Garlic grows well throughout the Northwest. There are two types of garlic frequently grown in home gardens: *Allium sativum*, the more commonly cultivated type, also called silver-skinned or Italian garlic. The other is *Allium ampeloprasum*, usually called great-headed or elephant garlic. The latter is more of a novelty because of its large size. There are many special selections or clones of each.

Garlic is not grown from seed. Bulbs used for planting stock are available from several vegetable seed catalogs and local seed companies. Shopping from several catalogs provides opportunities to collect different strains. Although fresh garlic bulbs available in grocery stores and produce markets also may be used for planting stock, such material may be infected with and can transmit serious diseases and nematodes.

*Allium sativum* garlic also can be classified as early and late, referring to the speed of sprout emergence after planting, and subsequent bulbing and maturing. Cloves of early garlic generally are enclosed in white scales, while cloves of late garlic usually are enclosed in pink or purplish scales. However, the scales that surround the entire bulb of both garlic are gray to white.

Great-headed or elephant garlic is least pungent, followed in rank by early and late *Allium sativum* in ascending order of pungency. There are minor variations among individual selections.

Garlic is a bulbous plant related to onion, chive, and leek. The leaves of garlic have solid, thin blades rather than the more round, tubular, hollow blades of onion leaves. As garlic matures, it produces a fairly smooth, round, dry bulb at the base. Each year common garlic divides into cloves (usually 10 or more) soon after bulbing. Some bulbs of great-headed or elephant garlic grown from the larger cloves divide at the end of one growing season, but most often the bulb grown from the smaller clove remains as one solid bulb or large clove called a "round." The stem of the plant is attached to the top of the "round" rather than to the root plate. A "round" planted back the second year will produce a plant, the bulb of which will segregate into a few very large cloves.

Small, round, very dormant cloves completely enclosed within thick, hard, brown, protective leaves may be found at the base of mature elephant garlic bulbs. Instead of using these small cloves as planting stock, it is better to use them for pickling after removing their leaf cases.

**Preparation for planting**

Garlic plants have large and well-developed root systems that reach to depths of more than 3 feet in well-drained soils of the Willamette Valley. Clay loams are better for garlic than sandy soils, provided there is good surface drainage during winter. Surface drainage is improved by planting garlic on beds raised 6 to 8 inches above the natural level of the garden.

N.S. Mansour, professor of horticulture and Extension vegetable crops specialist, Oregon State University.
Before planting, mix a complete fertilizer (such as 8-24-8) thoroughly with the top 8 to 10 inches of soil. Apply 2 pounds of fertilizer to 100 square feet of soil. In late April or May, sidedress the plants with 1/2 pound of ammonium sulfate to 100 square feet. No additional fertilizer is required in most soils.

Select clean, dry bulbs. Carefully break them apart into individual cloves. The bulbs will separate naturally into two sizes of cloves. The larger ones are preferred for planting stock. Do not bruise the cloves. Plant the bulbs the same day they are "cracked" (broken apart).

**Planting**

Plant cloves 1 to 3 inches deep anytime from September through November for best results. During fall and winter, the root system develops and a little top growth is made. By spring, the plant is already well established and makes rapid top growth as the weather warms up. Large, vigorous tops are necessary to produce large bulbs.

Plant garlic in the open where it will receive full sunlight and no competition from perennial plants. To save space on a small raised bed, plant the cloves 3 to 4 inches apart in rows 6 to 8 inches apart. Elephant garlic should be spaced 4 to 6 inches apart in rows 8 to 12 inches apart. If space is not a problem, garlic may be spaced more widely or planted in a single row through the garden.

Plant so that the tops of the cloves are 2 inches beneath the surface of the soil. Planting the cloves with the root end down is not necessary. The cloves used as planting stock disintegrate during winter as the plant grows.

**Care of plants**

Garlic, like onions, cannot withstand weed competition. Use very shallow cultivation with a sharp hoe to keep the area scraped free of weeds. Many roots of garlic are near the surface of the soil; damaging them will reduce yields.

Provide enough water during spring and early summer to moisten the soil thoroughly to a depth of 2 feet every 8 to 10 days. Stop irrigation as soon as the first plants begin to mature (the tops fall over naturally and become dry).

Thrips usually can be found on garlic leaves throughout the summer, and they are more damaging than generally realized. Thrips give the leaves a silvery, streaked appearance and may be seen as tiny brownish "threads" along the mid-ribs. Control thrips by applying malathion as dust or spray. Repeat applications as necessary but do not apply within 3 days of harvest.

**Harvesting**

After all the tops have fallen over and become fairly dry, the bulbs are ready to harvest. This occurs late August in Oregon. Lift the bulbs carefully with a shovel or spade, and place entire plants in the shade to dry for a week or more. After drying, clip off the tops and roots (3 inch from the bulb) or leave the plant intact with the tops of several plants braided together. Gently free soil from the roots. Handle carefully. Garlic deteriorates rapidly if bruised.

**Storage**

Garlic may be stored in a mesh bag or slated crate or hung in braided ropes or bunches from rafters. Any cool, well-ventilated place will do for storage through the winter months. In very cold areas the bulbs should be protected from freezing.

Save the largest and best-formed bulbs for planting in the fall.

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Use pesticides safely!

- **Wear** protective clothing and safety devices as recommended on the label.
- **Bathe or shower** after each use.
- **Read** the pesticide label—even if you've used the pesticide before.
- **Follow** closely the instructions on the label (and any other directions you have).
- **Be cautious** when you apply pesticides. Know your legal responsibility as a pesticide applicator. You may be liable for injury or damage resulting from pesticide use.

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