



Think of summer vegetables, and sweet corn usually comes to mind. It is an excellent vegetable for freezing or canning, extending this summer treat for year-round use. Sweet corn is not well-adapted for a small garden area and produces poorly if planted too close. Consider whether you want to invest the space to grow sweet corn if your garden area is limited.

Varieties

Many new hybrid varieties are easy to grow and yield well. Sweet corn varieties differ in growing days to maturity. For a continuous supply of corn, consider an early maturing (65–75 day) variety, with additional plantings of mid-season (75–85 day) varieties for later crops. Include some of each in the first planting. Many early varieties have smaller ears, lower yields, and less vigorous plants than later-maturing ones. Yellow varieties to try include: Gold Cup, Merit, Jubilee, Miracle, Bodacious, Incredible, Sundance, Sweet Time and Kandy Korn. Also, try the white kernel varieties: Argent, Silver Queen, Silver Streak, Sterling Silver, Seneca, Snow, How Sweet It Is, White Lightning, or one of the bi-color varieties with yellow and white kernels on the same ear: Ambrosia, Delectable, Honey and Cream, Candy Store, or Bi-color.

Disease Tolerance

Sweet corn is susceptible to several diseases. Newer varieties are resistant to maize dwarf-mosaic, a virus that causes severe plant stunting; bacterial wilt, which causes stunting and discoloration; and smut, which leads to the formation of large gray galls on ears and tassels.

Sweetness

New sweet corn varieties contain higher levels of sugar that is retained longer, and include the following types commonly available to home gardeners.

Standard (su): This is the normal sweet corn that contains a “sugary gene” (su). Isolate standard sweet corn from field corn, popcorn, supersweets, and ornamental corn. To do this, do not plant different types within 50–100 feet of each other or seed to mature within 12 to 14 days. Plant corn when the soil temperature reaches at least 55° F. Recommended varieties include Honey and Cream, Silver Queen, Sterling Silver, Jubilee, or Merit.

Supersweet (sh2): Supersweets provide up to three times the sweetness of standard sweet corns and maintain sweetness longer after harvest due to the sh2 gene but have tougher kernels and a lack of corn flavor. Supersweets should be isolated from other sweet corn types. Wait to plant until the soil temperature reaches 65° F as they are

highly sensitive to cooler soils. Try Candy Store, Florida Staysweet, Sugar Loaf, Sweet Time, or Sweetie.

Sugar Enhanced (se): This is probably the most popular type of sweet corn because of its tender kernels, good flavor, and lower sensitivity to cool soils. A soil temperature of 60° F is adequate for planting. Sugar-enhanced varieties maintain postharvest sweetness longer than standard types but not as long as the supersweets. The sweetness from the sugar-enhanced types is due to the se gene. If both parents were se types, the variety is known as an se+ or se se. If only one parent was an se type and the other an su type, then the variety is listed as se. These varieties do not need to be isolated other than from the supersweets. Suggestions include Bodacious, Ambrosia, Sweet Temptation, Delectable, and Miracle.

Triplesweet (synergistic): The newest sweet corns blend the su, se, and supersweet types in an effort to combine the best characteristics of each. Plant these varieties when the soil temperature reaches 65° F. It is too soon to make firm recommendations, but you may want to try Applause, Providence, Serendipity, or Avalon.

Soils and Fertilizer

Sweet corn thrives in deep, rich soils, but any well-drained garden soil should produce sweet corn. Sandy soils are better for early crops because they warm up faster in the spring. Corn responds to high levels of fertilizer. A base application should be provided before planting. Apply fertilizer to the soil before tilling and work it in. If you do not have soil test recommendations, use 2 to 4 cups of 10-10-10 or 12-12-12 fertilizer per 100 square feet. For more on soil testing, contact your local Extension office.

After planting, corn usually benefits from a side-dressing of fertilizer placed along the row as the crop is growing. Use 2 tablespoons of a high-nitrogen fertilizer such as ammonium sulfate (21-0-0) per 10 feet of row. Apply when corn is 8 to 12 inches tall and again just before tasseling in sandy soils or during wet years. Fertilizer can be washed from the soil under these conditions.

Planting

Sweet corn is a warm-season vegetable. The earliest you should plant is one week before the average frost date in your area, paying attention to the soil temperature as noted above. Mid-April to early May is usually best in most of eastern and central Kansas. For successive plantings, earlier planted corn will be slower to emerge, so wait until one planting is 1 to 2 inches tall before planting the next.

Plant kernels 1 to 2 inches deep and 8 to 12 inches apart in rows 30 to 40 inches wide. Do not replant skips as plants that emerge late do not produce well if shaded by neighboring plants. Replant only if many skips occur. A yield of about 30 ears for every 25 feet of row can be expected. Three to four rows 25 feet long provide enough corn for the average family.

Pollination

Sweet corn is a wind-pollinated crop. Wind transfers pollen from the tassel at the top of the plant to the small ears developing at the base of leaves on the stalk. Plant several short rows or blocks to ensure good pollination and avoid cobs with missing kernels. Popcorn or field corn planted nearby affects the quality of sweet corn. A separation distance of 50 to 100 feet is usually enough to prevent cross-pollination. If the corn does not pollinate at the same time, there is no risk of cross-pollination.

Cultivation and Watering

Weeds that compete with corn should be controlled. Corn is easy to hoe or cultivate, and several herbicides are available for use in larger plantings. Corn usually needs 1 to 1½ inches of water per week to produce a heavy yield. If rainfall is less than that, water to soak the soil, checking to make sure water has penetrated 12 to 18 inches.

Harvest

Sweet corn should be harvested when kernel juice appears milky when punctured with your thumbnail. The milk stage lasts only a short time, especially in hot weather, so check the planting regularly. Immature corn produces a watery juice, while overly mature corn produces a doughy, tough kernel. When silks dry to a deep chocolate brown, feel the ends of the ears for fullness, which indicates maturity. To remove ears from the stalk, twist the ear and bend it down sharply, trying not to damage the stalk. Use sweet corn immediately as sugars diminish rapidly. Without proper care, most varieties lose half their sugar in 10 to 12 hours. Corn should be picked in the early morning and refrigerated as it is harvested or processed immediately. Corn can be cooled quickly in cold water if harvested during the heat of the day.

Diseases

Several diseases can reduce sweet corn yields, with smut being one of the most common. Varieties differ

in susceptibility and little can be done to control the disease once it develops. Most newer hybrid varieties are smut resistant. Varieties resistant to maize-dwarf-mosaic virus, Stewart's bacterial wilt, and other diseases are also available. Seed catalogs often list disease resistance of varieties, so be sure to look for this information.

Insects

The corn earworm is probably the most destructive corn pest. It develops from moths that lay eggs on the silks of developing ears. The eggs hatch into larvae that then move to the tips of ears to feed on the kernels. Insecticides or mineral oil can be applied to the ears to lessen damage, but little can be done once worms have moved into the husks. Reapply insecticide every 2 to 3 days from tasseling until silks begin to dry up, or over about a two-week period.

Wildlife Protection

The official sweet corn inspector should be the raccoon as this animal seems to harvest sweet corn the day before it is to be picked. Electric or kennel fencing provides control.

Electric Fencing

Using fence posts with insulators, install two or more wires with the first about 5 inches above the ground and the second 4 inches above the first. Raccoons should not be able to crawl under, between, or over the wires without being shocked. Woven electrical wire with strands of wire embedded works better than solid metal wire. It is easier to bend around corners and to roll up at the end of the year.

You can use a plug-in fencer, but a battery-operated model can be moved anywhere corn is grown. One set of batteries should last the season. Start the charger before the corn is close to being ripe. Once raccoons get a taste of the corn, they are difficult to discourage. Control weeds so they do not touch the fence and intercept the voltage, allowing for raccoon entry beyond the weeds. Occasionally, check wires for current, using a tool to measure voltage.

Kennel Fencing

Kennel fencing will work for small plantings, as long as panels are tied together well enough that raccoons can't squeeze through the corners. If raccoons figure out how to climb the panels, cover the top with welded garden fence or a similar type of material.

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