



Codling Moths

Codling moths or to be precise their larva account for more damage to apples and pears than any other pest. They over winter as full-grown larvae in cocoons under loose scales of bark and in soil or debris around the base of the tree. The larvae pupate inside their cocoons in early spring and emerge as adult moth's mid-March to early April. At this time, males will be seeking females. Once mated, females will begin to lay eggs on the branches and the bark of local apple trees. Though these females will only live about one month, they will lay 50-100 eggs on fruit, leaves, or spurs during this time. The eggs will develop and start to hatch in 2-4 weeks.

Once hatched, larva or "apple worms" will forage for fruit on which to feed. It is not uncommon for one apple to have several larvae inside making it bad and rotten. After completing development they leave the fruit and drop from the trees to search out new pupation sites and continue the life cycle in the soil or on debris under the tree; some crawl back up the tree to pupate in bark crevices. The rate of development will vary with temperature, proceeding more rapidly in warmer weather and climates. Depending on the climate, codling moth can have two, three, and sometimes four, generations per year.

Identification

Codling moth adults are about ½" to ¾" inch long with mottled grey wings that are held over their bodies. Their appearance blends well with most tree bark, making them difficult to detect. If you are trapping the adults, codling moths can be distinguished from other moths by the dark, coppery brown band at the tip of their wings. The larvae are white to light pink "worms" with a dark brown head.



Management

Codling moth can be very difficult to manage, especially if the population has been allowed to build up over a season or two. It is much easier to keep moth numbers low from the start than to suppress a well-established population. Where populations are high and many infested trees are nearby, insecticide applications may be necessary to bring populations down to low levels. However since most larva will be in the apple itself, direct spraying is not effective.

The most effective control is by, interrupting the mating process preventing the cycle from getting established. If you can prevent females from mating with males, you will effectively reduce the amount of egg laying which occurs on the tree. Codling moths don't fly well and are not designed to travel great distances and though they can move from one tree to another in any one orchard, once they leave that common ground they are pretty much lost. For this reason most pupa hatch close to where they fed as larva and will be attracted to the same trees over many generations.



Pheromone Codling Moth Trap

Timely placement of Codling Moth traps will help to cut down on the amount of egg laying which can occur. A trap fulfils two functions - it traps the male moth so preventing it mating with the female and it alerts you to the presence of codling moth in your orchard so you can take further precautions if you wish.

Typically sold as kits they provide a small tent-like structure to be fitted together; 2 sticky base-sheets to go inside, to be used in succession; and a small 'bottle' which contains the particular pheromone lure to fool male moths that a female is present. Males landing on the sticky sheet can't get away, so mating with a female is prevented; hence, no eggs to hatch in to larvae which burrow in to the apple.

Most seasons moths mate from May to June although this can extend into August. Place trap in the middle of May. In a garden a trap will monitor up to 5 trees within a range of 15 metres (50 feet) of the trap. Hang at head height on windward side of the tree, each pheromone lure is effective for 5 weeks

It does not guarantee to total kill off all males in a locality, but if they are around in your area, some will be trapped. In commercial growing, they are used to monitor moth population levels, and if they reach a certain level the grower will start spraying. The amateur grower uses them as a control. However if you are catching more than 15 moths a week in the trap over a 2-3 week period, you may need to treat the area with a suitable insecticide 7-10 days later