



# Rescuing blueberry plants

*Blueberries require special care if infected with shock virus or blueberry scorch virus*

**BONNIE COURTER**  
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**Q**uestion: A few of my blueberry plants have suddenly turned brown, and the flowers look all dead. What's happened to them, and can they be saved?

**Answer:** Your blueberry plants look like they may have either blueberry shock virus or blueberry scorch virus. It's a little difficult to tell the difference, as both have similar symptoms – sudden, complete flower and leaf death just when blooms are about to open up.

But, unlike scorch virus, plants with the shock virus may recover, even putting out a second flush of foliage later in the season and often able to recover fully by the next year or two. So, maybe it's best to wait and see how they do by the end of the growing season, whether they perk up or not.

The scorch virus is a serious disease transmitted by aphids and infected plant material. Symptoms may take up to two years to develop, but by then, the disease has spread quickly in a radial pattern, eventually infecting all blueberry bushes in the vicinity.

In many cultivars like Bluecrop, Bluetata, Duke and Nelson, the plants don't show any sign of the virus but act as a source of inoculation for infection of surrounding bushes. The best way to manage the scorch virus is by planting certified, virus-tested planting stock and have symptomatic bushes tested to confirm the disease.

Unfortunately, blueberries showing the scorch virus will not recover, so then,



Group of pear fruit on one spur in need of thinning.

it's a matter of removing and burning infected bushes and replacing them with tolerant cultivars. Be sure and apply insecticides to control aphids but not when the blueberry bushes are in bloom to safeguard pollinators.

Blueberry shock virus, by comparison, is transmitted by pollinators such as foraging honeybees, which transfer infected pollen to the flowers of healthy plants. Flowers and young leaf shoots suddenly die in the spring when flowers are blooming.

Blighted leaves and flowers drop, but the plant may put on more leaves during the summer and look quite normal, except for the lack of fruit. Once the plants recover, they may continue to show discolored leaf spots, blotches and reddening for several more years.

Those cultivars particularly susceptible to shock are Berkeley, Bluegold, Bluetta, Duke, Liberty, Aurora, Pember-ton, Reka and Elliott. Infected plants often exhibit symptoms for one to four years, and then become symptomless, eventually recovering fully, though they can still serve as an inoculum source for surrounding bushes.

Again, it's best to use certified blueberry plants for new plantings. Give the recovering bushes good cultural care while they go through seasons with the shock reaction and just let the disease run its course.



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## Shock virus on blueberry plants.

**Question:** Two years ago, my pear tree had so much fruit, the branches were breaking, and then last year, I hardly got any. What would cause that?

**Answer:** If you're diligent to prune your pear tree properly during the dormant season each year, there might be another type of pruning that you should be doing as well in the late springtime, and that's called fruit thinning. I know it sounds horrible to have to eliminate most of your developing fruit, but it actually is healthier for the tree.

Fruit thinning is beneficial to most deciduous fruit trees, though cherries and nut trees are usually not thinned. It will increase the size of your fruit, reduce limb breakage and will take care of the tendency to overbear, which produces a heavy crop one year, and hardly any fruit the next.

Having an excessive amount of fruit on a tree will cause the fruit to compete with each other for carbohydrates and so remain small. This carbohydrate drain can also weaken the tree and

make it more susceptible to pests and sunburn damage.

Another benefit of fruit thinning is that the spread of some diseases can be reduced if fruit are not touching and air movement is increased. Thinning in this manner can also reduce codling moth damage because larvae often move between fruits that are touching.

So, how to go about it? For apples and pears, you should leave one developing fruit on each spur – the spur is the short woody structure where flowers arise. Leave only one fruit for every 6 inches along the branch if your tree is healthy and vigorous, so you may leave some spurs with no fruit at all.

Choose the largest fruit to leave on the tree, hand-pinching off fruit that is small or damaged first. Be careful not to break off the spurs while thinning, as these can produce fruit for many years. Thin fruit as early as possible before a pear or apple is the size of a dime, which is usually 20-30 days after petal fall, from April until mid-May.