Nature & Nurture Seeds'

Guide to Growing Onions, Leeks, Scallions & Chives

Amazing Alliums!

Allium is a genus of plants that includes hundreds of species! Think onions, leeks, chives, garlic, shallots, and scallions. Many people grow cultivated ornamental alliums in their gardens as well, for their beautiful flowering heads.

Alliums did not originate in North America. Garlic and onions were originally cultivated in Asia, and the leek's domestication can be traced back to Southeastern Europe. Thank goodness that our ancestors traded seeds! Can you imagine cooking without onions or garlic? These crops are cosmopolitan - a foundation for cuisines around the world - and have become such a staple to American cooking that sometimes we forget that they came from overseas!

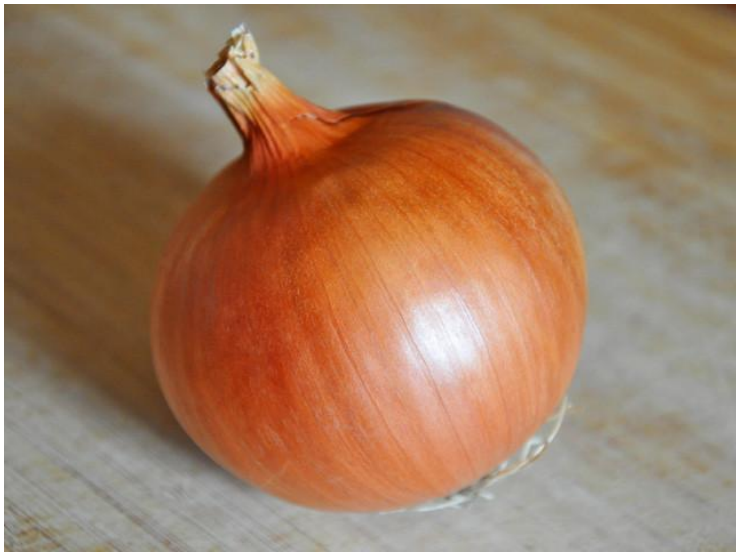
Why Grow Alliums?

Here are some reasons why alliums are awesome and why you should grow them:

1. **Easy to grow:** Most alliums are easy to grow (except big bulb onions, which are a bit more challenging). All alliums are naturally repellant to rabbits, deer, and groundhogs ~ animals don't like to eat them. Garlic chives can even be grown in the shade!
2. **They're healthy**: Members of the allium genus have been shown to include many micronutrients and phytonutrients that are very important to our health.
3. **They store well**: Alliums like onions, scallions and garlic can be stored successfully for long periods of time if stored correctly.
4. **They're tasty**: Alliums add some of the most incredible and complex tastes to the dishes we love to eat!

Growing Onions

(e.g. Clear Dawn Onion, Rossa Di Milano, Yellow Cipollini)



Large, bulbing onions are the most difficult of the alliums to grow, but your efforts are rewarded in the incredible flavors that they contribute to food! They are more difficult because, in order to get large bulbs, seeds must be started indoors very early, and the green plants must get as big as possible before the summer solstice (June 20) in order to create big bulbs!

1. *Starting Seeds:*
    a. Start seeds inside in late January under high quality grow lights. Your onion transplants need to get nice and big before planting outside ASAP in early spring.
    b. Use a good seed starting mix which includes compost and/or worm castings for fertility (we recommend Vermont Compost's "Fort Light" or "Fort Vee" , Sprout Island Organic Seed Starter, or Organic Gardener's Supply's Organic Seed Starting Mix).
    c. Ideal temperature for germination is 70-80℉ (use a heating mat).
    d. Days to germination: 4-13.
    e. Once leaves appear, grow plants at 70-75℉
    f. Fertilize weekly with fish/kelp fertilizer.
2. *Transplanting Outdoors:*
    a. When? Transplant outside as soon as the soil can be worked in the spring (March or early April). Plants should be about the thickness of a pencil.
    b. Where? Transplant onion seedlings into fertile garden soil where drainage is good

    c. Harden off plants before planting outside by gradually exposing them to above-freezing night temperatures.
    d. Plant into fertile garden soil 1” deep, spaced 4” apart in rows 15” apart.
3. *Growing Tips:*
    a. Mulch with straw to retain moisture & control weeds
    b. Keep weeded and well-watered
    c. Consider fertilizing with an organic fertilizer 1x per month
4. *Harvesting:*
    a. Harvest in late July once plants have turned brown, but while stems and skins are still intact.
    b. Dig on a dry day and cure them immediately in a warm dry place with good air circulation (see *Storage* below for more info)
5. *Storage:*
    a. Grow storage-type onions (which will store until April if stored properly). Clear Dawn onion is a fantastic storage onion.
    b. Cure onions for 2-4 weeks in a warm, dry, well-ventilated area. To cure, place onions in burlap/paper sacks, hang them, or spread them out in a single layer onto an open surface. Use a fan if air circulation is poor.
    c. Once cured, store in breathable bags in a cool basement, refrigerator, or root cellar
    d. Ideal storage temperature: 32-50ºF
    e. Ideal humidity: 60-70%
6. *Seed Saving:*
    a. Onions are a difficult seed saving crop because they are biennial.
    b. Minimum population size: 25.
    c. Dig and cure onions as you would for selecting the best for seeds.
    d. Store overwintered onions at cool temp (35-40ºF) with 65-70% humidity.
    e. Plant in mid spring spaced 4” apart in rows 28” apart.
    f. Harvest seeds in late summer by clipping seed stalks into a bucket as pods mature.
    g. Dry, thresh, and winnow to clean.

Leeks

(e.g. King Richard Leek)

We love leeks and think they are seriously underappreciated! Much easier to grow than standard onions, they are versatile in the kitchen and can be used in almost any recipe calling for onions. Sweet and delicately flavored, yet still retaining that onion-y bite... leeks won our heart a long time ago!

1. *Sowing seeds outdoors:*
    a. Leeks can be direct sown outdoors in early spring, once soil is workable.
    b. Plant 6 seeds per foot, ¼" deep, in rows 24" apart.
    c. Thin to 6".
2. *Starting Seeds Inside:*
    a. Leeks can be started inside in February-March. Days to germination; 4-13.
    b. Optimal temperature: 65-70ºF during the day, 55-60ºF at night.
    c. Transplant in late spring when plants are about 8-10" tall and pencil thick.
    d. Transplant 6" apart in rows spaced 24", only leaving 2" of leaves above the soil.
    e. Use irrigation to fill in soil around the plant; do not compact with hand or tool.
    f. For longer blanched stems, hill the soil up around the plants 2-3 times during the growing season. (optional)
3. *Growing Tips:*

    a. Leeks grow best in fertile soil with little weed pressure. Make sure that plants are well-watered and well-weeded.
4. *Harvesting:*
    a. Harvest whole plants before or at maturity.
    b. If necessary, loosen soil with a garden fork before pulling up plants.
    c. Upper leaves can become very tough at full size, but they can still be used to make stock.
5. *Storage:*
    a. Store leeks in a refrigerator and they will last a few weeks.
    b. To store leeks for a longer period of time, pack them in a box with moist soil and store in a cool, dry place.
6. *Seed Saving:*
    a. Leeks are biennial crops.
    b. Dig up pristine roots and store in cool, dry place away from sunlight over the winter.
    c. Transplant in early spring at same spacing.
    d. Flowering plants may need staking.
    e. Harvest seed when capsules split open, revealing black seeds.
    f. Minimum population size 5-20 plants. Isolation distance ½ mile.

Scallions

(e.g. Evergreen Hardy Scallions)

Evergreen Hardy Bunching Onions are winter hardy perennials so you can grow them in a patch and continue to harvest them for most of the year!

1. *Seed Sowing:*
    a. Sow seeds directly (outside) anytime 5/1-9/1, ¼" deep, 1-2" apart in rows spaced 12-18" apart. Be sure to plant seeds in an area with good drainage. Seeds are slow to germinate, especially in cold soil.
    b. Or start seeds inside, anytime January - May.
2. *Growing Tips & Info:*
    a. Plants will over-winter and will divide to grow in clusters when plants start growing again in Spring.
    b. Clumps can be divided in second year or harvested.
    c. Be sure to keep patch well-weeded, as scallions are not strong competitors.
3. *Harvesting:*
    a. Harvest greens anytime by cutting.
    b. To harvest whole plants, dig and remove.
    c. To grow as a perennial plant, divide plants during harvest and re-plant some whole plants.
4. *Storage:*
    a. Scallions don't store as long as leeks and onions. You can place harvested scallions in a cup filled with an inch or so of water, covered loosely with a ziploc bag, and the scallions should stay crisp and fresh for over a week.
5. *Seed Saving:*
    a. Scallions are biennial, and will form flowering seed heads in the second summer after planting.
    b. Once the seed heads start drying, harvest into bag and bring inside to finish drying.
    c. Separate seeds from chaff by shaking bag or threshing seed heads.
    d. Winnow to separate seeds from chaff.
    e. Store seeds only once fully dry.
    f. Minimum population 5 plants, 20-50 being more ideal. Isolation distance 800 ft.

Chives & Garlic Chives

Chives and Garlic Chives are easy-to-grow perennial plants with ornamental flowers. Chives can be used in the kitchen like scallions but their more delicate flavor lends to a greater variety of use. Garlic Chives have a stronger flavor and can be grown in deep shade and come up early very in the spring! Both Chives and Garlic Chives will re-seed and may become weedy - prevent this by shearing plants to remove flowers before they make seeds.

1. *Growing Tips & Info:*
    a. Direct seed in spring 1” apart, ¼” deep.
    b. Keep weed free.
2. *Harvesting:*
    a. Cut chives with scissors anytime 1-2 inches above the soil.
3. *Seed Saving:*
    a. Chives are perennial plants that produce seed reliably each year, but require cold exposure for vernalization and may not produce seed until the second year.
    b. Chives are cross-pollinated, so maintain at least five plants for seed saving.
    c. Chives are the only crop in the species Allium schoenoprasum. Garlic Chives are the only crop in the species Allium tuberosum, so isolation shouldn’t be a concern.
    d. Seeds are viable for 2 years.
    e. Can also be propagated by dividing the bulbs.

Happy Growing!