

## **BLUEBERRY SCORCH UPDATE - WHAT YOU NEED TO KNOW**

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Blueberry scorch is a virus disease that is increasing greatly in frequency in the northeast. The pathogen causes flowers to die without being fertilized and can result in major crop losses. After being introduced to a field the virus will infect a large percentage of the plants if it is not managed. Thus, this disease represents a serious threat to the blueberry industry.

Introduction of the disease to new planting should be avoided by using only clean planting stock. Use of cutting wood from noncertified sources such as production fields and noncertified nurseries should be avoided at all costs. In addition, growers should avoid purchasing plants from nurseries that are not certified. Introduction of scorch on to a farm will increase the risk of spreading the disease to other fields and also increase the cost due to removal and replanting. The NJ Department of Agriculture developed a scorch testing program as part of their voluntary nursery certification of NJ blueberry nurseries. Several nurseries are now certified to be free of the Scorch virus.

A virus causes blueberry scorch. For viruses to infect a plant they must enter a living plant cell through a wound. In the case of Blueberry Scorch, aphids can carry the virus on the sucking mouthparts or the stylus and inject the virus into the cell while feeding on plant sap. Once inside the cell the virus begins to multiply and spread to other cells in the plant. Eventually, the entire plant becomes infected and develops symptoms. Once a plant is infected it does not recover. Although infected plants may appear healthy during some years the infection is persistent and will greatly reduce berry production over the long term. Furthermore, the infected plants represent a source of inoculum that can be transmitted to healthy plants. For these reasons, it is a very good practice to remove infected plants. The virus is easily transmitted from mother plants to rooted cuttings making it critical to obtain cuttings from healthy mother plants only.

Growers and scouts should watch for development of scorch in the spring during bloom and mark all suspect bushes. Symptoms are easily seen during bloom. Growers should be aware if this disease is present on the farm and where the infected bushes are located. Mark locations of the disease on a farm map and monitor these areas in subsequent years. When suspect bushes are found they should cut back and removed. Aphid scouting and management should be made high priority in fields with infected plants.

Symptoms of the disease vary depending on the cultivar. In Weymouth, Duke, Elliott, and Chanticleer classic symptoms of scorched blossoms and a *Phomopsis*-like die-back are commonly seen. In other cultivars such as and Bluecrop the blossom scorch is less common and fruit may appear to set but will not develop. The plants may also appear chlorotic (yellowing similar to nitrogen deficiency) and partially defoliate. The disease may be easier to see by standing back from the bushes rather than close inspection. Shortly after bloom the plants will begin to recover. Even though symptom expression may not occur every year, infected bushes remain a source of inoculum in the field increasing the possibility for disease spread.