When Your Seed Arrives

Open the package and inspect your order. Store the seed potatoes in a cool, dark place with some humidity.

Two weeks before planting, bring the tubers into a warm area (65°-70°F) out of direct light to let them wake up. To pre-sprout, see below.

Pre-Sprouting ("Greensprouting")

Pre-sprouting seed potatoes (also called "green-sprouting" or "chitting") allows the seed to produce short stubby sprouts that help the plant emerge quickly. This in turn encourages early maturity, helps with disease control, and may produce higher yields.

About 4-6 weeks before planting, warm the seed in a dark area for about two weeks. Then spread the tubers out in flats or crates in a single layer, and store in a warm medium-lighted place (but out of direct sunlight) for another 2-4 weeks. The warmth triggers the bud end to produce sprouts, and the medium light keeps the sprouts short and stubby. The sprouts don’t break off very easily, but handle them carefully, as breaking them off will set the plants back. Typically, the more stems per seed piece, the higher the set per plant.

Preparing the Soil

Potatoes like any well-drained fertile soil. Prepare the soil by spreading and working in compost or aged manure, along with colloidal phosphate and greensand. Avoid fresh manure, lime, or wood ashes in the year of planting, as these encourage scab. Maine Potato Lady Potato and Garlic Fertilizer may be worked in 2 weeks prior to planting. Lime and manure may be worked into the soil the prior fall. Potatoes do well at a pH near 6.0; they require calcium for adequate plant health and tuber-specific gravity.

Planting Your Potatoes

Seed potatoes are subject to decay when they are exposed to hot, dry soil or cold, wet soil. The soil temperature should have reached a temperature of about 50°F-70°F, or when the dandelions bloom.

You may either plant whole seed pieces about the size of a hen’s egg, or you may cut larger tubers into pieces with 2-3 eyes each. Plant fresh-cut seed pieces immediately into warm moist soil, 10”-12” apart in furrows 4”-6” deep. Space the rows 32”-36” apart. Cover the seed pieces with 2” of soil.

Use one pound of seed potato to plant 5-8 row feet, 2.5 pounds per 12-15 row feet, 5 pounds per 25 row feet, and 20 pounds per 100 row feet. For fingerling potatoes, use about half these amounts, as the eyes spiral the length of the tuber.

Hilling and Weed Control

Cultivate shallowly to prevent root damage. Create a hill of soil or mulch around the potato plant where the new tubers can develop between the seed piece and the soil surface. When the plants are 6”-8” tall, gently gather the soil or mulch up around the plant until just the top of the plant is showing. When the plant again reaches 6”-8”, hill again, building up a total of 12”-18” of soil or mulch around the plant. Mulching thickly with hay after hilling will keep the soil cool and weed-free.

Watering Your Crop

Potatoes are shallow-rooted and susceptible to water stress, especially when they are bulking. Water plants adequately to ensure even soil moisture throughout the growing season. Stop watering 2-4 weeks before harvest.
Controlling Pests and Disease

The insect that most affects potatoes is the Colorado Potato Beetle (CPB). Several strategies are effective in controlling these pests:

• Plant your potatoes late enough to miss the emergence of the beetles in the spring.
• Work in Maine Potato Lady Potato and Garlic Fertilizer 2 weeks prior to planting.
• Pick beetles from plants and destroy egg masses, beginning two weeks after they emerge.
• Watch for larvae; brush them into a container of soapy water. Repeat daily.
• Check with your certifier for approved products and further assistance. Several commercial products are effective (see source list below):
  • Entrust or Monterey Garden Spray — Contains a spinosad which is effective on a wide range of insects including Lepidoptera caterpillars. Both products are OMRI-approved for organic culture.
  • Pyganic — This OMRI-approved formula is made from pyrethrum or chrysanthemum flowers. It has a good knockdown effect, but requires repeated applications.
  • Mycotrol O — A Beauvaria fungus that attacks CPB larvae, this can complement other strategies.
  • Azaguard — Contains azadirachtin, which works both as a repellent and as a growth regulator.

The most serious disease threat for potatoes is late blight, Phytophthora infestans, a fungus that thrives in moist conditions (50˚F-60˚F and 95% humidity). This disease is aptly named, as it strikes in late summer when the nights are cool and dewy and when the gardens and crops are almost done. Late blight, which thrives on live plant material of the Solanaceae family (potato, tomato, eggplant, pepper, and nightshade), can become firmly established very quickly, destroying a crop in just 3 to 5 days. To control late blight:

• Plant clean, disease-free seed. Infected seed is a prime source of inoculation, enabling the disease to get established early in the season.
• Ensure that all controls are present on all leaf surfaces throughout the season. Develop a spray schedule to accommodate local weather.

• Check with your certifier for approved products and further assistance. Several commercial products are effective (see source list below):
  • Champion WG — This product contains copper hydroxide, a very effective control when it is applied to the plant before exposure to the late blight pathogen. Begin spraying when plants are 6” inches high. Follow the spray schedule recommended by your state’s Extension Service. (Extension Services usually publish severity ratings and a recommended spray schedule.)
  • Serenade — Made from the bacteria Bacillus subtilis, Serenade colonizes the leaf surface, preventing the disease organism from finding a spot to invade.
  • Actinovate — Made from Streptomyces lydicus, Actinovate also colonizes the leaf surface, preventing the disease organism entry.

Harvesting Your Crop

You may begin harvesting any time after the plants bloom, about 60 days after planting. To find the delectable early tubers, gently rummage around under the plant, being careful not to disturb the roots. These “babies” are your new potatoes; they’re not very big, but they are delicious! Remember, though, that whatever spuds you steal now will diminish your final harvest. When the tops start to die back (senesce), the potatoes are mature. Allow the plants to finish dying on their own, or mow or burn the tops to hurry the process along. In about two weeks, when the tops are dead and the skins are set, dig your potatoes.

Storing Your Potatoes

After harvesting, allow the potatoes to dry thoroughly. Gently brush off dirt, but do not wash tubers intended for storage. Discard green potatoes. Damaged spuds are not suitable for storage, but they are fine for the table when eaten right away. Store your crop in wooden crates, baskets, or burlap bags where air can circulate freely. Place the potatoes in a dark place in your root cellar. Potatoes store best and longest at 38˚F-40˚F with 80%-90% humidity. Under the right conditions, you can expect six months’ storage. Save your best storage varieties for last. Enjoy your harvest!

Sources

Peaceful Valley Farm Supply
P.O. Box 2209, Grass Valley, CA 95945
1-888-784-1722
www.groworganic.com

Johnny’s Selected Seeds
955 Benton Avenue, Winslow, ME 04901
1-877-564-6697
www.johnnyseeds.com

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