

# Corn Growing Guide

*Zea mays*

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**Seed Savers:** Corn is wind pollinated. Separate varieties by 600' for home use, or 1/2 to 1 mile for absolute purity. Save at least 500 seeds from at least 10% of the plants to maintain vigor and genetic diversity of the variety.

## Sweet Corn

**How to Grow:** Sweet corn seed requires a soil temperature of 65 degrees F to germinate well, otherwise seed may rot easily due to its high sugar content. Don't rush your first planting; wait until after the first average frost-free date. An old saying is to plant corn when oak leaves are the size of squirrel ears. Succession plantings can then be made 2-3 weeks apart. Sow seed 1 in. deep in rows 36 in. apart and thin to 6-12 in. apart within rows. Later, taller varieties need wider spacing than early, shorter varieties. For good pollination and well-filled ears, plant in blocks at least 5 rows wide.

**Harvest:** After silk has dried and turned brown, puncture the skin of a kernel with your thumbnail. If a sweet, milky juice is released (milk stage) the corn is ready for harvest. Prepare corn for eating quickly after harvest. At room temperature, harvested ears lose 50% of their sugar in 24 hours.

**Pests:** Corn earworm can be suffocated by inserting a medicine dropper half filled with mineral oil into the silk after it has wilted and browned at the tip (4-5 days after silk appears). Corn borers can be prevented by composting corn refuse and stubble as soon as possible.

**Disease:** Corn smut forms large puffy, gray, irregular masses of fungus during dry hot weather. Corn smut is a delicacy in Mexico, but if you want corn rather than corn smut, remove and destroy the fungus; otherwise the black spores will re-infest your corn for several years.

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## Which is better: open-pollinated or hybrid sweet corn?

The answer depends on what is important to you. Old-fashioned, open-pollinated corn is not as uniform in size and maturity as hybrid corn. For the home gardener, this means the convenience of an extended harvest from one planting. Hybrid corn tends to mature all at once, an advantage to some farmers. The new supersweet and extrasweet hybrid corns are sugary sweet and hold their sweetness in storage, but they may have weak seedling vigor, are more susceptible to ear damage by insects, and the seeds rot readily in cool soil. Standard, open-pollinated sweet corn is still preferred by many

gardeners because of its old fashioned corn flavor. When pigs, chickens, horses, and cows are given a choice between open-pollinated and hybrid corn the animals invariably prefer the old open-pollinated varieties, possibly because of the higher protein content. For good pollination and ear development, open-pollinated corn should be planted in blocks at least 5-6 rows wide, whereas hybrid corn should be planted in blocks at least 4 rows wide. Note: If open-pollinated corn is new to you we suggest planting less than 1/4 lb. until you are familiar with its characteristics.

## **Dent, Flint & Flour Corn (Grain corn for cornmeal, polenta, grits & roasting)**

**How to Grow:** Plant these grain (field) when the soil is at least 55 degrees, or when dogwood leaves are the size of squirrel's ears. Space plants at 12-24," depending on variety height, in 36" rows. Harvest for roasting when ears have just reached full size, or for dry corn when husks have fully yellowed. In other respects, follow sweet corn culture as described above. When two maturity dates are given, the first is for roasting, the second for drying and grinding.

**Dent, Flint, and Flour types:** These three broad categories of field (grain) corn differ in climactic adaptation, kernel composition, kernel shape, and best culinary uses. **Flint corns** tend to do well in wet and cold climates, they are especially common in the Northeast. They have pointed kernels in which the hard part of the kernel predominates, and they are especially good for cooking methods that involve boiling, such as polenta and johnnycakes. **Flour corns** are most common in the Southwest, but have been traditionally grown in many areas. Flour corns have rounded kernels in which the soft part of the kernel predominates, and can be ground into flour fine enough to use like wheat flour. They are especially good for baking. **Dent corns** include most of the heirloom corns from the Southeast and Midwest, and as well as most modern hybrid field corns, though these hybrids have much less flavor. A dent corn kernel typically has a flinty ring around a floury center; as the kernel dries the center contracts, creating a dent in the top of the kernel. Heirloom dent corns make great cornbread, hominy, and roasting ears. All our field corns are dents unless otherwise stated. Some old-timers actually prefer eating the starchy dent corns in the same manner as sweet corns.

**Disease Resistance:** The tight husks of many dent corns gives them improved insect resistance.

**Cooking:** To roast corn preheat oven to 375-400 degrees F, or prepare a good bed of coals. Husk young ears, remove silk, replace husk, fill husk with water, drain, twist husk closed, and bake about 25 minutes. Alternately: husk completely, rub with butter, salt and pepper, foil wrap, and roast.

## **Popcorn**

Harvest and dry popcorn down as you would grinding corn. Thorough drying is important in getting kernels that will pop. Popcorns are resistant to ear damage by birds. In other respects, grow like sweet corn, referring to instructions at the top of this page.

We tend to think of popcorns for popping only, but some Native Americans also grind popcorn to make bread.

## **Gourdseed Corn**

Gourdseed corns are one of our oldest corns, and were commonly grown in southern Virginia. The plants of gourdseed corn are heavily stalked and bear ears having a large number of rows of thin, deep kernels. These valuable corns originated from Indian gourdseed corn dating back to at least 1700. They were used for roasting ears, and for feed and flour. At maturity the kernels of some varieties are easily shelled by a light touch to the ear. Gourdseed corns were grown until about 1940, before hybrids became popular. In 1889, gourdseed corn won the Great Corn Contest sponsored by the American Agriculturist, yielding 255 bushels per acre. Because of interest in hybrid corn, gourdseed corns were virtually extinct by the 1960s, but recently they have been found to be valuable because of their resistance to some diseases, notably southern leaf blight. Dr. Brown, former president of Pioneer Hi-Bred rediscovered gourdseed corn on a Texas farm, after a year-long search for this disease-resistant variety.