



Fruit: Good Cultural Practices

It is frustrating to go through the work and expense of planting a specific fruit variety, waiting several years for the plant to mature, and then discovering that insects and disease have destroyed the fruit before you can harvest it. Here are some suggestions:

Recognize Problems: The two biggest problems are insects and diseases. *Insecticides* destroy insects. *Fungicides* control diseases. Most insecticides will have no effect on a disease and vice versa. It is important to know what you are attempting to control. The goal of the successful fruit grower is not to kill every insect or eliminate every disease. Rather, the emphasis should be on keeping the various pests at an acceptable level while producing relatively “clean” fruit. With proper cultural practices, most brambles, blueberries, grapes, strawberries, cherries, and pears can be grown tolerably free of insects and diseases.

Adjust Your Cultural Practices: Cultural practices are what you do to create an ideal growing environment for your plants, without the aid of chemicals. To implement good cultural practices:

- Select insect- and disease-resistant varieties. Many newer varieties have been bred to be more resistant to diseases and insects.
- Develop a healthy, sturdy plant. Plants that are stressed for a variety of reasons (underwatering, weather extremes) become anemic and are more susceptible to diseases and insects.
- Make sure your plant is in the right location. Most fruit plants need full sun. Unless you have a minimum of 8 hours of direct sun on the plant during the summer months, consider another location.
- Determine the soil requirements. Heavy wet soils will always be a problem. Know the acid levels of the soil and the required level needed for the fruit you wish to grow. Unless you can *maintain* an acidic level of pH 4, forget about raising blueberries.
- Fertilize with the appropriate fertilizer, but don't overfeed. A soft, succulent plant can be just as susceptible to disease or insect attack as a plant starved for nutrients.
- Maintain proper moisture levels. Plants stressed for water are vulnerable to attack by insects such as spider mites. On the other hand, plants with wet “feet” can be affected by several root rot diseases. When watering, do not splash water on the foliage of the plants. This can create an environment that encourages mildew, as well as a means for diseases to spread.
- Keep the area mowed and weed free. Weeds and tall grasses harbor insects that eagerly jump onto your fruit crop.
- Maintain good sanitation to control disease. Prune out dead and diseased twigs and branches as soon as you detect them. When pruning, work when the twigs and foliage are dry, so that you are less likely to spread diseases to other plants or branches. Where disease is extensive, remove the entire plant to reduce the threat to healthy ones of the same type nearby. Don't allow plant debris to accumulate under and around the plants. This is an ideal place for insects and diseases to hide and winter over. Disinfect your pruning tools regularly.
- In early spring remove mummified fruit left on the tree and on the ground after harvest and either burn or deeply bury them. Immediately remove rotten fruit that appears in the trees early in the summer, since this is a source of infection for fruit at harvest time.
- After harvest, remove and destroy badly infected canes and old fruiting canes on brambles.

Monitor Your Crop: If you are using a minimal chemical application, you must monitor your crop on a weekly (or preferably daily) basis, looking for any indication of a potential problem: cupped foliage at the growing tip, wilted tips, discoloration, powdery appearance. Learn to know the difference between healthy plants and plants with problems. Learn environmental conditions that encourage specific problems; i.e., wet weather fosters powdery mildew. If a plant does appear to have a problem, identify the problem and the required cure or prevention. Your county extension agent can help. When using chemicals, follow label instructions carefully!

From Purdue Cooperative Extension Bulletin # ID-146.
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