

Leaf rust

Naohidemyces vaccinii (fungus)

Leaf rust epidemics occur sporadically in the eastern United States. The disease is rare elsewhere.



Early (left) and late (right) symptoms.

Symptoms. Reddish brown spots appear on leaves by mid-season. Affected leaves turn yellow and drop prematurely. On the lower leaf surface, yellow to orange spore pustules (uredia) surrounded by dark rings occur. The disease generally has little impact on yield but may cause premature defoliation.

Disease cycle. The alternate host of the rust fungus is hemlock (*Tsuga* spp.), so rust is more severe in the vicinity of hemlock trees. The fungus requires both hosts to complete its life cycle in cold climates.

Airborne spores produced on hemlock needles infect blueberry leaves in early summer. Yellow spores then develop in uredia on blueberry leaves and spread the disease among blueberries. The fungus overwinters in infected leaves and reinfects hemlock needles in early spring. In the southeastern United States where hemlocks are not present, the fungus overwinters in uredia on evergreen blueberry leaves.

Management. Remove hemlock trees within a third of a mile (0.5 km); avoid susceptible cultivars; start with rust-free plants; limit overhead irrigation; apply effective fungicides.



Rust pustules (uredia) on underside of leaf.

