

Protect the Sweet Corn!

(By: Katelyn Barthol, Marais des Cygnes Dist. Ag Agent)

I don't know about you but one of my favorite memories growing up was coming in from the hay field to some delicious, buttery, home-grown sweet corn! But I'm not the only one who loves to eat Sweet Corn. There are two pesky pests that love to devour our precious sweet corn: The Sweet Corn Earworm and Raccoons.

Sweet Corn Earworm

The Corn Earworm tends to be a problem every year on sweet corn in Kansas. The earworm moth lays eggs on developing silks at night. When the egg hatches, the larva crawls down the silk and into the ear. Feeding starts at the tip of the ear and works its way down. Though several earworms may hatch and attack a single ear, only one earworm is usually present at harvest due to the cannibalistic nature of the insect. Control is challenging as silks continue to grow over a period of time. This means that even if silks are treated, new silks will appear that haven't been protected. For insecticides to be effective, applications are needed every 2 to 3 days. Especially in early July when its peak flight time for the moths to appear.

There is a three-week period from silking to harvest, but there is only a two-week period from when the silks appear to when they begin to dry. Since moths prefer the juicy silks instead of dry silks, insecticides are only needed the first two weeks of silking.

What insecticides are most effective? We recommend Cyfluthrin (Baythroid; BioAdvanced Vegetable and Garden Insect Killer) or Spinosad (Captain Jack's Dead Bug Brew, Natural Guard Spinosad, Monterey Garden Insect Spray). Spinosad is an organic insecticide. If you are a Commercial grower, you do have some additional choices including Mustang Max, Hero, Radiant, and Belt.

Another organic choice is mineral oil or other light horticultural oils, although those maybe more time consuming. To treat the corn using oils, fill a medicine dropper $\frac{1}{2}$ to $\frac{3}{4}$ full of the oil, then apply inside the silk end of the corn's ear – where the tips of the silk begin to wilt and brown. The oil will kill any earworms present and prevent more earworms from entering the ear. However, you'll want to take note that applying the oil before the silk has begun to brown may lead to partially unfilled ears, as the oil will interfere with pollination.

Raccoons and Sweet Corn

I think it's safe to say that the official sweet corn inspector is the raccoon as they seem to harvest the sweet corn the day or night before we want to pick it. The only effective control measure we've seen have success is fencing; either electric or kennel fencing. Here are some suggestions for electric fencing:

- Two or more wires must be used. Place the first about 5 inches about the ground and the second 4 inches above the first wire. Raccoons must not be able to crawl under, go between or go over the wires without being shocked.
- Woven electric wire with strands of wire embedded is a little easier to use vs. the solid metal wire. The woven wire is also easier to bend around corners and to roll up when done for the year.
- Both the plug-in and battery-operated fence changers work. It just depends on the location of sweet corn on which one you use. If you have electricity close to the location

then use the plug-in fence charge. But if you don't have electricity close then the battery-powered fence charger will do.

- Control the weeds around the fence. Weeds can intercept the voltage if they touch a wire and allow raccoons to enter without getting the full effect of the hot wire.
- Check the wire occasionally to make sure you have voltage (a hot wire).

As mentioned earlier, kennel fencing can also be used. Make sure that the panels are tied together well enough that raccoons can't squeeze through corners. A covering over the top may be needed if the raccoons figure out how to climb the panels. Once raccoons get a taste of the corn, they are more difficult to discourage so, you will want to get your fencing done before the corn is close to ripe.

Hope this article has provided you with helpful information. If you have any questions or need more information, contact the Marais des Cygnes Extension District Paola (913-294-4306) or Mound City (913-795-2829).

-The preceding article was written with information provided by the K-State Research and Extension Horticulture Weekly Newsletter.