

## Combating Pests in Fruit Trees

This article will address the treatment of fruit trees in combating pests. Pests can deform the fruit, prevent fruit from maturing, and even kill the tree. Treatment options vary by region in the United States and northeast Ohio has no exception of enemies that are out to destroy your fruit tree!

The term “pest” refers to multiple harmful effects not just bugs and insects that attack the fruit, but fungus as well. Northeast Ohio has a predominantly wet environment where fungus can thrive on leaves, cambium, and fruit. Pests also include many from the insect world, but not all insects are bad. Targeting harmful insects with the right treatment at the right time works to minimize the negative impact they cause and allows the pollinating insects to do a better job.

References to “pesticides” in this article refers to “fungicides” and “insecticides”; which are the focus of this article and the chemicals that I am most familiar with and work well in my orchard. Organic means of pest control are not included herein because I have actually found them to be only marginally effective.

Personal protective Equipment (PPE) is essential when using chemical sprayers. Users need to be aware of the wind direction and remain upwind at all times. Often, after stopping the flow from the sprayer, a continuous visible cloud of mist is observed. Standing in the wrong location can lead to exposure from that chemical cloud. Wearing well-sealed goggles that cover the mouth, nose and eyes is an excellent choice of protection. Coverage of a hat, long pants and sleeves is helpful to keep the skin and hair protected. When your spraying project is complete, I recommend a thorough washing of all clothing and a shower; especially if the chemical has had contact with exposed skin.

If using a backpack or handheld pump sprayer, always check the nozzle adjustment to ensure that the right droplet size for the wind condition is used; as well as the correct extent of reach. A fine mist is good for close-up spraying in relatively calm air. Conversely, a larger droplet is best for windier conditions or if a further reach is desirable-say to the top of a tree. When spraying leaves and fruit, cover them with a back-and-forth motion working from the top of the tree to the lower branches. Continuously moving around the tree to ensure coverage and keeping the wind at your back will be most effective. The best way to spray the fruit only, is to mist the chemical lightly and directly onto the fruit itself. When spraying for insects there is normally no need to spray the leaves also. Most of the harmful insects are found on the fruit so it is best to focus the chemical application directly onto those areas.

Fruit trees are targeted in the spring by many insects seeking locations to lay eggs or to provide food for the newly hatched eggs. One of the most dreaded insects to fruit trees is the Plum Curculio, which is a weevil that lays its eggs inside of the fruit of apples, cherries, pears, and occasionally peaches. The best time to spray for these insects is in the spring when the tree pedals have almost completely fallen off the blossoms and the bees have moved on. The chemical Imidan is very effective, but be sure to follow label directions when mixing. The female insect arrives soon after pedal-fall so do not delay in spraying. You may also find the occasional aphid, borer and/or mite, which also cause problems. After four to five (4-5) weeks of spraying Imidan, consider switching to Seven. Using these two (2) insecticides back-to-back should deliver a powerful blow to these annoying insects.

Spring is also a good time to spray for certain fungus' that can cause rust and other irregular symptoms on your fruit and leaves. Mixing Captan with the Imidan in the same sprayer will treat leaves and young fruit at the same time. Use of a sticker/spreader with all spraying sessions will mix these two (2) pesticides together and encourage the mixture to spread out evenly and adhere well on the leaf and fruit; which is beneficial during rainfall. It is essential to reapply every two (2) weeks in the spring or after a heavy rainfall.

Make sure to rinse out your sprayer after each use and well away from the house and any grassy areas where kids play. Carefully release the pressure in the sprayer, open it, and rinse it out at least three (3) times. This triple rinse is an industry standard to ensure that your equipment is completely clean. Leave a small amount of water in the sprayer from the last rinse and pressurize the sprayer. Then, spray the water out until it runs clear. This results in the wand and tip being clean as well. Empty the rest of the water. Store your expensive pesticides indoors to avoid freezing; which is a sure way to ruin them. However, be sure to place them away from the reach of children.

Diligently protect the investment made in your fruit trees by treating them as described and you will enjoy the luscious fruit for many years to come!

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