

FRUITION SEEDS

guide to organically growing

GARLIC

AT A GLANCE

Latin Name: *Allium sativum*

Sun: Full

Life Cycle: Annual planted in fall, harvested the following summer

Ease of care: Easy

Direct sow or transplant: Direct sow only

Height: 2.5 to 3 feet

Container Friendly: Alas, it's not ideal. Container soil tends to be drier and colder than garden soil, increasing garlic susceptibility to winter desiccation. If you do try, just make sure it's at least a 15-gallon container.

Native to Central Asia, garlic has been co-adapting with humans for more than 6,000 years. The 5000+ varieties in six DNA types of garlic are beloved in countless cuisines across the globe. Potent food as well as medicine, Egyptian pharaohs were often buried with garlic-shaped clay vessels filled with garlic to accompany them in the afterlife; their enslaved people building the Pyramids were given a daily ration of garlic. Both the revolutions of enslaved people in Ancient Egypt were responses to deepening inhumanity, among them the elimination of garlic rations. What we grow grows us. What we change, changes us. Garlic is delicious resistance, Friends. You are what you eat :)

TYPES OF GARLIC

Native to Central Asia, garlic has been cultivated for more than 6,000 years with thousands of varieties now named. We grow three main types with dozens of varieties commonly grown here in the Northeast:

Hardneck: Beloved for the delectable false flower stalks (fondly called 'scapes') that rise in June, hardneck varieties are the most cold-hardy of all types and tend to store less long compared to softneck varieties. Left to 'flower,' scapes produce an orb of rice-sized bulbils: tiny garlic cloves that can be eaten or planted to produce a single clove. Cloves are typically arranged in a single ring around the hardneck. Porcelain, rocambole and purple stripe are the most common types of hardneck garlic.

Softneck: Without hard necks and their subsequent scapes, softneck garlic are easily braided. Though less cold-hardy than hardneck types, softnecks often store longer. Cloves are arranged in two concentric rings, the outer cloves much larger than the inner cloves. Artichoke and silver skin are the most common types of softneck garlic.

Elephant Garlic: Is more closely related to leeks than garlic, who knew?! Massive cloves are mild and arranged in a single ring in each bulb as well as less cold-hardy. Fruition's strain is better adapted for short seasons than most.

FALL: SOW

Soil: Garlic loves to grow in full sun as well as rich, well-drained soil with a pH of 6.2 to 6.4, which is ideal for most garden vegetables.

Fertility Considerations: Garlic is one of the hungriest plants in your garden, so don't skimp on fertility, Friends! As you prepare your soil prior to planting, incorporate 2 to 3 inches of compost as well as our garlic and shallot fertilizer to surround your garlic with fast- and slow-release organic nutrients to boost plant health

as well as bulb development.

Sow: It's vital to sow the healthiest 'seed' stock bulbs you can source; culinary bulbs are often smaller as well as not assured to be disease as well as nematode-free. Organic bulbs grow best in the widest diversity of conditions.

We love to share ours at www.fruitionseeds.com and if you're saving your own 'seed,' sow only the largest bulbs — indeed, the ones you want to eat most!



Garlic is incredibly cold-tolerant. Indeed, cold is essential for their life-cycle: In the depth of winter, the growth point in each clove splinters into multiple growth points, a unique way to 'hedge their bets' in case any succumb to the cold. They rarely do and thus, as they regrow in spring, an entire bulb of many cloves grows from the single bud. Though cold will rarely kill garlic, especially hardneck varieties, desiccation will. Mulching is an easy way to both cover garlic over the winter as well as reduce the frost heaving of the late fall and early spring, reducing the chances of cloves rising to the soil surface. And snow covering your emerging garlic leaves in spring? They won't blink!

When: Sowing 2 to 4 weeks after fall frost is ideal. Here in Zone 5, we plant between late September to early November. Earlier plantings establish robust roots growing abundant bulbs the following summer. Leaves rising above mulch in fall will die back in winter, ready to emerge strong in early spring.

Direct Sow/Transplant: Direct sow only

Spacing in Row: 6 to 8 inches between plants

Spacing Between Rows: 6 to 8 inches between plants

Depth: 3 inches deep with 1 inches mulch or less; mulch, 1 inches deep with 6 inches mulch. Sow cold-sensitive elephant garlic with 6 inches of mulch to bolster its hardiness.

Mulch: We recommend seed-free, organic straw from oats and wheat, if you can find it! Hay often has weed seeds. Alfalfa and grass clippings are the most nutritive

mulches, though they quickly decompose with their high nitrogen content; deciduous leaves sent through a chipper-shredder are also ideal, both nutritive but high enough in carbon to be a quality long-term mulch. If it's not about to rain, water the mulch well so it won't blow away! Keep in mind that once you've committed to mulching, you're also committing to hand-pulling weeds. Since mulches like straw, grass and leaves decompose, they compress and become soil over time. Our goal is to consistently have 6 inches of mulch over our garlic, so we often add a few inches additional mulch in early spring, once the garlic is 8 inches or taller.

Companion Planting: Interplant single spinach transplants between garlic in fall or early spring. Interplanting cool season lettuce transplants (Winter Density is our favorite!) in spring is a great choice as well; just be sure to harvest your greens once they are within 3" of overlapping your garlic foliage to prevent crowding and subsequent stress.

SPRING: CULTIVATE

Did you know? One delectable leaf can be harvested and enjoyed from each plant each in May and June without affecting bulb abundance!

Weed: Garlic can easily be stressed by weeds competing both above the ground for light and above the ground for nutrients. Mulching early and often is our strategy,

though we often still need to hand-pull a few weeds. See deeper mulching detail above!

Pests & Disease: Few pest insects & diseases affect garlic, especially if you've planted seed rather than culinary stock. A fungal rust may blow in on the wind, though it likely won't affect your harvest. Resist keeping this garlic for re-

planting, just to be on the safe side, and savor it, instead. White rot is not common in home gardens but worth mentioning, nonetheless. Though white rot is devastating, it's easily preventable by simply growing your garlic in different locations in a minimum three year rotation with other alliums, including onions, shallots, leeks and scallions.

Finally, in the 'pest' department, most nematodes are beneficial in the garden (like most bacteria and fungi) though some are a nuisance and there is a particular nematode whose 'nematode bloat' dramatically affects garlic. The easiest way to avoid this sadness is to simply source nematode-free seed stock. Don't take for granted that a source of garlic seed has tested their stock, always ask, Friends! Fruition's garlic seed stock is tested each year to be sure it's nematode-free.

Feed: Once our garlic is about 8 inches tall, we begin to foliar feed or root drench with compost tea or dilute fish emulsion every other week. This is generally about mid-April through June for us here in Zone 5. These additional nutrients provide additional plant health as well as flavor, nutrition and abundance. It's also ideal to side-dress with compost or our garlic and shallot fertilizer in May to boost health and abundance, as well.

Once scapes have emerged from your hardneck garlic, resist feeding your garlic further, allowing them to go into dormancy, cure and store most fully. Here in Zone 5, our scapes in mid-June.

MUCH ADO ABOUT SCAPES!

Garlic 'scapes' form only on hardneck varieties. In fact, the scape is the extension of the 'hard neck' at the center of each bulb. Softneck varieties lack such a hard 'scape,' making them ideal for braiding. We prefer them young and tender before the stalks begin to curl. See our recipe inspirations at the end for lots of ideas! Download and enjoy our *Garlic Scape Harvest & Recipe* ebook in Fruition's Growing Library, as well.



Only emerging from hardneck varieties, we prefer the young, tender scapes to the large, fibrous and spiraling scapes. We harvest scapes sometimes by snapping the stem though we prefer to pull them gently from the top, harvesting more of the most tender scape. Indeed, the scape is an extension of the 'hard neck' itself.

Counter-intuitively, the science is ambiguous as to whether removing the scapes may increase ultimate bulb size. Regardless, we harvest each one simply because they're delicious. We prefer the young, tender scapes but we'll eat the large, fibrous and spiraling scapes if we miss them young. We harvest scapes sometimes by snapping the stem though we prefer to pull them gently from the top. Since the scape is the uppermost part of the 'hard neck' of hardneck garlic, you can often pull 12+ inches of gloriously tender garlic scape, though it takes some practice.

Finally, garlic scapes emerge one month before bulbs mature, so once they emerge we make sure we're ready for harvest. We clean out the barn where we cure our bulbs, make sure our fans are working and get enough twine and tags so we can hang them immediately.

❧ SUMMER: HARVEST ❧

Friends, there are several ways to know when to harvest your garlic.

For years we've harvested garlic once one-third to one-half of a garlic's leaves are brown and drying down. Each garlic leaf above the ground corresponds to one bulb wrapper below the ground.

Hardneck garlic offers some additional clues: Their scapes rise one month before harvest and though we love to harvest each delectable scape, if you don't harvest them you'll

see they emerge, curl and then stick straight up in the air as their bulb matures below.

Our favorite way to know when to harvest garlic is this: Look for the pockets of space that form between the cloves and the center hardneck as well as the bulb wrappers. How? Harvest one bulb and slice it in half, creating a cross-section of every clove. The space you're looking for is in two places. First, it's around the center (around the hard stem of hardneck garlic, around the center clove wrappers of softneck), forming as the cloves swell to their final, most mature size.

Even if it's a millimeter, this is the space you're looking for! Second, move your gaze to the outer edge of your garlic bulb. The outer skins surrounding the garlic are essentially 'shrink-wrapping' your bulb and as the cloves inside swell, spaces form between the edges of each clove and the outer bulb wrappers. It's subtle! And once you train your eyes to look for it, the subtlety will be beautifully apparent, a clear guide to help you discern when to harvest your garlic.

Especially in wet summers, 'space' has been a much clearer indicator of maturity than crisp, dry leaves.

Once you've ascertained it's time to harvest your garlic, lift (rather than pull) gently with a digging fork, giving your garlic a wide berth to avoid puncturing it. Well-mulched garlic with moist soil may be pulled, though if it resists pulling, go for the fork! If your stem breaks off from your bulb, the garlic will still be delicious though it won't cure, so be sure to enjoy it promptly. Either way, shake any loose soil free to remain in your garden. We love to clip the roots immediately, when they're easiest to cut, leaving them to build your garden soil, as well.

❧ SUMMER: CURE ❧

Almost like 'shrink-wrapping' your garlic for seasons to come, curing is essential for garlic to store well.

Key Curing Conditions:

Garlic cures quickest in warm, dry places with plenty of airflow. Indirect to no light helps garlic cure both quickly and evenly. As soon as you harvest, begin the curing process.

How to Cure: Lay your garlic flat on a screen with minimal leaf overlap or vertically hang with no more than 10 to 12 stems in each bundle. (A slipknot is dreamy for hanging garlic and you'll find the video tutorial in our free *Garlic & Shallot Academy*.) You can also hang them



upside down, check out John Hunt's amazing method on the left! Fans are an easy way to increase airflow, wicking away humidity from your curing bulbs.

How Long: In warm, dry conditions, curing may take 3 weeks though here in the humid Northeast, it often takes 4 weeks or more. Crucially, curing your garlic is less about 'time curing' and more about looking for the conditions of cured garlic.

When has Garlic Cured?

Once stalks are completely crisp and dry, open up two bulbs to closely observe. If the inner clove wrappers are glossy or moist, even a little bit, your garlic hasn't fully cured.

❧ SUMMER & BEYOND: STORAGE ❧

How to Store: Clip the roots of your garlic back fully, clipping each neck back to 1 inch above the bulb so cloves are fully beneath enclosed wrappers.

Where to Store: Anywhere dark or indirect light & warm (between 55 and 68°F, 13 to 20°C is ideal) with less than 50% humidity and good airflow. An open colander on your kitchen counter is remarkably effective!

How Long Does Garlic Store? Some varieties store longer than others! As a general rule, softneck varieties store

longer than hardnecks. Rocambole types generally store through early January; porcelain store through February with softnecks lasting 10+ months. Growing, curing and storage conditions profoundly affect storage life, as well.

Evaluating Garlic in Winter: As we're reaching for garlic to enjoy over the winter, we're gently squeezing the bulb to see if the cloves feel solid inside. If they're starting to give and squish in any way, use those first! And if they're starting to get green on the tip of the clove, enjoy them nonetheless.



SEED KEEPING

Garlic is one of the easiest seeds to save and share! For the most abundant harvests, sow the cloves of the largest, healthiest bulbs you can source. And Friends, be choosy! Organic bulbs grow best in the widest diversity of conditions. We love to share ours at www.fruitionseeds.com and if you're saving your own 'seed,' sow only the largest bulbs — indeed, the ones you want to eat most :)

ENJOY OUR ORGANIC GARLIC & SHALLOT ACADEMY

Fruition's Academy shares a lifetime of learning with video tutorials surrounding you with insight whether this is your 1st or 50th season growing. You'll have lifetime access to the course, amplifying your abundance well beyond your garden and we look so forward to joining you on the journey! Join us at www.fruitionseeds.com under Learn & Online Courses.

BEST OF THE BLOG

- 6 Mistakes to Avoid When Planting Garlic & Shallots
- 2 Easy Ways to Boost Your Garlic Harvest this June
- Fruition's Favorite Garlic Scape Recipes & Harvest Tips
- When to Harvest Garlic
- Another (Brilliant!) Way to Know When to Harvest Garlic
- What Makes Garlic Easy to Peel?
- Secrets to Storing Garlic

Insight & inspiration daily!



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OUR VARIETIES:



ORGANIC ITALY HILL GIANT IVORY HARDNECK

Our favorite for pesto (along with Red Rezan), each massive bulb with massive, easy to peel cloves have rich, full garlic flavor with a depth rarely present in porcelain varieties.

Italy Hill Giant Ivory has been grown for decades here in the Finger Lakes, gifted to us years ago by our dear friends John and Caroline Hunt.



ORGANIC MUSIC GARLIC HARDNECK

Sweet and aromatic, spicy when raw yet balanced when cooked, Music is easy to grow and marvelously large with 4 to 5 massive, easy-to-peel cloves per bulb.



ORGANIC ITALIAN RED HARDNECK

If you appreciate depth of flavor over searing heat in garlic, you will delight in Italian Red's warmth and nuance. The flavor of the cloves, 8 to 10 per bulb, is mild at first and builds with

garlic intensity as they store deep into winter.



ORGANIC GERMAN WHITE GARLIC HARDNECK

If you're into sweet heat, German White is for you! With full garlic flavor and lingering heat, we love how easy to peel each of the massive cloves are.



ORGANIC CHESNOK RED GARLIC HARDNECK

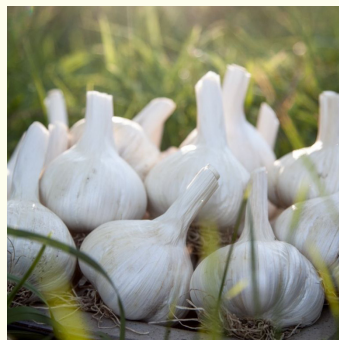
Each year we share a garlic tasting with our crew, tasting each of our varieties both raw (rub a clove on a well-toasted slice of sourdough, it's amazing!) and sauteed.

Each year Chesnok Red is a crew favorite, her rich garlic flavor and balanced, sweet heat is just so widely satisfying.



ORGANIC RED REZAN GARLIC HARDNECK

Our go-to for pesto with well-rounded garlic flavor and strong aromatic warmth both raw and cooked, we love Red Rezan for the rich depth and heat.



ORGANIC GERMAN RED GARLIC HARDNECK

If you're looking for strong, spicy and easy-to-peel cloves, German Red will not disappoint you. Fabulously adapted for short seasons, we love their silver-purple wrap-

pers with 8 to 10 cloves per bulb. Rocamboles do not store well, so we try to plant them by mid-October at the latest.

OUR FAVORITE RECIPES

Garlic scape pesto, Garlic scape pickles

~ both of these recipes you'll find in our free Garlic Scape Harvest & Recipe ebook in Fruition's Growing Library ~

Roast Garlic on Toast

And virtually in everything else we eat!



ORGANIC INCHELIUM RED SOFTNECK

We love braiding Inchelium's soft necks with dried flowers for the seasons to come. Included in the Slow Foods Ark of Taste, Inchelium's rich flavor is not spicy in fall, though their flavor concentrates

and heat intensifies beautifully in storage. Softnecks generally have 10+ cloves per bulb and Inchelium is no exception. Softnecks are also not as cold-hardy as hardnecks, though Inchelium is well-adapted for our short seasons.



ORGANIC REGATUSSO GARLIC SOFTNECK

With aromatic depth and a pleasant depth without singeing heat, even when raw, Regatusso is a massive soft-neck grown here in western New York since the 1880s. Thanks to our

friend Peter Ott who gifted us a handful of bulbs all those years ago! If you're looking for storage, look no further.



ORGANIC ELEPHANT GARLIC HARDNECK

More closely related to leeks than garlic, elephant garlic is gloriously massive, each easy-to-peel clove imparting a rich yet delicate onion-garlic flavor. Their enormous

cloves are arranged in a single ring around the central stalk which rises up at the same time as garlic scapes, though they stick straight up without curling and carry the same delectable onion-garlic flavor of the cloves.



BEGINNING GARLIC GROWERS COLLECTION

3 bulbs each of Chesnok Red, Italian Red & German White Garlic — plus 3 pounds organic garlic & shallot fertilizer + 32 ounces fish & kelp emulsion. Enjoy nine

gorgeous bulbs of easy to grow, best-selling garlic so you can savor the delectable diversity of garlic. We'll also share abundant organic fertility to feed your soil as well as your garlic, surrounding you with abundance for years to come.



ORGANIC GARLIC AND SHALLOT FERTILIZER

For years, Matthew has blended diverse amendments to feed both our soil and our garlic and Friends, this is it! In 2020 we grew over 12,000 bulbs of garlic and shallots; over 95% of them were seed-stock size. It's true, there are a lot of variables and we're confident this blend tips the balance.

~ 1 pound feeds 1 pound (35 to 40 cloves) of garlic
or shallots for the entire season ~

PRESERVING THE HARVEST: *We love to tuck garlic in most of the pickles, sauerkraut and other ferments we make. We share our kraut recipe on the blog, if you're curious! When we have a ton of garlic we have to use quickly, we make 'chile crunch,' a glorious garlic condiment we enjoy with almost everything. After sending the garlic through a cuisinart to finely chop it, we spread it on a dehydrator. Once crisp, we cover it with olive oil, a bit of salt and hot pepper flakes to taste. Since the dehydrated garlic is water but not oil soluble, it remains crunchy for months to come!*