THE GRAPEVINE

June 27th, 2019 Larry Crouse Extension Horticulture Agent

PULLING ONIONS

Onions are ready to harvest when about half the plants have tops that have fallen over. This is a sign that the onions are mature and need to be pulled out of the ground. Bulbs may sunburn without the foliage to protect them. The secret to onions keeping well is to allow the tops to dry completely before storage. This may take 2 to 3 weeks. Large-necked onions take more time to dry than small-necked onions such as Bermuda types. Move onions to a shaded, well-ventilated area after harvest and spread them out. After tops are completely dry, remove the dry foliage and compost. Store the bulbs in a cool, dry location. Avoid storage in plastic bags because the lack of air circulation will shorten storage life. Use an open, mesh bag instead.

When to Pick Blackberries

The exact time to harvest blackberries varies by cultivar, with thorny blackberries normally ripening earlier than thornless types. But there are some general guidelines to keep in mind when harvesting blackberries. Do not pick blackberries too early or berry size and flavor will be sacrificed. Two major characteristics determining maturity for harvest are fruit color and ease of separation. Blackberries usually develop a dull, black color with plump, juicy fruitlets as they ripen. The berries soften and produce the characteristic blackberry flavor. Full color often develops before the berries separate easily. Pick the berries by gently lifting with the thumb and fingers. The receptacle, or center part of the fruit, remains in the fruit when blackberries are harvested, unlike raspberries, which leave the receptacle on the bush. Take care not to crush the berries or expose them to the hot sun. When possible, avoid picking berries when they are wet. They'll likely need picking every second or third day. Cool the berries immediately after harvest to extend shelf life. Keep refrigerated under high relative humidity and use within three to five days.

Raccoons and Sweet Corn

It seems the official sweet corn inspector should be the raccoon as they seem to harvest the sweet corn the day before it is to be picked. The only effective control measure I know of are electric fencing and a very good guard dog. Here is one design for electric fencing that has been effective for us here in El Dorado.

- Two or more wires must be used. Place the first about 5 inches above the ground and the second 4 inches above the first (or 9 inches above ground). Raccoons must not be able to crawl under, go between or go over the wires without being shocked.

- Fence posts used for electric fences work well for this application (go figure), as do the insulators used to support the electric wire.

- It is much easier to use the woven electric wire with strands of wire embedded than to use a solid metal wire. The woven wire is easier to bend around corners and to roll up when done for the year.

- Though both the plug-in and battery operated fencers work, the battery operated types allow more versatility in where corn is grown. One set of batteries is usually sufficient for the season.

- Start the charger before the corn is close to being ripe. Once raccoons get a taste of the corn, they are more difficult to discourage.

- Control weeds near the wire. Weeds can intercept the voltage if they touch a wire and allow raccoons entry beyond the weed.

- Check the wire occasionally to make sure you have current. This can be done easily (but unpleasantly) by touching the wire. There are also tools that will measure the voltage available for sale. They are worth the money.

Squash Vine Borer

If you have squash or related plants that suddenly wilt and die, you may have squash vine borer. This insect will bore into the stems of squash, zucchini, pumpkins and gourds. Hubbard squash are a favorite, and butternuts are less likely to be attacked than other squash. Cucumbers and melons are usually not a target, although both can be affected by a disease that causes similar symptoms, known as bacterial wilt. The adult of this insect is a clearwinged moth that resembles a wasp. The forewings are a dark metallic green but the rear wings are clear. The abdomen is orange with black spots. The larva is cream-colored and rather wrinkled. Adults emerge in the spring and lay eggs on or near susceptible plants. Eggs are deposited singly on the underside of the vines and are often concentrated at the base of the plants. Larva bore into the plant and feed for about a month as they move toward the base. Mature larva will exit the plant, burrow into the soil and pupate where they remain until the next year. Each plant can have numerous borers. If you suspect squash vine borer, split the stem of a collapsed plant near where it enters the ground. Infested plants will be hollowed out and mushy and may contain borers. Unfortunately, there isn't much you can do at this late stage. Control measures should center on prevention. Suggested preventative controls would include crushing the dull red eggs before they hatch, excavating larvae from stems before they cause much damage or using insecticide applications. Applications should begin when the vines begin to run (too late for that) and reapplied every seven to 10 days for three to five weeks. Direct the spray at the crown of the plant and the base of runners. Chemicals used for borer control in gardens are permethrin (Eight Vegetable, Fruit & Flower Concentrate; Lawn, Garden, Pet and Livestock Insect Control; Lawn & Garden Insect Killer) or bifenthrin (Hi-Yield Bug Blaster II, Bug-B-Gon Insect Killer for Lawns & Gardens) and best applied as a sprays. Continue on a 7 to 10-day reapplication schedule for 3 to 5 weeks. If plants wilt, look for the presence of holes and ooze. However, in extreme heat, these plants will temporarily wilt in the afternoon even if undamaged by this insect.

Sweet Corn Earworm

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 down. Though several earworms may hatch and attack a single ear, only one 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 silk will appear that hasn't been protected. Applications every 2 to 3 days are needed for insecticides to be effective, especially in early July when peak flight of these moths usually 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 juicy silks and shun those that have started to dry, insecticides are only needed the first two weeks of silking. Homeowners can use 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 product. Commercial growers have additional choices including zeta-cypermethrin (Mustang Max), bifenthrin+zeta-cypermethrin (Hero), spinetoram (Radiant) and flubendiamide (Belt). Though more time consuming, mineral or other light horticultural oils may also be used as an organic control. The oil is placed inside the silk end of the ear with a medicine dropper $(\frac{1}{2}$ to $\frac{3}{4}$ of a dropper) when the tips of the silks begin to wilt and turn brown. This will coat the earworms already present and likely suffocate them and earworms that enter the ear after the mineral oil is applied will also be controlled. Applying the oil before the silk has begun to brown may interfere with pollination, leading to incompletely filled ears.

Larry E. Crouse Butler County Horticulture Agent K-State Research & Extension 206 N Griffith, Suite A El Dorado, KS 67042 (316)321-9660 Icrouse@ksu.edu