

Growing Potatoes

Potatoes are a fun crop to grow. You really don't know what's going on under ground, you can enjoy new potatoes along the way and in fall you get to really see what you accomplished when you dig up your main harvest. It's a great garden crop both to introduce kids to gardening and to eating their potatoes!

Potatoes are grown from what are called seed potatoes. These regular looking potatoes are different from store bought potatoes in very important ways. Montana law requires that all seed potatoes sold in the state be certified as virus free. Supermarket potatoes can carry viruses without showing any signs so it is best to avoid them for planting. You could introduce a virus into your garden soil that could be very harmful and nearly impossible to get rid of. These viruses, while harmful and possibly deadly to plants, do <u>not</u> pose any threat to humans. Supermarket potatoes are also often chemically treated to inhibit sprouting which you do not want on a potato you are trying to sprout and grow!

Different varieties of seed potatoes are available. We can grow just about any type of potato here. As any cook knows, different varieties of potatoes work best for different dishes.

For Baking	For Boiling	For Frying	For Storing
Russet Burbank		Russet Burbank	
	Dark Red Norland	Dark Red Norland	Dark Red Norland
	Red Pontiac	Red Pontiac	Red Pontiac
	Yukon Gold	Yukon Gold	Yukon Gold
	French Fingerlings	French Fingerlings	
	Huckleberry Gold	Huckleberry Gold	Huckleberry Gold
	Purple Viking	Purple Viking	•

Dark Red Norland: **90-100 days** to maturity. White flesh with burgundy skins. One of the best for new red potatoes. Heavy yields, good storage.

Red Pontiac: **90-100 days** to maturity. White with red skin. Produces large yields of big potatoes. The most common red grown. Good multi-use.

Russet Burbank: **100-120 days** to maturity. The famous Idaho potato! Excellent baker with white, fluffy flesh. Good keeper. *Not* a good choice for container gardening, however, it gets mushy.

Yukon Gold: **80-95 days** to maturity. Yellow fleshed, excellent for mashed potatoes or potato salad. A little too moist for frying. The plants need to be spaced close together to increase yields. Good keeper.

French Fingerlings: 90-100 days to maturity. A popular gourmet variety which produces large, fingerling tubers with smooth, dark rose-red skin and waxy, yellow flesh lightly splashed with pink. Rather dry and flourlike, this outstanding potato variety offers an exceptional quality and delicious nutty flavor all its own. Excellent multi-purpose potato. Mid to late-season maturity.

Huckleberry Gold: 85-100 days to maturity. A beautiful nutritious variety that produces round to oval tubers with purple skin and yellow flesh. Huckleberry Gold is more resistant to growth cracks, secondary growth, and hollow heart than Yukon Gold. It has very high antioxidant concentrations and good resistance to common scab and Verticillium wilt. Good keeper.

Purple Viking: 60-80 days to maturity. Truly a beautiful potato, with deep purple skin dappled with pink splashes and stripes. Bright white flesh is suitable for baking, mashing, and frying. This variety produces very large potatoes, so plant close (8"-10") to control size. Mid-season maturity.

Site selection: Like most vegetables, potatoes need good sun for a good crop. The soil should be very light and loose so the roots can easily go out into it and form tubers. Good soil is really needed for good spuds! Potatoes are not planted deeply but you do hoe up soil as they grow to bury them deeper and deeper. You need to be sure you can do this with the soil at the site you have chosen. If potatoes are grown with too much nitrogen (the first number in fertilizers) they will be all leaf and vine with little tuber development. The second number, phosphorus, is important for root development which after all, is what a potato is part of. If you have good soil that is well balanced you will grow great potatoes.

Seed Selection: Select seed potatoes that are firm and show no sign of rot. Seed potatoes are sold by the pound; **generally 1 pound of seed will plant an 8-10 foot row if the potatoes are spaced 1 foot apart.** The yield depends on the variety but most gardeners are happy with 2 to 3 rows. You'll still be buying supermarket potatoes but you'll have a reasonable crop of your own too. For container plantings, plan on using 1 to 2 potatoes (cut up) for each container.

Preparing Seed to Plant: If you have a seed potato the size of an egg or slightly more, it may be planted whole. Larger seed potatoes should be cut up into two or more pieces. Each piece must have two or more eyes. The eyes are the little indentations that sprout. Both whole and cut up seed potatoes should be dusted with sulfur before planting. Put a teaspoon of powdered sulfur (available at Plant Land) in a paper bag, put the potatoes and pieces in the bag, hold the top shut and shake the bag to coat. This prevents fungal diseases. Do not let cut pieces dry out before planting.

Planting Seed Potatoes: You can plant potatoes before all danger of frost is past but not so soon that they may rot in cool, wet ground. Additionally, the vines that sprout are not frost hardy so you should plant so that they will not come up while there is still danger of hard frost. If the ground is warmed to at least 55°F it is typically safe. Here in the Flathead Valley that is typically sometime in early May.

Dig a trench 6-8 inches deep for the length of your row. Leave about 2 feet between rows. Plant the seed potatoes about 1 foot apart. Cover them with 3-4 inches of soil but do not fill in your trench. When they are covered, water the row to thoroughly wet the soil but not too soggy. If we are still in the rainy season, water sparingly.

If you are planting in a container, put about 6 inches of soil in the bottom. Place the seed potatoes on top and cover them with 3-4 inches of soil. You will add soil to fill the container as the plants grow.

Growing Potatoes: Once the plants have emerged and are about 8 inches high, you must start the process of 'hilling' to grow your potatoes. Use a hoe to gently mound (hill) up soil around the vines with soil scraped from along both sides of the row. Leave about 4 inches or half the vine exposed. Hilling puts the root system deeper where the soil is cooler while the just scraped up soil creates a light fluffy medium for the tubers to develop into. All tubers will form between the seed piece and the surface of the soil. Repeat the process in 2-3 weeks and again 2-3 weeks after that. Don't hill soil up too deeply, 1-2 inches is usually enough. Potatoes that are exposed to light become green and they are not considered edible because this green indicates that mild toxins have formed under the skin.

In a container, add soil as the plant grows using the same measurements as above. Once the container is full, you are done adding soil. This soil can be reused from year to year if you replenish it with fresh compost.

Potatoes are often described as needing little or no irrigation. If your soil is light and rich with good texture, you can irrigate lightly, about once a week. You do not want the soil to get too wet. You can fertilize potatoes with liquid fertilizers up until the vines start to produce flowers. After that point, the tubers are forming and fertilizers will be of little or no good.

There are a few pests that specifically bother potatoes. The chief one is Colorado Potato Beetle. In a small garden, handpicking beetles off is the best method of control. You can use Bacillus thuringienses (Bt.) but since it is only effective on larvae it may not work if you notice the infestation at the beetle stage. For adult beetle infestations you can use Rotenone or Pyrethrum. Be careful not to use other kinds of chemicals indiscriminately on or near your potatoes. They will absorb the chemicals and you'll be eating chemicals with your spuds!

Harvesting & Storage: Normally 7-8 weeks after planting, the vines begin to blossom. This signals that new potatoes may be ready for a light harvest. New potatoes are considered an early summer treat.

Harvest lightly, rob a few plants of a few potatoes or pull up an entire plant at the end of a row. Containers often have trap doors you can use just for this purpose.

The main harvest occurs after hard frosts have killed the vines. After the tops are brown, rest the potatoes in the ground, undisturbed for two weeks to cure the skins. Plan to harvest in the cool of the day. Potatoes will store better if they are kept cool.

A digging fork works best for harvesting potatoes. Put the fork on the outside of the hill and dig. Try to avoid stabbing potatoes. If the soil is wet, let the potatoes air dry before storing them. Field grade your potatoes as you harvest. Any damaged, blemished, scarred or misshapen tubers should either be discarded or eaten as soon as possible. Only store whole and undamaged potatoes. As you retrieve potatoes for use, be sure to check over the rest of the crop and dispose of any that show signs of rot. They will keep well all winter.