

How to grow potatoes

Potato (*Solanum tuberosum*)

Family: Solanaceae (Nightshade)

Season: Cool

Ease of growing: Easy

Nutrient needs: High

Water needs: High

Common propagation: Tubers

Planting facts

Depth: 2" to 6"

Plant: 2 to 6 weeks before last frost

Direct sow: late April to June

Planning facts

Spacing: 12" in 30" to 36" rows

Plants per square foot: 1

Succession sow: every 2 to 3 weeks

Time to harvest: 90 to 120 days

Variety selection

Varieties vary according to flesh color – white, yellow, blue; shape – round or long; intended use – baking, chipping, salads; maturity date – early, midseason and late; and disease resistance. It is important to select varieties suited for the gardener's intended use. If winter storage is a priority, select late maturing varieties.

Preparation and planting

Potatoes perform best on sandy loam or peat soils with good drainage and aeration. They can tolerate soils with low pH, and some growers maintain low pH to minimize scab. Avoid clay soils with poor drainage. Potatoes require more nutrients than almost all other vegetables. On most soils additions of N, P and K sources will be important. Although potatoes are a cool-season crop, planting

before the soil reaches 45°F will increase tuber decay. Plant either small, whole tubers or tubers cut into smaller "seed pieces." Seed pieces should be about two ounces with one or two buds, or eyes. Since diseases, such as those experienced during the Irish potato famine, are a major threat to potatoes, use only certified disease-free tubers.

Care

Once the plants have exceeded 8 to 12 inches tall you should "hill" them by mounding up soil along the plant's stem so that at least 6 inches of the plant remains above the soil. Hilling encourages more potato tubers as tubers will form along the buried stem. It is important that these tubers do not get exposed to light as they will turn green and become poisonous. N is sometimes sidedressed when potatoes are about 6" tall, but excessive N fertilization later can reduce tuber quality. Consistent moisture is important for good potato growth, especially during tuber formation.

Major pests

Insects: Colorado potato beetle.

Diseases: Tuber rots, late blight, blackleg, potato scab.

Harvesting and storage

Time of maturity varies with the variety. Indicators of tuber maturity include the death of the vine, "skin set" – tuber skin does not peel from the flesh when pressure is applied, and the desired tuber size is reached. If your goal is long-term storage, wait until the tubers are fully mature. For optimal long-term storage, potatoes are cured at about 60°F and high humidity for two to three weeks, and then temperatures lowered to about 40°F.

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