



Growing Onions

With the recent up and down temperatures, spring is surely here! And early spring is a great time to start thinking about planting early season vegetable crops – especially onions!

Onions are quite hardy and grow best in cool weather, so slips or sets should be planted as soon as the soil may be worked in the spring. Onion varieties have different requirements as to the number of hours of daylight required to make a bulb. If the seed catalog lists the onion as "long day," it sets bulbs when it receives 15-16 hours of daylight and is used to produce onions in Northern summers. "Short day" varieties set bulbs with about 12 hours of daylight and are used in the deep South for winter production. Seed of short day varieties started indoors in January should produce a harvest in June. Seedlings or sets of long day varieties set out in April will produce a harvest in August.

Onion types are often grouped according to taste. The two main types of onions are strong-flavored (American) and mild (sometimes called European). Each has three distinct colors, yellow, white, and red. In general, the American onion produces bulbs of smaller size, denser texture, stronger flavor, and better keeping quality than European types. Globe varieties tend to keep longer in storage. For the best storage onions, direct seed the crop or use transplants. Bulb onions recommended for use in Nebraska include: Yellow Sweet Spanish (short term storage), Copra, Walla Walla Sweet (short term storage), Red Hamburger, and First Edition.

Planting

Like most vegetables, onions prefer a full-sun spot in the garden with well-drained soil. The number of leaves that form prior to bulb development determines the ultimate onion size. Since bulb development in each cultivar is triggered by a specific daylength, early planting is the most effective method of increasing bulb size. This allows more time for leaves to form. If the onions do not grow well before bulb induction, the final bulb size may be smaller than desired.

Place plants or sets 1-6" apart in the rows, and 12-24" between rows. Avoid sets more than ¾ inch in diameter because they are likely to produce seed stalks. (Since onions are biennials, onion sets are botanically prone to going to seed. Planting too early and exposure to cold temperatures also cause seed stalk development and thick elongated necks.)

The shape of the onion bulb is determined both by cultivar selection and the growing depth of the basal plate, a section of compacted stem at the base of the onion from which the leaves and roots grow. If the basal plate is near the surface of the soil, as often occurs when onions are direct seeded, the onion bulbs will be a flat disc shape. Onions sets and plants are usually set deeper in the soil causing the bulbs to be more globe-shaped.

Culture & Weed Control

Due to their shallow root systems, onions compete poorly with weeds; shallow cultivation is necessary. Do not hill up soil on onions, as this can encourage stem rot. Light mulch will help decrease the number of weeds, as well as conserve soil moisture. Keep onions evenly moist, but not waterlogged, throughout the growing season especially after bulbs begin enlarging. Even moisture is very important; moisture stress can cause double and/or split bulbs.

Harvesting & Curing

Onions should be harvested when about two-thirds of the tops have fallen over and dried, and the "necks" of the onions have started to dry. A common misconception among gardeners is that if they bend over the onion leaves, while they are still green and growing, it will prevent the leaves from growing so much and "send more energy to the bulbs," resulting in larger onions. It's also thought that this practice will make the onions mature faster. Unfortunately, it only succeeds in reducing bulb growth since the leaves, which manufacture carbohydrates stored in the bulbs and increase bulb size, are killed.

Research has shown that optimum flavor and sweetness is achieved if onions are harvest when 80% of the foliage has died back. However, once your onions reach this stage, don't wait more than one or two weeks to harvest; the bulbs may begin to rot, or grow again and go to seed.

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