

Codling Moth Sampling Instructions

When and How Often to Sample:

Place traps in orchards when 100 degree days have accumulated or by first bloom. Check traps at least every other day (preferably daily) until biofix, and weekly until mid-September.

Materials Needed:

1. At least two delta or wing-style traps
2. Enough codling moth pheromone lures to last the season. Use regular lure in 30 or 60-day longevity for monitoring in non-mating disrupted (MD) orchards, or CM-DA combination lure in MD orchards. (Store unused lures in a freezer.)
3. Latex gloves to handle lures (optional)
4. At least 4 replacement sticky bottoms
5. Material to hang traps (if not included with trap)
6. Flagging to mark trees
7. Forceps or similar tool to remove moths after counting

Sampling Procedure:

1. Assemble trap and place pheromone lure inside using latex gloves or forceps, according to manufacturer's instructions. (To prevent contamination, do not use a tool you have used on a different type of lure.)
2. Hang a minimum of two traps per orchard, one near the edge, and one near the center. For orchards larger than 10 acres, hang one trap per 5 acres.
3. Hang traps in the upper third of the canopy, at least 6 - 7 feet high. Make sure the trap entrance is not blocked by foliage and that it is parallel to the prevailing wind direction.
4. Mark tree with flagging so that it can easily be found.
5. Check traps by pulling out the sticky liner and counting the moths present. Record the number on the sampling form.
6. Remove and discard moths with forceps or other tool. Place liner back in trap.
7. Change liner after 20 - 30 moths have been caught or when it has become filled with debris.
8. Change lure according to manufacturer's recommendation.

For more information, see the [Codling Moth fact sheet](#).

Treatment/Mgmt. Recommendations:

| Degree Days | % Adults Emerged | % Egg Hatch | Management Event |
|--------------------------|------------------------|-------------|--|
| 100 * | 0 | 0 | • Place traps in orchards |
| 150 - 200 | First moths expected | 0 | • Check traps every 1-2 days until biofix is determined |
| First Generation | | | |
| 0 (biofix)† | First consistent catch | 0 | • Reset degree days to 0 |
| 50 - 75 | 5 - 9 | 0 | • First eggs are laid • Apply insecticides that need to be present before egg-laying |
| 100 - 200 | 15 - 40 | 0 | • Early egg-laying period • Apply insecticides that target early egg-laying period |
| 220 - 250 | 45 - 50 | 1-3 | • Beginning of egg hatch • Apply insecticides that target newly hatched larvae |
| 340 - 640 | 67 - 98 | 12 - 80 | • Critical period for control, high rate of egg hatch • Important to keep fruit protected during this period |
| 920 | 100 | 99 | • End of egg hatch for 1st generation |
| Second Generation | | | |
| 1000 - 1050 | 5 - 8 | 0 | • First eggs of 2nd generation are laid • Apply insecticides to target early egg-laying |
| 1100 | 13 | 1 | • Beginning of egg hatch • Apply insecticides that target newly hatched larvae |
| 1320 - 1720 | 46 - 93 | 11 - 71 | • Critical period for control, high rate of egg hatch |
| 2100 | 100 | 99 | • End of egg hatch for 2nd generation |
| Third Generation | | | |
| 2160 | 1 | 15 | • Beginning of egg hatch • Keep fruit protected through September 15 • Check pre-harvest interval of material used to ensure that final spray is not too near harvest. |

Precautionary Statement: Utah State University Extension and its employees are not responsible for the use, misuse, or damage caused by application or misapplication of products or information mentioned in this document. All pesticides are labeled with ingredients, instructions, risks, and registered crops or other hosts. The pesticide applicator is legally responsible for proper use. USU makes no endorsement of the products listed herein.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions. Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities. This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Dept. of Ag., Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University.