



Ventura County Garden to Table Series – Onions & Alliums



The below is for growing onions and other alliums – however, be sure to check out the General Vegetable Gardening Tip for additional information.

What are Alliums

1. Alliums are a genus of plants of the Alliaceae family, are characterized by their bulbous structure, which allows them to store nutrients and survive adverse conditions. They sport a single naked stem atop which busts an umbel.
2. Widely cultivated for culinary use due to their distinct flavors, which can range from sweet to pungent.
3. Onions specifically can be categorized into various types based on their skin color—yellow, white, or red—and their flavor profiles.
4. If the wrong type is planted, tops will grow, but not onions, or they will simply bolt and flower.

General Information for Growing Onions

1. **Length of Daylight** - the most important criteria for growing onions is the length of daylight available.
 - a. **Short day** - bulb up when the daylight length reaches 10-12 hours (latitudes of 25° - 35°). Best started in fall or early winter - harvest late May to July. Generally sweeter flavored onions, but do not store well.
 - b. **Intermediate day** - will bulb when the light length is about 12-14 hours (latitudes of 36° - 40°). Start seeds in January or transplants in February. They will grow into good sized plants and quite large bulbs. These can then be dried and stored by the end of August/September.
 - c. **Long day** - onions that require 14-16 hours of daylight (latitudes north of 40°). These grow well in the north of the USA but do not do well in this area. These are very sweet onions so do not store well.
2. **Leaf Formation** - onions grow foliage during the cooler weather – each leaf representing one layer in the bulb - until a specific daylight length is reached. Once this point has occurred, foliage growth stops and bulb formation begins.

Seeds, Sets, or Transfers

1. **Seeds** – are the cheapest method, but it requires a longer growing period and more work.
 - a. Start seeds indoors in pots in October and transplant them 50–60 days later.
 - b. Seedlings should be thinned to 2–5 inches apart in rows that are 12–24 inches apart.
 - c. Fertilize seedlings with half-strength fertilizer two weeks after germination until you transplant them.
 - d. Seeds are reliable and have the greatest variety available, use fresh each year - don't store well.
2. **Sets** – are small, immature onion bulbs that are planted like seeds – **generally not recommended for our area**.
 - a. Sets will quickly produce green onions but aren't recommended for mature bulbs as they tend to bolt (go to seed).
 - b. When using sets for bulbs, large sets are more likely to bloom in the summer, which can reduce the size of the bulb.
3. **Transplants** – are small onion plants that are grown by commercial nurseries.
 - a. Transplants are often considered the most successful method and take less time, not as many varieties available – and often need to order from an online source.

Information on Alliums

1. **Onions - Growing:** Onions are biennial but are often grown as annuals. **Varieties:** Each daylight length group contains. **Varieties to Consider:** Each daylight length group contains a variety of these possibilities – here are some to consider: Yellow Granex, Gabriella, Madalyn, White Castle, Red Rock.
2. **Shallots – Growing Conditions:** Shallots can be grown from seed or sets. **Planting:** Directly in the soil,



about 8” apart, with the pointed end facing up and 1”–2” deep. The soil should be well-worked and deeply watered.

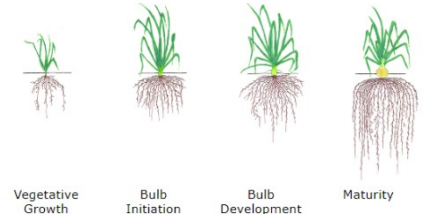
3. **Garlic – Types - Softneck** - is the easiest to grow. It lasts longer in storage and produces flavorful bulbs, **Hardneck** (grows best in colder climates) has larger cloves surrounding a stalk or ‘scape’ that terminates in a beautiful flower, and “**Elephant garlic**” (not a true garlic); it is more closely related to leeks but is cultivated the same as garlic and has large mild-flavored cloves. **Planting:** Plant garlic cloves (a cold weather crop) in the fall, about 1”- 2” deep – this allows the cloves to develop strong roots before going dormant for the winter, and the bulbs will be larger when you harvest them. **Varieties to consider:**
 - **Chesnok Red** - an heirloom variety that can grow in most climates.
 - **Inchelium Red (softneck)** - is a flavorful garlic.
 - **Nootka Rose (softneck)** – that can produce up to 24 cloves per bulb when planted in the fall.
 - **California Early (softneck)** - matures in 7 months, a large, flat bulb with skin that is off-white or tan.
 - **California Late (softneck)** - matures in 8 months – a large bulb which are firm with strong flavor.
 - **Silverskin group (softneck)** - This garlic matures late and stores well - it has a strong flavor.
4. **Green Onions – Other Names:** scallions, Japanese bunching onions, Welsh onions, and spring onions, are a perennial plant with long, available year-round but are freshest in the spring and early summer. **Planting:** The final spacing for bulbs should be 4-6 inches apart. Young plants removed during thinning.
 - In warmer climates, green onions can be grown year-round by dividing, but in colder climates they should be planted from seed in the spring.
 - They are sensitive to daylight and need a certain amount of sunlight to trigger bulb formation.
5. **Chives** – Perennial which can be harvested year-round, prefer 4 to 6 hours of sun but can grow in partial shade in hot areas. **Dividing:** chives can spread quickly and become overcrowded. Divide them into clumps of at least 10 small bulbs, and then let the divided plants grow for a few weeks before harvesting. **Varieties to consider:**
 - **Common chives** (*Allium schoenoprasum*) - these chives have small bulbs that produce thin, blue-green leaves that can grow up to 15 inches tall.
 - **Garlic chives** (*A. tuberosum*) - also known as Chinese chives, these chives have flatter, greener leaves that can grow up to 20 inches tall. Their leaves have a mild garlic flavor, and their bulbs have an even stronger flavor. When in bloom, garlic chives can produce white umbels that are 2–2.5 inches across.
 - **Staro chives** - produce lots of leaves that are great for eating fresh or freezing. They have a mild, sweet onion flavor, and their flowers are also edible.
6. **Leeks – Growth:** Leeks are biennials harvested at the end of their first growing season. They prefer cooler conditions and can thrive in partial shade. **Planting:** Start from seed or transplants, and ensure they are well-watered during growth. Leeks should be planted in a sunny location, but can tolerate a little shade, and prefer loose, well-drained soil amended with compost. **Care:** Leeks have a small root system that does not compete well with weeds. Leek roots grow near the base of plants so apply water close to plants and irrigate keeping the top 6” of soil moist but not soggy. Never let the soil dry out completely. **Varieties to Consider:**
 - **Carentan 75 days** - European heirloom variety.
 - **Lincoln 80 days** - 18-20” tall w/ stems up to 2.5” thick.



- **Pandora** 90 days - Long stems, rust tolerant.
- **Dawn Giant** 98 days - Plants up to 15 inches tall.
- **Titan** 110 days - Large, thick white stalks with a slight bulb at the base. Up to 8" long and up to 2" thick.
- **Baby Primor** 110 days - French hybrid developed for sweetness and tender texture, superior flavor.

General Information

1. Withhold watering as onions mature (as first tops begin to bend). Otherwise, the additional water uptake may cause splitting of the bulbs and increase the chance of rotting after harvest.
2. Avoid overwatering, as it can lead to root rot and other problems.



Basic Care: QR code will take you to the Soil to Sprouts slide deck on the Ventura County Master Gardener website

- **Seeds or Transplant** – Transplants produce earlier harvest and often have multiple plants in each container - separate by soaking.
- **Mulch the Soil Surface** – Apply a 3-4-inch layer of organic mulch.
- **Watering** – water deep - overhead watering can lead to diseases.
- **Support (indeterminate)** - trellis, stake, or cage.
- **Fertilizer** – Use a General Purpose (10-10-10) fertilizer. High nitrogen fertilizer will increase green growth – not fruit.
- **Using Raised Beds or Containers?** – use potting soil or blend of compost/topsoil/vermiculite.



When to Harvest

1. **Onions/Shallots/Garlic:** Harvest when the tops begin to dry & yellow – in about 6 months.
 - a. Pull/dig and let them dry on top of the ground – cover with top to prevent sunburn.
 - b. When tops and necks are dry – remove the tops and store the bulbs in cool, dry place – or you can leave the tops on a braid them, hang in a cool dry place.
 - c. If onion/shallots are allowed to seed – the center of the bulb becomes woody, unsuitable for long storage, and not as flavorful.
2. **Green Onions:** May be harvested as desired but before they bolt, typically when they are 1/4 to 1/2 inch in diameter.
3. **Chives:** Begin picking chives when the leaves are at least 6" tall.
 - a. Select some leaves on the exterior of the plant about 2" from the base.
 - b. Cut with a scissors or a knife, leaving a few leaves for continuous growth.
 - c. For most flavorful leaves, cut off the flowers. Flowers are edible, too.
4. **Leeks:** When they are about 1" but maturity size can vary by variety. Dig rather than pull to avoid breakage.

Learn more about the Ventura County Master Gardener using this QR to visit the website.





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