



Harvest of the Month

Garlic



Social Sciences

Garlic is native to Central Asia, South Asia, and northeastern Iran. It was known to ancient Egyptians and other ancient cultures for which its consumption has had a significant culinary cultural impact, especially across the Mediterranean region and across parts of Asia. It is produced globally, but the largest producer is China which produces over 70% of the world's supply. In the United States, California is the top producing state, growing over 90% of the nation's crop. Gilroy, California is known as the garlic capital of the United States.



Botany

Garlic, *Allium sativum*, is a perennial flowering plant that is grown from a bulb. Its close relatives include onions, shallots, and leeks. It has long been used as a seasoning and culinary ingredient worldwide, with a history of several thousand years of human consumption and use, including use as a traditional medicine.

There are two subspecies of garlic commonly called softneck and hardneck. Softneck varieties have less stringent growing requirements and longer storage potential than hardnecks. They are also the varieties used for making garlic braids as they don't have a central hard stalk.

Hardneck garlics have fewer cloves per head as there is usually just one ring of large cloves around the central stalk. The phytochemical responsible for the sharp flavor of garlic are produced when the plant's cells are damaged. When a cell is broken by chopping, chewing, or crushing, enzymes stored in cell vacuoles trigger the breakdown of several sulfur-containing compounds stored in the cell fluids. The resultant compounds are responsible for the sharp or hot taste and strong smell of garlic. Allicin has been found to be the compound most responsible for the "hot" sensation of raw garlic.

Ajo means garlic in Spanish.



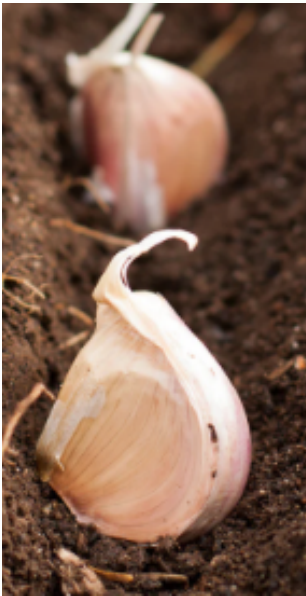
Nutrition

Garlic isn't eaten in large quantities, but it contains so many valuable phytochemicals that it is an important food. It is also used extensively as a medicine as it has anti-carcinogenic, antioxidant, antifungal, anti-clotting, antiseptic and antibiotic properties.

Harvest:

Garlic ready to harvest in the late Spring when the leaves begin to yellow. When you begin to see the lower leaves turning yellow turn off the irrigation for the last week or so before harvesting. Harvest when about half of the leaves have yellowed. Don't wait too long because the bulbs may split and the storage potential will be shortened. If your garlic is in raised beds, you can probably pull them by hand easily. If they are in the ground they may need to be dug out, being careful not to pierce the bulbs. After harvesting, cure your garlic by hanging or laying it in a cool, dry place for a couple weeks; after which you can cut off the dead tops and unruly roots. Your garlic is now ready to store and enjoy.

Growing Tips



Planting:

Garlic is planted in the fall, November is an ideal month in Sonoma County. Start by breaking your garlic heads into individual cloves. If possible, soak them for about an hour in a weak fish meal and kelp solution before planting. Space the cloves about 6 inches apart if planting in rows, or plant 4 per sq. ft. Place the root end at the bottom of the planting hole and only plant about 1-2" deep.

Care and Maintenance:

Work some compost into your garlic planting area before planting in the Fall; but hold off on fertilizing until active growth resumes in the Spring. Then feed monthly with a balanced fertilizer.

Garlic doesn't compete well with weeds, but can handle being mulched. So feel free to mulch the bed well with straw after planting. If you don't mulch, stay on top of the weeding throughout the growing season. It is very important to be ready to begin irrigating your garlic as the rains diminish in the spring as garlic needs a steady supply of water as it is forming bulbs.