Growing Potatoes

by Sydney J. Tanner, Chippewa Valley Master Gardener Volunteer



Americans eat a lot of potatoes. In fact, according to the Northern Plains Potato Growers Association, Americans eat an average of 110 lbs per person, per year. Other sources suggest that number is closer to 140 lbs.

We've all heard how potatoes are good for you. Then, how potatoes are bad for you. There are many medical and nutritional benefits of potatoes. Potatoes are high in fiber and help soothe the digestive tract. Potatoes are high in calcium, iron, magnesium, and phosphorus. This aids in bone health. They contain L-tryptophan and have a calming effect. Potatoes boost sarotonin production and can help with mood swings and PMS. They contain alpha lipoic acid and high amounts of vitamin B-6 for brain health. Potatoes are high in potassium and have no cholesterol. They can help regulate blood pressure. Potato flesh and juice have anti-inflammatory properties. A facial mask made from potato tightens sagging skin and diminishes under eye circles. The peels are rich with antioxidants and can work their magic externally as well as internally. A poultice made from mashed raw potato has been used for hundreds of years as a burn treatment.

Grieve considers the potato an herb, though most people consider it a vegetable. Potatoes (*Solanum tuberosum*) are part of the Solanaceae family. They are related to tomatoes, peppers, tobacco, tomatillos, eggplant, and other nightshades.

Potatoes are a perennial grown as an annual. Gardeners pull up the plant to facilitate the harvest. The aerial part of the plant is considered poisonous (like many of its cousins). There are over 4000 varieties of potatoes grown in the world. There are more than 180 species of wild potato.

They like fertile, well-drained, loam soil. The standard pH that potatoes thrive is between 5.8 and 7 (slightly acidic). A good compost should be worked into the soil before planting. After planting, the potatoes should be covered with several inches of mulch. Potatoes grow from seed or from sprouted potatoes. They should be planted in cool weather, as soon as the soil can be worked. (Read that-- you can plant potatoes as soon as the soil reaches over 40 degrees.) Depending on the variety, potatoes take between 75 and 100 days from planting to harvest. Tubers form and grow when the soil is between 60 and 80 degrees. If the soil temperature rises above 80 degrees, the tuber growth stops. Mulching moderates the soil temperature and keeps it lower, so you have a longer potato growing period.

Plant the eyes 12-18 inches apart and about four inches deep. In a square foot garden, that means one potato plant. To prepare the "sprouts" or buds, called eyes, the spud needs to be cut (if larger than a ping pong ball), with an eye in each piece. If the potato has more than one sprouted eye, try to keep the pieces to 2-3 inches in size. When planting, the cut side of the potato should be placed down, with the "eye" facing up. If planting "seed potatoes" make sure several eyes are pointing up. When the potato sprouts come through the soil, cover them with another few inches of soil or compost. The question of "green potatoes" comes into play when the tubers grow too closely to the soil line. Make sure your potatoes are covered, either with soil or mulch.

Watering potatoes is like watering other vegetables. They need 1-2 inches of water a week. To thrive, potatoes need full sunlight for at least six hours a day. Plants that make good planting companions for potatoes include cabbage, eggplant, beans, and corn. Potatoes do not do well when planted near berries, tomatoes, cucurbits, or sunflowers.

Harvest usually takes place between 2 and 4 weeks after the plant has flowered. Some sources suggest waiting until the main plant stalks "droop" or turn brown. That's not really necessary. However, harvest all the potatoes immediately if the stalks are dead. (That means you waited too long...)

Pests that attack potatoes include flea beetles, potato beetles, potato tuber worms, wire worms, and white grubs. To get rid of the pests, you can hand pick, use commercial pest products, neem oil, or a mixture of vinegar and dish soap. Because of pest problems, it's best to "rotate" the spot where the potatoes are planted each year. Do not grow them in the same place year after year. Some sources suggest a three-year rotation. Other suggest five years.

There are lots of creative ways to plant and grow potatoes. The "traditional" way to plant your spuds is in straight row trenches. The plantings are then covered with soil and straw. Ruth Stout suggests growing potatoes in at least 8 inches of straw mulch above the ground. Growing them in straw bales (straw bale gardening) eliminates the potato bugs. It also gives an incredibly fast, easy, and clean harvest. Just snip the twine holding the bale together and break apart the bale. In many cultures, potatoes are grown in burlap bags filled with soil. At the end of the season, the plants are pulled and the bag is cut open or dumped out revealing the harvest. Some gardeners choose to grow their potatoes in plastic buckets or plastic garbage cans with the bottoms cut off. These are pushed into the ground and filled with soil. A few weeks after the stalks flower, pull the plants, pull up the bucket, and harvest the potatoes. If you live in a wet climate, we'd suggest growing your potatoes in a wire mesh cylinder filled with soil. This allows the soil and potatoes to have circulating air. Growing bags made of plastic are sold in many garden centers. The bags are filled with soil and planted. They have flaps built into the sides to facilitate in the potato harvest. Using raised beds or wooden boxes to grow potatoes, increases your yields.

Do not wash the potatoes that you are planning to store. There is a process to it. For information regarding potato storage and preparation, see the Azen Lodge News Volume 5 Number 2.

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