

Growing Garlic

Growing garlic

- We plant our garlic in the fall, late September to early October.
- If you keep your own garlic for seed, it is best to keep the biggest bulbs and then we discard any small cloves and use them in the kitchen. Only keep healthy bulbs for seed.
- We grow all our garlic in raised beds. This is mainly due to the type of soil we have, heavy clay. The soil does not drain well, so the raised beds helps with drainage problems. We do not put down plastic mulch, we just use our bed maker to pull up the beds.

Raised beds



Raised beds



Soil Preparation

- The first thing we do is to amend our soil with compost. Our soil requires as much compost as we can put down. I have seen suggestions of 1-2 pounds per square foot. We don't measure, we have a manure spreader and a very large pile.
- In addition to compost we try to grow a cover crop prior to planting and work this in prior to planting. One problem I have seen with this method is you need to be careful with the cover crop and make sure you get it incorporated early enough. One year we had Sudan grass planted and worked it in right before planting. I believe the chemical breakdown of the Sudan grass affected the sprouting of garlic. Timing should have been more like a couple of weeks or more to allow for proper decomposition.

Fertilization

- In addition to compost we add fertilizer and incorporate it. We add 1 to 2 pounds per 100 square feet of 12-12-12.
- In the spring we then add $\frac{1}{2}$ to 1 pound of ammonia sulfate per 100 square feet. We do this twice, the first time is when the garlic first starts growing and the second is about 4 to 6 weeks later. Do not fertilize during the last month of growth. This may start a second growth and affect the garlic drying down in the field. I've also seen this can affect long term storage.

Planting

- We crack (break the garlic bulbs apart into cloves) a couple of days prior to planting, but as close to planting time as possible.
- We plant our garlic on six inch spacing. Rows are six inches apart and spacing in rows is six inches. We only plant two rows per bed, but in the future we will start placing more rows, but keep the total 6 inch spacing. Our bedder is adjustable and the width can be varied.
- We currently plant all our garlic by hand, one clove at a time. If our beds are crusted over we run our tiller over the top to soften the top layer to make pushing the cloves in easier. Cloves are planted about 2 inches deep.

Mulching

- After the garlic is planted we then mulch the beds with straw. The straw does three things. First it prevents weed growth. The second is maintains moisture in the bed and will help with watering, if needed. It also prevents heaving of the soil during hard freezes and thaws.
- We have to either replace or rake the straw back into place until it settles. Wind can quickly move your mulch around.

Mulching



Mulching



Weeds

- One thing you have to do is keep all the weeds out of the beds that you can. Garlic can't stand weed competition and weeds can greatly affect the size of the bulbs.
- For non organic growers there are options in addition to mulching and weeding. Goal 2XL can be applied while the garlic is growing and will kill many weeds. Chateau/Tuscany is a pre-emergence herbicide that can be put down in the fall. A good source of information about diseases and weeds is the Midwest Vegetable Production Guide for Commercial Growers.

Scapes

- In the spring many hardneck garlic varieties will form scapes. Scapes look like the tops of onions when they go to seed. These scapes contain tiny bulbils that are miniature garlic bulbs and can be planted in the fall and will produce garlic bulbs. It usually take 3-4 years to produce a full size bulb when grown from bulbils. We remove the scapes from the plant. The idea of removing the scapes is that the plant will now put all it's energy into making a larger bulb and no energy is put into producing bulbils.
- Scapes can be sold or used in the kitchen. They have a garlic taste and people will buy them. You might have to educate people as to what they are and how to use them, but after they find out about them, they are easy to sell.

Harvest

- When the plant dies down partially we start to dig the garlic. Determining when it is the right time to harvest can be tricky. We look for about 50% of the leaves turning brown and dropping. If you harvest early the bulb has not developed completely and loose size. If you wait too long the bulb's outer wrapper begins to deteriorate and the cloves will start to open up in the bulb.
- The garlic is either dug by hand with a fork or we have an attachment with a large 16 inch cultivator on it that will undercut the plant, then it can be pulled easily.
- The plants are then tied in bundles and hung in our barn until dry. This is out of direct sunlight and it has good air flow. It is essential to have good air flow to assure proper drying and to prevent molding. In some cases you may need to provide additional air flow such as fans depending on humidity.

Garlic hanging in barn



Garlic hanging in barn



Dried Garlic



Harvest

- After the garlic is dried it is taken down and the tops are cut off and the roots trimmed. The dried bulbs are then stored in mesh bags in our cooler, until they are sold or planting time.

Varieties of garlic we have

- Wild Buff
- Kettle River Giant
- Lakayana
- Australian Giant
- Lohontan White
- Ontario Purple Trillium
- Khabar
- Island Rocambole
- Russian Red Streak
- Sural
- Osage
- Susanville
- Shantung Purple
- Vietnamese Purple
- Lampang
- Russian Giant
- Island Star
- Punuk
- Applegate Giant
- Shatih
- Mt Saint Helens
- Silver Rose