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Codling Moths Are There - Bad News for Vegetarians

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How does raw codling moth sound? Maybe surround the larva with a nice tart apple, or cook it into an apple crisp. Like it or not; realize it or not, we eat a lot of these little critters. Eating them is not a safety issue, as codling moths are neither poisonous nor parasitic to humans, just disgusting.

Codling moth is the most serious apple and pear pest in Utah, according to Jerry Goodspeed, Utah State University Extension horticulturist. Codling moth larvae are the pesky worms that enjoy apples and pears as much as we do. The codling moth is not picky about which variety to invade and eat. It enjoys all apples and pears equally.

The codling moth emerges from its pupa each spring as the weather begins to warm, he explains. Its emergence is based on temperature. Typically, it emerges about the time the trees are in full bloom. Although it makes its first appearance at this time, spraying when the trees are in bloom does not help control the worms. The emerging adult takes about three weeks to mature, mate and begin laying eggs.

“Adult moths spend their days hiding outing out on the bark and other protected areas,” Goodspeed says. “About dusk, when the temperatures reach about 50 degrees, they become active. One femalemoth can lay up to 100 eggs. They hatch in 6 -20 days after being deposited, depending upon the weather. Upon hatching, the young larvae crawl on the fruit until they find a place to enter. This is normally done through the calyx (or blossom) end or on the side of the fruit. Larvae can spend up to five weeks in the fruit before exiting to find a place to pupate and either overwinter or begin another generation.”

The best way to stop codling moths is to keep the larvae out of the fruit, he says. The most common way to do this is with insecticide applications to the tree and fruit before the larva enter the apple or pear. The timing of the first spray is critical. Too early and it is a waste of money and an improper use of chemicals. Too late and it does no good.

USU Extension, U.S. Department of Agriculture and many commercial fruit growers trap the codling moth and monitor its development in order to predict when to start control, he adds. Normally, spraying starts about three weeks after full bloom.
“We leave a recorded message on our answering machine here at the parkway indicating when to start control methods for apple and pear trees. Call us at 801-627-3270,” Goodspeed says.

Currently there are three or four insecticides labeled for codling moth control on apple and pear trees for homeowners to use, Goodspeed says. Imidan, Malathion and Diazinon are probably the most popular. When using these products, be certain to read and follow all label directions carefully. The first generation of codling moths are active for about a three-week period. This means the fruit needs to be protected for that length of time. After the first generation is through feeding, the next generation will not emerge and become active until the middle of July. No spraying needs to be done until this second generation becomes active. The second generation sometimes has a longer period of activity than the first. Protect the fruit through the middle to end of August.

Some cultural practices help reduce the number of codling moth in the area, he says. These include picking up any fruit that falls during the summer (June drop apples), keeping a clean orchard and yard and cleaning up the area every fall. Currently, there is no great organic control for codling moth in home orchards. That may change in the next few years as more research is conducted.

“I tried apple bags a few years ago,” Goodspeed says. “Apple bags, made of paper and plastic, are placed around each individual fruit just before the codling moth begins to lay eggs. The apple bags are a physical barrier protecting the fruit. They are removed a few weeks before harvest to give the fruit time to color and properly mature.

“My experience with the bags was not really productive. About two weeks after I put the bags on, a big canyon wind came into the area. I found the bags not only protect the apples, but make great sails and kites. I watched about 70 percent of my fruit fly off the tree, on its way toward Wendover. There were, however, no worms in the apples.”

For more information, contact your local USU County Extension office.

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