

Growing Your Own

A beginner's guide to gardening

Potatoes

Potatoes grow well in the spring or fall. They are not roots but tubers, which are a type of stem. Potatoes are a good source of vitamins B and C, potassium, and complex carbohydrates.

Varieties

These varieties grow well in Kentucky.

Red-skinned types

- **Dark Red Norland** is red skinned and has shallow eyes, and it is fit for the table as “new” potatoes. New potatoes are young, usually smaller potatoes with a thinner skin, as compared to fully mature, larger potatoes.
- **Red Gold** has light-red skin and yellow flesh, and it offers good yields of high-quality tubers. They are not fit for long-term storage.
- **Red Pontiac** is a red-skinned potato with white flesh. It is an ideal potato for mashing.
- **Red Lasoda** is a red-skinned potato with very white flesh.

White-skinned types

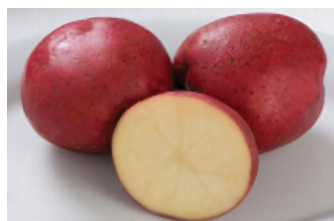
- **Superior** is white skinned. The tubers are oval to oblong in shape. They can be used for many purposes.
- **Kennebec** is enjoyed by many people. It has white flesh and buff skin.
- **Norchip** is white skinned. The tubers are round to oblong in shape with shallow eyes. They are very good for making potato chips.
- **Russett Norkotah** is a white russet type and a good potato for baking.

Gold-fleshed types

- **Yukon Gold** has yellow flesh. It is round with a smaller size.

Fingerling types (skinny, elongated potatoes)

- **Russian Banana** has white skin; light-yellow flesh; a long, thin shape; and a special flavor.
- **Swedish Peanut** has white skin; golden-yellow flesh; and a shorter, teardrop shape. It has shallow eyes and a unique flavor.



Dark Red Norland



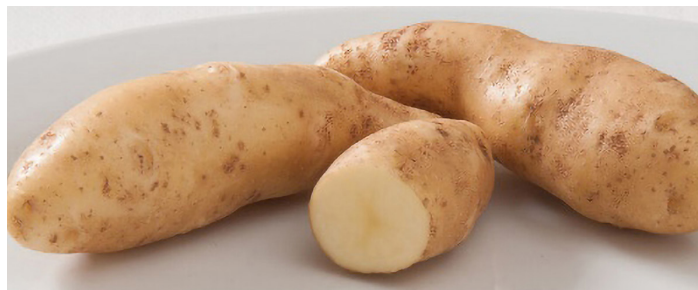
Red Gold



Kennebec



Yukon Gold



Russian Banana

Johnny's Selected Seeds

How much to plant

As a rule, a 10-foot row of plants, depending on which variety you grow, will yield 10 pounds or more of potatoes.

How and when to plant

Potatoes should be planted using seed pieces. Seed pieces are not actually seeds; they are pieces of specially grown seed potatoes you plant in the garden. You can get them from seed companies or garden stores. Be sure to select certified (disease-free) material. Using potatoes from the pantry to start a new crop is not advised. Each seed potato is cut into pieces about one inch across that contain at least one eye or sprout. Be sure to allow the cut area on seed potatoes to dry for a few days before planting. Potato sprouts should be planted cut side down, with the sprout side facing up. Use one seed piece per foot, planted three to five inches deep. Potatoes need a lot of space to grow, so rows should be about 36 inches apart. In most cases, it is a good idea to plant potatoes into a built-up mound. The mound should be two to three inches above the soil. The mound will help with drainage. It is common to plant for a fall potato crop, but fall potato crops often have a smaller yield.



Potatoes sprout from “eyes” on their surfaces. These sprouts will grow into new plants.

Whitney Cranshaw, Colorado State University, Bugwood.org, CC BY 3.0

Region	Spring Planting	Fall Planting
Eastern Kentucky	Late March	Early June
Central Kentucky	Mid-March	Late June
Western Kentucky	Mid-March	Early July

Once the plant starts producing tubers, it is important for the tubers to stay covered by the soil until they are ready for harvest. If they are exposed to sunlight while they are growing, they can turn green. Most often, green potatoes are not harmful to eat. Contact your county [Extension](#)

agent if you have questions. To stop potatoes from turning green, use a technique called hilling. Hilling is piling soil up around the base of the potato plant throughout the growing season. It can be done by hand or with hand tools. Focus the new dirt in places where the soil is cracking, because that is likely to be caused by a tuber. The added soil will block sunlight that could cause the potatoes to turn green. Be sure not to cover potato leaves with soil.

Potatoes need nitrogen, so plan to use nitrogen fertilizer before planting. You should need about a half of a cup of 33-0-0 fertilizer or one-third cup of 44-0-0 fertilizer for each 10 feet of potatoes. Refer to the fertilizing section in the publication titled [Growing Your Own: Preparing Your Garden \(NEP-219\)](#). Fertilize a second time or apply compost about six weeks after planting.

Pests and diseases

Wireworms are hard-bodied worms that are yellow to white in color and look like a jointed wire. They will eat their way through root vegetables like potatoes. Wireworms are common when you are planting in a place where lawn grass was grown previously.



A close-up photograph of a wireworm.

University of Kentucky Cooperative Extension

Leafhoppers are small, pale-green, wedge-shaped insects that can ruin plant leaves. If leafhoppers are on your potatoes, you will see the sides of the leaves curl upward, turn yellow-brown, and get brittle. The same thing can happen to the leaf tips. If you notice this occurring to your potatoes, you may need to use a pesticide. Contact your local county [Extension](#) office for help on taking care of these insects.



Leafhoppers can do major harm to the leaves of potato plants. The harm they cause will be mostly noticed on the edges of the leaf.

Steve L. Brown, University of Georgia, Bugwood.org, CC BY 3.0

Colorado potato beetle is noticeable, as it is one half-inch long. It has yellow coloring and black stripes. Colorado potato beetle larvae are bright red and humpbacked. The larvae can be up to three-fifths of an inch long. Both the adults and larvae feed off the foliage of potatoes and other common garden crops. Hand-picking beetles or young larvae off plants is a good way to control this insect. By keeping numbers low, you may be able to control this pest without using insecticides.



Colorado potato beetle eats the foliage of potato plants and can cause major damage.

Ward Upham, Kansas State University, Bugwood.org, CC BY-NC 3.0

Black leg is a common disease caused by bacteria. To avoid black leg and other diseases, only buy seed pieces from seed vendors. It is also important to harvest all your potatoes to prevent the bacteria population from growing.

Early blight and **late blight** are both fungal diseases that can harm a potato crop. You can ward off early blight by making sure the nitrogen and potassium levels in your soils are right. Your county Extension agent can give guidance on how to collect a soil sample. The agent can send it in for analysis and translate the results for you. Many counties offer free soil testing. For more information on soil testing, refer to the publication titled [Growing Your Own: Preparing Your Garden \(NEP-219\)](#). Late blight thrives in cool, damp weather. It is important to plant potatoes in areas with good air flow.



Early blight kills the plant and ruins the tuber.

Howard F. Schwartz, Colorado State University, Bugwood.org, CC BY 3.0



Late blight killing a potato plant leaf.

Howard F. Schwartz, Colorado State University, Bugwood.org, CC BY 3.0

Scabs are raised places on the skin of the potato that have many shapes and sizes. Varieties are affected by scab differently. Red Gold and Norland, two varieties pictured previously, have more resistance to scab.



Scabbing on an Irish potato.

Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo, Bugwood.org, CC BY-NC 3.0

Harvesting

Potatoes will mature in 90 to 140 days, based on the type. They can be harvested from a potato plant in two ways: as young potatoes or as mature potatoes.

For new or young potatoes, one sign that potatoes are beneath the soil may be cracks in the soil under the plant. They are often there about the time potatoes start to bloom. These young potatoes can be removed with care while plants are still growing. It is best to look for these potatoes with your hands instead of with a tool, so you don't disturb the plants more than necessary. New potatoes should be used fairly quickly after harvesting, because they do not store as well as mature potatoes.

For mature potatoes, you will know it is time to harvest when the plants start to die and fall over. Potatoes will have to be dug up from the ground. Be careful digging the potatoes, as it is easy to hurt the tubers if you are using a large tool with a sharp blade. Use a hand trowel, if you can, to protect your crop. For better storage, do not wash potatoes until you are ready to use them.

Storing

Store potatoes at 40 degrees F, which is cooler than the home but warmer than a refrigerator. The space needs to stay dark and humid (not wet) but not closed; allow air to flow freely. Good places for storage include an unheated basement, crawl space, or root cellar. Potatoes can be stored for four to six months. Check them often to make sure they are not rotting from too much moisture or shriveling from too little moisture. If potatoes cannot be kept this cool, they can be stored in warmer areas (50 degrees F to 60 degrees F). These potatoes will not last as long. Potatoes should never be stored in the refrigerator.

Serving

Potatoes are a good source of vitamins B and C, potassium, and complex carbohydrates. They do not contain fat, cholesterol, or sodium. There are only 70 calories in a half-cup serving of cooked potato. Most nutrients are located just below the skin, so avoid peeling whenever possible.

Select firm potatoes free from wrinkles, green spots, or bruises. New potatoes are immature potatoes of any variety. They are creamy, thin-skinned, and small enough to serve whole. New potatoes are best in dishes that call for boiled potatoes, as they will hold their shape. For baking, frying, and mashing, choose drier varieties such as russet or Yukon Gold.

Potatoes should be thoroughly washed and scrubbed before cooking. Any sprouts or eyes should be cut out. Common ways to prepare include boiling, baking, microwaving, mashing, frying, and grilling.

Clean up

At the end of the season, compost any leftover vegetation. Make sure that all the potatoes have been harvested. Potatoes left in the ground will rot and may carry disease forward to next year's crop.

Summary

Varieties

There are many varieties of potatoes. Potatoes that grow well in Kentucky include Dark Red Norland, Red Gold, Red Pontiac, Red Lasoda, Superior, Kennebec, Norchip, Yukon Gold, Russett Norkotah, Russian Banana, and Swedish Peanut. Purchase certified (disease-free) material.

How much to plant

As a rule, a 10-foot row of potato plants, depending on the variety, will yield 10 pounds or more of potatoes.

How and when to plant

Potatoes should be planted using seed pieces. Each seed potato is cut into pieces about one inch across, containing at least one eye. Use one seed piece per foot, planted three to five inches deep. In most cases, it is a good idea to plant potatoes into a built-up mound. To stop potatoes from turning green, use a technique called hilling. Hilling is piling soil up around the base of the potato plant throughout the growing season.

Pest and diseases

Pests that affect potatoes include wireworms, leafhoppers, and Colorado potato beetles. Diseases that affect potatoes include black leg, early blight, late blight, and scabs.

Harvesting

Potatoes will mature in 90 to 140 days, based on the type. There are two types of potatoes: early and mature.

Serving

Common methods of preparation include boiling, baking, microwaving, mashing, frying, and grilling.

Storing

Store potatoes at 40 degrees F, which is cooler than the home but warmer than a refrigerator.

Clean up

At the end of the season, compost any leftover vegetation. Make sure that all the potatoes have been harvested.

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