

A Bonsai Potato?!

If I told you the ancient bonsai masters trained potato plants into beautiful shapes for the gardens of the Ming emperors it would be a complete lie. The idea was that bonsai potato would be a way to give kids a bonsai. I thought the potato plant would grow in a way conducive to bonsai. Turns out it, the plant had other ideas.

To see a great alternative bonsai potato, [click here](#).

Potato Starch Bags

Potatoes are little more than bags of plant starch.

Starch is a form of energy storage for the potato plant. Think of a potato tuber as a battery to fuel new growth. Potatoes, bulbs and other tubers lie dormant through the winter until spring. The warming soil triggers the tuber to grow new sprouts up through the soil using starchs stored in the tuber from the previous year. This is why potatoes can grow under the sink without light.

Starch

Starch is a storage form of glucose. Glucose is the simplest kind of plant sugar and is created by photosynthesis. Plants store glucose molecules by linking them together in long chains, forming starch molecules.

Starch is composed of thousands of molecules of glucose linked together.

Science?! We don't need no stink'n science!

Although I sometimes refer to myself as a 'man of science,' I confess I rarely use the scientific method and prefer basing my unfounded hypotheses on observations instead of measurements.

Summary

Starting with a nasty sprouted spud will make this activity all the more fun while you create your own bonsai potato. This is a perfect use for those recently rediscovered spuds that might be otherwise headed for the trash. All you need to do is plant it in a pot and with patience and careful pruning, you too can create a bonsai potato.

Activity

You will need a sprouted potato and a shallow pot. I use bonsai pots, but these can be pricey and hard to find. I would suggest using a shallow clay pot. Plastic might be ok, but you'll need to make sure it doesn't get overwatered.



Shoots grow from the top of the potato slowly.

Plant the potato in the pot so it juts out of the dirt. Your potato should be at least half way in the dirt. Before planting your spud spend some time observing how the sprouts grow out of the potato. The sprouts become the branches so you'll want to plant the tuber with these sprouts above the dirt. How you position the potato in the dirt has everything to do with the form that your bonsai will take after planting. Because every sprouted potato is different, every bonsai potato will be different. I like to imagine the potato is a rock and the sprouts are small trees growing from the rock.

A couple weeks after planting your potato, small leaves will form on the sprouts. The sprouts grow very slowly after it is planted. However, shoots that come up from underground around the potato grow very quickly. Cut these shoots below the dirt line.



Just a little purple after two weeks in the refrigerator.

As always, testing was done at the GreatScott.com Labs and Proving Grounds in Phoenix, Arizona where outdoor summer temperatures regularly exceed 115F (65C). Be assured that I put the potato through some extreme testing.

I tested the potato for cold resistance by placing it in a plastic bag in the refrigerator for a couple weeks. The leaves turned purple, but otherwise the potato was unaffected.

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The plant also did fairly well outdoors in the hot summer temperatures. Most plants couldn't survive in a pot outdoors in the summer. The air is very dry and soil in pots dries out very quickly. The bonsai potato did well and was even able to survive a few days with no water. When the soil is dry, the plant draws moisture from the tuber. The tuber shrivels but the plant will survive.

If your spud is neglected and the potato shrivels, you may be able to save it if you catch it early. Place the pot in a tray with a couple inches of water for a couple days. If the potato plumps up, consider yourself lucky. If the potato does not plump up-it may be too late. Continue to water the spud daily, but don't soak in water. Sometimes the tuber will no longer respond to watering and will shrivel and die no matter how intensive the care. I have repeatedly tested the abuse a bonsai potato will take and have killed several this way.

A good bonsai should have a height proportionate to the depth of the pot and the size of the tuber. To keep the sprouts from growing too tall, cut off the top growth tip with small scissors right before the first leaf. This stops the sprout's upwards growth. The stem will get a little taller as the spacing between leaves grows, but will soon stop. Depending on the height of your plant this growth may add an inch or two to the plant's height. Cutting off the top growth tip prevents the stem from getting taller and forces the plant to grow multiple branches. This slows the plant's upward growth.



Cutting off the growth tip keeps the plant height proportionate.

A sideline discussion would involve the varieties of potatoes and bonsai plants of each. The most common type of potato someone might encounter would be the Russett potato. They are big, a little rough-skinned, and frequently come in 5lb (2.3Kg) bags. They are also very good baked. A bag can frequently be had for around a dollar. These half-used bags of potatoes are often forgotten in a cupboard. They can be a good place to find your next bonsai.

Synopsis

I'd like to say that the bonsai potato project was a great success, but I don't think that's the case. I doubt that this method of bonsai potatoes will ever catch on. It might make a good windowsill plant. It is a definitely a conversation starter. Since bonsai spuds take a long time to grow, this is not an experiment suited for impatient children. And although the bonsai potato

stood up to more abuse than a conventional bonsai I wouldn't say it was indestructable.