



Growing Great Garlic!

By Alaska Master Gardener Deb Blaylock

Garlic Background

- * Family: *Amaryllidaceae*
 - * Subfamily: *Allioideae*
- * Two main types
- * Hard neck - *Allium sativum* var. *ophioscorodon*
- * Soft neck - *Allium sativum* var. *sativum*
- * Elephant garlic is actually in the leek family, *Allium ampeloprasum* var. *ampeloprasum*

Hardneck Garlics

- * All produce a woody flower stalk called a scape
- * This stalk doesn't produce a true flower (it can but with a lot of help) – it does produce bulbils – bulbils are clones of parent plant
- * Normally produce a single circle of cloves around the woody stem
- * Some say its more flavorful
- * Doesn't store as well as soft-neck varieties
- * More cold-hardy varieties available

Hard-neck Garlic Best for Cold Climates

- * **Marbled Purple Stripe**

- * Siberian
- * Metechi
- * Russian Red

- * **Purple Stripe**

- * Chesnok Red

- * **Porcelain**

- * Music

- * **Rocambole**

- * German Red

Hardneck Garlic

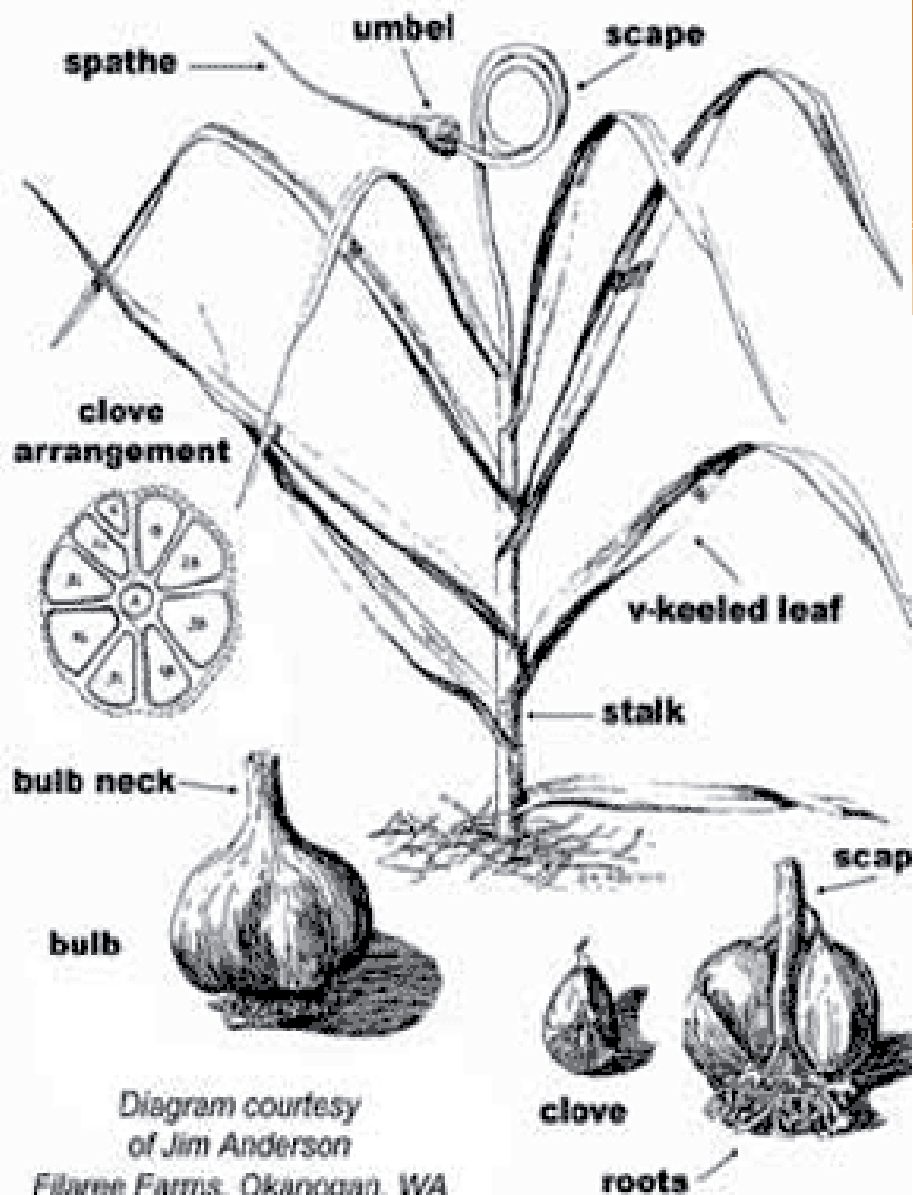
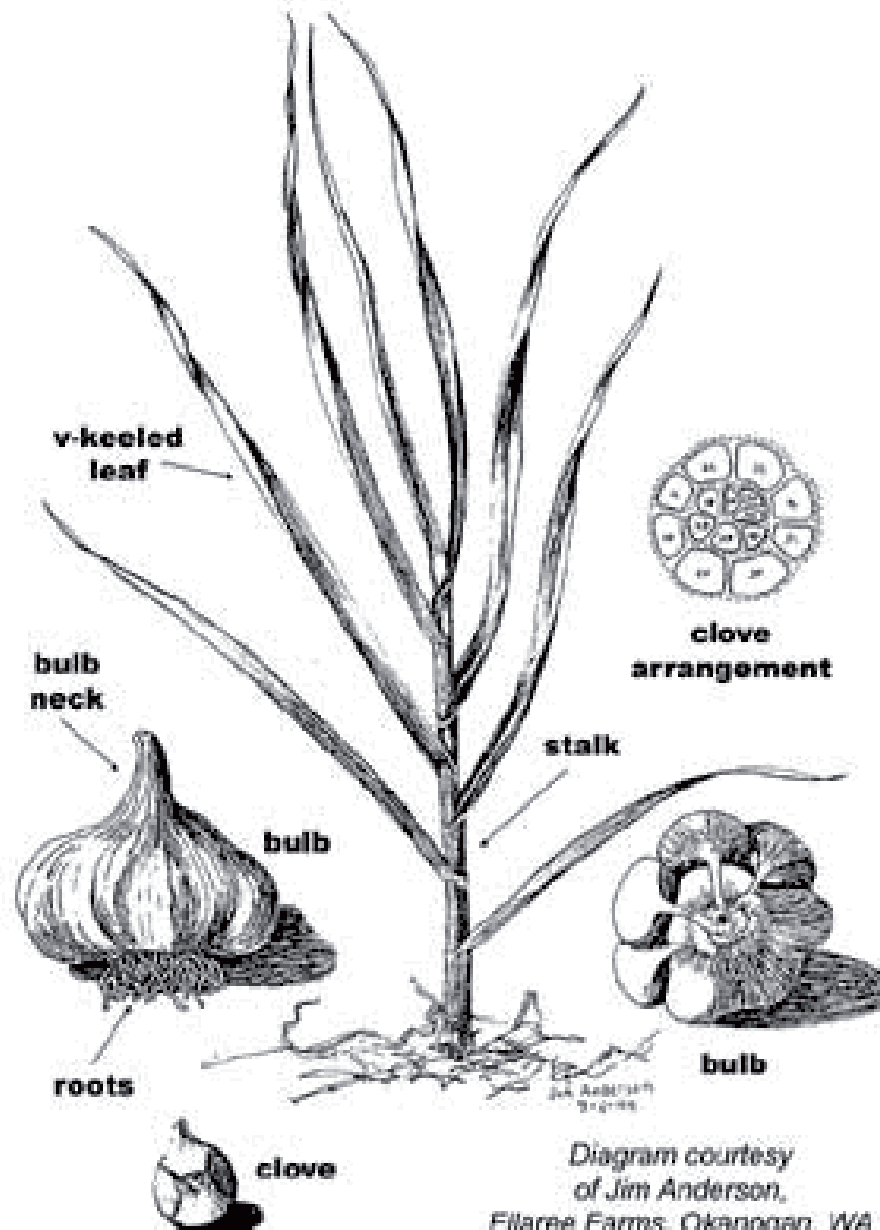


Diagram courtesy
of Jim Anderson
Filaree Farms, Okanogan, WA

Softneck Garlics

- * *Allium sativum* var. *sativum*
- * Bulbs have more and smaller cloves - generally
- * Some will produce weak flower stalks (scapes) in cold climates
- * In colder climates will often produce bulbils just above the soil in the pseudostem
- * Longer storage capability
- * Less acclimated to cold weather
- * Varieties most often seen in groceries
- * Can be braided

Softneck Garlic



Elephant Garlic

- * *Allium ampeloprasum* var. *ampeloprasum*
- * Not a true garlic
- * Is in the leek family
- * Very large bulbs – as much as a pound
- * Can get a bitter taste in northern climates

Pests/Disease

- * Onion Maggots – use an Azadirachtin product IAW label instructions
- * White Rot – mostly during rainy season and planting bulbs too early
- * Penicillium Decay - mostly during rainy season and planting bulbs too early
- * Botrytis – can be brought in from non-certified garlic or grocery store garlic
- * Physiological Disorders
 - * Freezing/Hard Frost – can cause brown tips on early spring plants
 - * Waiting too long to harvest – wrapper paper separation and loose cloves on bulbs
 - * Water damage – wrapper paper damage and invites in molds, fungi and bacteria
- * Special note: Grocery store garlic can have growth inhibitors and can carry and spread diseases from outside Alaska.

Planting and Growing

- * When to Plant
- * Bed Preparation
- * Planting
- * Winter Bed Protection
- * What to do in the Spring
- * Spring Tips (May – June)
- * Summer Tips (July – August)
- * When to harvest
- * After the harvest

When to Plant?

- * After the first hard frost and the rainy season ends
- * Usually late September to late October
- * Don't wait until the ground is frozen too deep
- * Can plant in the early spring – bulbs will not get as large and may produce “rounds”
- * Most hard neck varieties need a period of cold (vernillization) to encourage bulbing
- * Don't plant too early – especially in rainy season – garlic will rot in the ground

Bed Preparation

- * Raised beds are recommended for areas with poor drainage – prepare them early
- * Add a nitrogen source - blood meal is my choice – dig in well
- * Neutral pH (7.0) – will tolerate lower
- * Garlic loves loose loamy soil with lots of compost and excellent drainage
- * Cover beds to protect soil from freezing if you don't plant immediately IE tarp, plastic, etc.
- * Get a soil test if you don't know your baseline



Prepared Beds

Planting

- * Rows 8 to 12 inches apart - 4 to 6 inches apart in rows
- * Plant deep – at least 3 - 4 inches deep
- * Carefully separate the bulbs into individual cloves – try not to break the clove wrappers
- * Plant the pointy tip up – stem (basal plate) down
- * Don't plant too closely – garlic does not like to be crowded
- * Plant the largest cloves for the biggest bulbs next spring – eat the small cloves
- * Use labels if planting more than one variety! You WILL forget when spring rolls around



A Planted Garlic Bed

Winter Bed Protection

- * VERY IMPORTANT – probably most important step
- * Mulch with at least 8 – 12 inches of material as soon as possible after planting (straw is good)
- * Two big reasons – keep the bulbs frozen and protect from the wind (freeze thaw cycle and desiccation)
- * Secure the mulch if in a high wind area
- * Check periodically during the winter – add more if needed
- * The best mulch is SNOW!!

Construction
fencing stapled
to the wood
bed frame



What to do in the Spring?

- * Remove any items used to secure the mulch
March – April time frame
- * Carefully remove the mulch in increments (there may be garlic growing under the mulch) as it thaws – this helps the soil to warm up faster
- * Wait patiently for the green tips to appear
- * Water well when garlic is several inches tall and water deeply at least once a week
- * Garlic sprouts can handle some frost



Starting to
peek
through
Late April
2017

Spring Tips (May – June)

- * Lots of water early on – especially during the “drought” season (May – June)
- * Keep beds weed free
- * Feed a high nitrogen fertilizer once or twice during growing season
- * When onion maggot nits (eggs) appear on chives, get your desired insecticide ready to apply to your alliums (garlic, shallots, onions, etc)
- * Apply as directed on the product’s label

Garlic with Scapes



Summer Tips (July/August)

- * Cut scapes off after the curly-Q forms and start to straighten out
 - * Scapes are yummy treats!
- * Don't fertilize after scape removal
- * Water less frequently
- * Harvest a bulb or two to get a feel for bulb size
- * DO NOT leave garlic in the ground when the rainy season starts!

Bulb Comparison



When to Harvest?

- * Harvest when you like the bulb size
 - * Pull one approximately two weeks after cutting scapes and then every 5 days until the bulbs are of a satisfactory size. You can also just dig down and look at the bulb size without pulling the bulb.
- * The leaves and plant will tell you when to harvest – the outer ones start dying – garlic is no longer actively growing and over half the leaves are browning
- * Approximately 3 weeks after scape removal
- * Don't wait too long – garlic is susceptible to molds
- * Use a potato/digging fork to harvest –don't pull the garlic - pulling can cause bulb damage

2017 Garlic



Russian Red bulb



After the Harvest

- * Clean dirt off bulbs gently (shake or brush off)
- * Dry in a warm area with a fan for air movement
- * Wet garlic bulbs will mold quickly
- * Allow to dry for several weeks then cut off the stems and trim the roots
- * Leave about 1 to 2 inches of stem
- * Bulbs are ready to replant or place in storage
- * Store in a dry, dark area

What do you do with your harvest?

- * Store in a cool, dark and dry area
- * Replant the largest cloves and eat the smaller ones in a bulb
- * Slice and dehydrate – stores a long time
- * Grind the dehydrated garlic into powder
- * Pickle some! Pickled garlic is yum!
- * Ferment in honey – five star yum!

Some Garlic Sources

- * Filaree Farms, <http://www.filareefarm.com/>
- * Territorial Seed, <http://www.territorialseed.com/>
- * Peaceful Valley, <https://www.groworganic.com/>
- * Seed Savers Exchange, <http://www.seedsavers.org/>
- * Best to purchase early for best choices of varieties

Not recommended using grocery store garlic (could be treated with sprout inhibitors and may carry diseases)

Garlic References

- * Growing Great Garlic: The Definitive Guide for Organic Gardeners and Small Farmers by Ron L. Engeland
- * The Complete Book of Garlic, A Guide for Gardeners, Growers, and Serious Cooks by Ted Jordan Meredith
- * Growing Garlic in Minnesota, WW07317, University of Minnesota Extension:
<https://www.extension.umn.edu/garden/fruit-vegetable/growing-garlic-in-minnesota/index.html>
- * Growing Garlic in Alaska, University of Alaska Fairbanks Extension:
<https://www.uaf.edu/ces/garlic/#sthash.YxoXizLC.dpbs>
- * A link to this presentation:
<https://www.alaskamastergardeners.org/growing-garlic-in-alaska.pdf>

2018 Garlic Collection

