

# POTATO

Gardening tips provided by  
Jefferson Farm & Gardens



## Overview

The potato, *Solanum tuberosum*, is a cool season vegetable of the Solanaceae family and is related to peppers, tomatoes, and eggplant. Thomas Jefferson is said to have served French fries in the White House during his presidency at a time when potatoes were still thought to be poisonous. Potatoes are rich in carbohydrates, magnesium, and potassium.

## Choosing Varieties

There are different varieties of potatoes available that differ in days till maturity, disease resistance, tuber color, and shape, as well as other traits. A few recommended varieties for Missouri and other Midwest states are:

- All Blue (blue skin and flesh)
- Kennebec (late, resistant to blight)
- Norkotah Russet (early, scab resistant)
- Red Pontiac (does well in heavy clay soil)
- Yukon Gold (early, yellow flesh)

To get the best results, grocery store potatoes should not be planted because they are treated with a sprouting inhibitor. Even though the chemical will wear off and they will eventually sprout, they are not certified to be disease free.

It is recommended to try a few varieties to determine overall plant performance and personal preference.

## Planting Tips

The potato is a cool season vegetable and can tolerate a light frost, but not a hard freeze.

Potatoes are grown from seed potatoes. Large seed potatoes should be cut into 1.5 inch-thick pieces containing at least two eyes or buds and should be cut 1-3 days before planting. This way the cut sections will have time to dry and callus, minimizing the potential for rotting after planting. If the seed potato is small, the mini tuber can be planted whole.

In Missouri, seed potatoes can be planted in late March to mid April. The seed potato pieces, cut end down, and small tubers should be planted about 3 inches deep and about 1

foot apart in rows about 2-3 feet apart. Alternatively, they can be planted in hills 2-3 feet apart. Once the potatoes are about a foot tall, a hoe can be used to mound soil around the stem to prevent exposure of potato tubers to the sun, which causes them to turn green, rendering that part inedible.

If the soil is shallow, rocky, or poorly drained, potatoes can be grown above ground in a method involving straw. The seed potato pieces or mini tubers should be gently pressed into the soil's surface and then covered with about 4-6 inches of clean straw. More straw should be added if the layer decreases in thickness throughout the season.

## Soil Fertility and Pest Control

Potatoes need a loose well-drained soil for proper formation of roots. Heavier clay soil should be amended with compost to prevent misshapen tubers. Potatoes would benefit from the addition of nutrients either in the form of a complete fertilizer or aged compost.

Colorado potato beetles, flea beetles, leaf hoppers, and aphids can cause damage to potato leaves and stems. Chemicals containing the organic compound pyrethrin can be used to control an infestation of Colorado potato beetles and flea beetles (be sure to follow product labels), while insecticidal soap can control leaf hoppers and aphids.

Common potato scab is a cosmetic blemish on tubers and can be avoided by planting resistant varieties. Potato blight occurs as brown-gray patches on leaves and stems and purple-brown scars on tubers. It can be avoided by buying disease-free certified seed potatoes, planting resistant varieties, and avoiding overhead watering. Potato plantings should be rotated with other crops each year to avoid build up of soil borne diseases and pests.

## Harvesting

Around the time of flowering, dig several hills to collect the “new” potatoes, which are 1-2 inches in diameter. Dig the rest of the potatoes with a spade or fork 1-2 weeks after the vines have died. Gently brush off soil, but do not wash them until ready to use because they will not keep. The straw potatoes can be harvested by removing the thick layer of straw to reveal the potatoes at the soil’s surface. Some of the potatoes may have formed in the loose top layer of soil and should be checked. The potatoes should be kept in a cool dark place until needed. Green “sunburned” spots should be cut off before using.

## Seed Sources

Seed potatoes can be ordered from mail order companies via phone or website. Burpee Seeds (1-800-888-1447, burpee.com) and Irish Eyes Garden Seeds (1-509-964-7000), gardencityseeds.net) are two companies that sell potato varieties.

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