Growing gourmet Garlic

1) Why Garlic? Why Gourmet garlic?

a) Many people think when they hear that I grow gourmet garlic for a living, that "oh, you must just love garlic. Eat if breakfast lunch and dinner..." Well, I do enjoy garlic, but not *that* much. Really it is a spice *Not* a food group folks... No offense to those who eat it by the clove or crush it in their oatmeal er something... Really though, For us climate had a lot to do with it, as well as gourmet garlic's ability to be a cash crop. We are in state that many people assume primarily a sandy hot desert. And that's kinda true for some of the state, where we are is actually 7,500', so we have a short growing season with lot's of cool weather, and even snow in the winter. We have to grow anything like tomatoes in a greenhouse. Which means we're competing with everyone that has climate on their side within a couple hours of us. Another great thing about gourmet garlic is that currently there is more demand than supply, which makes it a cash crop. I love the outdoor, country type lifestyle of "farming", but we have to create a path where it's not an exclusive thing for those who already have land or \$. We have to make it financially

least 2 more higher value crops that do well for us, like a couple kinds of berries. This gives some buffer and redundancy.
i) Gourmet Garlic sells from anywhere around \$10/lb. on up to \$22+/lb. for good sized *organic* seed garlic. Many high-end restaurants and coinsures of exotic food are willing to go to great lengths and expense to get this stuff on their tables.

repertoire to do that. Absolutely do recommend having a handful

rewarding, not that we have to be flush with money, but to be

of "cash crops". On our farm, the longer term plan is to add at

good stewards. Garlic is one crop that can round out your

I have heard that an acre of prime ground, grown *very* intensively could potentially grow up to 10k lbs. of garlic. Now we haven't seen anywhere near that on our farm. But that is the far reaches of the max I have heard is possible.

- ii) Garlic is in the ground for around 9 months. About four to five of those are pretty hands on if you are growing upwards of a thousand pounds—a ballpark, totally depending on how much you're doing and your system of man hours for that time period would be in the thousands. But hey, during the middle of the winter it doesn't need much attention at all. Like any other crop you'll have to invest in soil health to maximize your return. And there may be some equipment investment as well, but if starting small, not a huge amount. And don't forget marketing.
- iii) It's a forgiving crop. Pretty much, it can have a lot go wrong;
 with soil fertility, weather, watering, and it will still grow. You'll get something. However, though garlic is fairly easy to grow,
 great garlic is fairly difficult to grow
- 2) What is gourmet garlic
 - a) We all have seen garlic in the grocery ("Gilroy garlic." China garlic) How does this differ from gourmet garlics. Irradiated so it won't sprout—supposed to store better, but doesn't really because the harvest with machines and dumping in dump trucks sometimes takes it's tole, making cloves go soft and become susceptible to disease. And all those good things you have heard about the health benefits of garlic? Not so much there once it's been "cooked" out by the irradiation.
 - b) "You haven't tasted real garlic flavor until you've tasted and "ophio" garlic." There are somewhere around 300 different kinds

of garlic, with flavors ranging from an very strong garlic flavor ("pungency") to a more muted, nearly "sweet" effect; and from hotter than some peppers to mild. So there's plenty of entertainment for the taste buds

- 3) Lay out some of the more popular kinds.
 - a. Artichoke,
 - b. Asiatic
 - c. Silverskin
 - d. Turban
 - e. Purple stripe (Glazed Purple Stripe, Marbled Purple Stripe)
 - f. Porcelain
 - g. Rocambole

Let's assume you decide garlic is a good fit for you. Where do you start?

1) Soil, Soil, Soil. It's the foundation of all success for your farm. I can't stress this enough. It influences your crop health diseases and pest, size, flavor, water needs, even how easy or hard your job has to be. Believe me, If you're trying to harvest a root crop out of an 8" cinderblock... well, it's just not easy... yeah, yeah, Don't ask... It's not a short term project. You'll probably want to start soil prep a year before you plan to plant. Two is better. Now, Our first year we jumped in feet first... Started Sep. plant Nov. Fight winter and fertilizer, and irrigation, and... it was just a struggle. But do

you know the great thing about garlic? It's a survivor. Don't be disheartened if first crop seems failure.

"Many people would claim that small bulbs well-grown in poor soil still produce the best tasting, best keeping garlic bulbs." But small doesn't sell well in America. So if that first crop is a seeming flop, that's where the farmer's creativity comes in. Make garlic powder... etc.

- a) One of the kingpins of soil fertility for a crop of garlic is organic matter. This is huge. A good sandy loam with OM in the 3-4% range tend to support good sized market garlic. Soil is a continual project. You may not hit the target the first year, but take a soil test and start working on it. Green manures/ covercropping. Animal manures (Careful...), Alfalfa hay are all options to coax your soil toward that optimum... Be careful of tilling...
- b) OM helps #2. Soil has to be well draining. Garlic can't stand wet feet... Needs well drained soil.
- c) Nitrogen needs. 100-120/lb. actual nitrogen/acre. Optimum.
- d) Garlic likes pH of about 6.8
- e) Micronutrients. Garlic may not feed as heavily as you think on things like selenium or sulphur. Get a soil test and amend to what it says. Garlic is also a great miner, so will bring up many of the things it needs on it's own
- f) Irrigation. Talk about later

It's very tempting to find a great idea and want to jump in big, but I would really encourage, start small. Buy 5-10 pounds of seed, grow for a year, save the best for more seed stock and slowly grow more and more. 100 lbs. is a LOT of garlic seed. Do yourself a favor and don't plant that much right off.

2) How to choose varieties:

- a) Comes down to sorting out which varieties do well in your climate, soil, keep well, and have the flavor you want.
- b) Nice to grow a cross section that address these needs.
- c) It's nice to have a well-known name available, but maybe it also has short storage life, so to be able to offer alongside it a long keeper is nice.
- d) Mindful of climate and whether you need to sell "name brand" aka Spanish Roja, or do you have face-to-face interaction with customers i.e. farmer's market, where you can educate them on a lesser known variety (NM Topset) that does well for you and they may like as well as the well-known variety.
- 3) How much do you need for seed. The general rule of thumb to give the cloves plenty of room to size up is 4"-6" apart in both directions, and 4 is really to close in my opinion. We use 30" beds interspersed with 30" walkways with 4 rows per bed, each row being 6" apart center to center, with a couple inches on either side of the outside rows before the edge of the bed. Each of those rows has a plant every 6+"... each bed is around 400' long. So a rough estimate is 800 per row x 4 rows = 3200 bulbs to harvest. Rough because we never seem to get that many... And it would take *roughly* 64 lbs. of garlic cloves to plant one bed of those figures.

- 4) Once you know how much of what kinds you are planting, go ahead and get it ordered early. Many of the garlic farmers you find online will have ordering available by May or even before, even though the product won't ship until autumn.
- 5) When to plant... Couple weeks before the ground hardens is good rule of thumb.
- 6) Prep.
 - a) Peel, pop.
 - b) Soak and rinse.
 - We have used formula of 1 heaping Tbs. Baking Soda + 1 Tbs. fish emulsion per gallon of water and soak overnight.
 - ii) Then rinse for a couple minutes just before planting in rubbing alcohol
 - c) Peel clove wrappers if you have time
 - d) Prepare beds
 - i) Till
 - ii) Add Final amendments if necessary
 - iii) Mark
 - e) If planting a large amount, find several gullible friends to lighten the load.

7) Get 'er planted

- a) Remember: 4-6" apart.
- b) 2-3" to *bottom* of clove depending on climate
- c) Pointy side *always* up. Root plate down!
- d) Cover gently
- e) Top dress with amendments if needed
- f) Put down drip line

- g) Mulch. Important... Don't want you're little cloves heaved out if you have a lot of freezing and thawing. Also helps keep moisture levels from swing wildly, which garlic doesn't seem to like.
- 8) All set for winter then right? Mostly...
 - a) Don't forget to mark what kind is what. Otherwise all that trouble you went to picking out what varieties to buy goes to waste. Sounds like a no brainer, but it happens...
 - b) Enjoy the winter off. Mostly...
 - c) Cold hours. Gourmet garlic's need for vernilization.
- 9) Spring time
 - a) Any time it's above freezing garlic is growing. Think about irrigating sooner rather than later...
 - b) Weed pressure. Garlic size will be negatively impacted by even a small amount of weeds.
 - c) Possibly side dress a time or two. Or fertigate...
 - d) Put your mulch back on if it blew off or the ravens picked through it...
 - e) Make sure some plants not hung up in mulch as they begin to sprout.
 - f) Keep an eye out for diseased or funny looking plants. Something strange? Look it up. It may be ok, but if not, dig up that plant or plants and burn/ take to dump. Don't compost.
 - g) Keep watering. Garlic likes soil at about 50% moisture... about 1" of water/wk.
- 10) Depending on what climate you're located in, start monitoring for plant maturity. Anywhere from May through

July depending on when it gets warm enough to stop growth... weather

- a) Couple weeks before harvest, stop watering.
- b) Scapes... Must de-scape most varieties to maximize bulb size. Don't do it too soon to also maximize storage life.
- 11) Harvest
 - a) How to tell when... when the bottom few leaves start to turn brown—"dry down", dig down and actually look at a few bulbs. You can kinda tell if they will grow a little more, or if leaving them an few days would mean they'd start breaking their wrappers.
 - b) Order of varieties.
 - i) Asiatics and turbans. Don't wait on the Turban's to turn brown much. Check bulb size.
 - ii) Artichokes, Creoles, Rocamboles, Purple Stripes, and Porcelains
 - iii)Silverskins
 - c) Watch leaf browning... don't wait for this on Turbans...
 - d) When there are 6 or so green left... dig and check bulbs.
 Do NOT wait til whole plant brown. Won't store well if you do...
 - e) When ready, start digging... Using a potato fork works fine
 - f) Don't mix varieties!!... Yeah, been there...
 - g) Bundle and hang/ lay out in a shady place to cure for 2+ wks. More in humid climates. Keep the air circulating.
- 12) After curing, trim roots and tops to length... measure, sort by size. Weigh...

- 13) For planting stock, store above 50 degrees around 50% humidity. Table garlic can be kept as low as 27degrees I hear...
- 14) Marketing
- 15) Shipping
- 16) Replant
- 17) Health benefits
- 18) Resources
- 19) Questions