



PEST ALERT

State of New Hampshire
Department of Resources and Economic Development
Division of Forests and Lands
Forest Protection Bureau—Forest Health Section

White Pine Blister Rust

Cronartium ribicola

Hosts: Five-needle pines including White Pine (*Pinus strobus*) in the northeast and Currants & Gooseberries (*Ribes spp.*)

Distribution: Throughout all the states along the Atlantic seacoast inland to Tennessee and up through the upper Midwest. Also along the Pacific Seacoast inland to South Dakota and down to New Mexico.

History: Introduced to North America from Europe in the 1890s, thousands of foresters and laborers spent millions of hours destroying gooseberries and currant plants throughout NH from 1917 to 1986. This monumental effort was designed to break the disease cycle and by the mid 1990s the occurrence of blister rust damage in the northeast was relatively rare. Much research had gone into developing immune *Ribes* cultivars. By 2000 a short list of 19 gooseberries and currants were available to legally plant in NH if you provided the State with information on what species and cultivar you purchased off the list and where it was being planted. In 2011 scientists in Connecticut documented the occurrence of *Cronartium* infected *Ribes nigrum* cv. *Titania*, one of the immune cultivars. Subsequent research proved a breakdown of immunity in this cultivar and led to the removal of immune black currants from the varieties approved for planting in NH.



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Symptomatic *Ribes*



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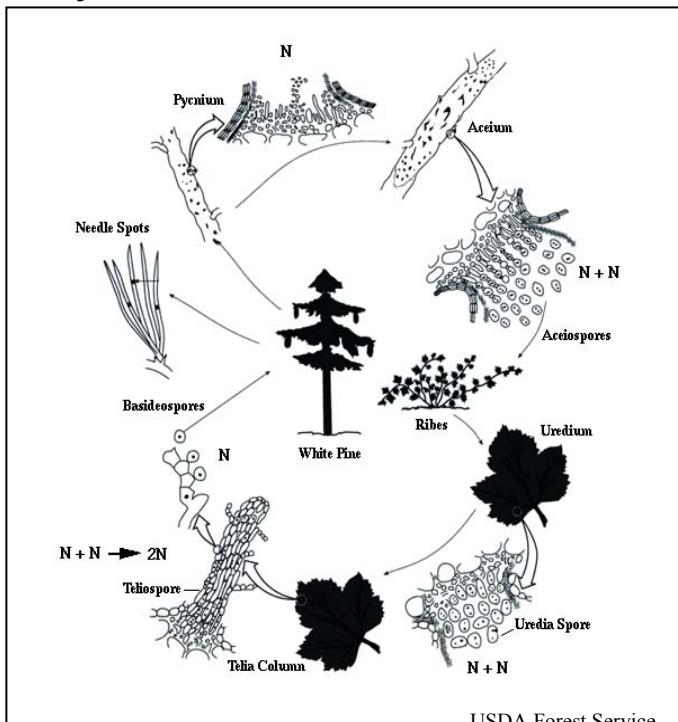


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Symptomatic Pines

Identifying Symptoms: Signs of the disease are visible on *Ribes* species in the summer and fall when rust colored uredia and telia are present on the undersides of leaves. On pine symptoms first appear as the disease infects the needles in the fall. The infection is most apparent by recently killed branch flagging and stem cankers early summer when orange aecia rupture the bark.

Life Cycle:



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