

Grape Expectations?

Control the Pests!

Whether you have one vine or a hundred, it is critical to prune the canopy to allow good air flow through the foliage, making conditions less favorable for disease development.

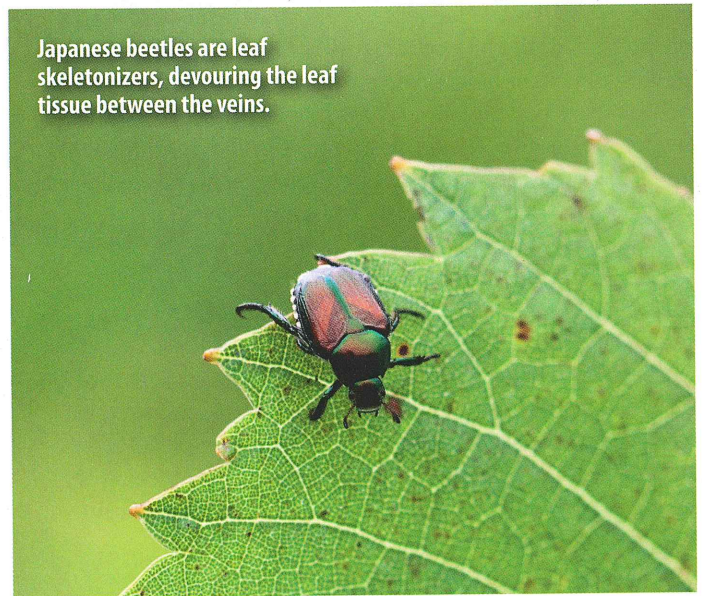
Grapes are excellent fruits for jams and jellies, juice and wine, but grapevines can also be valuable as accent or screen plants in the home landscape. Once established, well-tended grapevines can be productive for many years. However, grapes certainly have their share of insects, mites and diseases that can severely impact vine growth and fruit quality.

Damaging Diseases

Common grape diseases are black rot, powdery mildew and botrytis bunch rot or gray rot. Unfortunately, to ensure a good quality crop, an effective disease control program requires both good canopy management and preventive fungicide treatments. Waiting until disease appears is usually too late.


Black rot is probably the most devastating fungal disease to grapes. The disease first appears as leaf blotches with black specks, and later spreads to the fruit. Berries turn into blackened, shriveled "mummies" that resemble raisins. The fungus survives the winter in these mummified berries and cane lesions, so their removal can lower disease potential for the following year. Dormant pruning and proper training of the vines that allows better light penetration and air circulation will also help decrease this disease's severity. A good fungicide spray program is extremely important, with the biggest concern for protection of young grape clusters. Always read and follow label instructions.

Japanese beetles are leaf skeletonizers, devouring the leaf tissue between the veins.



"The sun, with all those planets revolving around it and dependent on it, can still ripen a bunch of grapes as if it had nothing else in the universe to do."

— Galileo Galilei



Infection of the young fruit is by far the most serious phase of black rot, causing the berries to shrivel and become worthless.

Powdery mildew appears as grayish-white patches on the upper surfaces of leaves, on stems and fruit. High incidence of powdery mildew can kill leaves and defoliate the vine. Grape quality suffers when leaves are unable to perform proper photosynthesis to fill the berries. A well-managed canopy and regular spraying will prevent powdery mildew. To potentially reduce the need for fungicide sprays, select grape cultivars that are the least susceptible to diseases. However, there are no grape cultivars that are totally disease resistant.

The Scourge of Grapes

Several species of insects and mites infest and feed on grape buds, leaves and fruit. The most damaging are those that attack the berries, because their feeding opens up the fruit to fungal disease that can cause rot of entire clusters. It is much easier to control damage caused by insects than damage caused by disease. With insects, you can evaluate the problem as it happens, and can determine whether damage is significant enough to warrant spraying.

Major insects and mites on grapes are Japanese beetle, grape flea beetle, European red mite and grape phylloxera. Grapes are one of the most preferred and susceptible hosts of the Japanese beetle. Since these beetles have a voracious appetite, populations need to be monitored to determine when insecticides need to be applied to protect grapes from serious feeding damage. Many general-use insecticides are effective in controlling the adult Japanese beetles, but spot treating of infestations is best. This avoids the elimination of beneficial insects that feed on mites and other pests in your vineyard.

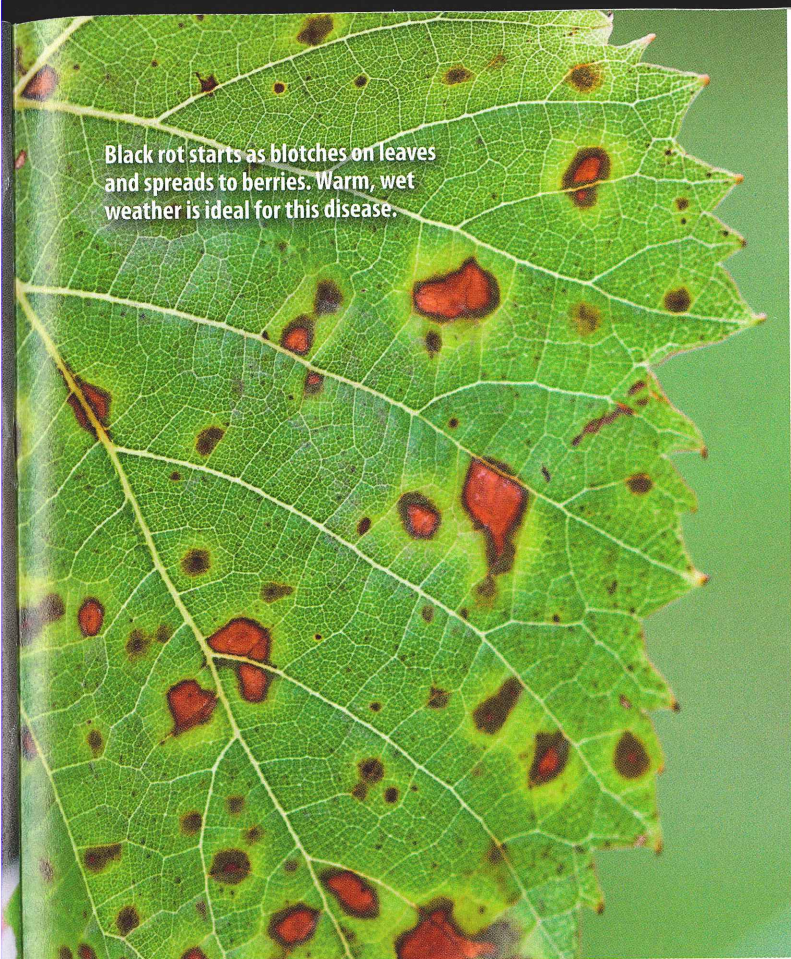
The most common sign of grape phylloxera, a tiny aphid-like insect, is the formation of tiny leaf galls. Low to moderate appearance of galls, although not visually appealing, rarely impacts the vigor of the vine. In general, management of grape phylloxera is not required.



Landscaping with Grapes

Although the fruit is commonly the main purpose for growing grapes, their vines can be an attractive element in any home landscape. It is easiest to train grapes along an existing fence or on a trellis. Using an arbor, arch or pergola for support may be more visually appealing, but it makes the necessary cultural duties of weeding, pruning, tying and spraying more difficult. If planted in lawn areas, note that grapes can be very sensitive to broadleaf herbicides containing 2, 4-D or dicamba, like those used for dandelion control. Spray drift from these compounds can cause leaf distortion and vine damage.

Black rot starts as blotches on leaves and spreads to berries. Warm, wet weather is ideal for this disease.



Pests that Try to Ruin the Harvest

In late summer and early fall as berries mature, both yellow jackets and multicolored Asian lady beetles can be troublesome. The yellow jacket diet changes from protein food sources to sugary ones, such as grapes. Their feeding can cause damage to the maturing grapes and a stinging hazard to grape harvesters. Insecticides are not an effective management option for controlling yellow jackets, and traps are limited in area effectiveness. Although multicolored Asian lady beetle adults are notorious fall home invaders, they also are attracted to maturing grapes, especially those injured by yellow jackets or birds. For home gardeners, selective removal of injured grapes before harvest will help reduce the attractiveness to both yellow jackets and beetles. Shake the clusters during harvest to dislodge the multicolored Asian lady beetles, keeping them from entering your home or tainting the favor of the wine or juice.

In some areas, birds can be a big problem. Their pecking of berries can easily start rot damage and attract nuisance pests. Scare devices and radios are helpful, but these can be annoying to neighbors. In some extreme cases, netting may be the only solution.

The selection of disease-tolerant cultivars, use of good sanitation practices, pruning of vines for good air flow and light, pest scouting, and an effective spray program are all part of a successful grape pest management program. It may take some diligence to grow grapes, but the results can be delicious. ♣

Douglas A. Spilker, Ph.D., is a consulting ornamental plant pathologist and entomologist, garden writer and lecturer. Dr. Doug can be reached at askdroug@gmail.com.

DRAMM

Cutting Tools



DRAMM

Professional Quality for Life

www.dramm.com

available at independent garden centers & online retailers