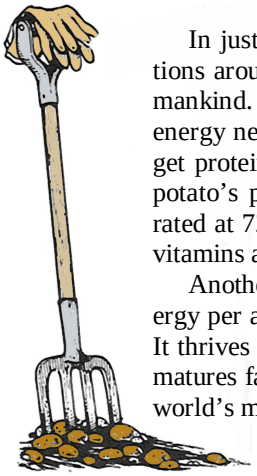
Potato Garden

"There is no species of human food that can be consumed in a greater variety of modes than the potato."
Sir John Sinclair, 1828



In just 400 years, the potato has replaced grain as a basic source of nutrition in many nations around the world, because the potato is the best all-round bundle of nutrition known to mankind. Its ratio of carbohydrate to protein is ideal — eat enough potatoes to satisfy your energy needs and you will automatically get much of the protein you need. Furthermore, you get protein of the type that you can readily use for body growth and maintenance. 73% of a potato's protein is easily utilized by humans. Only eggs rank higher, at 96%. Soybeans are rated at 72%, corn at 54% and wheat at 53%. The potato also provides significant amounts of vitamins and minerals, especially Vitamin C, iron, thiamin, phosphorus and niacin.

Another virtue of the potato is exceptional productivity. No other crop produces more energy per acre than potatoes. The potato grows well at elevations from sea level to 14,000 feet. It thrives in a wider variety of soils and under a wider range of climatic conditions than any other staple food. It also matures faster, yielding edible tubers in just 50 days, and reaching maturity in 60 to 120 days. Overall, the potato is the world's most efficient means of converting plant, land, water and labor into a palatable and nutritious food.

Certified Seed Potatoes

Potatoes In Vitro

Mini-tubers From the Greenhouse

Colorado's certified seed potato program insures quality seed and prevents the spread of potato diseases. Without such programs in place, farmers would struggle with their seed stocks running out. Running out describes the process where diseases spread and multiply year after year and yields continually drop. The certification program also helps prevent certain diseases that can wipe out whole fields of potatoes in a single year.

We use a technique called micro-propagation or tissue culture. The process starts at the eye of a potato where new cell growth is harvested and planted in test tubes that contain a growing medium of minerals and sugars. The hope is that the new cells haven't been infected with any diseases yet. These new plants are tested for diseases and only the clean ones are kept. The plants in the clean test tubes can be divided between each leaf node and replanted in jars in the same growing medium. This division, or micro-propagation is how we multiply the numbers of disease fee plants.

Next, we take the plantlets grown from the micro-propagation process and plant them in green houses to produce mini-tubers called "nuclear" seed. The Certification Service inspects the plants visually and conducts disease testing on the leaves and the mini-tubers produced. The lots that pass inspection and disease testing are kept in storage for the following year.

The mini-tubers are then planted outside in the field to produce regular sized seed potatoes. These plants are also visually inspected and disease testing is conducted on the leaves and the tubers. A "winter" test is also conducted by planting a sample from each lot in a warmer climate like Texas or Florida with the same visual inspections and leaf and tuber tests conducted. The first year planting in the field produces Generation 1 (G1) seed. The second year planting and testing produces G2, the third G3 and so on until 6 years have been reached. The lots are no longer certified after 6 years since the impact of pests makes it impractical to continue. However, tissue culture, nuclear seed, and G1—G6 seed are continually produced each year to make sure there is no gap. The seed potatoes in this catalog are Generations 4 and 5.

Onions and Shallots

SHALLOT SETS

YELLOW POTATO ONIONS

Potato onions are in the multiplier onion family, and once commanded an important and well-loved position in home gardens and commercial farms in the early 1900's. The Potato Onion produces a medium-sized bulb 1" - 2" in diameter, which resembles a common storage onion, yet its long-term storage ability far exceeds any onion that we have seen. During the growing season, the sets you plant divide underground to form clusters or "nests" of as many as 5-9 onions. Some will be large for table and storage use and the small ones are your sets for next year! If you fall plant a number of the larger bulbs, you can enjoy the nicest early spring green onions the following year. We have planted both spring and fall with good results. Expect to harvest by mid-July. They store until your new crop!

OLD GERMAN SHALLOTS (Red)

This non-hybrid heirloom is a standard in Europe cuisine, although botanically very closely allied to the cultivated onion, the shallot, in its manner of growth, differs from it completely. It is a plant which seldom produces seed but has a profusion of leaves. When the bulbs are planted in the spring, they speedily divide into a great number of cloves, which remain attached to a common disc, and in a few months become as strong as the parent bulb. Native of Palestine, it has been in cultivation from a very remote period and there are now several rather distinct forms in existence. Small roundish pointed shallots with a rich brown skin and satisfying flavor.

DUTCH RED SHALLOTS

This variety also stores well with a red skin and a red to purple inside. It has a nice raw taste and cooks to a delicious light flavor. Larger than Old German Shallots.

The onion and its satin wrappings is among the most beautiful of vegetables and is the only one that represents the essence of things. It can be said to have a soul.
Charles Dudley Warner, *'My Summer in a Garden'* (1871)

ONION SEEDS

CIPOLLINI ONIONS

These flattened little onions are sought after for their distinct sweet taste, for bunching, braiding, or loose bagged. Small size (1 1/2"-3" diameter by 1" depth). A good onion for colder climates. Stores well, and fills the gap between winter-stored onions and the early new ones.

Bianca Di Maggio—White Cipollini Onion	**Seed Packet (200+ seeds) - $2.25 each**
Gold Coin—Yellow Cipollini Onion	**Seed Packet (200+ seeds) - $2.25 each**
Red Marble—Red Cipollini Onion	**Seed Packet (200+ seeds) - $2.25 each**

EVERGREEN SPRING BUNCH ONIONS

We discovered this hardy onion in a local's garden! Its attractive starburst seed head throws out many seeds which pop up in early spring around the mother plant. This non-bulbing allium is used for scallions in the spring when over-wintered, or in the summer if planted in the spring. We like these low maintenance beauties because they are easily divisible after plants are established. A little seed goes a long way with these!

Evergreen Hardy White - Seed packet (200+ seeds) - $2.25 each

PURPLETTE MINI ONIONS

Petite, beautiful little classy rich burgundy onion. For the specialty plate or gardener who loves something tasty and different. Reach half-dollar size at maturity yet can be harvested at nickel size, matures early at 60 days, mild and sweet, eat with peas and new potatoes.

Purplette—Early purple-red-skinned mini bunching onions with purple pearl ends
Seed packet (200+ seeds) - $2.25

SUPER STAR

Big, mild, white onion that's great fresh or fried. Can be an early green onion for your table or used later when the bulb sizes up. Leave the green tops on for a nice display at the farmers' market. Super Star is day-length neutral, which makes it widely adaptable.

Super Star—Seed packet (200+ seeds) - $2.25

RED LONG OF TROPEA

A unique red onion from Tropea Italy. It has a mild sweet taste that is enhanced with the right soil. We enjoyed harvesting and taste testing these for the first time. With the lowest lacrimal factor, the Tropea onion does not make you cry, well, almost.

Red Long of Tropea—Seed packet (200+ seeds) - $2.25

Onion Culture

& Real Salt

Onion Culture: Onions like full sun, fertile and well drained soils. The finest onions are grown in humus rich, sandy loam soils and will thrive with high organic matter. Seed onions are usually of better quality and quantity than set-grown onions.

Planting: Direct seed in April / May or as soon as the soil can be prepared in the Spring. Sow 1 - 2 seeds per inch, 1/4" - 1/2" deep rows 10" - 20" apart . . . thin to 3" - 4" for large onions. Potato onions and shallot sets require about the same care as onions, yet sets can be planted 4" - 6" apart in rows with rows 12" - 18" apart.

Watering: Onions are big feeders of water, compost manure, green cover crops worked into the soil before planting. Onions like about 1" of rain or irrigation per week. They like a pH of 6.8 - 7.0 and the most important thing with onions is to encourage them to grow tops early in the season. Fertilize early on and close to the bulb, or foliar feed, as onions have a coarse, small root system. There is no need to fertilize after bulbing begins, because the bulb size is determined by the size of the top.

Harvesting: When the tops die back, turn yellow and drop over, it is time to harvest. One short cut would be to roll the tops or break them all to expedite the process and make harvesting even. Onions can lay in the sun for a few days as long as the weather is arid through the nights. If not, they should be hung or placed on screens in a covered area.

Storage: When dry, clip off the tops and store in mesh onion bags and/or well ventilated boxes in a dry cool environment. High and dry—optimum temperature is 35 to 50 degrees.

"Happy is said to be the family which can eat onions together. They are, for the time being, separate, from the world, and have a harmony of aspiration."

Charles Dudley Warner,
'My Summer in a Garden' (1871)

REDMOND REALSALT

REAL SALT comes from a natural mineral rock salt deposit deep in the earth. A long time ago, when the mountains were being formed, near what is now known as the town of Redmond, Utah, there existed a super-saturated body of sea water. It congealed to form a great body of rock salt and captured within the crystallization a number of wholesome minerals. Light pink blocks of mineralized rock salt are hand selected from this ancient deposit, crushed, screened and then packaged under U.S.D.A. approved conditions, assuring you the finest natural mineral salt available today.

Item	Price	Shipping
9 oz. Real Salt Shaker	$4.25	Use 1 lb rate
26 oz. Real Salt Pouch	$7.25	Use 2 lb rate
10 lb. Real Salt Bucket	$35.00	Use 10 lb rate
25 lb. Real Salt Bulk	$75.00	Use 25 lb rate
8.25 oz Organic Garlic Salt	$7.95	Use 1 lb rate

We are firmly convinced that REAL SALT meets and exceeds the nutritional needs of a healthy body as well as providing natural flavor for food enhancement. Our customers say the flavor is nature's best, you need only try it to like it.

REAL SALT is made from rock salt and is in it's truly natural state of pure sodium chloride and valuable minerals necessary for good health.

"I can't have salt or I really swell. Last year, I bought one pound of your Real Salt and could have all I wanted without a problem . . . It's great!

— L. Paecard

Garlic

Garlic for Fall Planting - Shipping September - December

HARDNECK GARLIC

BROWN TEMPEST (Marbled Purple Stripe)
The brown cloves will carry a tempest to your mouth when eaten raw. And this raw power is what makes Brown Tempest a great garlic for seasoning as the garlic flavors come through nicely when cooked.

CHESNOK RED (Purple Stripe)
This hard neck produces large bulbs with purple striped wrappers. The variety may have originated in Shevlisi, Republic of Georgia. It is superb for cooking, holding its flavor and shape and offers a distinctive, lingering taste. You get 9 to 10 easy to peel, large cloves per bulb.

FRENCH ROSE (Rocambole)
This pretty variety produces a large bulb with 5 to 10 large cloves. The wrapper is clean, firm and white in color and the clove covers are pink. The flavor is relatively mild, even when eaten raw. It is a good storing bulb for a hardneck.

ITALIAN PURPLE (Rocambole)
The basic Italian hard neck, also called Gambino and "Easy Peel." It produces large bulbs with easy to peel cloves that do wonders for Mediterranean cooking. Widely grown in the Ohio valley and Northeast and makes its way into a lot of home-cooked Italian suppers.

KILLARNEY RED (Rocambole)
These cloves are easy to peel and this variety tolerates wet climates well. Nice sized bulbs with pretty pink skinned cloves, often about 8-10. Reported to be among the best tasting of the hardneck cultivars. Short storage life. Does better in the cooler climates. (North)

PURPLE GLAZER (Glazed Purple Stripe)
A nice, easy-to-peel and easy-to-like purple stripe variety. It comes originally from the Republic of Georgia. It has pretty wrappers around a tan skinned clove. The flavor is pleasant with some heat that is not overbearing.

ROMANIAN RED (Porcelain)
This variety is a long storing porcelain hard neck that was brought to British Columbia from Romania. The bulbs have very large, easy to peel cloves. The taste is hot and pungent with a considerable bite. Usually it produces 4 to 5 cloves per bulb and stores very well.

RUSSIAN GIANT (Porcelain)
Six to eight giant, easy to peel cloves. This one can grow pretty large if the soil and conditions are right, and is fun to harvest and cook with.

RUSSIAN RED (Rocambole)
This large hard neck has an easy-to-peel bulb. It is an old heirloom variety brought to the Northwest by Russian immigrants in the early 1900s. This variety is one of our favorites for great flavor that tends to be very hot. It grows well in cold climates.

SIBERIAN (Marbled Purple Stripe) A popular garlic with 5-7 large plump cloves. It has the most beautiful purple striped wrapper seen and is a good producer in the North. It also does well in the South where it is harder to grow hard necks. Alaskan fishermen obtained Siberian when trading leafy vegetables with Eastern Siberian farmers who only grew root crops.

SOFTNECK GARLIC

CALIFORNIA EARLY (Artichoke)
The mainstay of the Gilroy garlic industry, California Early is mainly grown for processing into powders and seasonings. It grows well in Northern and Southern climates and has a nice mild taste.

CHET'S ITALIAN (Artichoke)
This prized softneck was found growing in an abandoned garden in the state of Washington during the 1960s and has become very popular ever since. It is relatively mild, though cold winters tend to ramp up the fire in the taste.

EARLY RED ITALIAN (Artichoke)
A beautiful variety from southern Italy ready to season your favorite dishes. Selected by Telowa Farms in southern Oregon for its early maturing qualities.

INCHELIUM RED (Artichoke) This is just about everyone's favorite among the soft necks. Its relatively spicy but prolonged taste won the 1990 garlic-tasting test at Rodale Kitchens. Originally found growing in the Colville Indian Reservation. The bulbs can grow to 3 inches across. The flavor becomes more pronounced over time.

KETTLE RIVER GIANT (Artichoke)
This artichoke soft neck can grow quite large, up to four inches at a time. It has been a long time heirloom garlic grown in the Pacific Northwest. Cold winters are not a problem. It also stores quite well. It has a medium heat and a rich taste, not unlike some hard necks.

LORZ ITALIAN (Artichoke)
Lorz Italian Garlic was brought to Washington State from Italy by the Lorz family sometime before 1900. It is a Northwest heirloom with a zesty flavor. Stores well for six to eight months.

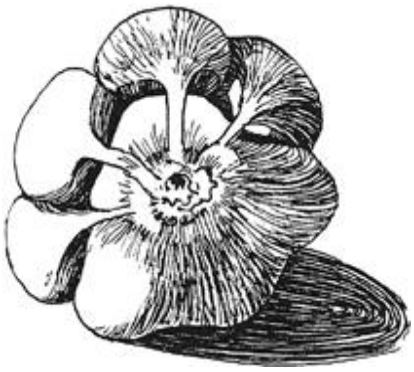
RED TOCH (Artichoke)
This variety was collected in Tochliavari, Republic of Georgia. This is a rare collector's bulb. The bulb can be rather large, and the cloves can be red streaked. It does well in warm climates and tends to mature a bit earlier than most soft necks.

SILVER ROSE (Artichoke)
A silver skinned wrapper that grows to a nice large size with beautiful rose covered cloves. Silver Rose is a very good keeper and has a moderate heat to the taste. Many plump clovers per bulb make this one a good choice.

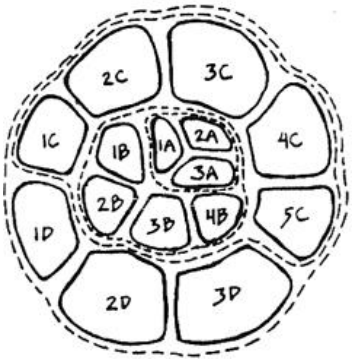
SIMONETTI (Artichoke)
These large white artichoke bulbs were uncovered in the Republic of Georgia by garlic researcher Dr. Phil Simon. Grows well in all climates. It has a pleasing taste with a mild heat. Good storage variety.

SONORAN (Turban)
One of the most early maturing large sized varieties of garlic available that originates from Mexico. Sonoran prefers mild winters but has handled colder climates well. Grows large beige bulbs with occasional red streaks. May grow as a soft neck or hard neck.

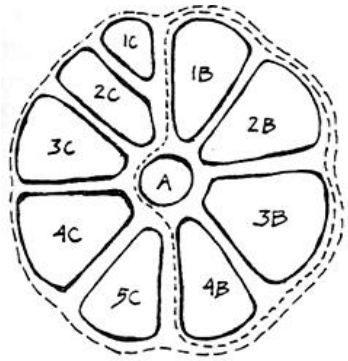
Garlic Growers Guide



Softneck Bulb



Cross section Softneck



Cross section Hardneck

The world has become familiar with two main groups of garlic. They are commonly referred to as hardneck (ophioscorodon, bolting) and softneck (sativum, nonbolting).

The first category is hardneck (ophioscorodon) which produces a flower stalk much like wild garlic. These usually produce between 5 and 9 cloves per head. They grow in a circle around a woody stem and produce large cloves which typically have a more full-bodied flavor than their softneck counterparts. Most hardneck perform better in the northern regions with cold winters and do not store as long as the softnecks. They are easier to cook with because of being easier to peel and handle.

The second category is the softneck (sativum) which usually does not produce flower stalks. These usually produce between 6 and 18 cloves in multiple layers around a soft central stem. Softnecks have the longest storage qualities and are used for braiding purposes. If you have ever bought garlic from the supermarket, chances are it was a softneck.

SOIL PREPARATION: Deep till or spade beds, working in well-composted manure in the summer before planting. Rotate your crops and do not plan on planting garlic or any member of the onion family in the same areas three years in a row. Soil should be well-drained, fertile, loose ground. Garlic does not like wet feet, so if your soil tends to be wet in the winter, try planting garlic in raised beds.

PLANTING: The garlic we offer grows best when fall-planted. Dates vary from mid-September through November, depending on your climate. Usually plant one month before the real cold weather as this will allow time for initial root development and will strengthen the young plant for over-wintering. Water beds a few days before planting if the soil is very dry. This encourages early root growth before winter. Break open your garlic bulbs and loosen them into individual cloves. Select the firmest, largest, best looking cloves for planting. Discard any cloves with signs of decay, irregularities or damage. After deciding on the best spacing pattern for your garlic patch, plant the cloves, root-end down, one inch deep, (that is, to the first knuckle), by simply pressing the clove into the soil. Later, a light raking over the entire bed will cover the cloves. Where the wind blows, or it can get very cold, people do plant deeper, 2" - 4" inches is usually the recommended maximum depth.

SPACING: Garlic requires a minimum 4" to 8" spacing. In a 3 1/2 foot raised bed, we make three evenly spaced rows and plant the cloves 4" - 6" apart. Single rows may be planted with plants 4" apart and a minimum 8" - 10" between rows. Double rows can be created 3" apart with 6" between plants in a staggered or "triangulated" pattern. Leave 15" - 20" between double rows. Across the surface of a raised bed, you can create a "triangulated" pattern, leaving 6" between plants.

MULCHING: Loosely apply a good layer of hay, straw or grass mulch immediately after planting to protect the young plants through the winter. In the Spring, most of the plants will have no trouble growing up through the mulch, while a few may have to be "helped" by pulling the mulch back a bit.

FERTILIZING AND WATERING: In the Spring, water the garlic as you would any leafy green vegetable, keeping the soil moist but not too wet. The best fertilization for garlic is well-worked manure or cover crop residues in the soil prior to planting. However, early in the Spring, when the leaves are growing, green and supple, garlic responds to fish or seaweed emulsion every ten days or two weeks. By the time Summer heat arrives, the garlic stops actively growing leaves and begins bulbing.

HARVESTING: Harvest after the leaves have begun to brown but while there are still 5 - 6 leaves remaining on the plant. Pull a few plants to check for bulb division and that there is a good bulb wrapper around each clove. In good soil, the plants might be pulled by hand, but we recommend loosening the soil first with a spading fork. Brush off the soil lightly and loosen it completely from around the roots. Please do not try washing garlic bulbs with water. Drying is an essential part of the curing process. It is important to remove freshly dug garlic from the direct sunlight and it should be taken immediately to a curing shed.

CURING : Choose a shed, garage or open barn with good air circulation for curing the garlic. The stalks can be loosely tied in bundles of 8 - 12 and hung by nails from rafters, walls or loose partitions that you can build for this purpose. Spreading garlic out in single layers on screens, drying racks or slatted shelves is also good. Keep the bulbs exposed to the air. Garlic stores longer if it is cured with it's stalk intact. Remember, good air circulation is absolutely essential for curing. Garlic should be cured for a minimum of three weeks and up to two months. If it is cool and humidity is high, you may want to use heaters and fans to keep the air circulating. After curing, you may trim the roots, cut off the stalks 1/2" - 1" from the bulb, and gently clean the bulbs a bit more with a bristle brush. Do not knock off the protective layers of papery skin.

STORING : Always store garlic loosely on netted sacks or hung in bunches with good air circulation. Avoid direct sunlight. Ideal conditions are 35 - 50 degrees Fahrenheit with a relative humidity of 60%. With good storage, garlic can keep well for six or eight months.

Jerusalem Artichokes

Sun Chokes

Native of North America, a type of sunflower whose tuberous roots have been eaten for millennia by Native Americans. The first recorded discovery of sunchokes in America apparently occurred in Native American gardens along the eastern coastline in the early 1600's. The Indians called them "sun roots".

A tall plant, with annual stems, but producing year after year underground shoots, which are swollen into genuine tubers. Tubers are red, white or yellow and form very late and should not be dug until the stems have nearly ceased growing. The inside has a delightfully sweet nutty flavor and is a little crunchy and watery when you bite into it. No starch, lots of iron, very earthy taste, has the food value of potatoes, so they are considered good food for anyone on a low-starch diet. Sunchokes may be an "adaptogen" — that is, something that can equalize acidity / alkalinity and blood sugar levels in the bloodstream. It can work very rapidly and very effectively.

Sunchokes are delicious eaten raw as they have a crisp, juicy texture like water chestnuts. We like to slice or grate them for a zesty addition to any fruit or vegetable salad. We have found that steaming or boiling is the best way to cook them, with a little butter and Real Salt.

Plant, hill, culture and harvest sunchokes, similar to potatoes, except space them at least 20-24" apart and 36" between rows. They can be planted early in the spring or in the fall, very drought tolerant, yet thrive with water, but don't over water, plant about 3-4" deep. Hilling encourages tuber growth. They are frost tolerant and store best right where they grow or dug and pitted in a hole in the ground covered with straw, some dirt, a tarp, and more straw and dug as needed fall, winter and spring. The sweet flavor escalates with the winter frost and cold. . . fresh dug in the spring, they are at their peak of flavor and enjoyment. If you miss a tuber when harvesting, you will surely have another crop in the same place.

NUTRITION

A Jerusalem artichoke is not exactly a nutritional powerhouse, but it does have two important features. One is that it is low in calories, with only 35 per hundred grams, (about 3.5 ounces). That, and its sweet crunchiness makes the Jerusalem artichoke a good, low-fat snack for kids and adults alike.

For vegetarians, the good news is that Jerusalem artichokes are a good source of iron, with 3.4 mg per serving. That's more than lean ground beef and about 19% of the RDA for iron. A serving also contains 2.3 grams of protein, .1 grams of fat, 16.7grams of carbohydrates, .8 grams of dietary fiber and 6% of the RDA for vitamin C.

Jerusalem artichokes are extremely versatile because they can be used raw or cooked whole, diced, sliced or julienned. Try adding them too a roast as you would potatoes or carrots. Or just roast them as you would potatoes for a side dish. We find steaming to be one of the finest ways of preparation.

STAMPEDE (O, N)
Roundish, knobby, 2"-4" tubers, these are the classic form of sunchokes enjoyed by generations of homesteaders and farmers. In our fields, stampede is first to flower and mature in late summer with its beautiful, robust bouquet of 3" sunflowers. Slightly shorter stocks, 6'-8' tall. Best yield.

FUSEAU (O, N)
Much taller plants, 7'-9' tall and hold their green well into October, somewhat frost resistant with gorgeous flowers that bloom very late here. Long carrot-like tubers, white-fleshed with tan yellow skin.