

Growing Potatoes in the Desert Southwest

By Alexandra Berger, Master Gardener

As a person with celiac disease and a passion for homesteading, I have often asked myself what staple crop I could grow successfully to reduce my need to buy prepackaged goods. Potatoes and corn are the obvious answers, but corn can be a challenging crop to grow in abundance in a small backyard garden, so potatoes became my most viable option.



Photo courtesy of the Cook's Thesaurus

The idea of growing my own potatoes really excited me - so much so that I planted them way too early this past winter and only got a small crop in my home garden (with better luck in some of my other gardens). So tuck this article away until January and get ready to have a beautiful and bountiful potato crop for spring 2017.

Now just to clarify, this article is addressing Irish potatoes, not sweet potatoes. These are completely distinct crops in completely distinct families and require completely distinct environmental conditions. Irish potatoes (family Solanaceae) - russets, Yukon golds, red skinned - are cool season crops whereas sweet potatoes (family Convolvulaceae) are warm season crops and each should be planted accordingly. Despite being winter crops potatoes are frost tender, so planting them too early can spell disaster for the developing tubers. Frosts and freezes can damage the tender growth, so be sure to plant your greens and root veggies in October, but hold off on the potatoes until late January or February. In addition, potatoes make great container plants, so consider this crop if you don't have a lot of space to plant.

How to plant potatoes, step by step:

1. Order seed stock from a reputable, organic seed company or buy some potatoes from your local farmers' market. Avoid purchasing potatoes from the supermarket, as these could be treated with growth-inhibitors or other chemicals. Seed potatoes should be firm with several eyes/buds.

2. If your potatoes are larger than 2 inches, cut them into 1-1.5 inch chunks, each with at least 1-3 eyes. If your potatoes are smaller than 2 inches, you can plant them whole.
3. Allow your cut seed pieces to callous over for a few days. Planting them when they are freshly cut can invite rot or disease.
4. Dig individual holes or garden rows about 6 inches deep in which to plant your seed stock.
5. Plant your potato slips with eyes facing up towards the sky and cover with 3-5 inches of soil. Potatoes like rich, well-draining, moist, slightly acidic soil and a sunny environment. Make sure to amend your soil with compost if your soil is not already fluffy and nutrient rich and water your crop consistently. Potatoes are sensitive to drought.
6. As your potato plants grow, you'll need to bury them with soil, a process called "hilling". When the stems of your plants reach 6-8 inches tall, mound the soil around your potato plants to cover the stems about halfway. Repeat this procedure as needed throughout the growing season (every 2-3 weeks) to keep the developing tubers covered. As a note: potatoes can be prone to scab, blight, and a variety of insects, so rotate where you plant your potatoes every few years to avoid such diseases and pests.

Tip: Tuber formation stops when soil temperatures hit 80 degrees. Extend the growing season by applying a thick layer of mulch (straw, alfalfa, etc.) to your crop, increasing your chances of growing larger potatoes in addition to loads of new potatoes.

7. Once plants finish flowering, wait about 2-3 weeks to harvest. Stop watering your plants, as tubers will be easier to harvest in dry soil. Dump your container or dig up your potatoes, taking care not to damage them. Brush the soil from each potato, but do not wash with water if you want to store them long-term. Eat new potatoes without peeling the skin or cure larger tubers to produce a thicker skin that is better for storage.

8. To cure potatoes, store them in a cool, humid environment for 1-3 weeks. For long-term storage, potatoes need to be kept cool (40-50 degrees F) to avoid sprouting or softening.

So get your nose into your seed catalogs, pick out your potato seed stock, find your favorite potato recipes, and get ready to grow an exciting, new winter crop! Growing potatoes is fairly straightforward, but can take some practice. In Tucson, we typically have better luck with smaller varieties, so don't get discouraged if you can't grow russets or larger baking potatoes. With experience, you should be able to grow up to 15 pounds of potatoes per 10 foot row. Enjoy your homegrown potatoes.

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