



# Potatoes in Your Garden

University of California Cooperative Extension  
Stanislaus County

Potatoes are a fun and easy crop to grow. Digging for potatoes during harvest is almost like a treasure hunt! This publication discusses how to grow and harvest both white and sweet potatoes.

## “IRISH” POTATO VS. “SWEET” POTATO

Irish potatoes are also called “common” or “white” potatoes. In this publication, the term “Irish potato” will be used. Sweet potatoes are sometimes called “yams” but will be referred to as “sweet potatoes.”

Irish and sweet potatoes are only distantly related and their growing habits are quite different.

## HISTORY OF THE IRISH POTATO

Irish potatoes originated in the Peruvian Andes of South America where they have been grown for over 10,000 years. It’s unknown how many actual potato varieties exist. There are over 1,000 known varieties and possibly more to be discovered.

When the potato was introduced to Ireland, it quickly became a staple in the Irish diet. Only a few of the numerous potato varieties

in existence were cultivated. This lack of genetic diversity made the few potato varieties vulnerable to disease. In 1845, a disease known as late blight destroyed entire crops of potatoes and led to the Great Irish Potato Famine.

## HISTORY OF THE SWEET POTATO

Sweet potatoes originated in the tropical areas of Mexico’s Yucatan peninsula down to Venezuela.

Sweet potatoes are often called “yams” which is technically incorrect. A true yam is a vegetable crop native to Africa and Asia. Much of the confusion between the names of these vegetables has to do with language barriers and misunderstandings between travelers and natives.

The flesh of sweet potatoes is either called “dry” or “moist.” These terms describe the texture of the potato.

## WHERE TO BUY THEM

It’s possible to grow Irish potatoes from tubers bought at the grocery store. However, it’s not a good idea as these potatoes may carry diseases that can be transmitted to your garden soil.

For Irish potatoes, look for “seed potatoes” at local

nurseries in January. Seed potatoes are potatoes that have not been treated to prevent sprouting. They are usually sold by the pound.



Sweet potato plants are grown from “slips” which are stems of vegetative growth. Slips are not sold at local nurseries, but can be purchased online. See page 2 for how to grow your own.

Although sweet potato slips are planted in April, the ordering season begins in October. Order early, as companies may run out of the type you want. Once you place your order, you’ll be given a time frame of when your plants will arrive. For this reason, (and because slips are very perishable) have your soil prepared ahead of time so you are ready to plant.

## SOIL PREPARATION

Both Irish and sweet potatoes need good drainage. To prepare your potato beds, add 3-4 inches of compost and then till it into the soil. Remove dirt clods or rocks.

Both types of potatoes can be

# Potatoes in Your Garden

planted in large containers like wine barrels. Use good quality potting soil purchased at a nursery or gardening center.

## **PLANTING IRISH POTATOES**

An Irish potato is a tuber that has many “eyes.” Each eye is capable of sprouting a stem. Cut potatoes into small segments, leaving at least 1-2 “eyes” on each piece. Then allow them to dry at room temperature for 1-3 days. Small seed potatoes can just be planted whole.

To prepare the garden plot, create rows 2 1/2 feet apart. In each row, plant potato pieces 3 inches deep and 6-12 inches apart, depending on what size potato you desire. The closer you plant the seed potatoes, the smaller the potato size. The further apart you plant them, the larger the potato size.

Once the potato stem sprouts, it must make its way up through the soil to reach sunlight. It has a limited amount of resources to do this, which is why you plant it just 3 inches deep. As the stems come up through the soil, mound soil around and over them. Continue to do this until the mound is 8 inches tall. Then the potatoes will develop in the soil that you have mounded around the plant.

You can also grow Irish potatoes in straw. Dig a trench 4 inches deep and 12 inches wide. Plant the potatoes with the “eye” facing up, 1/2 inch deep. Then, fill the trench with 6 inches of clean straw. As the plants emerge, cover them with 4-6 inches of straw. When harvest time comes, simply pull back the straw and pick up the potatoes!

## **GROWING “SLIPS”**

Sweet potatoes are grown from vine cuttings known as “slips.” To grow slips, purchase sweet potatoes at a farmer’s market or the grocery store. Stack the potatoes lengthwise in a 5 quart bucket and fill the container 1/2 full with water. Check weekly to see if the container needs more water, and change the water completely every 2-3 weeks. Start your potato slips about 9 weeks before your planting date in mid April.

## **PLANTING SWEET POTATOES**

Space rows 3 feet apart. A 10 foot long row produces approximately 4-8 pounds of potatoes.

To plant, snap off the slips, then dispose of the inch of stem nearest the potato. Plant slips several inches deep and 1 foot apart. Then water deeply.

Don’t discard the original potato tubers, as they will continue to grow. That way, if some vines die in the field, you

can easily replace them. You can also eat the vines that grow. When cooked, they have a mild, spinach-like flavor. Incidentally, sweet potato vines also make an attractive houseplant.

## **HARVEST**

You can harvest both Irish and sweet potatoes when they reach suitable size. “New” potatoes are simply Irish potatoes dug up early. Once the potato plants begin to die, this is a sign that the potatoes are ready.

## **TOXICITY**

Irish potato plants produce a “fruit” that grows above ground. This green colored fruit is not for consumption as it contains toxic plant compounds called alkaloids. Never cook or eat potatoes that are green, because they also contain these alkaloids.

## **NUTRITION-IRISH POTATOES**

Although the potato is often portrayed as an unhealthy food, it’s actually full of nutrients. Potatoes contain Vitamin C , Vitamin’s B6, B1 (Thiamine), B2 (Riboflavin) and B3 (niacin). They also contain calcium, magnesium, potassium and iron.

The main reason potatoes are considered unhealthy has to do with how they are prepared. Potatoes easily absorb oils and fat. A baked potato topped with sour cream, cheese and

# Potatoes in Your Garden

bacon bits is not as healthy as a baked potato prepared with a little butter.

## NUTRITION-SWEET POTATOES

Sweet potatoes are full of vitamins and nutrients and have 180 calories per serving. They also contain Vitamins A, B and C as well as iron, calcium and potassium. They are now being prepared as “sweet potato fries” in restaurants. For a healthier option, ask for them baked instead of fried.

## POTASSIUM

It's interesting to note that both Irish and sweet potatoes have more potassium per serving than a banana!

## POTATO VARIETY GUIDE

The following page lists Irish potato varieties that can be found at local nurseries. It also includes types that can be ordered from a catalog or online source. Those normally found locally are denoted by an asterisk (\*).

Nurseries may not know the specific name of a potato variety. For example, the white potato sold may just be “white.”

All sweet potatoes must be started from slips or ordered. Pay special attention to the information written earlier on when to start and/or order slips.

## DAYS TO MATURE

The guide lists the time needed for a potato to reach full size. However, you can harvest potatoes at any size and eat them, as long as they are not green.

## BIBLIOGRAPHY

Healy, S. *Growing Potatoes in Straw*. Retrieved on September 16, 2009 from: <http://www.coopext.colostate.edu/4DMG/VegFruit/potatoes.htm>

Irish potato Nutrition Data retrieved on December 9th, 2009 from: <http://www.nutritiondata.com/facts/vegetables-and-vegetable-products/2770/2>

Nelson, G. *It's easiest to start sweet potato slips in water*. Retrieved on September 17, 2009 from: [http://findarticles.com/p/articles/mi\\_m1082/is\\_v29/ai\\_3705294/](http://findarticles.com/p/articles/mi_m1082/is_v29/ai_3705294/)

Pacher, S. *About Sweet Potatoes*. Retrieved on September 15, 2009 from <http://www.motherearthnews.com/Organic-Gardening/1988-11-01/About-Sweet-Potatoes.aspx?page=2>

Sweet Potato Nutrition Data retrieved on September 15, 2009 from: <http://www.sweetpotato.org/content/nutritional-info>

Steele Plant Company. *Our sweet potatoes*. Retrieved on September 17, 2009 from: <http://www.sweetpotatoplant.com>

## AUTHOR

Anne Schellman;  
UCCE Stanislaus County, 3800  
Cornucopia Way Ste. A,  
Modesto, CA 95358.  
e-mail: [aschellman@ucdavis.edu](mailto:aschellman@ucdavis.edu)  
September 2009

The University of California prohibits discrimination or harassment of any person on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994: service in the uniformed services includes membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services) in any of its programs or activities.

University policy also prohibits reprisal or retaliation against any person in any of its programs or activities for making a complaint of discrimination or sexual harassment or for using or participating in the investigation or resolution process of any such complaint.

University policy is intended to be consistent with the provisions of applicable State and Federal laws.

Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Equal Opportunity Director, University of California, Agriculture and Natural Resources, 1111 Franklin Street, 6th Floor, Oakland, CA 94607, (510) 987-0096.

## Potato Variety Guide

<b>Irish Potato Variety</b>	<b>Description</b>
Fingerling	Elongate shape potatoes have a creamy texture great roasted or mashed. 90-110 days to harvest.
Red*	Have a moist texture and are great roasted, boiled or steamed. 70-90 days to harvest.
Russet*	White potato traditionally found in stores. Has a thicker skin than most types. Great mashed, roasted and baked. 100-120 days to harvest.
Purple*	Both skin and flesh are a bluish purple. Interesting mashed. 70-90 days to harvest.
Yukon*	Yellow-flesh variety with a reputation of a butterfly flavor. 60-75 days to harvest.
<b>Sweet Potato Variety</b>	<b>Description</b>
Beauregard	Type commonly found at the supermarket. Red-orange skin with orange flesh. 90-100 days to harvest.
“Bunch” Porto Rico	Great for gardeners with limited space. Copper colored skin, reddish flesh. 110 days to harvest.
Centennial	Used often in baking contests. Both skin and flesh are orange. 100 days to harvest.
Nancy Hall	Popular potato in the 1930’s and 40’s. Light skin, yellow flesh. Not the most attractive potato, but sweet when baked. 110 days to harvest.
Vardaman	Also great for gardeners with limited space. Golden yellow skin with bright orange-red flesh. 100 days to harvest.
White Yam	Has a dry flesh but is known as one of the sweetest potato varieties. 110 days to harvest.