

# Growing Your Own – All about Alliums

By Anne-Marie Walker

Allium is the botanical name for a group of bulbous plants that include lovely flowering perennials as well as every cook's staple, the indispensable onion. My mother once confidentially advised me should dinner ever be delayed; simply fry an onion and smile saying, "Yes, things will be ready shortly. I've been cooking all day."

Alliums are a genus of plants of the Alliaceae family. They have fleshy layers wrapped around and protecting a growing bulbous center filled with reserve food products. Found in the wild throughout the Northern Hemisphere, alliums sport a single naked stem (without leaves) atop which bursts an umbel. An umbel is a racemose inflorescence. That explains a lot, don't you think? Here's how to decode and appreciate the root of our word "umbrella":

**Umbel** – racemose inflorescence

**Racemose** – having or growing in the form of a raceme

**Raceme** – a simple inflorescence in which the elongated axis bears flowers on a stem in succession towards the apex

The bulb structure of alliums enables the plants to tide over during cold or dry periods safely buried in the earth until favorable conditions return. A cool season crop, these perennials are grown by the home gardener as annuals and bloom in the spring and summer in a range of colors from whites and pinks to reds and blues and even shades of yellow. In an age of global gardening, it is interesting to note that California has about 50 native onions; the easiest to cultivate is *Allium unifolium* whose umbel is light rose to pink. Most other species are also found in the Northern Hemisphere except a few species occurring in South America and Africa. Onions were greatly prized in ancient Egypt, even venerated. They were cultivated by the Israelites and no Roman kitchen garden was complete without leeks, onions, shallots and garlic. In England, three hundred years after Roman occupation ended, the Saxons and the Anglos continued to cultivate some of the vegetables the Romans had grown to perfection. Saxon vocabulary included "orthead", the root of our word "orchard", and "leac tun" a special enclosure Saxons built for cultivating leeks, clearly of great importance in their diet. In Elizabethan England, onion juice was used as a hair restorer and leeks as an antidote to inebriation.

Alliums produce chemical compounds including allicin which has anti-microbial activity, steroids, oligopeptides, and fatty acid derivatives. Research is being conducted on the properties of alliums, exploring their potential to control crop seedling diseases. The UC Davis Good Life Garden reminds us that when you cozy up to a warm bowl of leek soup, you are getting a dose of kaempferol, a phytochemical that helps ward off many types of cancer. The chemical responsible for alliums seductive taste is cysteine sulfoxide. Depending on the species of allium, the taste may be stronger or weaker and in most cases, both the leaves and the bulbs are edible. Incidentally, green onions, sometimes called scallions, are just immature bulbing onions harvested early. If left in the ground, they would develop into regular onions.

Onions are heavy feeders, requiring 2 to 3 pounds of 8-8-8 fertilizer per 100 feet of row. To keep a balance in your soil, UC Davis suggests companion planting of leeks with peas, which produce a lot of nitrogen. For those of you interested in garden design, why not consider creating a "Tartan" garden of purple cabbage, blue leeks and red sage. Such a garden would be lovely come Thanksgiving!



Here is a planting guide for the allium groups and integrated pest management tips:

**Onions** - Cepa group: Plant in the spring or fall from seed, seedling or sets (small bulb). Onion varieties require different daylight hours to form a bulb. After about six months, tops of dry onions will start to turn yellow. Break the plant over and let dry for a few days. Store in a dry, dark place.

**Leeks** - Porrum group: Plant seeds in late summer and thin to 4-6 inches. When plants are almost full grown, push soil up around stems to blanch them white. Harvest next year in early summer before the soil gets hot.

**Garlic** - Plant cloves (garlic does not set fertile seed) in the late summer. Next summer, cease watering and the foliage will yellow. Break over like onions. Dig up bulbs and sun dry them for about three weeks until the skins become papery.

**Shallots** - Aggregatum group: Plant bulbs (reproduces only by bulb) in spring. The harvest will be next summer. Dig the bulbs out when tops begin to dry.

Alliums are susceptible to stem and bulb nematodes. Rotate crops and use only certified seed. These cultural practices are your best defense. Alliums are also susceptible to thrips (use insecticidal soap), maggots (destroy crop), downy mildew (keep soil well drained and allow plants to dry out between waterings) and white rot (caused by fungus – destroy crop).

After the harvest, you can enjoy eating alliums in many dishes. But if you are searching for a truly celebratory allium harvest dish, here is an old Tuscan recipe that is sure to please. It includes onions, leeks and garlic!

### ***Tuscan Three- Onion Soup***

*Ingredients:*

*3 T of olive oil*

*4 oz. of pancetta (or bacon), cubed*

*4 large yellow onions, diced*

*4 leeks, thinly sliced*

*6 cups of chicken stock*

*3 T balsamic vinegar*

*1 C of red wine*

*Salt and pepper*

*6 slices of rustic country bread, grilled*

*2 cloves of garlic*

*6 oz of Parmigiano-Reggiano*

*2 T parsley, chopped*

Heat the olive oil and add the pancetta, browning until some of the fat has rendered. Reduce heat and add leeks and onions stirring until they have softened – about 30 minutes. Do not let them brown – just let them “sweat” (as my grandmother used to say). Add stock and increase heat simmering another 30 minutes.

Just before serving, add the vinegar, wine, salt and pepper to taste. Rub the grilled bread with the garlic cloves. Ladle the soup into six bowls and place a slice of grilled bread in each bowl and shave 4 or 5 slices of cheese on top and garnish with chopped parsley. Bon appétit!