

Onion & Leek Planting Guide

Important

- *Remove plants from box immediately.*
- *Do not put in soil or water before planting.*
- *Keep cool and dry until you can plant.*
- *Follow the instructions inside for best results.*

Four Easy Steps to Growing Big, Sweet Onions

1. PREPARE

While the enclosed plants may appear dry, don't be alarmed; they're simply dormant. Don't worry if you can't plant them immediately, even if the roots and tips begin to dry out. The onions can live off the bulb for approximately three weeks.

Do remove the plants from the box immediately. Keep them in a well-ventilated, cool area until you can plant them. **Do not** put them in soil or water.

Soil Preparation

Onions require full sun and good soil drainage. Choose a location that gets plenty of direct sun. Onions grow best on raised beds or raised rows at least 4" high and 20" wide.

The soil should be loose and crumbly. If it's compacted, work in compost to improve aeration and drainage.

To stop weeds for up to six weeks, rake a pre-emergent herbicide, such as Treflan or corn gluten meal, into the top inch of soil before you plant. Don't worry; the herbicide will not affect the onion plant roots.

Soil Type

It's helpful to know whether your soil is acid (pH below 7.0) or alkaline (pH above 7.0). Onions prefer soil with a pH between 6.2 and 6.8.

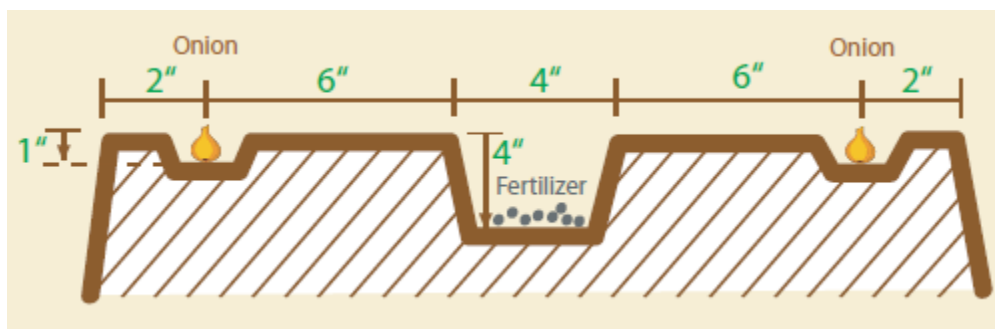
Your agricultural extension service can test your soil for you, or you can buy a home test kit at your local garden center. Visit www.csrees.usda.gov/extension to locate the nearest extension service.

If your soil is too acid, mix in ground limestone, available at your garden center. If it's too alkaline, add peat moss.

2. PLANT

Plant your onions four to six weeks before the last estimated spring freeze. (Your agricultural extension service can tell you when that is.)

For the best growth and yield, onions need fertilizer right from the start. Use a fertilizer with the middle number higher than the other two, such as 10-20-10.



Dig a trench that's 4" deep and 4" wide. Sprinkle $\frac{1}{2}$ cup fertilizer per 10 linear feet of row. Cover the fertilizer with 2" of soil.

Plant the onions 6" from the edge of the trench on both sides of the trench. **Do not** plant the onions in the trench! Leave a 2" margin between the onions and the outside edge of the bed.

Plant the onions 1" deep and no deeper, as this will inhibit their ability to bulb.

If you want the onions to grow to maturity, space them 4" apart. If you prefer to harvest some earlier as green onions, space them 2" apart and pull every other onion during the growing season, leaving the rest to grow to maturity.

When planting several rows of onions, leave 16" between the outside edge of one bed, and the outside edge of the next. The spacing from the center of one fertilizer trench to the center of the next should be 36".

3. WATER, FERTILIZE AND WEED

The better care your onions receive during the growing season, the more likely you'll have a bountiful harvest.

Watering

Water thoroughly after planting, and regularly thereafter. Onions have shallow roots, so don't let the soil at the base of the plants become dry and cracked.

Overwatering is equally problematic. If leaves develop a yellow tinge, cut back on watering.

The closer to harvest time, the greater the need for water. However, when the onion tops start falling over, stop watering and let the soil dry out before harvesting.

Fertilizing

Nutritional needs are different during the growing season. Every two to three weeks after planting, fertilize with ammonium sulfate (21-0-0) in alkaline soils, or calcium nitrate (15.5-0-0) in acidic soils. Sprinkle it on top of the original fertilizer strip at the rate of ½ cup per 10 feet of row. Water the onions after every application. Stop fertilizing when the onions start to bulb. (See *Bulbing* below.)

Weeding

Controlling weeds is critical to prevent competition for nutrients. An application of Treflan or corn gluten meal raked into the top inch of soil every six weeks during the growing season will prevent weeds from returning.

Mulching with a light layer of straw will help control weeds and preserve moisture. Be sure to push the straw back when the plants start to bulb so they'll cure properly.

Bulbing

When the ground starts to crack as the onions push the soil away, the bulbing process has begun. Stop fertilizing at this point.



Soil cracks when onions bulb.

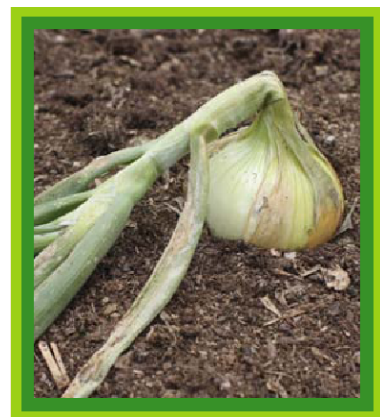
4. HARVEST & STORE

Proper treatment at harvest maximizes the amount of time you'll be able to store your onions.

Harvesting

When the tops of the onions turn brown or yellow and fall over, it's time to harvest. Ideally, the plant will have about 13 leaves at this point.

Pull the onions early in the morning on a sunny day. Dry the onions in the sun for two days. To prevent sunscald, lay the tops of one row over the bulbs of another.



Tops fall over at harvest time.

Curing

How long your onions will keep depends on how you treat them after harvest. They must be dried thoroughly to avoid problems with rot.

If left outside when the weather is dry, this will take two or three days. The entire neck (where the leaves meet the bulb) should be dry, all the way to the surface of the onion, and shouldn't "slide" when you pinch it. The skin will take on a uniform texture and color.

If rain is expected, you'll need to dry your onions indoors. Spread them out in a well-ventilated area with room to breathe. Drying indoors may take longer than outdoors.



Once the onions are thoroughly dry, clip the roots and cut back the tops to one inch. Now they are ready to eat.

Storing

Store onions in a cool, dry, well-ventilated location, such as a garage or cellar. Place them in mesh bags or netting to permit airflow.

Periodically check for any soft onions, and remove them to avoid deterioration of the others.

As a general rule, sweeter onions don't store as long as more pungent ones, so use the sweeter onions first.

Bon appetit!

Troubleshooting Tips for Growing Onions

The most common problems growing onions are blight, purple blotch and thrips.

Both blight and purple blotch are caused by fungus, and are more common during periods of high moisture. Blight appears as small white spots surrounded by a greenish halo. Purple blotch causes a purplish discoloration of leaves.

Proper plant spacing helps increase air flow and reduces both blight and purple blotch. The best preventative measure, however, is the use of a fungicide such as Mancozeb or Seacide every two weeks after planting.

Thrips are insects that sometimes attack onion plants, causing the leaves to turn grey. Thrips are barely visible as tiny yellow or dark specks. Treat thrip infestations with an application of insecticide.

Growing Leeks

Leeks are easy to grow in cool climates. They're best suited to growing where temperatures range between 55° and 75°. Unlike onion plants, day length is not a factor in their growth.

Upon Arrival

Remove plants from the box immediately. Do not put in soil or water before planting. Keep cool and dry until you can plant.

Soil Preparation

Like onions, leeks grow best in direct sunlight in well-drained soil that is neither too acid nor too alkaline. Work a balanced fertilizer (10-20-10) into the soil before planting. Leeks also benefit from an application of pre-emergent herbicide before planting.

Planting

Plant leeks 4" to 6" apart in rows 6" to 12" apart. Use the handle of a hoe to poke holes 6" to 8" deep where each plant will go. Place the seedlings one to a hole, so the youngest leaf protrudes just above the soil surface. Water gently and thoroughly after planting. As your leeks grow, throw dirt up on the shaft to keep it nice and white.

Watering, Fertilizing and Weeding

Requirements are the same as for onions.

Harvesting

Leeks can be harvested at any time. Because they're hardy, they're often left in the garden until needed.

Storing

After harvest, leeks need to be stored near 32° and at high humidity. Cool them upon digging, and pack them in plastic bags to prevent drying. They can be stored this way for two or three months.

Leeks can also be stored frozen. For maximum flavor, cook them without thawing.

