Garden Mastery Tips

from Clark County Master Gardeners

Popcorn

Popcorn kernels
In the pot
Jump and dance
When they get hot.

And when they've Carried on enough, They do a flip And turn to fluff!

Cathy Drinkwater Better

Corn is grown on every continent in the world, except Antarctica. There are three types of corn grown: flint, dent and sweet. Flint corn has a hard kernel outer shell that protects a soft center. Colorful Indian corn and popcorn are two types of flint corn. Dent corn is often called "field corn" and is used as feed for livestock, as well as in industrial products. It can be either white or yellow. Sweet corn is usually what the home gardener grows. It is eaten on the cob, canned or frozen. Sweet corn contains more sugar than other types of corn.

History

Corn as we know it today would not exist if it weren't for the humans that cultivated and developed it. This plant does not exist on its own in the wild. It is believed that popcorn was grown by people in central Mexico some 7000 years ago. It originally started from a plant quite different from today's corn: a wild grass

called Teosinte that had very small kernels not placed close together like the husked ear of our modern corn. South American Indians cultivated corn, which they called maize, and depended upon this crop for much of their food.

Uses

There are more than 3,500 different uses for corn products and more uses are being found each day. Many of the new products, like paints, are more environmentally friendly than their petroleum counterparts. Not a lot needs to go to waste when growing corn. Corn starch is used in the production of aspirin, antibiotics, processed meats, puddings, detergents and adhesives to mention a few. Corn syrup is popular in fruit drinks, chewing gum, baby food and pastries. Corn husks are used for wrapping tamales, making corn husk dolls and as fiber reinforcement in the manufacture of particle board. And corn cobs are used as a biomass fuel source.

Popcorn Secret

A popcorn kernel is actually a seed with a tiny plant embryo inside. The embryo is surrounded by soft starchy material that is used as energy to feed the growing plant. This material holds some water, and when the kernel is heated to 400 degrees F, the water turns to steam. The pressure from the steam is what causes the kernel to explode and burst out at about 40 times its original size. The popped appearance may resemble either a butterfly or a mushroom. The butterfly type is preferred for snacking; the mushroom type for confectionery products.

Popcorn Varieties

Popcorn comes in white, yellow, blue, red and black kernel types, but white and yellow are the ones of commercial importance. There are three kernel sizes; small, medium and large, with the small kernel type being

the most tender and preferable for home use. Since popcorn is a long season plant, we here in the Pacific Northwest will have better results growing a short season variety. Those would include 'Early Pink' at 85 days, 'Calico' at 90-105, 'Shaman's Blue' at 100, 'Dakota Black' at 100 and 'Strawberry' at 100 days to maturity.

Nutritional Value

Popcorn, in and of itself, has no artificial additives, preservatives, colors or flavorings. It is high in carbohydrates and low in sugar, which makes it an ideal snack food. It can satisfy the appetite without spoiling it. It is fat-free, contains fiber and is low in calories.

Air-popped, 30 calories per cup

Oil-popped, 55 calories per cup

Buttered, 90 to 120 calories per cup

Caramel-coated, 151 calories per cup

For popcorn recipes see:

That's My Home: Popcorn Recipes You Can Make in Your Own Kitchen

Growing Popcorn

Popcorn is grown like sweet corn in the field. The plants look similar, with popcorn growing taller and taking longer to mature. Proper and timely planting is important due to its slow germination and seedling growth. Popcorn is generally planted between Mothers' Day and the 24th of May, allowing time to mature before the first frost. A sunny site, a pH of 6.0, and soil that drains easily are important factors. Planting in short blocks versus one long row insures better wind pollination. Thin seedlings to stand 10-12 inches apart and space rows three feet apart. Be sure to plant popcorn well away from sweet corn, a minimum of 500 feet, or cross-pollination could ruin both crops. Apply 12-12-12 fertilizer at planting time, when the stalks are knee high and again when tassels appear. Water is particularly important from the time the silks appear until the kernels develop.

Harvesting

To be ready for harvest, popcorn plants must dry out and turn brown. Look for this to happen in early October. The ears are likely to mold if the moisture level is above 25 percent. The husks should be dry and the kernels hard. Try popping a few kernels to see if they are ready to be removed from the stalks. Husk the ears and place them in a warm dry, well ventilated area for two to three weeks to dry.

Diseases and Insects

Most insects and diseases that attack dent and sweet corn affect popcorn in the same manner. The insects are as follows: corn earworm, corn leaf aphid, European corn borer, corn delphacid, stalk borer, and corn silkfly. The most common diseases are: corn smut, common rust, and corn mosaic virus. For treatment, follow state recommendations and the specific information on the product labels regarding application and restrictions.

Shops

Shops that specialize in gourmet popcorn and related items include:

Crown Jewel Gourmet

Fireworks Popcorn Company
Yoder Popcorn
Wisconsin Gold Harvest
Los Chileros de nuevo Mexico

Seed Sources

Territorial Seed Company

Swallowtail Garden Seeds

Seeds of Change

Seedman.com

References

Alternative Field Crops Manual

Grow Your Own Popcorn

Hartman, Holly. Popcorn

Maize. Wikipedia

What is Popcorn