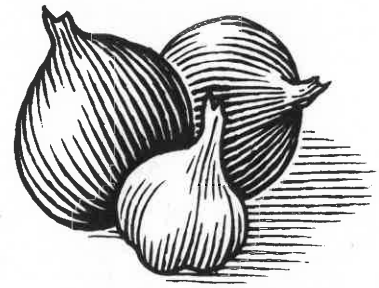


## **'Growing Great Garlic'**

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### **Hardneck Cultivars:**

#### **Rocombole—**

- Deep, full-bodied, sweet flavor. Excellent raw, so use in olive oil or dressings.
- Grows very well in cold climates.
- Very short shelf life – 3-5 months
- Recommend: 'Spanish Roja,' 'Killarney Red,' 'Carpathian,' 'German Red.'

#### **Purple Stripe—**

- Very flavorful, usually win the 'best baked garlic' at various taste tests.
- Short to medium shelf life – 4-6 months.
- Recommend: 'Chesnok Red' (or sold under 'Shvelisi;'), 'Persian Star,' 'Shatili.'

#### **Porcelain—**

- Cloves are large, often mistaken for elephant garlic.
- Need water up to harvest.
- Have the highest levels of allicin, making them a bit more sulfurous.
- Flavor is hot raw, mild when baked.
- Medium shelf life – 4-6 months.
- Recommend: 'Music,' 'Romanian Red,' 'Zemo,' 'Polish Hardneck,' 'Georgian Crystal.'

### **Softneck Cultivars:**

#### **Artichoke—**

- Easy to grow. Vigorous plants. Found in grocery stores (to eat).
- Flavor is on the milder side, some varieties can be spicy. Mild is good for raw eaters. Some strains produce a bite, intensified by cold winter growing conditions.
- May partially bolt (form bulbils along the pseudostem or false stem) from cold winters or stress.
- Matures early, so it's first harvested.
- Recommend: 'Inchelium Red,' 'Kettle River Giant,' 'Lukak,' 'Lortz Italian,' 'Tochliavri,' (also called 'Red Toch'), 'Susanville.'

#### **Silverskin—**

- Very long storage life. Highest yielding variety, prefers mild winters. Best one to spring plant.
- Most popular garlic for braiders because of the narrow leaf and teardrop shaped bulb.
- Last garlic harvested and may fall over a week or more before harvest due to their weak necks.
- Recommend: 'Silver White,' 'Nootka Rose,' 'Idaho Silver.'
- Creole (not braidable). Sub-variety hardneck (genetically close) small bulbed, but long shelf life.

**Green Garlic**—uncured bulbs, harvested about a month early and used immediately for culinary use. **Garlic Scallions** are small cloves or bulbils that are planted in mid-summer, spring or indoors, then grown and harvested like green onions. **Garlic Greens** are dedicated garlic plants where the upper green leaves are cut or harvested for culinary uses, like cut and grow again lettuce. Bulbs will not form well when growing for greens.

#### **How Much to Order—**

- Hardneck produces 4 to 10 times amount planted. One lb. of Rocambole HN (60 cloves) will produce 60 plants.
- Softneck produces 7 to 12 times amount planted. One lb. of Silverskin SN (70 cloves) will produce 70 plants.
- Go in with a friend and share bulbs. Next year, save bulbs to plant and buy some new varieties to try.

**Do not use grocery store garlic as planting stock it may be diseased or treated to prevent sprouting.**

#### **Soil Preparation—**

- Garlic grows best in well drained, amended soils in full sun, okay to plant in shade in the fall, just as long as the area starts getting sunny after the winter solstice.
- Soil test every few years to determine soil needs.
- Balanced fertilizer (10-10-10) based on soil test. Use a foliar spray early spring.
- Never use fresh manures at planting time.
- Container grown garlic must be sunk in the ground or protected from freeze/thaw exposure.
- Use green manures, also known as cover crops before or after vegetable harvest of any crop.
- Three-year garlic crop rotation is recommended.

#### **Plant and Mulch—**

- Fall planting is best, by mid-October, well before the ground freezes.
- Never plant in wet soils.
- Separate bulbs (no need to peel) before planting.
- Plant individual cloves pointed side up.
- Plant 2-3 inches deep, 4-6 inches spaced apart, rows 10 inches apart. Label each row.
- Mulch deeply with shredded leaves or weed free straw after planting or right after first hard freeze.
- Water immediately after planting.

#### **Growing Care—**

- Renew mulch throughout the growing season.
- Water when no snow or moisture is around, at least twice a month in winter.
- Resume regular weekly or bi-weekly watering as the weather warms during April, May and June.
- If spring is extremely rainy, move mulch away from garlic crowns to prevent rot or possible fungus.
- Cut off scapes after they have curled downward, but before they uncurl to grow straight up OR 2-weeks before harvest.
- Rotate all vegetable crops to reduce disease and insects.
- Poor growth, small bulb size is usually due to compacted soil or lack of sun.

#### **Harvest and Storage—**

- Garlic is ready for harvest mid-summer when planted the previous fall.
- Stop watering 4-5 days prior to harvest, **exception is porcelain hardneck, stop two days before harvest.**
- Wet bulbs will not cure well, nor store well.
- Wait for lower leaves to turn brown.
- Harvest when 5-6 upper leaves remain green.
- Use spading fork or dig around bulb to carefully lift, just brush off dirt, don't scrub.
- Do not expose harvested bulbs to the sun.
- To cure, dry away from sun for 4-6 weeks in a well-ventilated space (basement w/fan).
- Lay on mesh screens or bundle (tie) in 6s to 12s, then hang.
- When dry (4-6 weeks) remove stalks and roots and any excess dirt (soft brush okay).
- Hang in mesh bags, stores best at humidity levels like a wine cellar.
- Storage conditions: 50 – 68 degrees (58 is better), 45 to 50% humidity, good air circulation, not in closed containers or paper bags. Use netted bags (reuse your onion or lemon bags).

## ***Garlic in the Kitchen***

### **Basics—**

- Grow your own if you can, but when purchased, make sure it is firm when pressed in your hand.
- Old garlic will begin to sprout and taste bitter. Cut out green and okay to use.
- Store garlic cloves and opened bulbs in a cool, dark place, not the refrigerator. Glass bowl for everyday use.
- Minced garlic only holds its flavor for a few hours, after that it becomes bitter. One day in the refrigerator will make it dull and lose heat, so use minced right away.
- Do NOT store garlic in olive oil (possible botulism). If you must, soak garlic in vinegar first for 12 hours.
- Crack open a clove by whacking it using a knife blade on a hard surface or cutting board. For health benefit, let crushed or minced garlic sit for several minutes to release allicin.

### **Measure—**

1 fresh plump clove yields 1 ½ rounded teaspoons of fresh minced garlic.

1/8 teaspoon garlic powder equals 1 small clove

½ teaspoon garlic salt equals 1 clove

### **Preparation—**

#### **1) Raw** garlic can vary by different preparations-

- Food processing makes it soft, but flavor is somewhat diminished. Toss cloves in last when making pesto.
- Cut in half and rubbed over bread (bruschetta) the taste is assertive.
- Finely minced and added to gazpacho it's vivid and lively.
- Smashed and minced is the hottest.
- A garlic press will be very strong
- Add raw chopped or minced raw into soup, stew or vegetable just prior to serving. Use Rocambole, Creole or Purple stripe for raw. Porcelain and Silverskins can be hot and aggressive

#### **2) Cooking—**

When cooking on the stove with olive oil, keep heat low and keep an eye on it.

When cooking onions and garlic, sauté onions first, add garlic later.

#### **3) Braise—**boil cloves in water or vegetable water for 20 minutes—will be soft and mellow

#### **4) Dry-Roast—**use unpeeled garlic on medium heat in a cast iron pan. Turn often until soft to touch and a bit blackened in spots for about 15 minutes. Cool, peel and mince. Makes a toasted flavor, not very sweet.

**5) Oven-Roasted—** whole bulb-preheat oven to 325. Slice off top of head; gently remove outer papery skin from sides of the head. Place head in a small, ovenproof dish. Spoon 1 tablespoon of water or olive oil over it. Cover tightly with foil. Bake for 1 ¼ hours. Uncover, baste uncovered until golden about 15 minutes, cool. Using a fork or potato masher, thoroughly mash garlic. Blend mixture with softened butter, season with salt, white pepper and Tabasco (2-3 drops). Spoon into a small serving dish and wrap thoroughly. Store in the refrigerator for seven days. Bring to room temperature and serve with crusty bread or warm focaccia. Sweet, carmel taste...yummy!

#### **6) Stir-fried scapes—**grill, roast or broil with olive oil, use like asparagus. A pesto made with scapes is divine!

### **Resources—**

- The Complete Book of Garlic by Ted Jordan Meredith
- The Stinking Rose Restaurant Cookbook by Andrea Froncillo with Jennifer Jeffrey
- Garlic Garlic Garlic by Linda and Fred Griffith
- Growing Great Garlic by Ron Engeland
- Totally Garlic Cookbook by Helen Siegel and Karen Gillingham
- Cover Crop Information: [www.cmg.colostate.edu/gardennotes/244.html](http://www.cmg.colostate.edu/gardennotes/244.html)
- Vegetable Garden - Soil Management and Fertilization: [www.cmg.colostate.edu/gardennotes/244.html](http://www.cmg.colostate.edu/gardennotes/244.html)

***"Shallots are for babies; Onions are for men; Garlic is for heroes." Author unknown***