Growing Garlic in the Arizona Central Highlands Chef Molly Beverly September 27, 2023

1 Introduction—personal background—

Chef/Yavapai College 9 years Food Service Director/Independent Caterer 30 years (my chef signature is garlic) Chair of SF Presc – 12 years – championing school and community gardens Cooking Instructor at Yavapai College since 1976 and current Food writer for 5enses and Edible Phoenix, current Small scale garlic farmer since 1983 AND Associate Master Gardener

2-3 Garlic (Allium sativum)

Is a perennial plant grown as an annual for its pungent tasting (and smelling bulb) Originated in Eastern Asia_____ And has been cultivated for thousands of years in Mesopotamia, China and ancient Egypt Known to ancient Greece and Rome. Fundamental to Asian, Middle Eastern, northern African, southern and eastern European and Latin American cuisines

Widely used in traditional medicine (Thus the vampire myth)

Current medical research— inconclusive for common cold, infections, prostate, colorectal and stomach cancer. Strong antioxidant and anti-inflammatory properties under research.

Not to be used topically!!!

Garlic breath – when eaten raw. A recent study in the Ohio State University journal, Molecules, shows that whole milk plain yogurt may help neutralize garlic breath (Tzaziki garlic yogurt dip) mdpi.com. Ohio State University Department of Food Science and Technology

GARLIC TYPES:

Elephant garlic belongs to the onion genus. It is not garlic—but I still grow some. It's relatively mild and fun as a vegetable.

Hard Neck Garlic—long flowering stem/scape (which needs to be removed) and turns rigid when dried

Very cold tolerant, into Siberia and Canada, but will grow here

Sweeter and easier to peel

Does not keep as long

Soft Neck Silverskin – does not produce flowers or seeds or scapes

About 40 years ago, Bill Grey, gave me a handful

We found garlic perfect for our Chino Valley 3-acre field. We could hire a crew to break up the cloves and plant. They we hired one worker to weed in the fall and spring. We covered the irrigation. Then we hired a crew to harvest and braid. After that one worker handled cleaning, sorting and filling orders. At one time we expanded to 6 acres. We shipped through cross country carriers and met the trucks on I-40.

We love this variety. We have tested and tasted many others and found this garlic to have the largest cloves, most pungent flavor, and the best keeping quality. The garlic hanging on my kitchen wall will keep until next year's crop is harvested... a full year. We love it so much and planted it for so long that that we named it Chino Valley Silverskin. Over this time we have paid back Bill's generosity by sharing it with many other small farmers and backyard gardeners, including Corey and Shanti Rade of Whipstone Farm.

If you want to plant Chino Valley Silverskin yourself get some at the Whipstone Farm booth at the Prescott Farmer's Market or at Whipstone.com. It's the only garlic they grow and sell.

We used organic practices before organic certification,

They grow bigger garlic than me. Why?

4 PLANT: Here you see my planting in CV in October 2022

You see the cover crop—rye/vetch (we also plant crimson clover AND blackeye peas) planted in August

Here's why I love blackeye peas—fast, sprouts, leaves, immature pods, mature pods, dry, cooking time

September - cut and dig in the cover crop or use mature compost well dug in (with native soil)

WE avoid replanting allium (garlic or onion crops) in the same place for 3 years to avoid disease

Here you see the 36 inch beds, with two rows of drip irrigation system on timers for consistent moisture.

5-8 Bulbs are broken and planted. Place bulbs on a cloth base and hit them gently with a rubber mallet. **Select biggest bulbs and biggest cloves – Corey Rade story** Right before planting and use immediately.

Plant staggered across drip tape, 6" apart, 3" deep – point side up or down??? Garlic is smart enough to know which end is up.

9 Here you see the 140 foot row- 2 42-inch beds (distance of tractor wheels), total of 560 row feet of garlic.

Here you see the drip tape, to maintain consistent moisture on a timer.

Mulch with about 4 inches of compost or leaves (we use a leaf blower to move leaves)

10 EMERGENCE in 3-4 weeks, depending on temperatures.

They grow until the weather gets really cold

They wait out the snow and cold (we have had down to 10 degrees)

11 MAY – vigorous growth. Continue to maintain consistent moisture, weed free, and mulch

In April/May apply fish emulsion – 1 application

12 JUNE Watch for browning leaves

Look at this sample—pull one bulb, cut and count for 5 wrappers When you have the 5 wrappers turn off the water and wait 2 weeks. If the monsoon/rain threatens, harvest the garlic early. Rain will shorten the storage life.

13 Tractor video –

notice dry leaves and green tops and leaf mulch For smaller plots loosen with a fork Do not dry the garlic completely in the ground or heads will shatter and not keep well

14-16 HARVEST Heads should come up easily without pulling. Leave tops on. Knock off excess dirt

DRY in racks with good air circulation and in the shade

4-5 days for braids, 2 weeks for other storage

After harvest - Prepare soil and plant cover crop – rye/vetch, crimson clover, blackeye peas

17-20 BRAIDING – tops are wilted & flexible, not dry & brittle.

21 Braiding or bunching with tops on will keep for up to a year (until your next harvest!)

22 Storage. After two weeks of drying—CLEAN & TRIM-- trim beards and tops, brush off dirt.
SORT out largest heads for replanting – we set aside 30#
Bulbs are now dry enough so cloves peel easier. Save, sell, or give away.
Optimum storage conditions: 56-58 degrees, 45-50% humidity, well ventilated NOT STRICT
Do not refrigerate
HARVEST 2023 – 200# from two 140' beds (560 row feet), and 30# of seed

23 Best instructions from Johnny's Selected Seed

24 Toasted Garlic Burger. With Garlic Tahini Sauce, 5ensesmagazine.com

THE TOASTED GARLIC BURGER WITH GARLIC TAHINI SAUCE

I'm celebrating Garlic Season this year with The Toasted Garlic Burger. Here's how you make it.

Peel and mince one or two whole big garlic bulbs, you'll need at least 1/3 cup minced, but more is better. For easy peeling, lightly smash the garlic with a knife, then dip your fingers in a little water. Garlic is sticky.

Heat 2 tablespoons of olive oil in a small skillet and add all the garlic. Stir over medium heat until the garlic is golden and crisp. Cool for a few minutes, then add this to one

pound of ground beef with 1 teaspoon salt, 1/2 teaspoon black pepper and a pinch of red pepper (to taste). Mix, form into patties, and fry in a cast iron skillet or grill over a hot fire. Slice and toast buns. Then rub each cut side with a clove of raw garlic and brush with olive oil.

For an additional garlic kick dress that burger with Garlic Tahini Sauce. Finely mince four cloves of garlic. Mix them with 1/4 cup of freshly squeezed lemon juice. Set aside for 15-30 minutes, then strain completely, pressing the juice through the strainer. Discard the garlic. Mix the lemon juice with 1/3 cup of tahini (aka sesame seed paste), 1/2 teaspoon salt, and a pinch of ground cumin. Add a pinch of ground chili if you like spicy. Whisk well, adding 5 tablespoons of ice water as you go. You'll end up with a thick creamy garlic dressing. Layer up that burger with a generous dollop of this Garlic Tahini Sauce, slices of red onion and ripe tomato and a crisp leaf of lettuce. And, of course, with a crisp chilled beer.

Garlic bread - toast bread, rub with garlic, brush with olive oil

25 RESOURCES- Now get out there and plant garlic!!!

Garlic Production from Heads and Cloves, Johnny's Selected Seeds pdf <u>https://www.johnnyseeds.com/growers-library/vegetables/garlic/garlic-production-tech-sheet.html</u>

Garlic in the Garden, Utah State University <u>https://digitalcommons.usu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=12</u> <u>50&context=extension_curall</u>

5enses story https://www.5ensesmag.com/single-column/garlic-season-2023

Chino Valley Silverskin available from Whipstone Farm: https://whipstone.com