Blueberry Scorch Virus (BBScV)

Carlaviruses

Synonyms

- sheep pen hill disease

Plant hosts

- Major hosts: Vaccinium corymbosum (blueberry), Vaccinium macrocarpon (cranberry), as well as other Vaccinium species

Symptoms

Once blueberry plants are infected with BBScV, symptoms will take one to two years to express themselves. This is called the latent period. Infection occurs when aphids feed (on the west coast) during May, June and July. The best time to spot symptoms is during bloom. In severe cases, blossoms and leaves rapidly blight and dry up following early bloom. Sometimes only blossoms are blighted or a scattering of infected shoots may be observed. Blighted blossoms may remain on the bush over the summer and into the following year depending on the blueberry cultivar. Leaves may become yellow along the margins. Plants with these symptoms tend to decline and die back over a period of years. Other more subtle signs include red line patterns on leaves in the fall, leaf mottling, overall pale color, low number of blossoms, or a "twiggy" appearance. Often foliage growth will appear normal, even with infection. Symptomless plants can often be seen next to diseased ones. Once infection occurs, normal production of berries will never be regained. All varieties are susceptible although several are thought to remain symptomless. Symptoms can easily be confused with other pest, disease, cultural, or environmental problems. If BBScV is suspected the only reliable method to verify infection is through laboratory virus testing.

Blueberry bush showing symptoms of blueberry scorch virus.

Transmission

Blueberry Scorch Virus (BBScV) is an aphid-borne carlavirus. Feeding aphid populations of various species transmit the virus from plant to plant infecting significant numbers of surrounding plants. If left unchecked, entire fields of Vaccinium plants could be devastated. Infected plants, including roots and other plant material under plants, should be removed and destroyed.

Geographic distribution

The virus has been detected in British Columbia, Connecticut, Europe, Massachusetts, New Jersey, Oregon, and Washington.

Applicable regulations

Oregon has a control area order (57 KB pdf) for blueberry scorch virus.