

Growing Guide: Sweet Potatoes

FUN FACTS

- Although they are often referred to as yams, sweet potatoes are not actually yams. A true yam is an entirely different and botanically unrelated, edible tuber that is starchy, not sweet, with coarse, tough, almost bark-like brown skin. True yams are grown as a food crop mainly in tropical climates in Africa, Asia, and the Caribbean.
- Sweet potatoes are North Carolina's official state vegetable. This state is also the leading producer of sweet potatoes in the U.S.
- George Washington Carver, working in the early part of the twentieth century, developed 118 different products from the sweet potato, including dyes, candies, molasses, wood filler and library paste!
- The sweet potato was introduced to China towards the end of the sixteenth century, where it quickly became a staple crop. Because it grew well on land that was not suited to traditional Chinese crops, it helped to fuel a major population increase. Today China is the biggest producer of sweet potatoes in the world.

GROWING GUIDE

Despite their name, sweet potatoes are not related to Irish potatoes. In fact, they are members of the morning glory family! One of the most nutritious vegetables around, the sweet potatoes is high in Vitamin A and C, potassium, antioxidants, fiber and complex carbohydrates. Sweet potatoes are warmth lovers and grow best in southern gardens. But with a little extra effort, even gardeners in many northern areas can reap a respectable harvest of these tasty, nutritious tuberous roots. And, unlike many common garden veggies that are grown from seed, sweet potatoes are grown from rooted cuttings, called slips.

Native to the tropical lowlands of Central America and parts of South America, where they have been cultivated for thousands of years, sweet potatoes were brought back to Europe by Christopher Columbus in the fifteenth century. Spanish and Portuguese explorers carried these nutritious tuberous roots with them around the globe, introducing them to the Philippines and eventually to China, where they became a dietary staple that helped to stave off famine, supported population growth and profoundly influenced the course of Chinese history.

VARIETIES

Sweet potato cultivars fall into two main categories: those with moist flesh and those with dry flesh. Varieties with moist flesh are the most popular. They generally have bright orange or deep yellow, very sweet flesh and grow best in warmer climates, although there are a few varieties such as 'Beauregard' and 'Georgia Jet' that mature relatively quickly and do well in northern gardens. Dry-fleshed varieties, with yellow, white or purple flesh, are starchier and not as sweet, and also offer some varieties that do well in cooler climates.

SITE

Be sure soil in your sweet potato bed is well-drained. Plants need full sun, although those grown in the warmest areas may tolerate a little afternoon shade. Sweet potatoes are vining plants, so be sure there is plenty of space for the vines to run.

WHEN TO PLANT

Sweet potatoes are started from rooted cuttings called slips that are planted in the garden when the soil is warm (at least 55°; 65° is best) and all danger of frost is past, usually a couple of weeks past the average last frost date.

PLANTING

Slips can be purchased from mail-order nurseries or local garden stores. Don't be alarmed if slips look limp before planting time; they will revive once they're in the ground. You can also start your own slips if you have disease-free sweet potatoes stored from the previous growing season. Starting slips from supermarket sweet potatoes isn't recommended as they are often treated to prevent sprouting and you won't know which variety you have and whether it's suitable for your climate.

To produce homegrown slips, stick several toothpicks into the middle of a sweet potato and set it in a jar so that the toothpicks rest on the rim of the jar. Fill the jar with enough water to submerge the bottom half of the sweet potato. Place in a warm spot out of direct sun and change the water weekly. In a couple of weeks, green sprouts will emerge from the sweet potato. When the sprouts are at least 6 inches long, twist or pull them off from the sweet potato. Place the sprouts in new container with enough water to cover their bottom ends. Roots will form in about 10 days. Once they have formed roots, the slips are ready to be planted.

Plant slips about 3-4 inches deep about a foot apart in rows spaced 3 feet apart. Sweet potatoes can also be grown in a large (20 gallon) container.

In northern gardens, it's a good idea to raise the soil in the sweet potato bed into mounds or ridges, and then pre-warm the soil by covering it with black or infra-red transmitting plastic mulch two weeks before the last frost date. Lay some drip irrigation lines before putting the plastic down. Then you can cut slits in the plastic through which to plant the slips, leaving the plastic in place. Cover newly planted slips with row cover fabric for several weeks to give some protection from cool night temperatures.

CARE

Keep sweet potato plants weeded and watered consistently, especially as they are getting established. Plants don't need much added fertilizer if the soil was well prepared before planting time; too much nitrogen fertilizer results in lots of leaves, but few tubers.

TROUBLESHOOTING

Tunnels or holes in tubers Tunnels or holes in sweet potato tubers may be the work of one of several pests. **Wireworms** are golden-brown, shiny, segmented worms that are the larvae of click beetles. In southern areas, the white, worm-like larvae of the **sweet potato weevil** may tunnel through plants into the roots. **Sweet potato flea beetle** larvae chew shallow tunnels just under the surface of the tuber.

Trap wireworms by burying chunks of Irish potatoes in the ground, with a stick shoved into each chunk so that it protrudes above ground. Wireworms will be attracted to the potato chunks, which can then be pulled up and destroyed. Rotate the location of sweet potatoes in the garden on a 3-year cycle and cultivate soil in the fall to expose wireworms to cold and predation. To prevent weevil damage, start with certified weevil-free slips; rotate the location of sweet potatoes in the garden on a 3-year cycle; and mound soil around the base of the plants to discourage egg-laying. Flea beetle adults are small, black beetles that jump when disturbed. They chew small holes in leaves, but most of the damage to sweet potatoes is done by their white, worm-like soil-dwelling larvae. To minimize their feeding damage rotate crops, keep weeds down, clean up plant debris well at the end of the season, and look for resistant varieties. Cover plants as soon as they are set out with row covers to prevent adult flea beetles and sweet potato weevils from laying eggs.

Root knot nematodes Infestation by these small, worm-like soil dwellers causes stunted plants that don't yield well, as well as cracks and internal black spots in tubers. To minimize problems, look for resistant varieties, rotate the location of plants in the garden, add lots of organic matter to the soil to encourage the soil organisms that keep nematodes in check, and till the soil in the fall a couple of times after harvest.

Blackened leaves Sweet potato plants are very sensitive to cool temperatures; even temperatures between 40-50°F will damage leaves. In northern growing areas, cover plants with row covers near the end of the season to protect from night-time lows and harvest plants before night temperatures dip below 50°F. If some leaves are blackened by cold, cut them off right away and harvest your tubers as soon as possible.

HARVEST

Sweet potato tubers will keep getting larger as long as the weather is warm enough; unlike Irish potatoes their tops will not start to die back naturally. Use the days to harvest for the variety you're growing as a guide, but harvest when night temperatures drop into the 50s. Cut back the top growth first; then dig tubers out carefully to avoid nicking or bruising them. Move them out of the sun to a warm, humid spot (minimum 70°F; ideal 80-85°F) to cure for 10-14 days. Cured tubers will store better and taste sweeter. After curing, store tubers in a spot with temperatures in the 55°-60°F range.

Check out recipes for everything from sweet potato hummus to sweet potato turkey tacos at [Vermont Harvest of the Month](#).