Growing Potatoes

Information adapted from ohioline.osu.edu Factsheet HYG-1619-92

Potatoes can be grown successfully in Ohio gardens, but they require more care and attention than other vegetables. The potato has specific soil requirements, and insect and disease control is necessary. A good yield would be 150 to 175 pounds of usable potatoes from 100 feet of row.

Soil Requirements A well-drained, fine sandy loam soil, high in organic matter is preferred. If heavy clay or clay loam soils are used, drainage problems should be corrected and organic matter added such as manure or Bumper Crop compost.

Soil pH and Fertilizer Practices

Because scab disease (brown corky tissue on surface of tubers) may be a problem in alkaline or "sweet" soils, the pH should be 5.0 to 5.5. Liberal amounts of fertilizer are required for large yields of potatoes. Ideally, the fertilizer should be placed in continuous bands two to three inches to each side and slightly below the seed piece. However, many gardeners will broadcast the fertilizer before tilling or spading. Fertilizer rates should be based on results of a soil test; a typical rate would be two and a half to three pounds of 13-13-13, 10-10-10, or equivalent per 100 square feet. When plants are four to six inches tall, band two to three pounds of fertilizer per 100 feet of row about 6 to 10 inches from the row.

Variety Selection Irish Cobbler is an excellent early maturing variety for the home garden. It should be planted early, from late March to mid-May, depending on the section of the state. A red-skinned variety is Pontiac, a late-maturing, high-yielding potato of fair cooking quality. Kennebec is very desirable when gardeners want to store potatoes. Yukon Gold is very popular for it's flavor and creamy texture when cooked.

The potato seed is not a true seed, but modified stem tissue known as a tuber. The true seed of the potato occurs in the small, inedible orange fruit the plant produces during mid-season.

Planting Small tubers weighing 1-1/2 to 2 ounces should not be cut before planting. If 4 to 6 ounce or larger tubers are used, cut them so that each piece is block shaped, contains at least one good eye or bud, and weighs about 1-1/2 ounces. Plant immediately after cutting.

Plant the seed in shallow trenches 3-1/2 to 4-1/2 inches deep and cover with an inch or two of soil. The seed pieces should be spaced 9 to 12 inches apart in rows 28 to 34 inches apart. Nine to 12 pounds of seed will be needed for each 100 feet of row.

Cultivation and Weed Control It is important to keep potatoes well watered on a very regular basis. If you allow potatoes to get too dry, then add a lot of water, then let them dry again, you will end up with potatoes that look lumpy and will have a very poor texture when cooked. Remember to keep them watered consistently.

Due to the small area involved and the variety of potentially sensitive crops grown in the garden, chemical weed control is not recommended. Control weeds by shallow and frequent cultivation. When plants are 6 to 8 inches tall, begin to mound soil around the bases of the plants to start forming a ridge or hill. By the time the plants are 15 to 18 inches tall (at last cultivation), the ridge or hill should be 4 to 5 inches high. "Hilling" is necessary to prevent greening of shallow tubers.

Insect and Disease Control

The spraying or dusting program should start as soon as the plants emerge and continue according to the product label until late summer or a few weeks before harvest. Flea beetles, leafhoppers, aphids and Colorado potato beetles are the major insects affecting leaves and stems. Early Blight and Late Blight are the major foliar diseases.

Harvesting & Storage New potatoes can be dug in June or July when they are 1-2". For highest yields and best storage, potatoes should not be dug until two weeks after vines have naturally died down. This allows the skins to set and reduces skin peeling, bruising and rot in storage. Potatoes exposed to sun* and high temperatures will turn green and may rot. Most homes do not have a suitable place to store potatoes for more than four to six weeks. To store potatoes for several months, the tubers should be cured in a dark place at 60 to 65 degrees F and a humidity of 85% or higher for 10 days, then keep them in a cool (40 to 45 degrees F), dark place.

- Another method of growing is above-ground in mulch. Place seed pieces on top of the soil or 1 inch below soil level, and cover with a 12- to 18-inch layer of straw or pine needles. The tubers will form in the mulch. Harvesting is easier using this method. Move the straw aside to harvest early potatoes. Replace straw to allow plants to produce more potatoes until the vines die.
- If you have a small space, or don't want a lot of potatoes to store, simply take a plastic garbage can or tub and drill holes in the bottom for drainage. Fill the container one third full with potting soil mix. Put your potato sprouts on top of the soil, spaced about 6" apart, and 4" away from the sides of the container. Cover the sprouts with about two inches of potting soil. When the plants reach about 6" in height, add another two or three inches of potting mix, covering the lower leaves of the plants. Repeat each time the plants reach a height of six inches above the soil. When the soil reaches 2 inches from the top of the container, stop adding soil, but mound the soil up around the base of each plant.

*Green in potatoes indicates the presence of a harmful toxin. When you see patches of green in your potatoes as you peel them, cut out the green parts entirely and discard them. The green is chlorophyll, but the chlorophyll indicates that the potato has been exposed to sunlight. Where the potato has been exposed to light a natural toxin in the potato (solanine) becomes concentrated at harmful levels. Never store your potatoes on the counter. Always keep them in a cool, dark place.



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