

BLOSSOM-END ROT

Though we normally see this condition most commonly on tomatoes as evidenced by a sunken, brown, leathery patch on the bottom of the fruit, we can also see it on summer squash. Not a disease, this condition is caused by a lack of calcium in the developing fruit. It is often assumed that this means there is a corresponding lack of calcium in the soil. This is not necessarily the case, especially in Kansas. Most Kansas soils have sufficient levels of calcium. So what causes blossom-end rot? Actually, there are a number of possible causes. Let's look at some of them.

- This year, inconsistent amounts of water may be a factor. This can be due to watering practices or may be due to heavy rains followed by dry periods. Try to keep soil moist but not waterlogged. Mulching can help by moderating moisture levels over time.

- Vegetable tops will sometimes outgrow the root system during cooler spring weather. This is especially true of tomatoes. As long as it is cool, the root system can keep up. When it turns hot and dry, the plant has a problem, and water —with the calcium it carries — goes to the leaves and the fruit is bypassed. The plant responds with new root growth and the condition corrects itself after a couple of weeks.

- Heavy fertilization, especially with ammonium forms of nitrogen, can encourage this condition. Heavy fertilization encourages more top than root growth and the ammonium form of nitrogen competes with calcium for uptake.

- Anything that disturbs roots such as hoeing too deeply can encourage blossom-end rot. Mulching helps because it keeps the soil surface cooler and therefore a better environment for root growth.

There are some years you do everything right and the condition still shows up due to the weather. In such cases, remember that blossom-end rot is a temporary condition, and plants should come out of it in a couple of weeks. You may want to pick off affected fruit to encourage new fruit formation. Soils with adequate calcium will not benefit from adding additional calcium. If your soil is deficient in this nutrient, add 1 pound gypsum per 100 square feet. Gypsum is calcium sulfate and will not affect pH. Though calcium raises pH, sulfate lowers it and the two cancel each other out. Even if not needed, gypsum will not hurt anything. We have also found that spraying plants with calcium doesn't work. The fruit's waxy surface doesn't allow absorption of the material and calcium does not move from the leaves to the fruit.

How to Pick a Ripe Melon

Telling when a melon is ready to be harvested can be a challenge, or it may be quite easy. It all depends on the type of melon. Let's start with the easy one. Muskmelons are one of those crops that tell you when they are ready to be picked. This can help you not only harvest melons at the correct time but also choose good melons when shopping. As a melon ripens, a layer of cells around the stem softens so the melon detaches easily from the vine. This is called "slipping" and will leave a dish-shaped scar at the point of stem attachment. When harvesting melons, put a little pressure where the vine attaches to the fruit. If ripe, it will release or "slip." When choosing a melon from those that have already been harvested, look for a clean, dish-shaped scar. Also, ripe melons have a pleasant, musky aroma at room temperature (not refrigerated).

Watermelons can be more difficult and growers often use several techniques to tell when to harvest.

1. Look for the tendril that attaches at the same point as the melon to dry and turn brown. On some varieties this will need to be completely dried before the watermelon is ripe. On others it will only need to be in the process of turning brown.

2. The surface of a ripening melon develops a surface roughness (sometimes called "sugar bumps") near the base of the fruit.

3. Ripe watermelons normally develop a yellow color on the "ground spot" when ripe. This is the area of the melon that contacts the ground.

Honeydew melons are the most difficult to tell when they are ripe because they do not "slip" like muskmelons. Actually, there is one variety that does slip called Earlidew, but it is the exception to the rule. Ripe honeydew melons become soft on the flower end of the fruit.

The "flower end" is the end opposite where the stem attaches. Also, honeydews should change to a light or yellowish color when ripe, but this varies with variety.