



1&L Garden Center

The All Season Gift and Garden Center

620 North 500 West Bountiful, Utah 801-292-0421

in fo@JL Garden Center.com

www.JLGardenCenter.com

Onion Care

Onions are versatile, and an essential ingredient in countless recipes. Onions are a cold-season crop, which makes them easy to grow, because of their hardiness. You can plant onions from seed, from onion sets (small bulbs), or from bare root plants.

They are frost-hardy. You can plant them as soon as you can prepare your garden soil in the spring, which means you can start to harvest small onions, ready to eat, early in the summer. They can be harvested early for scallions (green onions), mid-season for summer meals, or they can be left to fully mature for fall harvest, and winter storage.

A scallion is any onion that is harvested before it has the chance to form a bulb. Green onion varieties (bunching onions), producing small, if any bulbs, are also called scallions. Scallions have a mild, onion flavor, that is not as intense as regular onions. Scallions from green onion varieties are milder, juicier, and sweeter tasting, than scallions from the regular, full size onions. They can be used raw or cooked. While some discard the darker green tops, the whole thing can be eaten, and is often used in Asian cooking.



Onions need full sun, where they won't be shaded by other plants.

The soil needs to be well-drained, loose, and rich in nitrogen. Heavy or compact soil stunts bulb development.

Onions are heavy feeders and need constant nourishment to produce big bulbs. Add plenty of Bumper Crop Compost, or well-rotted manure, before planting.

At planting time, apply 16-16-8 Multipurpose Fertilizer. Side dress onions every three or four weeks, with 16-16-8 fertilizer, until the bulbing process begins.

You can plant onions as soon as the ground can be prepared in the spring, usually late-March or April. Make sure temperature doesn't drop below 20 degrees F. once the plants start to grow.

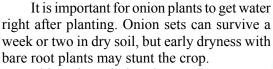
Direct-seed in the spring, when the soil temperature reaches 50 F. Plant seed ¼ inch deep, ½ inch apart, in rows 12 to 18 inches apart. Thin to 4-inch spacings for large bulbs, 2-inch spacings for smaller bulbs - but higher yields, or 1-inch spacings for scallions.

Start transplants inside about 8 to 10 weeks before the last frost date. Plant 4 or 5 seeds in each cell, or seed in flats ½ inch deep and ½ inch apart. If tops grow too tall and begin to droop, trim back to about 3 inches tall with scissors. After hardening off, transplant them outside 2 to 4 weeks before the last frost date.

The 'Last Frost Date' in Davis County is approximately May 15.

Plant sets, or bareroot plants, about 1 inch deep. Space them 2 to 4 inches between each plant, and in rows 12 to 18 inches apart. When planting onion sets, don't bury them more than one inch under the soil; if more than the bottom third of the mature bulb is underground, bulb growth can be stunted.





Thin onions during the summer to space them 3 to 5 inches apart, and don't forget to eat the thinnings.

Practice crop rotation with onions in your vegetable gardens. They are good to rotate with tomatoes, beans, or carrots. *Please read our Crop Rotation Handout for more information.*



Fertilize every 3 to 4 weeks with nitrogen to get big bulbs. Stop fertilizing when the onions push the soil away, and the bulbing process starts. Do not put the soil back

around the onions; the bulb needs to emerge above the soil.

Generally, onions need consistent watering. About one inch of water per week (including rain water) is sufficient. If you want sweeter onions, make sure that you water them consistently. Onions will still look healthy, even if they are bone dry, however, they will not be nearly as sweet if they are allowed to become too dry. Make sure your soil is well-drained, because too much water can be bad for your onion crop.

Unfavorable growing conditions (heat or water stress) may result in onions bolting, or sending up flower stalks. If flower stalks should develop, carefully cut them

from the plant immediately. If left, the formation of bulbs will be reduced.

Harvest and Storage

There's never a time when onions aren't ready for harvesting. They can be picked and eaten at any stage; spring, summer or fall.





When onions start to mature, the tops become yellow and begin to fall over. At that point, bend the tops down, or even stomp on them, to speed the final ripening process.



Cut back on watering when the tops start dying back, to prevent the bulbs from rotting.

Loosen the soil to encourage drying, and after a few days, turn them up and let them cure on dry ground. Always handle them very carefully—the slightest bruise will encourage rot to set in.

When tops are brown, pull the onions. Be sure to harvest in late summer, before cool weather. Mature onions may spoil in fall weather.

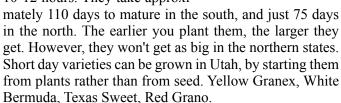
Allow onions to dry for several weeks before you store them. Spread them out on an open screen, off the ground, to dry. Store at 40 to 50 degrees F in braids, or with the stems broken off.

Mature, dry-skinned bulbs like it cool and dry, so don't store them with apples or potatoes.

Onion Tip: When onion tops begin to fall over, turn brown and wither, it is time to harvest. Tipping bulbs over to break some of the roots will speed drying.

Day Length

Short Day. The short-day varieties start the bulbing process when daylight length reaches 10-12 hours. They take approxi-



Intermediate Day. These varieties are the most widely adaptable, since they only require 12 to14 hours of sunlight before beginning the bulbing process. Candy, Red Candy, Super Star.

Long Day. Long-day sweet, and storage varieties, do well in the northern states that have between 14-16 hours of daylight length. Sweet varieties generally mature a few weeks before the storage varieties, and will keep from one to four months, so eat them first. Big Daddy, Walla Walla, Yellow Sweet Spanish, White Spanish

Candy Onion

135 days. Intermediate or Day Neutral Variety. **Candy** grows almost everywhere! From northern Texas to the Canadian border, this variety provides a



sweet onion for mid and northern areas. It produces very large globe shaped bulbs, with an excellent tasting white colored flesh. Candy stores for months - if you can resist them that long, that is! It's earlier, larger, and more flavorful

than its long- and short-day varieties. Candy is unsurpassed for performance and taste!

Red Candy Onion

95 days. Day Neutral. The most beautiful red onion on the market. Red Candy's glossy-skinned red beauty adds color and sparkle to salads and recipes. It has a delicious flavor, so sweet you can eat them raw, but will also add a wonderful flavor to any recipe. When planted in short and intermediate day areas it produces larger bulbs; up to 3". It will not grow as large in long day areas. Stores 2 - 3 months.

Walla Walla

56 to 65 days to harvest. Long Day Variety. **Walla-Walla** is one of the best sweet onions for northern gardeners. It produces a colossal yellow skin globe shaped bulb with a sweet white flesh.



Ultra-mild bulbs mature 2 weeks quicker than other Spanish types. If you enjoy sweet onions, like the ones grown in Vidalia, Georgia, you'll love this ultra-mild variety. It's a delicious cold-hardy variety with a flattish shape, tan skin, and white flesh. Sweet enough to eat like an apple, yet with an onion "zing" that adds zest to any dish!

The mild taste of a Walla Walla Sweet Onion is not due to sugar, but rather a low sulfur content, which is half of an ordinary yellow onion. It is a very large, flattened onion that is mild and juicy. It can be planted in the spring or in August to overwinter. Spring-planted bulbs are not quite as mild as are fall sown ones. The only draw back is that it does not store well for long periods of time.

White Spanish

110-120 days to harvest. Long Day Variety. Long time gardening favorite. This traditional variety



produces huge globe shaped bulbs with a strong, yet mild flavor. It has excellent storage qualities (up to 6 months) and is best suited for northern gardeners. It has white skin, fine white flesh and has an excellent flavor. A uniform Sweet Spanish type, popular for fresh markets. Glistening white skin and mild flesh can be cooked, used raw in salads, or harvested as scallions at a young stage. Widely adapted onion that stores only for a short term.

Yellow Spanish

115 days to harvest. Long day variety. Yellow Sweet Spanish Onion seeds produce large bulbs that have medium firm flesh and yellow skin. Bulbs are very mild and have golden brown skin. It is one of the most popular onions grown by home gardeners and market growers.



Flavor never fades. Golden globes weigh up to a pound and keep well for their size. Sweet Spanish onions are a popular vegetable used either raw or cooked, as a

flavoring in fresh salads, soups, hamburgers, sandwiches and stews. Sweet Spanish onions will grow quite large and sweet. This variety is one of the best varieties to store for extended times.

Yellow Granex - Vidalia Onion

125 days to harvest. Short Day Variety. Mild, sweet, but also good for storing! This is the same sweet yellow onion that's famously grown in Vidalia, Georgia, and just one bite tells you why



it's one of the most popular sweet Onions in America. Not only is this short-day type nice and mild, it's actually got a sugary flavor you'll love! And even though it's a sweet type, it stores remarkably well.

This onion is a bit flattish, with flimsy papery wrapping and light-yellow, thick flesh. It is equally well suited for cooking or using raw, and is a very reliable garden performer.

Texas Sweet Onion

110 days to harvest. Short Day Variety. The Texas 1015-Y Supersweet is a short day yellow variety that produces globe shaped jumbo size onions. It is extremely sweet and will store better than other short day varieties. They hold very well after harvest — more than 2 months with proper curing — and are trouble-free in the garden

It has a great onion flavor, but it won't cause tears to run and drip off your cheek. It grows best in the south but can be planted further north than other short day varieties because it matures a little later. Although this is a short day variety, it can be grown in our climate by starting them from plants, rather than from seed.

Red Grano Onion

112 days to harvest. A short day variety. Red Granos have a mid-range storage period. They can be stored 3 to 4 months at room temperature. Red Grano onion produces medium sized red onions that are crisp and mild flavored. Perfect for salads or hamburgers.

Red onions are sometimes called purple onions. The onion has purplish-red skin, and white flesh tinged with red. These onions tend to be medium to large in size and have a mild to sweet flavor. They are added for color to salads. and grilled or lightly cooked with other foods. They may lose their redness when cooked.

Super Star Onion

95 days. Intermediate Day variety, or day length neutral white onion. Mild, crisp white onions. The globe-shaped bulbs are very attractive, have a mild,



sweet flavor and retain their skins well. Wonderfully thick rings. Thrives just about anywhere. Super Star keeps well for a mild white onion, but like other whites, it's not recommended for long-term storage. All-America Selection vegetable award winner.

Big Daddy Onion

110 days to harvest. Long Day variety, but can be grown as an intermediate. By far the largest of the storage types. He's super-sized with a tender heart. The delec-



table, delicately textured flesh is superb raw, and makes magnificent French onion soup. Yellow globes will last 8-10 months in storage.

Crystal White Wax Onion

60 - 95 days to harvest. Full sized, white bulbs can be harvested in 150 to 180 days. Short Day variety. Small, round to slightly



flattened bulbs, are popular to produce pearl or pickling onions, with a wonderful, mild flavor. Great for stews, soup, and in stir fry receipes, the onions carmelize to perfection. It is not a good storage onion, but it is excellent used fresh. Also good as a bunching onion. Heirloom variety.

Tokyo Long White Onion

65 - 100 days to harvest. A popular green onion, or scallion variety, that is easy to grow, and very good to eat. Slightly pungent, long white shanks, with stiff blue-green tops. Plants



grow 12" to 15" tall. Resistant to hot weather, and it is also fairly cold tolerant, but not recommended for over-wintering. Use fresh, or cook as you would onions or scallions. Heirloom variety.

Leeks

Leeks look like a larger version of green onions. They have a subtle onion flavor and are excellent for soups! They can be grown in all areas since they are not day length - dependent. They will continue to grow as long as you continue to blanch them (throwing dirt up on the shafts).



They have their own distinct flavor - quite harsh when raw (only very young leeks are eaten this way) but, when cooked, very delicate, like a mild onion but with a hint of sweetness. Two thirds of their length is white and firm, and this is the part that is mainly eaten. The rest of the third is made up of the leaves (flags), most of which is discarded. Leeks are very versatile and work well cooked in various recipes or as a side dish.

Shallots

Shallots have a more subtle flavor than their larger onion cousins. They're frequently used raw and as a garnish. Shallots are also a great substitution for regular onions. They are sometimes considered to be the gourmet member of the onion family due to their mild, delicate flavor,

Onion Trivia

What compound in onions brings tears to your eves? When you cut an onion, you allow chemicals inside the onion cells that are ordinarily kept separate, to mix with each other and with air. Amino acid sulfoxides form

sulfenic acids. Enzymes that were kept separate now are free to mix with the sulfenic acids to produce propanethiol S-oxide, a volatile sulfur compound.

This gas reacts with the water in your tears to form sulfuric acid. The

sulfuric acid burns, stimulating your eyes to release more tears to wash the irritant away.

How do you protect yourself from crying? Rubbing your eyes is a bad idea, since your hands are likely covered with onion juice. Closing your eyes is another bad idea, especially with a knife in your hand.

You could cut the onion under a kitchen fan that sucks the air away. You can cut the onion underwater so the chemicals don't get into the air as much. You could chill the onion before cutting it to try to slow down the reactions. You could wear goggles so the sulfur compounds won't reach your eyes.

Cooking the onion deactivates the enzyme, so while the smell of cooked onions may be strong, it doesn't burn your eyes.

What should you eat to get rid of onion breath? Parsley. Rinse your

mouth with equal parts of lemon juice and water. Chew a citrus peel.

Reducing the Pungency. To reduce the pungency, sharpness or aftertaste of a raw onion, cut them the way you plan to use them, and then place them into a bowl of ice water to stand for 1 1/2 hours. If you don't have time, place onions in a strainer. Run water through onions for at least a minute.

The Color of Onions. Onions are available in three colors - yellow, red, and white. Approximately 87 percent of the crop is devoted to yellow onion production, about 8 percent red onions and about 5 percent white onions.

Yellow onions are full-flavored and are a reliable standby for cooking in almost anything. Yellow onions turn a rich, dark brown when cooked and give French Onion Soup its tangy, sweet flavor.

The red onion, with its wonderful color, is a good choice for fresh uses or in grilling and charbroiling - don't forget the hamburgers.

White onions are the traditional onions used in fresh salads and in classic Mexican cuisine. They have a golden color and sweet flavor when sautéed.

Dinner is not going to be ruined if you use a red onion, when you should have used a yellow onion.

Onion Sizes.

Onions range in size from less than 1 inch in diameter (creamers/boilers) to more than 4.5 inches in diameter (super colossal).

Super Colossal- 4-1/4" and up Colossal 3-3/4" and up Jumbo- 3" and up Medium- 2-1/4" to 3-1/4" Prepack- 1-3/4" to 2-3/4" Boiler- 1" to 1-7/8"



The most common sizes of onions sold in the United States are the medium (2 to $3\frac{1}{4}$ inches in diameter) and the jumbo (3 to $3\frac{3}{4}$ inches in diameter).



More Resources:

http://extension.usu.edu/files/factsheets/onionsf.pdf http://www.onions-usa.org/about/season.php http://extension.usu.edu/files/publications/publication/HG_2004-03.pdf http://onions-usa.org/recipes

Fall Planting

Fall is an excellent time to plant onions for a great harvest next summer. You can plant onions with seed or in bulb sets. Fall onions grow



much like a crop of garlic, becoming well established in the cool fall temperatures before going dormant for the winter.

When Spring arrives – they come back to life, using the previous year's head start to take off strong!

Fall planted onions mature earlier, and can usually be harvested full size as early as mid June.

In early-spring you'll find that the plants haven't grown much over the winter, but with any luck most have survived. They will be about the size of large scallions in April, producing small bulbs by May, and generally are full grown by June.

Many of the onions will start sending up a scape to produce seeds, since onions are biennials. Be sure to harvest the onions before, or as soon as you see a scape appear; before the flower stalks become large, and start to affect the flavor.

These overwintered onions won't store very long – they should be used up quickly, just like a scallion or a fresh market onion.

The easiest way to grow onions is from seed planted directly into the garden from mid-September through mid-October. Plant seed 1" apart and ½" deep in well prepared soil. For the best growth and yield, onions need fertilizer right from the start. Be sure to keep newly planted seed evenly moist, to ensure good germination and growth.

If you plant onion sets, they do not require as much care as seeds when first planted. They are easier to start, but require the same care as onions started from seed as they grow during the fall, winter and spring.

As the onions grow, thin out the seedlings so individual plants stand 3" to 4" apart. Onions pulled during thinning can be used as green onions.

Make sure your crop has a good 4 to 6 week window to become established before hard freezes become a regular event. Mulching the plants, with straw or leaves, once they become established, will also help the plants survive the harsh winters.

When regrowth begins in the spring, fer ize all your over-wintering onions with 1 cup Vegetable fertilizer for each 10' row. Water occasionally if the spring is dry.

