

GARLIC

Varieties

There are many types, varieties and selections of garlic. Some of the most commonly grown include Spanish, Roja, Yugoslavian and French. California Early and California Late are also grown, but markets seem to prefer pungent types compared to mild. Roadside and specialty markets prefer selections having pink, red or purple streaks in the skin. Supermarkets generally prefer white skin garlic. Elephant garlic is not a true garlic. It is more closely related to leeks.

Soils

Garlic can be grown on a wide range of soil types if they are well-drained, deep and fertile. Soils with good organic matter are preferred due to increased moisture and nutrient holding capacity. Extremely heavy soils should be avoided. Soil pH should range from 6.0 - 7.5.

Seed Sources

Garlic planting stock can carry viruses, white rot, and bulb and stem nematode. If these problems are brought in, land can be made unusable for the production of garlic and related crops such as onions. Make every effort to obtain planting stock from a reliable, disease-free source.

Seed Treatment

Garlic cloves may be dipped in a suspension of Rovral WP or WDG at 4.0 g/L of water prior to planting for the control of *Penicillium* (green mold). This is particularly important if cloves have been damaged during cracking. Dip for 30 minutes. Make one application in the fall, immediately before planting.

Seeding

Cultivated garlic does not produce true seed. All garlic is propagated vegetatively by separating the bulbs into individual cloves either by hand or by machine (cracking). Hand separation is much less damaging to the cloves.

Seeding rate is about 700 to 1000 kg/ha (280 to 400 kg/acre) of garlic cloves. Depth of planting is 3 to 5 cm. Row spacing is 7 to 12 cm apart within the row and at least 20 cm between rows depending on

methods of weed control to be used. Garlic can be planted in single rows or in multi-row beds. Beds may be raised or on the flat.

Seeding Date

In the Southern Interior, garlic is planted in the fall from September to mid-October. In the South Coastal Region and perhaps North Central areas, spring planting is sometimes preferred, but planting must be done as early as soil and weather conditions allow.

Irrigation

Garlic is shallow-rooted and is sensitive to moisture stress. For most soil types, approximately 2.5 cm of water is required per week. On very dry, sandy soils, as much as 5.0 cm is required weekly. Irrigation should not be applied within two weeks of harvest.

Fertilizer

A soil test is required to determine nutrient requirements. Phosphorus and potassium requirements are similar to onions. See Chapter 3 for recommendations based on soil test results.

Note: *Commercial garlic can be grown conventionally using chemical fertilizers or organically using composted manure or other materials.*

Weed Control

Cultural

Garlic competes poorly with weeds. Cultivation should be frequent and shallow to avoid root damage. A straw mulch 4 inches thick can effectively suppress weeds. See Table 7.26 for herbicide recommendations. See also the fold-out chart inside the back cover.

Insect Control

Garlic is a member of the onion family and is susceptible to many of the same pests.

Onion maggots

See Onion Maggot (Onions-Dry Bulb section). Maggots have not been a problem in garlic production to date.

Control

If necessary, use one of the products listed in Table 7.27.