a.m. & during rains  | As air dries out in a.m. & during rains  |
| **Evergreen hosts**  | Mostly Eastern red cedar in Illinois & a few other junipers not commonly grown in Illinois.  | Eastern red cedar; Rocky Mountain, common and prostrate junipers as well as a few not commonly grown in Illinois.  | Eastern red cedar, common, creeping, prostrate, Rocky Mountain, and savin junipers.  |
| **Gall shape**  | Kidney shaped to round  | Flat on twig side to round  | Elongated swelling of the twig  |
| **Gall appearance**  | Dimples/depressions by fall where telial horns develop the following spring  | Raised "bubble/blister" like appearances by fall where telial horns develop the following spring.  | Spindle shaped that has rough bark appearance after telia production is finished.  |
| **Telial horn appearance**  | Long and thin  | Short and stubby  | Orange bark scum  |
| **Number of years telia are produced**  | One year (spring following gall development)  | May produce telia horns for several growing seasons/years.  | Many years – sometimes for more than 20 years.  |
| **Death of twig**  | Twig almost always dies  | Twig seldom dies  | Twigs seldom die.  |
| **Distance between hosts that spores can travel to cause infection**  | Usually within several hundred feet but possible for several miles  | Usually within several hundred feet but possible to 11 or more miles  | ? |