

Grape Pests, or, Help! I Have a Bug Up My Nose!

by Jim Bliss

A friend recently asked me what to do about leaf hoppers. She had done her research and even identified the pest as a Virginia Creeper Leafhopper. They had become so numerous that she didn't even like being around her vines; she is not alone, either. If the infestation is too bad, farm workers have been known to refuse to harvest grapes. Unfortunately, it was September and by then there really is very little you can do.

The first thing many people think of is to "Go Nuclear" or use chemical insecticides. Having lived on the vineyard I farmed, with my wife and two small children, this is one option I would have never considered. There are other ways.

Take those leaf hoppers for example. Grape vines can tolerate up to five leaf hoppers per leaf. Walking through a vineyard with clouds of leafhoppers flying and jumping around you, that is going to seem like a lot, but vines are hardy. The easiest method of control is to maintain good vineyard hygiene. Keep the area around your vines clean and clear of the debris that so often allows insect pests to overwinter.*file391196*

All of that that starts with pruning. Most of us make our first mistake right here, leaving way-too-many canes on the vine when we prune. Later in the year, this reduces air circulation under the vine canopy and provides a perfect home for a whole variety of pests. Prune for openness and in the correct way for the variety of grape you are growing.

Once you have pruned, clean up immediately. Either burn or throw out canes and leaves. Rake and dispose of any weeds growing under the vines. Bare earth is best at this stage. Debris provides a primary place where insects and other pests will over winter. While they also can hide in the bark of the trunk and canes needed for next year's growth, proper pruning and disposal eliminates the majority of pests. Keep it clean!

After bud break in the spring, keep a close watch for developing insect pests. They can be easily controlled in the larval stage. If you catch it early after hatch, you are only dealing with larvae, not the very mobile adults or masses of eggs they lay. At this stage, you can use insecticidal soap and agricultural oils. Yes, even for leaf hoppers! Past this stage, control will require pesticides that I have never used and that will also kill all of the beneficial insects that are truly our friends.

The second big grape problem is a caterpillar – the Grape Leaf Skeletonizer (*Harrisina americana* in the eastern U.S. and [*Harrisina metallica*](#) in the West). This pest is yellow with black and purple bands; caterpillars eat outward from their hatching site like a pillaging army. By the time of a second hatch, they can leave an entire vineyard with only the skeletons of leaves hanging on the vines. They can be controlled with *Bacillus thuringiensis* or diatomaceous earth.

Another thing to watch for is powdery mildew. This is especially a problem if the canopy is too dense. To combat mildew, prune all canes a foot off the ground in mid-summer to increase air circulation. If pruning does not control mildew, dust with sulfur powder. Rain and high humidity are the enemies here. If it rains, dust again!

Good air circulation is extremely important. It not only prevents a lot of diseases but helps beneficial insects keep the other insects at bay. This means **annual pruning to keep the canopy from getting too dense**. Equally important is raking and removing leaves each fall as well as picking up and composting fallen fruit. After pruning, remove cuttings away from the vines. A clean vineyard is a healthy vineyard. Start your vines off right this winter.

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