

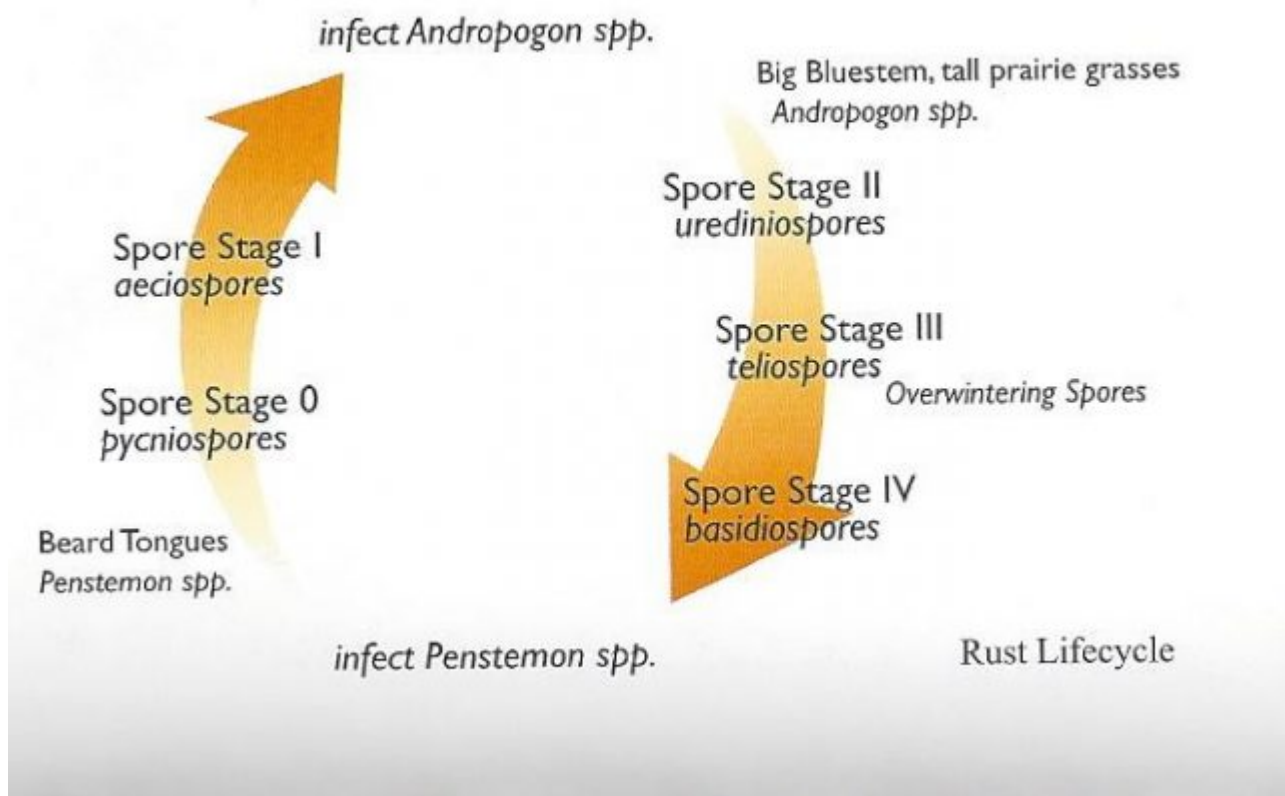
Rusts

Rusts, named for their distinctive red-orange colored spores, are fungi that cause plant diseases and can be seen from spring through fall on infected plants. Keep an eye out for bright colored rust spores in May or June after a warm rain.

All rusts are obligate parasites, that is they require a living host to complete their life cycle. Different species of rust fungus can go through up to five separate spore stages during a life cycle that requires two or even three different host plants. Bright red urediniospores are produced in vast numbers and spores from this stage can be blown on air currents for hundreds of miles to infect new plants. Urediniospores require moisture to germinate but when that happens a spore that lands on a leaf will physically punch into otherwise healthy leaf tissue. Tough dark-colored teliospores overwinter in debris and infect plants early in the growing season.

Some rust fungi take advantage of insects to aid fertilization for sexual reproduction with a system similar to that of flowers. They produce brightly colored clustered cups (aecia) that even secrete a sweet fragrant nectar. Most rusts are host specific and identifications of them can be made based on which plant they infect. [Information provided by Andrea Gargas]

Here's a diagram of the lifecycle of rusts. (by Betsy True)



Actinobacteria (Rusts)

Allodus podophylli – Mayapple Rust: for more [info](#)
Puccinia andropogonsis



Allodus podophylli – Mayapple Rust



Allodus podophylli – Mayapple Rust



Allodus podophylli – Mayapple Rust



Puccinia andropogonsis on *Penstemon digitalis*



Puccinia andropogonsis on *Penstemon digitalis*



Puccinia andropogonsis on *Penstemon digitalis*



Puccinia andropogonsis on *Penstemon digitalis*