



GROWING GARLIC

- BY Kathy Morse

ABOUT GARLIC - Growing garlic in the Pacific NW is pretty easy but there are some things you should know before starting out. Just a note; if you give these instructions to a friend make sure they realize that it is specific to the PNW, these same instructions may not apply for growing garlic in other areas of the country!

Garlic is a member of the Lily Family and is broken down into two cultivars; the Allium sativum ophioscordon or Hardneck garlic and the Allium sativum sativum, which evolved from the wild garlic of the ophioscordon species and is a softneck garlic. The softneck variety stores longer but the Hardneck variety has more flavor. Under the Hardneck varieties, which have about 4-12 cloves per head, you have the **Rocamboles**, which are popular with Chefs because they have a rich flavor, but do not store well, the **Purple Stripe**, which is a good general cooking garlic, and the **Porcelains**, which are hotter and store longer than the Rocamboles. The two subgroups of the Softskin are the **Artichoke** and the **Silverskin**. The Hardnecks have a hard core neck, they have a shorter shelf life, are less productive, peel more easily, have a more complex flavor, and like cold winters. The softnecks have soft necks, and are easily braided at harvest, are highly productive and have long lasting bulbs which will last you all season if stored properly. Elephant (Great Headed) Garlic is actually a Leek and is milder and larger in size. It is grown in roughly the same manner. Decide on what kind you want to grow. Are you a budding chef? Then look to the hard necks. If you just want a nice reliable garlic to get through the year or to make braided gifts then look to the softnecks. If you have room, grow some of each. Several winter catalogues have both varieties, as do the feed stores and some nurseries. Also many Farmers' Markets have vendors with different varieties and the grower can tell you about taste. It is not a good idea to use the ones from the grocery store (unless they are organic) as they may have sprout inhibitors applied to keep them from sprouting.

SOIL PREPARATION - Garlic likes a sunny area with loose, fertile soil so you want to prepare your garlic bed. Nitrogen is the crops most important nutrient. The earlier you start prepping the soil the better. The folks from Olympic Meadows Farm in Sequim, advised me to till under a lot of alfalfa hay which provides the nitrogen and provides good tith and to amend with Bone Meal. You would want to do this at least a few months before you plant your garlic. You could also use alfalfa pellets, which break down faster, and plenty of compost. I also grow a crop of buckwheat prior to applying the above. Whatever you do, make sure the bed is fertilized well especially with phosphorus amendments so necessary for good root development.

Also, because of our wet climate liming every few years is suggested. Weeds are a foe of garlic so starting with a well-weeded bed is essential. Mulching will help to keep them down but also you must be vigilant on weeding.

Fall

PLANTING - Garlic can be planted here anytime from October to January. The end of October is when I have been planting mine. If you wait until spring to plant it you will have very small bulbs. The plant is grown vegetatively from healthy **cloves**. Do not separate the cloves from the head until just before you are ready to plant them and keep them cool but dry. The larger the clove planted the larger the bulb. Save the small ones to eat or plant for garlic sprouts. Do not remove the papery covering. Plant them 2" deep, root end down, 4-6" apart in rows 6-8" apart. Plant Elephant garlic further apart and in wider rows. Tamp them down to prevent the roots from pushing up the cloves during the initial growth period. Using a mulch will keep the temperature even; Good mulches are straw, freshly cut grass or chopped leaves. Some cultivars (there are over 600) do better with our rainy winters than others. Some that I like are; (Softnecks) Polish, Susanville, Nootka Rose, Mild French and (Hardnecks) Zemo, Georgian Crystal, Brown Tempest, Russian Red.

Initially the garlic develops its root structure, and then as the days lengthen and warm the shoots of the leaves will poke out of the mulch. The bulbs are the last to form in spring. I have not had problems with rotting but it is possible in a very wet year. One year I had to pull the mulch back to allow some evaporation so the soil didn't become soggy. If it looks like that might be the case, you could also put an open cloche over the bed so that they have enough ventilation and sunlight but don't get too soggy!

Winter

Winter is when you will start to see the garlic start to sprout. If you have mulch on the bed, the sprouts may be small yet but you can gently dig down in the mulch and I bet you will see some tips shooting up. If you have mulched and it continues to rain heavily you might want to pull away the mulch to decrease the possibility of rot. So what is happening? The garlic is now putting on the top growth, which will feed the plant. The top growth gives you an indication of what is happening underground to your bulb as each leaf is one of the paper-like skins covering the bulb which protects the bulb from invasion of organisms and insects. Now it is this time to begin fertilizing. Garlic likes a high nitrogen fertilizer applied every two weeks during this top-growing season. Foliar application is especially helpful once the leaves get bigger. To some extent the growth reflects the temperature that the bulbs were stored at prior to planting. If bulbs were stored at a range of 41 - 50 degrees F for one to two months prior to planting, bulbs will form quickly with the lengthening and warming of the days.

Spring/Summer

Well spring is here and that means your garlic is preparing to bulb up. Until the days lengthen and get quite warm, continue to provide fertilizer. Either use a high nitrogen organic fertilizer as a side dressing or provide it in foliar feed. In our area we don't usually have to worry about the plants becoming too dry but they should be kept moist. Small plants that appear weak will produce only small bulbs so you could use them as green garlic and greens in stir fries or salad. When we do get those warm days the garlic will finish growing the green leaves and then the growth will go into the bulb. Stop fertilizing at this time, as it will do no good.

Around early June or so the hardneck types (and also the Elephant Garlic) will send up a flower stalk called a scape which is coiled. There is general consensus that leaving the flower stalk on will pull the energy out of the bulb and therefore you will have smaller bulbs. So it is best to snip off the flower stalk as it loses its coil and straightens out, to direct the energy back into the bulb formation. These coils can be used in salads and stir-fries - you will see them for sale at Farmers Markets! Share with your family and friends if you have too many!

It is best to withhold watering at this point. There is usually enough dampness in our soil to keep the growth going yet allows the plant to dry out. The plant will gradually dry down from the lowest leaf up and the leaf tips down. Remember, if you planted several varieties, that not all your garlic will dry down at the same rate so you will have to watch each variety for this evidence.

When the plant has about 80% green leaves left, if the bulbs are full, harvest them. If you are not sure you can pull up one and take a look at it. If you leave it in too long the cloves will begin to separate, if you pull it too soon it may not be full yet! (This technique of pulling when more green and cleaning immediately is new and you may not find it in books but I have found it to work very well and you have less chance of losing bulbs to rot or dryness).

Loosen the soil around your bulbs with a garden fork and then pull out gently. Leave four or five "leaves" on each bulb (the others can be removed leaving a clean bulb) and the root. The bulbs will be very white and aromatic. The bulbs should not be washed. Also, keep them out of the sun, as they will burn. Bunch them up according to variety and hang/or spread them under cover in a place that gets good air circulation to cure. Use fans and heaters if you do not have a dry, airy place.

Curing takes anywhere from 3-7 weeks. When cured you can cut the necks off about 1-2 inches above the bulb and trim the roots to $\frac{1}{4}$ inch. Store in mesh or paper bags at a temperature of about 55 degrees. Softneck varieties can be braided when the stems are dry, re-wetting the stems helps to braid. Separate out the bulbs you want to save for planting and keep them at around 55 degrees - do not break them apart until just before planting.

PESTS AND DISEASES

Because of our wet climate we can encounter problems with rot which is the biggest problem we contend with here. Good stock, soil prep and bed rotations help keep most

problems at bay. Black mold, downy mildew, mites, onion thrips, soot, white rot, penicillium molds and some viruses are the major problems.

Good sanitary practices are the best defense against disease!

Tasting Garlic

Most people think that garlic is garlic is garlic, but it is not! The taste of garlic depends on the amount of sun it has had, the water, the temperature and the soil it is grown in. To decide on which garlic you like to use for which purposes use the following guidelines to help you decide. Always taste the garlic raw first - If you are going to have a garlic tasting fest - you might choose a time when you have a cold and/or are not going to be in the company of other non-garlic tasters. ☺

Flavor, the degree of garlicky taste when eaten raw

Heat, how hot it is on your tongue

After taste, how long the flavor lasts. (3)

Then cook it, either by sautéing or roasting. See what happens from the raw state to the cooked.

Have fun growing and eating your garlic!

References:

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Garlic and Friends, Penny Woodward

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www.gourmetgarlicgardens.com

www.filareefarm.com -- organic

www.thegarlicstore.com

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BRAIDING GARLIC (FROM GARLIC, ONION AND OTHER ALLIUMS)