

Growing Potatoes in the Home Garden

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

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 content improved by growing cover crops or adding aged manure or compost. Be cautioned, however, that manure may increase the incidence of potato scab (see below).

Seedbed Preparation

If a cover crop (rye or wheat are excellent choices) was planted the previous fall, it should be turned under before it exceeds 12 inches in height by tilling 8 to 10 inches deep, depending on the depth of the topsoil. After tilling, level the surface slightly so that furrows can be made. It is best to wait at least a week after tilling in the cover crop before planting the seed pieces.

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 8-16-16, 10-20-20, 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, if growth is not satisfactory and if foliage is yellowish-green.

Variety Selection

Irish Cobbler is an excellent early maturing variety for the home garden, but seed is scarce. It should be planted early, from late March to mid-May, depending on the section of the state. Norland is an early, red-skinned variety, various strains of which are readily available. Another red-skinned variety is Pontiac, a late-maturing, high-yielding potato of fair cooking quality, but often misshapen. Superior is a white-skinned variety, maturing later than Irish Cobbler, but earlier than two other recommended varieties, Katahdin and Kennebec. These two are desirable when gardeners want to store potatoes.

Whichever variety is selected, use certified disease-free seed. Such seed is grown under rigid rules and carefully inspected by state authorities. 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.

Some feed and garden stores sell B-size seed-small tubers weighing 1-1/2 to 2 ounces. These tubers 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.

Planting

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 when 1-1/2 to 2 ounce seed pieces are planted 12 inches apart.

Cultivation and Weed Control

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. Deep cultivation may cut potato roots and slow growth. 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 up" is necessary to prevent greening of shallow tubers.

Insect and Disease Control

Most feed and garden stores sell approved insecticides and fungicides for use on potatoes. 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.

Garden area previously in sod may harbor wireworms, white grubs and other soil insects. These insects should be controlled before planting. Contact your local Cooperative Extension office for current control recommendations.

Harvesting and Storage

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. When harvesting at temperatures above 80 degrees F, potatoes should be picked up immediately and put in a dark place. 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 percent or higher for 10 days. After the tubers are cured, keep them in a cool (40 to 45 degrees F), dark place with high humidity. Under these conditions most varieties will not sprout for two to three months.

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