

Growing Garlic in Minnesota

VARIETIES – There are two main varieties of garlic: hardneck and softneck. Softneck are the varieties that are commercially grown in California and that we find in the local grocery stores. Each bulb contains between 10 to 40 cloves arranged in multiple layers. Softneck garlic can be stored for 6 to 8 months without significant deterioration. Hardneck garlic produces a flower stalk or “scape”. Typically hardneck garlic varieties have 4 to 12 cloves surrounding the flower stalk. They do not store as well as softneck varieties. It takes several years for garlic to adapt to your specific climate and growing conditions. Softneck varieties that have done well in Minnesota are Inchelium Red, and Chet’s Italian Red. Hardneck varieties seem to do better in Minnesota than softneck. Some hardneck varieties that have done well are Chesnok Red, Georgian Crystal, Leningrad, Polish Hardneck, and Georgian Fire.

PLANTING – Garlic is a heavy feeder, with a moderate to high demand for nitrogen, which likes loose rich well-drained soil high in organic matter. In southern Minnesota planting around the 1st or 2nd week of October is recommended. In northern Minnesota planting should be several weeks earlier. Garlic planted in the spring usually does not do well. Garlic can be planted 6 inches apart in the row, with rows 8 inches apart if planting in beds. Individual cloves should be separated from the bulb and the larger cloves used for planting. Larger cloves produce larger bulbs. Cloves should be planted with the pointed side up. Cloves planted upside down will result in small misshapen bulbs. The base of the clove should be planted 2 to 3 inches below the soil surface.

CARE – After planting, rows should be covered with mulch, 3-4 inches thick. The mulch will minimize fluctuating temperatures in the winter and early spring, which may cause the ground to heave separating the clove from its roots. The mulch will also help control weeds during the growing season. Garlic has a relatively shallow root system and is sensitive to dry soil conditions. Garlic needs about 1 inch of water per week during the spring growing season. The amount of water to apply will depend on soil type. Garlic is a poor competitor with weeds, which if not controlled can cause a significant reduction in yield. For hardneck garlic, the removal of the scape just after the initiation of curling will increase the size of the bulb.

HARVEST – Different varieties of garlic will mature at different times. Harvest in Minnesota usually extends from the second week of July through the first week in August. Harvest when half or slightly more than half of the leaves remain green. If you wait until all the leaves are brown the bulbs will begin to separate in the ground. To harvest, the bulbs should be dug with the shoots and roots still attached. Dig the garlic carefully, do not pull the stalk, especially on the softneck, or it may separate from the bulb.

DRYING AND CLEANING – After digging the plants, they should be tied in bundles of 10 to 15 depending on the size and hung up to dry in a well-ventilated room. After 3-4 weeks of curing, the tops can be cut about ½ to 1 inch above the bulb and roots trimmed. Bulbs can be cleaned by removing the outer most skins with a toothbrush, leaving as many outside leaves as possible.

STORAGE – For kitchen use, hang in wire basket in cool shade area. For long term, store at 32 degrees F at 60 percent humidity. *Do not store peeled garlic cloves in oil. Garlic is low in acid and storage in oil may result in botulism.* It is better to store peeled cloves in vinegar, which not only preserves the garlic but also adds a nice flavor to the vinegar.

Sources -

Girardin Gourmet Gardens, Joel & Coleen Girardin, 29321 Enger Court, Cannon Falls, MN 55009, 507-263-5897
Filaree Farm, 182 Conconully Hwy, Okanogan, WA 98840, Catalog - \$2.00 Grows over 400 varieties, offers 125 for sale
Seed Savers Exchange, 3076 North Winn Road, Decorah, Iowa 52101, Membership \$25.00 per year, thousands of heirloom seed varieties including garlic
Garlic Seed Foundation, Rose Valley Farm, Rose, NY 14542-0149, quarterly newsletter

Websites -

www.gourmetgarlicgardens.com - growing tips, health benefits, garlic diseases, pills oils extracts, cooking with garlic
www.extension.umn.edu - growing garlic in Minnesota – varieties, fertilizer, planting, mulching, irrigation, weed control, diseases, harvesting and curing, storage

Books -

Growing Great Garlic, Ron L. Engeland
Garlic Is Life – Chester Aaron
The Great Garlic Book, A Guide With Recipes, Chester Aaron
Garlic Garlic Garlic – Linda & Fred Griffith
A Garlic Testament – Stanley Crawford
Onions And Garlic Forever – Louis Van Deven
Garlic, Nature’s Original Remedy – Stephen Fulder & John Blackwood
Compendium of Onion and Garlic Diseases – APS Press