



### ONIONS (*Allium cepa*) and LEEKS (*Allium porrum*)

When your plants arrive, they may be wet or dry, as a result of field conditions and where and when they were harvested prior to packaging. Immediately take them out of the box and spread them out in a cool, dry area. **DO NOT PUT THEM IN WATER OR SOIL** while waiting to plant. The plants are in a dormant state and should be planted as soon as possible (within 1 week). The roots and tops may begin to dry out, but do not be alarmed — as members of the lily family, onions and leek plants can live for 3 weeks off of the bulb.

#### SITE AND SOIL PREPARATION

Onions and leeks require a fertile, well-drained soil with a pH of 6.2–6.8. Sandy loam soils are ideal, so raised beds or raised rows are recommended for heavier soils to promote soil drainage. Full sun is required for optimal growth; avoid planting adjacent to other crops that will shade them. Add compost, balanced fertilizer, or other amendments to the soil prior to planting. Testing your soils on a regular basis will determine which amendments and how much of each are required.

#### PLANTING

**Onions:** Set plants out approximately 1" deep and spaced 4" apart, in rows spaced 12–18" apart. If you plan to harvest some of the crop during the growing season as green onions, space plants 2" apart and harvest every other onion as needed.

**Leeks:** Using a dibble, poke holes 6" deep, spaced 6" apart, in rows spaced 24" apart. Drop one plant in each hole. Only 1–2" of the leaves need extend above the soil surface. Do not firm the soil around plants. Let irrigation or rain fill in the hole. By using this method, the plants will self-blanch, but plants can be hilled throughout the growing season to increase the white portion.

(Alternatively, if using our [Manual Leek Planter](#), follow directions on the [Manual Leek Planter Instruction Sheet](#).)

#### WATERING

Water the transplants immediately after planting. Because of their shallow root systems, onions and leeks require frequent irrigation. We recommend drip irrigation rather than overhead methods to discourage foliar disease. Onions and leeks generally require 1" of water per week, especially during the bulbing stage. For onions, when tops begin to fall over, signaling maturity, watering should be discontinued.

#### DISEASES, INSECTS, AND WEEDS

Along with drip irrigation, adequate air circulation will help reduce risk of foliar disease. Thrips are the most common *Allium* crop pest. Reduce overwintering habitat by keeping fields free of weeds and crop debris. Combat serious infestations with spinosad, pyrethrin, or insecticidal soap (see our [Insect Control Comparison Chart](#)). Controlling weeds is critical to the success of your onion crop. Competition from weeds will reduce yields and encourage insect pest populations. Cultivate carefully so as not to damage the base of the plants and shallow root systems. An application of organic mulch will also help control weeds and preserve moisture.

#### HARVEST AND STORAGE

**Onions:** Necks will soften and tops will begin to fall over when mature. Intentionally bending the tops over early results in smaller bulb size. When approximately half of the crop's tops have fallen over on their own, pull the onions out of the ground and allow them to dry in the sun for 2–7 days, depending on weather. Lay the tops of one row over the bulbs of another to prevent sunscald. If the weather is rainy, onions can be dried in a shed, barn, or shaded greenhouse. When dry, clip roots and cut tops back to 1", or braid uncut tops together and hang in an airy spot. Store onions in mesh bags or shallow boxes, at near-freezing temperature, with 65–70% relative humidity. Sweet onions have a much higher water content than more pungent varieties, and will thus store well for only a few weeks; more pungent onions will store longer. Every few weeks stored onions should be sorted, to cull any bulbs that have begun to decay.

**Leeks:** Leeks can be harvested at any time during the season; simply dig as necessary. Leeks will store for several weeks. Clean plants and store near freezing temperature, in boxes or in a humid cooler, or place roots in a moist soil/sand/peat mixture and store in a root cellar under the same conditions as onions. Tops will stay green if exposed to some light.