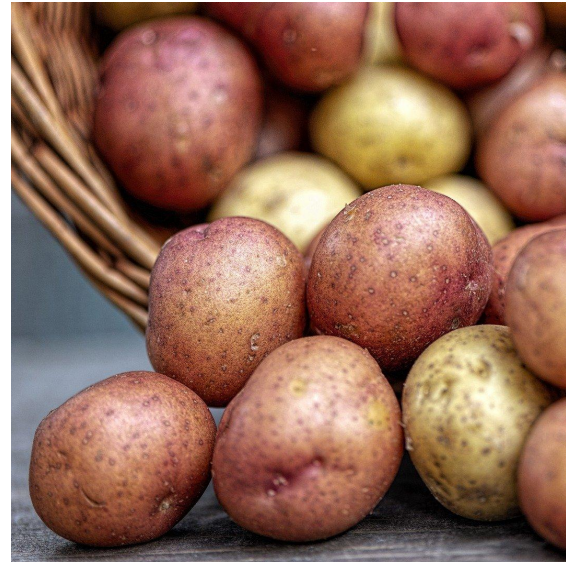


# Potatoes

## *Solanum tuberosum*

### A Garden Guide

Potatoes were domesticated 7,000-10,000 years ago by indigenous peoples in present-day Peru and Bolivia. There are now over 5,000 different types of potatoes, and they are grown all around the world. Potatoes are an incredibly important staple food; potato starch is used to create biodegradable products. Homegrown potatoes are generally juicier and more flavorful than store-bought.



**When to Plant:** Potatoes are a cool season crop that can handle light frosts. The traditional time to plant potatoes here in WNC is St. Patrick's Day, although any time between March 15 - and April 15 are considered to be fine. They prefer a soil temperature of at least 45°F. Avoid planting when soil is waterlogged. Optimum potato growth occurs at 50-60° F, and slows down at 80°F.

**Siting:** Select a sunny spot (6-8 hours of direct sunlight) with rich, loose, well draining garden soil, high in organic matter. Heavy clay soils will require amending. To decrease potential disease and pest issues, **rotate crop locations** from year to year. Avoid planting in the same location or near tomatoes, eggplants, or tomatillos.

**Planting:** Prior to planting, cut each potato into quarters, or about the size of a small egg, making sure there is a good "eye" or two in each portion. Before planting you can let them dry out for 2-7 days in a cool (NOT freezing) spot with some light; this helps prevent rotting and encourages sprouting. Plant when sprouts are around ½".

Potatoes perform best in a loose, rich, moist, well-draining soil, with a soil pH of 5.0-5.5. A good soil test will tell you exactly what to add, but usually in our soils, potatoes will need at least 1/3rd soil conditioner, up to 1/3rd rich composts, mixed with our native clay. Plant 1 lb of seed for every 10 feet of row. Fingerling potatoes will fill up to 3x more space than regular potatoes. For planting in the ground: Regular Potatoes - plant 12" apart, 4" deep; Fingerling Potatoes - plant 18" apart, 4" deep. For planting in raised beds: plant more densely. A 4' x 8' bed will make two 8' rows and use about 1½ lbs of seed potatoes. Plant 4" deep with the eyes facing upwards. They do

not like root competition - keep well weeded. Wheat straw is an excellent mulch for potatoes, that can help retain soil moisture and suppress weeds.

As potatoes grow, adding more soil to the base of the stem (“hilling up”) 3x or 4x during the growing season will help you maximize yields.

**Fertilizing:** Potatoes thrive in rich soil with plenty of Phosphorus - Espoma Rock Phosphate and Espoma Bone Meal are good sources. To improve overall health and resilience, they’ll also benefit from mycorrhizae, which must come into direct contact with the potatoes in order to work - use at planting time.

**Watering:** Potatoes need 1-2” of water per week. Uneven watering will result in lumpy, misshapen potatoes.

**Organic Spray Schedule:** Keep a sharp eye out for Colorado Potato Beetles. They lay tiny orange football-shaped eggs on the undersides of leaves. Pluck off adult beetles and drown in soapy water. Rotate usage of Neem Oil, Horticultural Oil, and Spinosad.

**Harvesting & Processing:** There’s two different ways to harvest potatoes - new potatoes, and mature/storage potatoes. In both cases, to avoid damaging your crop, carefully harvest by fork or shovel. New potatoes are harvested early, usually 2-3 weeks after flowering, or 65-75 days after planting. New potatoes have thin skins that are easily rubbed off by hand. New potatoes do not keep well and are meant for consuming within a few days. Do not consume green-colored potatoes.

Mature/storage potatoes can be harvested 2-3 weeks after all the foliage has died down. Dig up some test potatoes and check to see if the skin removes easily - if it does, they are not quite ready. You can gently brush soil off mature potatoes, but do not wash prior to storage, only wash prior to using. For curing, allow freshly harvested potatoes to sit in a dry, cool, dark place (45 to 60°F / 7 to 15°C) for 10-14 days. Potatoes stored around 40°F with 80 humidity in a dark, well-ventilated location can last for 4-5 months. Avoid storing them near apples or onions.

**Usage:** Potatoes can be baked, boiled, or fried. They are used in a staggering range of recipes: mashed potatoes, french fries, potato chips, potato salad, twice-baked potatoes, potato soup, roasted potatoes, potatoes au gratin, scalloped potatoes, potato pancakes, potato dumplings, alcoholic beverages, and more. Version 1.0, Feb 21

