Potato

Potatoes are a very easy and fun crop to grow in the home garden. White-skinned and red-skinned potatoes can be grown as an early crop for new potatoes and as a late crop for storage. Choose an early-maturing variety and a medium- to late-maturing variety if early and late harvests are desired.

**Planting**

Purchase only certified seed tubers for planting to help reduce disease problems. Saving your own seed potatoes is generally not worthwhile because viruses and diseases often show up the next year. Seed potatoes should be firm and unspouted. Use seed pieces that have at least one good eye and are about the size of 1- to 2-inch cubes. Seed pieces should be cut three to five days before planting to allow the cut surfaces to heal.

Plant potatoes in late winter (see planting chart). Plants will resist a light frost, but hard frosts and freezes may set back growth. Potatoes prefer a cool spring and moisture throughout the growing season.

Plant potatoes in furrows with the cut side down 3 to 5 inches deep. Later crops should be planted 5 to 6 inches deep. Space the seed pieces 8 to 10 inches apart. Pull a ridge of soil over each row when planting. Twelve pounds of seed potatoes will plant 100 feet of row.

Another method of growing potatoes 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 considerably 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.

### Planting Dates

<table>
<thead>
<tr>
<th>Area</th>
<th>Spring</th>
<th>Fall</th>
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<tbody>
<tr>
<td>Piedmont</td>
<td>Mar. 15-30</td>
<td>July 1-15*</td>
</tr>
<tr>
<td>Central</td>
<td>Feb. 20-Mar. 10</td>
<td>July 15-30*</td>
</tr>
<tr>
<td>Coastal</td>
<td>Feb. 1-15</td>
<td>July 15-30*</td>
</tr>
</tbody>
</table>

*Seed potatoes for July planting and fall harvest may have to be mail-ordered (usually not available in local garden supply stores.)*

**Fertilizing**

A soil test is always the best method of determining the fertilization needs of the crop. Information on soil testing is available in HGIC 1652, *Soil Testing*.

Follow the results of a soil test to maintain a soil pH between 5.8 and 6.5 and optimal fertility levels. In gardens where potato scab is a problem, keeping the...
pH of the soil between 5.0 and 5.3 can significantly decrease the level of disease in susceptible varieties. If a soil test has not been taken, remember that potatoes are heavy feeders and a complete fertilizer high in phosphorus (1 tablespoon of 10-20-10 per 10 feet of row) should be added before planting. Work the fertilizer into the furrow and mix with the soil before planting. Sidedress about six weeks after planting (when tubers begin forming) with a high nitrogen fertilizer (5 tablespoons 33-0-0 per 10 feet of row).

**Watering**
Water is critical when blossoms are forming and should be added if the soil at this time is very dry. Mulching can help conserve water, reduce weeds and keep soil temperatures lower. Potatoes will grow for a longer period of time when soil temperatures remain low, resulting in a bigger harvest.

**Cultural Practices**
Rake the surface occasionally to kill any weed seeds that germinate before the potato sprouts emerge. Later cultivation should be shallow and far enough from the rows to make certain that no roots are damaged.

Just before the tops have grown too large to allow cultivation, a finishing cultivation, sometimes called "laying-by" or "hilling-up," is made. "Laying-by" is throwing soil over the potatoes to prevent exposure of the potatoes to sun; exposure can cause greening or scalding. Green portions on potatoes are poisonous, taste bitter and contain an alkaloid. Cut off and discard green areas before using.

The release of the new true seed potatoes is an interesting development. The major advantage of growing potatoes from seed is the decreased chance of disease. However, for the home garden, growing from seed pieces is generally less time consuming and will give better yields. With time, true seed potatoes may be bred for higher yields, but at present, good quality stock potatoes yield the best crop.

**Harvesting & Storage**
Potatoes average 100 to 120 days to maturity. Harvest potatoes after most of the vines have died, a spade fork is useful for digging. Handle as gently as possible during harvest. Avoid skimming tubers when digging and avoid long exposure to light. Leave the tubers exposed to the sun just long enough for the soil to dry and fall off (usually about one to two hours).

Potatoes for use in early summer ("new potatoes") may be dug before the vines die. Dig early potatoes when tubers are large enough to eat.

Harvest potatoes for storage about two weeks after the vines die down in midsummer. Fall harvest should be completed before frost to ensure the best quality.

Late potatoes are best for winter storage. Potatoes can be stored in medium cool (40 to 50 °F), moist (90 percent relative humidity) conditions for six to eight months. Sprouting is a problem when stored at higher temperatures.

**Problems**
Green skin (sun exposure), hollow heart (alternate wet and dry conditions) and black walnut wilt (located too close to a black walnut tree) are cultural problems that may occur. Insect problems include Colorado potato beetle, wireworm, flea beetle and potato leafhopper. Diseases include early blight, late blight, common scab, brown rot, soft rot and root-knot nematodes. See HGIC 2214, Irish & Sweet Potato Diseases; HGIC 2215, Sweet Potato & Irish Potato Insect Pests; and HGIC 2216, Root-Knot Nematodes in the Vegetable Garden.

**Varieties**
- Irish Cobbler
- Red Pontiac
- Kennebec (this cultivar has performed well in the Piedmont)
- Yukon Gold

See the HGIC fact sheets listed above for disease and insect pest resistant varieties. If unable to locate the varieties needed, many good mail order companies sell certified seed potatoes. A few are listed below:

Irish Eyes Garden Seeds
Washington State
(509) 933-7150
www.irisheyesgardenseeds.com
Johnny's Selected Seed
955 Benton Ave.
Winslow, ME 04901
http://www.johnnyseeds.com

Park Seed Company
1 Parkton Ave.
Greenwood, SC 29647
(800) 213-0076
www.parkseed.com

Peaceful Valley Farm Supply
P.O. Box 2209
Grass Valley, CA 95945
(888)784-1722
http://www.groworganic.com

Seed Savers Exchange
3076 North Winn Rd.
Decorah, IA 52101
(563)382-5990
http://www.seedsavers.org

Territorial Seed Company
P.O. Box 158
Cottage Grove, OR 97424
(541)942-9547
http://www.territorial-seed.com

Vermont Bean Seed Company
334 W. Stroud St.
Randolph, WI 53956
(800)349-1071
http://vermontbean.com

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