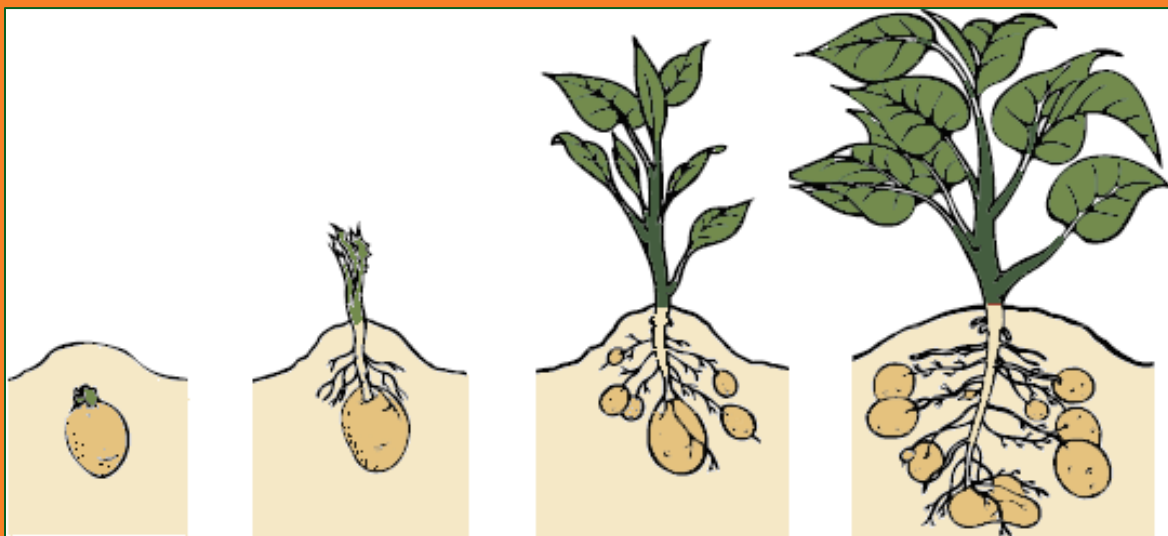


Seed Potato Care and Planting Guide

2015 edition



“What I say is that, if a man really likes potatoes, he must be a pretty decent sort of fellow.”
– A.A. Milne

“A 10-pound sack of potatoes lasts a long time.” – Octavia E. Butler



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Caring for Your New Seed Potatoes

Storage

Store your seed potatoes with the box open to give them proper air circulation. They will keep at room temperature for 1-2 months. For longer term storage seed potatoes require cooler temperatures (40-45°)

If you notice your seed potato is already sprouting, that's not such a bad thing. If it is too cold to plant in the 2-3 weeks, you can wipe the sprouts off. They will grow back. If you will be planting soon, take care while cutting and planting to leave the original sprouts intact. This will give them a head start and result in faster emergence after planting.

Avoid dropping your seed potatoes from above 6 inches onto a hard surface, as this will cause them to bruise. Bruised seed potatoes are significantly less productive.

Prepare to Plant

Sprouting

The process of pre-sprouting (or "chitting") seed potatoes before planting is not difficult, and can give you a better crop. Potential benefits of planting seed potatoes with strong sprouts from the bud eye are: a better stand, quicker maturity of the tubers, and a heavier yield.

Step 1: A week or two before planting, spread the seed potatoes out in a single layer with the seed end facing up, and place in a warm area (around 70°) with medium sun exposure.

Step 2: Observe the seed potatoes as they begin to sprout. When the sprouts reach a length of ½-1 inch, they are primed to be planted. It is better to plant while the sprouts are short and stubby because they are not as easily broken. If the sprouts grow over 1 inch, plant your potatoes as soon as possible. They are more than ready!

Cutting

Any seed potato resembling size of a chicken egg should be planted whole. To increase the number of plants (and potatoes) from your amount of seed, you can cut the larger seed potatoes into 2 pieces, and the largest into 3-4 pieces.

It is important to use a clean, sharp knife to reduce damage and risk of contamination.

When deciding where to slice, make sure each of your pieces will have at least one eye. Two or more is best.

You can plant seed pieces directly after cutting, but if the soil is wet you should allow the cut pieces to cure overnight. Curing gives the potatoes a chance to "heal over", which prevents them from rotting in wet ground. You can cure seed potato pieces for up to a week, but don't let them completely dry out or they will shrivel up and not perform as well.

Planting Your Seed Potatoes

When

You can plant your seed potatoes two weeks before the last spring frost, when the soil is around 50°. Since seed potatoes are planted underground, they benefit from a layer of soil buffering them from freezing conditions on the surface.

The key is to not let the greens freeze. If the greens emerge, and the forecast tells you there is a frost on the way, you can cover them over with dirt to protect them, and they will re-emerge a few days later.

Some say an excellent time to plant seed potatoes is when you see the grass starting to turn green again.

If you want to play it safe, wait to plant until the danger of frost has passed.

Planting

Dig a 4-6 inch deep furrow, and *gently* place your seed potatoes in the trench. Dropping from above knee level may bruise and damage them.

Space each seed piece 8-12 inches apart, depending on your needs and the characteristics of the variety you are growing.

Plants spaced farther apart are better suited to withstand drought, and have easier access to distant nutrients in poor soil.



Students Planting Seed Potatoes at Warren Wilson College in Swannanoa, NC

Closer spacing is suitable for gardens and will give you a good ground cover of foliage to keep soil cool and retain moisture.

Cover the seed pieces immediately after planting. Do not cover too deep. (4" maximum)

If your soil drains well, give the newly planted row a good soak. In heavy or compressed soils where drainage is an issue, restrict initial watering to a bare minimum. Newly planted seed potatoes that stay wet will likely rot before they can grow.

Days to Emergence: 14 to 28

Sprouts from seed potatoes should emerge in 2 to 4 weeks depending on soil temperature.

Potato Growing Guide

Potatoes go through five stages of growth.

1. Sprouting
2. Vegetative
3. Tuber initiation
4. Tuber bulking
5. Maturing

Temperature

The optimum temperature to achieve the best growth of potatoes is between 65 and 80 degrees F.

Soil

Needs plentiful, consistent moisture.

Potatoes need loose, well-drained, aerated soil to form large tubers. You don't want the roots to face resistance when they try to expand within the soil. In heavy clay, grow them in raised beds amended with compost and sand.

Select a soil that is well drained but not prone to drought. Waterlogged, poorly drained soils prevent roots from obtaining sufficient oxygen, which can cause "souring" of roots.

Potatoes like a slightly acid soil. The optimum pH range is 5.0-7.0. If your soil needs lime, incorporate the appropriate amount several months before planting. Common potato scab (brown corky tissue on surface of tubers) can be a problem if the soil pH levels are on the alkaline or "sweet" side.

Hilling

When potato greens reach 12" above the ground, you can employ a technique called hilling. Hilling is burying the vine so that only half of the of greens are left exposed. This will give you more tubers because they will be able to set higher on the vine.

You can hill up to 3x per season, as long as there is at least 8" of green tops. After the plant blooms, the roots are defined, so additional hilling is unnecessary.

If you see any potatoes poking out of the soil, cover them up! Otherwise they will turn green, and green potatoes are toxic.

Growing Guide (cont.)

Fertilization

Any average soil will grow a reasonable crop of spuds, but as with all vegetables, potatoes respond well to the right nutrients. They are especially fond of rich organic soils so for those gardeners who don't have access to animal manures the next best thing to add to the potato patch is compost.

Root crops don't require heavy applications of nitrogen because that will only develop a great crop of potato plants with poor tuber growth. Phosphorus and more important potassium, is needed to grow and maintain a good crop of spuds. Using any fertilizer with high phosphorus-potassium to nitrogen content will do them well.

It is during the tuber initiation stage that potatoes will form on the roots and the point when side dressing is going to be most effective. This stage is marked above ground by heavier leaf growth and more apparent, the forming of flowers. You need to be looking at medium to fast release nutrient sources other-wise the crop will be harvested before the nutrients become available for the plants to fully utilize.

Pest and Disease Management Tips

Control aphids.

Tips for preventing Early blight and Late blight:

- Use certified seed.
- Avoid wetting plant foliage if possible.
- Water early in the day so above grounds plant parts will dry as quickly as possible.
- Avoid crowding plants. Space apart to allow air circulation.
- Eliminate weeds around plants and garden area to improve air circulation.
- Locate new plants in a part of the garden different from previous year's location.

Look for scab-resistant varieties if soil pH is greater than 6.0.

Questions

If you have remaining questions about growing potatoes after reading this guide, feel free to call us at 828-357-5501, or send them in an email to growersupport@newsproutfarms.com. We are happy to assist you with the information on how to produce a successful harvest from your organic seed potatoes.

Harvesting

Early varieties are ready for harvest as soon as the tubers are large enough to eat. Mid-season potatoes can be harvested mid-summer after the vines die back and late varieties are ready when temperatures cool in the fall.

One pound of potatoes will plant a row approximately 8' long with seed pieces spaced at 8"-12" apart.



Plan on 1,200 lbs/acre (600 lbs. of fingerlings) when rows are spaced 36" apart with 12" between plants



Harvest 10-15 lbs. of potatoes for every pound planted under optimal conditions.
