Sweet Corn

When it is grown and handled properly, sweet corn is almost dessert-like in its flavor. Sweet corn is usually grown by gardeners with larger gardens; however, new cultivars are on the market, suited for container production. Nothing beats the taste of fresh sweet corn harvested from the garden. For best flavor, pick and eat the same day. Keep corn cool, in an ice chest or refrigerator between picking and eating, to slow down respiration. If the ears respire too much, the flavor is lost.

Varieties

Sweet corn varieties have differing maturity dates and kernel colors. The list below provides a few that grow well in Louisiana.

- White color, mid-season: Argent, Ice Queen, and Summer Sweet 8101R.
- White color, late-season: Silver Queen.
- Yellow color, early-season: Bodacious and Seneca Horizon.
- Yellow color, mid-season: Honey Select, Incredible, Merit, Prime Plus and Miracle.
- Bicolor, early-season: Temptation, Precious Gem and Honey and Pearl.
- Bicolor, mid-season: Ambrosia, Cameo, Mirai 301BC and Sweet G90.

Cultural Practices

Sweet corn quality is usually associated with taste (the sweeter the better) and the milkiness of the kernels. In Louisiana, the sugar content of sweet corn remains for only a short time because high temperatures hasten the conversion of sugar to starch. Therefore, it is best to plant sweet corn a few weeks before the last frost date. For example, in north Louisiana, sweet corn is typically planted from early March to mid-May, and in south Louisiana, sweet corn is usually planted mid-February to early-May. This helps gardeners harvest ears before the temperature gets extremely high and before insect pressure becomes thick.

If the soil is too cold, however, (below 60° F), the seed will be slow to germinate and may even rot. Sweet corn is usually direct-seeded. In gardens where mice and birds repeatedly eat the seed before it germinates, however, some gardeners will transplant sweet corn.

Choose a planting location that gets full sun. Most soil types are suitable for sweet corn production as long as they are well-drained. Corn is a heavy feeder, and it responds well to fertilizer on most soils. In the garden, apply 1.5 pounds (3 cups) of a complete fertilizer like 8-8-8 or its equivalent per 20 feet of row. Do this several days before planting. If the fertilizer is placed in a band, it should be well below and off to the side of the seed. Make additional sidedressings of nitrogen when the corn is 12 inches and again at 24 inches tall. Use 1/2 pound of calcium nitrate or 1 pound (2 cups) of 8-8-8 each time for every 20 feet of row.

The male part of a corn plant is the tassels and the female part is the silks. Pollination occurs when the pollen falls from the tassels and touches the silks. The pollen travels down the silk and forms a single kernel of corn. Irrigation or rain is critical at silking to have proper kernel formation.

Sweet corn is wind-pollinated and should be planted in blocks of at least four rows in the garden. If container-grown, multiple containers will be needed and placed close together on a porch. Poor pollination leads to very poor corn ears. This is why the LSU AgCenter suggests planting blocks even if they are very short rows rather than one long row. Imagine if all the wind only blew in one direction.

Plant the seed about 1 inch deep, and thin plants to about 10 to 12 inches apart in rows. Rows should be at least 24 inches apart.
Remember: Moisture is essential for good sweet corn production. If less than 1 inch of rain falls during the week, the corn should be irrigated, especially at silking and when temperatures are high and growth is rapid. It is not necessary to remove the suckers at the base of the plants. In fact, it can cause more harm than good.

**Harvest and Use**

The best time to harvest sweet corn is in early morning while the temperature is low. To determine when sweet corn is ready to harvest, first check the silks to see if they have begun to dry and turn brown, then feel the ear. It should feel firm and full. Puncture a few kernels on the ears with your thumbnail to make sure they are plump and milky.

When sweet corn is at its highest quality, the juice from the kernels will be milky white and runny. If you planted super sweet varieties, this kernel juice will remain clear. The corn is still ready to eat. Corn is over mature and starchy when the kernels are large and chewy, and the sap inside the kernels is dough-like. Corn usually matures 18 to 24 days after the tassels appear or 15 to 20 days after the first silks appear. Watch the corn closely, because the quality changes fast with the normal sweet varieties. Refrigerate or cook immediately after harvesting.

**Pest Control**

**Weeds**

Cultivation should be shallow to avoid damage to the corn roots. Many gardeners use atrazine to reduce weeds in corn. But take a huge precaution when doing so, because the herbicide stays active in the soil for a very long time and can injure the next veggie crop you plant after corn.

**Insects**

The most common pests of corn are the corn earworm, chinch bugs, stink bugs, aphids and birds. To control the corn earworm, apply carbaryl to silks every 2-3 days after silks appear. Stink bugs and chinch bugs can be hard to control, but carbaryl and pyrethroids typically give satisfactory control. Malathion is effective on aphids, and spinosad is effective on earworms. Bifenthrin will also control a large variety of corn insect pests.

To help control the damage from birds, cover the ear with a paper bag after the silks have been pollinated or have first begun to dry. Varieties with a good husk cover can help to discourage birds. Planting early helps to miss much of the insect pressure. Avoid summer and fall corn plantings because of pest pressure.

**Diseases**

Goss’s wilt is a bacterial disease, which was confirmed in Louisiana in 2015. Symptoms include large, light tan-colored, water-soaked discrete lesions on both surfaces of the leaves and the stalks. Black freckles can be found scattered throughout the lesions, but highly concentrated on the expanding edges. Discarding infected plant material and crop debris, preferably by burning, is critical in managing Goss’s wilt.

Damping-off of seedlings is caused by soilborne fungi and fungus-like microorganisms. Disease becomes serious in cool, wet soils. Disease results in death of the seedlings. Good cultural practices include planting healthy, disease-free seeds in well-drained fertile soils, avoiding previous spots with disease history and following good irrigation practices to help reduce disease infection. Captan can be used for seed-rot treatment.

Other foliar diseases that can occur in home gardens include leaf blight, downy mildew, rusts and smuts. Choose resistant varieties and bury crop residues. Fungicides for foliage protection include chlorothalonil, fixed copper, mancozeb, neem oil and propiconazole.

**Authors**

Kathryn Fontenot, Assistant Professor (School of Plant, Environmental and Soil Sciences)
Mary Sexton, Extension Associate (School of Plant, Environmental and Soil Sciences)
Raj Singh, Assistant Professor (Department of Plant Pathology and Crop Physiology)
Sebe Brown, Assistant Area Agent (NE Region)
Ron Strahan, Associate Professor (School of Plant, Environmental and Soil Sciences)
Thomas J. Koske (Retired)