

Planting Guide

50 Variety Seed Kit



Beet, Cylindra



Geography/History:

Cylindra or Formanova beets are an heirloom variety from Denmark believed to have been developed in the 1880s. They were first introduced to American gardeners around 1900. This variety of *Beta vulgaris* is generally planted close together because it grows longer than wider than the round varieties, thus achieving a higher crop yield. Cylindra beets grow best in mild, cooler climates.

Nutritional Value: A rich source of Iron, Calcium, and Vitamins: A, B1, B2, C, and Niacin.

Sun:	Full Sun
Spacing:	3"
Height:	8-10 inches
Optimum Soil Ph:	7
Days To Maturity:	60
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Beet seeds can be planted in early spring or midsummer. Soak seeds overnight in damp towel before planting for excellent germination. Plant beet seeds 1" apart and thin weakest seedlings to desired spacing. Keep soil evenly moist to prevent beet roots from getting woody. For longer harvest, stagger beet plantings every 2-3 weeks.

Beet, Early Wonder



Geography/History:

Early Wonder Tall Top Beet is an heirloom product; it has been around since 1911. Beets have been widely used in the Mediterranean, few parts of Europe and in Asian countries like India and China since earlier times. Some beets were also excavated from a pyramid in Thebes, Egypt. This particular variety is known to come from Crosby's Egyptian.

Nutritional Value:

Beets are high in fiber content and loaded with nutrients. Packed with vitamins and minerals, these beets are almost as good as Detroit Dark Red Beets, the only difference is that they are not as hard. They contain high quantities of vitamin B6, B2, C and A. The color can range from dark purple to red with tops that have a deep green hue.

Sun:	Full Sun
Spacing:	3"
Height:	2"-4"
Optimum Soil Ph:	7.0
Days To Maturity:	48-55
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Beet seeds can be planted in early spring or midsummer. Soak seeds overnight in damp towel before planting for excellent germination. Plant beet seeds 1" apart and thin weakest seedlings to desired spacing. Keep soil evenly moist to prevent beet roots from getting woody. For longer harvest, stagger beet plantings every 2-3 weeks.

Broccoli, Green Sprouting



Geography/History:

Form of cabbage, of the Mustard family (Brassicaceae), grown for its edible flower buds and stalk. Native to the eastern Mediterranean and Asia Minor, sprouting broccoli was cultivated in Italy in ancient Roman times and was introduced to England and America in the 1700s. High in dietary fiber and a number of vitamins and minerals, including potassium, folic acid, and vitamins A, C, and K, broccoli is a nutritious vegetable and can be eaten fresh or cooked.

Nutritional Value:

Broccoli is high in vitamin C and dietary fiber; it also contains multiple nutrients with potent anti-cancer properties, such as diindolylmethane and small amounts of selenium. A single serving provides more than 30 mg of vitamin C and a half-cup provides 52 mg of vitamin C. The 3, 3'-Diindolylmethane found in broccoli is a potent modulator of the innate immune response system with anti-viral, anti-bacterial and anti-cancer activity.

Sun:	Full Sun
Spacing:	10 – 11"
Height:	30 – 36"
Optimum Soil Ph:	5.5-7.0, Ideal 6.0-6.5
Days To Maturity:	50-60 Spring Summer
Sowing Method:	Start Indoors or Direct Sow Outdoors

Planting/Growing Tips:

Broccoli is a great choice for a home garden. Freshly cut broccoli heads are rich in vitamins and minerals. They're delicious raw in salads or lightly steamed and they freeze well. If you choose a variety such as 'DiCicco' or 'Waltham' that produces plentiful side shoots, you can enjoy several cuttings from each plant in your garden. Broccoli raab and Chinese broccoli are fast-growing, cool-loving broccoli relatives that produce small, tender flowering shoots that you can eat—buds, stems, leaves, and all.

Brussel Sprouts, Long Island



Geography/History:

Brassica (Cabbage Family) vegetables are said to have been cultivated for thousands of years, the plants have a great tolerance to salt and limestone and other harsh soils. No one knows for sure where the first plants started. Many of the Brassica family of plants grow in winter and were good food and nutrition in colder climates thousands of years ago.

Nutritional Value:

In brief, Brussel Sprout plants are very high in vitamin C. Brussels sprouts are an excellent source of vitamin C. Brussels sprouts can also be included in dieting programs, as it is a low-calorie food. Along with broccoli and other Brassica vegetables, Brussels sprouts are a source of indole-3-carbinol, a chemical which boosts DNA repair in cells and appears to block the growth of cancer cells.

Sun:	Full Sun
Spacing:	12 – 24"
Height:	24"
Optimum Soil Ph:	5.5-7.0, Ideal 6.0-6.5
Days To Maturity:	90 Days
Sowing Method:	Start Indoors

Planting/Growing Tips:

Start seeds indoors 6-8 weeks before last spring frost. While starting seeds indoors is recommended, you may also direct sow seeds 4 months before the first fall frost. You may also have luck finding seedlings at a nursery. Plant transplant seedlings 12-24 inches apart. If direct sowing seeds, plant ½ inch deep and 2-3 inches apart. Thin plants to 12-24 inches apart when they reach 6 inches tall. Water well at time of planting/transplanting.

Fertilize three weeks after transplanting. Mulch to retain moisture and keep the soil temperature cool. Do not cultivate, roots are shallow and susceptible to damage.

Cabbage

Copenhagen Market



Geography/History:

It is difficult to trace the exact history of cabbage, but it was most likely domesticated somewhere in Europe before 1000 BC, although savors were not developed until the 16th century. By the middle Ages, it was a prominent part of European cuisine. Cabbage heads are generally picked during the first year of the plants' life cycles, but those intended for seed are allowed to grow a second year, and must be kept separated from other cold crops to prevent cross-pollination.

Nutritional Value:

Cabbage is a good source of beta-carotene, vitamin C and fiber. Studies suggest that it, as well as other cruciferous vegetables, may reduce the risk of some cancers, especially those in the colorectal group. Purple cabbage also contains anthocyanins, which in other vegetables have been shown to have anti-carcinogenic properties.

Sun:	Full Sun to Light Shade
Spacing:	9 to 12" apart
Height:	12 – 18"
Optimum Soil Ph:	7.0
Days To Maturity:	95 – 110 Days
Sowing Method:	Start Indoors or Direct Sow Outdoors

Planting/Growing Tips:

When to sow outside: 4 to 6 weeks before average last frost for a late summer crop or 3 to 4 months before average first fall frost for a fall crop. When to start inside: 4 to 6 weeks before average last frost for spring transplanting, or 4 to 6 weeks before transplanting outdoors for fall crop. Start in pulp pots that go directly in the ground for minimal transplant shock.

Harvesting: Harvest heads as soon as they are well developed, firm, and solid when squeezed. Cut off heads at base with a sharp knife. Cabbages left in the ground beyond maturity are more subject to disease and splitting.

Cabbage, Golden Acre



Geography/History:

It is difficult to trace the exact history of cabbage, but it was most likely domesticated somewhere in Europe before 1000 BC, although savors were not developed until the 16th century. By the middle Ages, it was a prominent part of European cuisine. Cabbage heads are generally picked during the first year of the plants' life cycles, but those intended for seed are allowed to grow a second year, and must be kept separated from other cold crops to prevent cross-pollination.

Nutritional Value:

Cabbage is a good source of beta-carotene, vitamin C and fiber. Studies suggest that it, as well as other cruciferous vegetables, may reduce the risk of some cancers, especially those in the colorectal group. Along with other cold crops, cabbage is a source of indole-3-carbinol, a chemical that boosts DNA repair in cells and has been shown—in experiments using cell cultures and animal models—to block the growth of cancer cells. Research suggests that boiling these vegetables reduces their anti-carcinogenic properties.

Sun:	Full Sun to Light Shade
Spacing:	6 to 8"
Height:	12 – 18"
Optimum Soil Ph:	7.0
Days to Maturity:	60 Days
Sowing Method:	Start Indoors or Direct Sow Outdoors

Planting/Growing Tips:

Cabbage seedlings are ready for transplanting when they are between 6 and 8cm high (2½ to 3in). Water the day before moving, and keep well-watered until established. Plant firmly, close together for small heads and wider apart for larger cabbages, around 30 to 45cm (12 to 18in) apart. Plant firmly, close together for small heads and wider apart for larger cabbages, around 30 to 45cm (12 to 18in) apart.

Carrot

Danvers



Geography/History:

Improved strain of Danvers carrot that was introduced in 1947 by Eastern States Farmers Exchange. Danvers was created for better yields, smoother skin, and uniformity. Danvers is a heat tolerant carrot variety that will also work in a wide range of soils. 6-7" long and about 2" at the shoulder this is a premier storage carrot. Danvers resist cracking and splitting. Strong tops make it easy to pull this carrot from the garden.

Nutritional Value:

Most carrot cultivars are about 88% water, 7% sugar, 1% protein, 1% fiber, 1% ash, and 0.2% fat. The fiber comprises mostly cellulose, with smaller proportions of hemicellulose and lignin. Carrots contain almost no starch. Free sugars in carrot include sucrose, glucose, xylose and fructose. Nitrite and nitrate contents are about 40 and 0.41 milligrams per 100 grams (fresh), respectively. Most of the taste of the vegetable is due to glutamic acid and other free amino acids.

Sun:	Full Sun
Spacing:	2"
Height:	6-7"
Optimum Soil Ph:	6
Days To Maturity:	72
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Plant in the spring in a well-prepared bed free of rocks. Scrape shallow furrows 1/4"-1/8" deep and sow seeds directly, covering with a thin layer of soil. Weeds can be a problem due to the long germination time – careful weeding is a must. Thin to 2-3" apart once seedlings have come up. For longer harvest, stagger plantings every 2-3 weeks.

Carrot, Scarlet Nantes



Geography/History:

Carrots originated over 5000 years ago in present-day Afghanistan. They were first cultivated as a purple root. Morphological characteristics lead to a division of the cultivated carrot into two botanical varieties: *atrorubens* and *sativus*. The variety, *atrorubens* refers to carrots originating from the East, exhibiting yellow or purple storage roots.

Nutritional Value:

Most carrot cultivars are about 88% water, 7% sugar, 1% protein, 1% fiber, 1% ash, and 0.2% fat. The fiber comprises mostly cellulose, with smaller proportions of hemicellulose and lignin. Carrots contain almost no starch. Free sugars in carrot include sucrose, glucose, xylose and fructose. Nitrite and nitrate contents are about 40 and 0.41 milligrams per 100 grams (fresh), respectively. Most of the taste of the vegetable is due to glutamic acid and other free amino acids. Other acids present in trace amounts include succinic acid, α -ketoglutaric acid, lactic acid and glycolic acid; the major phenolic acid is caffeic acid.

Sun:	Full Sun
Spacing:	2"
Height:	8 – 22 inches
Optimum Soil Ph:	6.0
Days To Maturity:	65 – 70
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Cultivate the soil at a depth of at least 8 inches. Remove weeds with your hands and a garden hoe, and rake out lumps and rocks that may obstruct root growth. Work a 2-inch layer of compost into the soil. Apply a 10-10-10 fertilizer according to package instructions.

Broadcast the seeds over the soil surface at a frequency of three seeds per inch. Thin the seedlings to 2 inches apart when they have three true leaves or are at least 1 inch tall. Use scissors to remove the weak, small seedlings by cutting them at soil level. Side-dress the plants with a 20-0-0 fertilizer about six weeks after germination.

Cauliflower, Snowball Y



Geography/History:

Snowball Y improved was Introduced by Ferry-Morse Seed Company in 1947 It was developed from “Snowball” cauliflower which can be documented as early as 1884.

Nutritional Value:

As far as nutrition goes, cauliflower is high in vitamin C and a good source of folate. It's fat free and cholesterol free and also is low in sodium content. Additionally, cauliflower contains only 25 calories in 1/6 of a medium head. This portion size also contains 2 grams of dietary fiber and only 5 grams of carbohydrate.

Sun:	Full Sun
Spacing:	15 – 18”
Height:	24 – 30”
Optimum Soil Ph:	6.5
Days To Maturity:	70 – 80
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Spring seedlings 4-6 weeks before last frost. Fall transplants, 2-3 months before first frost. Plant in ground when 3-4” tall – enrich soil with 1/4 cup of blood or bone meal to ensure high yields. Blanching may be required – once a head has begun to form, tie outer leaves together to shade head. Consistent watering is essential.

Heirloom organic cauliflower is a cool season vegetable that may be considered a challenge to those who haven't learned its secrets. It is a crop that needs both correct soil and climatic requirements. However, it can be grown successfully if it is planted so that it will mature in the early summer or in the fall.

Celery, Tall Utah



Geography/History:

Welcome Family: Carrot (Apiaceae) Biennial normally grown as an annual for the tender stalks. 90 to 100 days to full-sized edibility, with seeds in the summer of the second year. This open-pollinated variety "Utah" yields vigorous, stocky plants with thick, solid, tender yet crisp stalks. Celery seed is one of the most efficient of all diuretics. Plant prefers sun, rich soil and frequent watering. Mound soil up around plant as it grows to keep the stalks light-green and crisp. Sow in spring.

Nutritional Value:

Celery is mostly water and fiber and has barely any nutritional value. I guess that's why it is associated with people who are trying to lose weight. It does contain some useful phytochemicals, including apigenin, which has anti-cancer properties.

Sun:	Full Sun
Spacing:	10 – 11"
Height:	18 – 24"
Optimum Soil Ph:	5.5-6.0
Days To Maturity:	90 – 100
Sowing Method:	Start Indoors

Planting/Growing Tips:

Sow the seed very shallowly (about 1/10 of an inch deep) in the garden and cover with light soil. It's important to keep the soil moist during the 3-week germination period. Note: For faster germination, try soaking the celery seed in room-temperature water for 1-2 days. Plant at once. Once seedlings reach 6" tall, thin them to 10 inches apart with 18 inches between rows. (Seedlings can be used for flavoring soups.

Collards

Georgia Southern



Geography/History:

Georgia Southern is a very old standard variety that is still very popular in the South. Georgia Southern Collards are a deep blue/green color that really stand out in your garden. 1944 Burpee's Seed Catalogs says about Georgia Southern Collard...."Produces as loose rosette of large, succulent, cabbage-like leaves which make delicious boiling greens. Does not form heads. Deserves to be better known."

Nutritional Value:

Collard greens are an excellent source of vitamin-A (222% of RDA per 100 g) and carotenoid antioxidants such as lutein, carotenes, zeaxanthin, cryptoxanthin, etc. These compounds are scientifically found to have antioxidant properties. Vitamin A also required maintaining healthy mucus membranes and skin and is also essential for healthy vision

Sun:	Full Sun
Spacing:	18"
Height:	36"
Optimum Soil pH:	6.5 – 6.8
Days To Maturity:	75
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

You can grow collard greens as either a spring or fall crop, though your greens will be more flavorful and sweeter when grown in the cool autumn. Collards are usually sown right into the garden rather than indoors for transplants.

In the spring, get your soil ready for seeds about 6 to 8 weeks before your last frost date. Dig down to loosen the soil and add in compost or aged manure for nutrients. Collards are considered to be "heavy-feeders". Plant a few seeds every 2 feet, and thin them down to 1 plant after they sprout. Seeds should be planted just a 1/4 inch under the surface.

Vates



Geography/History:

Collard is one of the most primitive members of the cabbage family. They are closely related to kale and cabbage and could be described as a non-heading cabbage. They originated in the eastern Mediterranean or Asia Minor and have changed little in the thousands of years that man has used them for food.

Nutritional Value:

Collards are low in calories and fat but are excellent sources of fiber, Vitamins A, C and K, calcium, manganese and folic acid. They are also a good source of Vitamins B₂, B₃, B₆ and E and magnesium. People on blood thinners such as coumidan should be careful because of high Vitamin K content and people prone to kidney stones should be careful because of oxalate content.

Sun:	Full Sun
Spacing:	18 – 24"
Height:	30"
Optimum Soil Ph:	6.5 – 6.8
Days To Maturity:	75
Sowing Method:	Direct Sow Outdoors

Planting Tips:

You can grow collard greens as either a spring or fall crop, though your greens will be more flavorful and sweeter when grown in the cool autumn. Collards are usually sown right into the garden rather than indoors for transplants.

In the spring, get your soil ready for seeds about 6 to 8 weeks before your last frost date. Dig down to loosen the soil and add in compost or aged manure for nutrients. Collards are considered to be "heavy-feeders". Plant a few seeds every 2 feet, and thin them down to 1 plant after they sprout. Seeds should be planted just a 1/4 inch under the surface.

Cucumber

Marketmore



Geography/History:

The original Marketmore was developed and released in 1968 by Dr. Henry Munger at Cornell University. It quickly set the standard for cucumbers in the USA, with its popularity soon spreading throughout Europe. Marketmore is now firmly established as one of the 'Greats' of the cucumber world, it is very disease resistant and produces a large amount of fruit.

Nutritional Value:

Cucumbers provide excellent nutritional value. This food is low in Saturated Fat, and very low in Cholesterol and Sodium. It is also a good source of Vitamin A, Pantothenic Acid, Magnesium, Phosphorus and Manganese, and a very good source of Vitamin C, Vitamin K and Potassium.

Sun:	Full Sun
Spacing:	18"
Height:	12"
Optimum Soil Ph:	5.8–6.7
Days To Maturity:	65
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

This plant needs lots of water and continuously added supports to avoid creeping, rotting, and pests. Approximate sowing to flowering time is 45-50 days with female flowers appearing about 2-3 weeks after that. Initial flowering consists mainly of male flowers that bloom, fall off, and regrow. Marketmore 76 likes a position of full sun and remember to water often. Keep in mind when planting that Marketmore 76 is thought of as tender, so it is really important to ensure that the outside temperature is well above freezing before planting or moving outdoors.

Boston Pickling



Geography/History:

Boston Pickling Cucumber is a very old (first documented in 1877) reliable pickling cucumber that was “improved” sometime in the 1950s giving it resistance to cucumber mosaic virus and cucumber scale.

Nutritional Value:

Cucumbers have a very high-water content, very few calories, and a whole range of vitamins and minerals. Their hydrating quality is important for healthy skin, and two compounds in them, ascorbic acid and caffeic acid, prevent water retention and explain why sliced cucumbers are often used topically for swollen eyes, burns, and other skin problems.

Sun:	Full Sun
Spacing:	12-24”
Height:	12”
Optimum Soil Ph:	6-7
Days To Maturity:	57
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Soak seeds overnight before planting either individually in rows or hills of 3-6 seeds each. Tighter spacing and higher yields can be achieved through trellising the plants on fences or poles. Continually harvesting will keep the plant producing new fruits.

Heirloom cucumbers do not like acidic soil! Frost tender. Heirloom cucumbers love warm weather. To get an earlier heirloom cucumber crop start indoors 3-4 weeks before last frost.

Heirloom cucumbers are thirsty! Never let them go dry. Heirloom cucumbers are over 95 % water. Fertilize heirloom cucumbers with manures BEFORE planting.

Cucumber beetles are “supposed” to dislike marigolds or wood ashes sprinkled at the base of cucumbervines.

Dill, Mammoth



Geography/History:

Originally named Long Island Dill, this tall billowing relative of Queen Anne's Lace and carrots is perfect for edible landscaping, container gardens and, well, pickles, of course! All parts of the plant—leaves, stems, flowers, and seeds—can be used to impart dill flavor to dishes.

Nutritional Value:

Dill weed contains numerous plant-derived chemical compounds that are known to have been anti-oxidant, disease preventing, and health promoting properties. Consumption of natural foods rich in flavonoids helps the human body to protect from lung and oral cavity cancers. Fresh dill herb is an excellent source of antioxidant vitamin; vitamin-C. 100 g contain about 85 mg or 140% of vitamin C. Vitamin-C helps the body develop resistance against infectious agents and scavenge harmful, pro-inflammatory free radicals.

Sun:	Full Sun
Spacing:	6" – 8"
Height:	16 – 24"
Optimum Soil pH:	6.0 – 7.5
Days To Maturity:	40 – 60
Sowing Method:	Start Indoors or Direct Sow Outdoors

Planting/Growing Tips:

Direct sow around last frost, or indoors before last frost and then transplant fairly quickly. Sow Mammoth Long Island Dill every 3-4 weeks for highest quality fresh dill leaves all season. For use as a dry herb, harvest before the umbel (Latin for umbrella) flowers form.

Eggplant

Black Beauty



Geography/History:

Eggplant is believed to have originated in India and was cultivated in China as early as 500 B.C. Eaten in the Middle East and Asia for centuries, it was taken to Africa by the Arabs and Persians during the Middle Ages, eventually finding its way to Italy in the 14th century. Even though eggplants were consumed without hesitation in other parts of the world, it was not eaten by all Europeans. The fruit was considered dangerous because it belonged to the nightshade family which contains many poisonous plants including jimson weed, angel's trumpet, belladonna and deadly nightshade.

Nutritional Value:

A host of vitamins and minerals, eggplant also contains important phytonutrients, many which have antioxidant activity. Phytonutrients contained in eggplant include phenolic compounds, such as caffeic and chlorogenic acid, and flavonoids, such as *asnasunin*.

Sun:	Full Sun
Spacing:	24 – 36"
Height:	36 – 48"
Optimum Soil Ph:	6.0 – 6.8
Days To Maturity:	65
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Start seeds indoors 4-6 weeks before last frost. Plant seeds 1/4" deep in small containers. Transplant when seedlings reach approx. 4-6". Eggplants love and thrive in hot weather, and prefer a rich, composted soil.

Eggplant

Long Purple



Geography/History:

Eggplant is believed to have originated in India and was cultivated in China as early as 500 B.C. Eaten in the Middle East and Asia for centuries, it was taken to Africa by the Arabs and Persians during the Middle Ages, eventually finding its way to Italy in the 14th century. Even though eggplants were consumed without hesitation in other parts of the world, it was not eaten by all Europeans. In fact, it was called *mala insana*—the mad apple or bad egg. The fruit was considered dangerous because it belonged to the nightshade family which contains many poisonous plants including jimson weed, angel's trumpet, belladonna and deadly nightshade.

Nutritional Value:

A host of vitamins and minerals, eggplant also contains important phytonutrients, many which have antioxidant activity. Phytonutrients contained in eggplant include phenolic compounds, such as caffeic and chlorogenic acid, and flavonoids, such as *asnasunin*.

Sun:	Full Sun
Spacing:	24 – 36"
Height:	22"-38"
Optimum Soil Ph:	6.0-6.8
Days To Maturity:	75
Sowing Method:	Start Indoors

Planting/Growing Tips:

Start seeds indoors 4-6 weeks before last frost. Plant seeds 1/4" deep in small containers. Transplant when seedlings reach approx. 4-6". Eggplants love and thrive in hot weather, and prefer a rich, composted soil.

Kale

Dwarf Siberian



Geography/History:

Dwarf Siberian Kale, as the name implies, originated in Russia. This is a very strong, easy to grow, tasty variety of heirloom, open-pollinated kale. The leaves of this variety are only slightly frilled, and are very high quality. The plants grow to a maximum height of 16", making them perfect for small spaces.

Nutritional Value:

Kale is very high in beta carotene, vitamin K, vitamin C, and rich in calcium. Kale is a source of two carotenoids, lutein and zeaxanthin. Kale, as with broccoli and other brassicas, contains sulforaphane (particularly when chopped or minced), a chemical with potent anti-cancer properties.[6] Boiling decreases the level of sulforaphane; however, steaming, microwaving, or stir frying do not result in significant loss.

Sun:	6 hours of daily sun light
Spacing:	14-16"
Height:	12-16"
Optimum Soil pH:	5.5 to 6.8
Days To Maturity:	63-65 days
Sowing Method:	Start Indoors or Direct Sow Outdoors

Plant Growing Tips:

Kale prefers cool temperatures and will be sweetened by a touch of frost. Optimal soil temperature is 60 – 65 degrees F. Hot weather turns kale bitter.

Kale plants like to grow in a rich soil, high in organic matter and slightly acidic (5.5 – 6.5 pH). You're growing it for the foliage, so a high nitrogen content is good.

Kale can be direct seeded in the garden or started indoors and set out as transplants. Start plants indoors about 6 weeks before your last expected frost date. Kale seeds germinate quickly in warm soil and should be up within 5 – 8 days. Transplant seedlings after danger of frost. Set plants out with about 16" spacing between plants. This gives them room to spread out and still allows for air circulation.

Kohlrabi

Purple Vienna



Geography/History:

Kohlrabi was first introduced sometime just before the Civil War. Three varieties appeared later in the 1884 D.M. Ferry Seed Catalog. Obviously, Kohlrabi has made an impact on gardeners and chefs alike as it has stood the test of time. Kohlrabi is actually a member of the cabbage family, but the edible part is actually an enlarged stem. Best harvested when the stem reaches 2-3 inches. Many people use the young leaves in salads or steamed.

Nutritional Value:

Kohlrabi is a good source of Thiamin, Folate, Magnesium and Phosphorus, and a very good source of Dietary Fiber, Vitamin C, Vitamin B6, Potassium, Copper and Manganese

Sun:	Full
Spacing:	10-12"
Height:	9-12"
Optimum Soil pH:	6.0-6.8
Days to Maturity:	55-70
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Select a site with full sun and well-drained soil. Prepare the garden bed by using a garden fork or tiller to loosen the soil to a depth of 12 to 15 inches, then mix in a 2- to 4-inch layer of compost. Adjust the soil pH to 6.0 to 6.8.

The best advice about harvesting kohlrabi is not to wait too long. Most varieties are ready for harvesting just 6 to 7 weeks from planting and are the most tender and flavorful when the bulbs are 2 to 4 inches in diameter.

Fall crops that ripen in cool weather don't get woody as readily and can be picked a little larger, up to 5 inches larger, up to 5 inches.

Lettuce

Black Seeded Simpson



Geography/History:

This old favorite is said to have been introduced by Henderson Seed Company in 1875. One great easy to grow and quick to mature lettuce with light green frilly leaves, a loose head and a very dependable producer. It withstands heat, drought, and even a light frost. Black seeded Simpson lettuce was first grown in 1898. They are easy to grow, germinate in 7 to 10 days and can even tolerate a little frost.

Nutritional Value:

A good source of Dietary Fiber, Calcium, Magnesium, Phosphorus and Selenium, and a very good source of Vitamin A, Vitamin C, Vitamin K, Thiamin, Riboflavin, Vitamin B6, Folate, Iron, Potassium and Manganese.

Sun:	Full Sun
Spacing:	5-6"
Height:	9-15"
Optimum Soil Ph:	6.2-6.8
Days to Maturity:	50-60 Days
Sowing Method:	Start Indoors or Direct Sow Outdoors

Planting/Growing Tips:

Lettuce grows best in full sun, though excessive heat can cause plants to bolt to seed, or leaves to wilt. For an early start, seeds can be started in flats 4 weeks prior to the last frost and transplanted outdoors in mid to late spring. If growing in summer, select a partially shaded location, or one that receives primarily eastward exposure to mitigate the potentially damaging effects of excessive heat upon lettuce. Lettuce is tolerant of a wide range of soils, but prefers well-drained, cool, loose soil with plentiful moisture and pH 6.2 to 6.8. Sensitive to low pH. Lime to at least 6.0. To encourage tender and tasty growth, make sure location is rich in organic compost matter. Amend prior to planting if needed.

Bronze Mignonette



Geography/History:

Introduced in 1898. You know Bronze Mignonette has to be good if it's been around for over 100 years. A heat resistant cultivar that is slow to bolt and produces emerald bronze heads. Produces a head that is about 8" across with crumply, crisp leaves perfect for salads or sandwiches. Does well in hot climates and is semi drought tolerant.

Nutritional Value:

A good source of Dietary Fiber, Calcium, Magnesium, Phosphorus and Selenium, and a very good source of Vitamin A, Vitamin C, Vitamin K, Thiamin, Riboflavin, Vitamin B6, Folate, Iron, Potassium and Manganese.

Sun:	Full Sun
Spacing:	12-18"
Height:	10"-14"
Optimum Soil ph:	6.2-6.8
Days To Maturity:	45-55
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Choose an area with full sun to partial shade and a soil pH of 6.2-6.8. Lettuce is a heavy feeder and prefers a rich, well cultivated soil with good drainage. Some success can be expected even in poor soils using the loose-leaf lettuce types. Add plenty of compost or well-rotted manure prior to planting lettuce. Lettuce benefits from regular feedings with a nitrogen rich fertilizer. Mulching is useful to keep soil cool and reduce weeds.

Butter Crunch



Geography/History:

Butter crunch was developed by George Raleigh of Cornell University. Buttercrunch produces a nice head of mild buttery flavored 6-8" in height, thick, juicy, slightly crumpled dark green leaves and white-yellow heart.

Nutritional Value:

Butter lettuce provides 15 to 35% of daily Vitamin A needs based on a 2000 calorie diet. It is also an excellent source of Vitamin K, with 56 mcg providing 70% of the daily value. A serving of Butter lettuce offers 2% of the daily value of calcium.

Sun:	Full Sun
Spacing:	8-12"
Height:	9-15"
Optimum Soil ph:	6.0-6.7
Days To Maturity:	60-65
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

One of the classic butterheads, Buttercrunch combines good garden performance with tender-crisp flavor. The leaves are very dark green and thicker than most, with a crisp texture and juicy bite. They are loosely held on big heads that grow more vigorously than many others, ready in just 65 days.

Lettuce thrives in cold weather and can be sown directly into the garden, starting in early spring. For an even earlier harvest, sow indoors; the seedlings don't mind transplanting. If a fall crop is desired, begin in late summer. Grow in single rows, plants spaced 18 inches apart, or in containers.

Lettuce

Oak Leaf



Geography/History:

Oak leaf lettuce was introduced in the 1770s and was known at that time as “American Oak Leaved”. Just like the name implies Oakleaf has deeply lobed leaves that form a tight cluster. The unique shape really adds to salads.

Nutritional Value:

They provide a high dose of beta carotene, linked with cancer prevention particularly lung cancer and reduction in the risk of heart disease. Beta carotene is converted by the body into vitamin A, vitamin that prevents night blindness, needed for growth and cell development, maintains healthy skin, hair, and nails as well as gums, glands, bones, and teeth. May prevent lung cancer.

Sun:	Full Sun
Spacing:	8-10"
Optimum Soil ph:	6.2-6.8
Days To Maturity:	55-65 Days
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Lettuce grows best in full sun, though excessive heat can cause plants to bolt to seed, or leaves to wilt. For an early start, seeds can be started in flats 4 weeks prior to the last frost and transplanted outdoors in mid to late spring. If growing in summer, select a partially shaded location, or one that receives primarily eastward exposure to mitigate the potentially damaging effects of excessive heat upon lettuce.

Cantaloupe

Hale's Best Jumbo



Geography/History:

Hale's Best Jumbo Melon was discovered by ID Hale near Brawley, California in 1923. It was reportedly growing in a Japanese market gardener's field. This is a similar story to the Crane melon, but Mr. Crane crossed his discovery with an unknown melon to produce the famous Crane Melon. However, you look at it, California has been very lucky to have so many wonderful Japanese immigrants bring their heirloom seeds to the golden state when they settled here.

Nutritional value:

An excellent source of vitamin C, vitamin A, iron, and calcium.

Sun:	Full Sun
Spacing:	1ft apart
Height:	2.5ft-3.5ft
Optimum Soil pH:	6.0-7.0
Days To Maturity:	80-90
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Amend soil with aged manure or compost before planting.

Growing the vines in raised rows, known as hills, ensures good drainage and will hold the sun's heat longer.

If you are in a cooler zone, start seeds indoors about a month before transplanting. Cantaloupe vines are very tender and should not be transplanted until all danger of frost has passed.

If you live in warmer climates, you can direct sow seeds outdoors, but wait until the soil temperature warms to at least 65 degrees to avoid poor germination. Plant seeds one inch deep, 18 inches apart, in hills about 3 feet apart.

If you have limited space, vines can be trained to a support such as a trellis.

Hearts Of Gold



Geography/History:

(Cucumis melo) Developed by Roland Morrill of Benton Harbor, Michigan; the variety name was trademarked in 1914. Similar to Hoodoo, which it replaced. Once very popular in Michigan.

Nutritional Value:

Melon Hearts Of Gold notably contains phyto-nutrient, polypeptide-P; a plant insulin known to lower blood sugar levels. In addition, it composes hypoglycemic agent called charantin. Charantin increases glucose uptake and glycogen synthesis in the cells of liver, muscle and adipose tissue. Together, these compounds are thought to be responsible for reduction of blood sugar levels in the treatment of type-2 diabetes.

Sun:	Full Sun
Spacing:	8-12"
Height:	12-18"
Optimum Soil ph:	6.0-6.8
Days To Maturity:	70-97 Days
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Can be direct sown in warmer climates after soil temperatures reach 70, plant 3-4 seeds 1/2" deep in hills 3-4' apart on rows 5-6' apart. Once established, thin to two strongest plants. For cooler climates we prefer to start in pots in the greenhouse and transplant later when night time temperatures stay above 55 degrees. Start seedlings 3 weeks before last frost. Once seedlings are 4" tall and soil temperatures are 70, plant in rich loose soil.

Keep well-watered until fruits are tennis ball sized and then water only if absolutely needed. (We know organic farmers that never water them and grow amazing melons, but a great deal depends on your soil.)

Remember, you must have a healthy population of pollinators like bees to get a good fruit set.

Mustard

Florida Broadleaf



Geography/History:

A southern favorite produces one of the first greens in Spring. A mild-flavored mustard, Florida Broadleaf produces large, broad, rich green leaves of appetizing pungency. Greens may be steamed, sauteed or cooked in broth. Easily grown in the north.

Nutritional Value:

Mustard Greens are among the most nutritious of greens, rich in vitamins A and C, as well as calcium, iron and potassium. Like other Brassicas they also contain a variety of cancer preventing phytochemicals.

Sun:	Full to partial
Spacing:	3" to 6"
Height:	12" to 18"
Optimum Soil Ph:	5.5 to 6.8
Days To Maturity:	48
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

In spring or fall, sow directly into soil 1/8" deep about 1" apart. Keep well-watered. For additional crops, sow a new patch every 20-30 days.

Okra

Clemson Spineless



Geography/History:

Okra was brought to America from Africa by slaves and has been a favorite of Southern cuisine since the 1700s. When cut, okra releases a sticky substance with thickening properties. Related to the hibiscus and to cotton it is a Southern treat – essential for gumbo, but also added to all manner of soups, stews, curries and catsup. Or try dipping in corn meal and frying for a real treat! Also makes excellent pickles. A unique vegetable with mild flavor it is also highly ornamental with large yellow flowers.

Nutritional Value:

Okra is surprisingly nutritious and beneficial. Just half a cup provides 20% of your daily value for vitamin C and calcium. Okra is also a good source of magnesium, vitamin B6, potassium and more. It also is an exceptional digestive detoxifier.

Sun:	Full
Spacing:	12"
Height:	36"-72"
Optimum Soil Ph:	5.5 to 6.8
Days To Maturity:	56
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Okra is from Africa. Okra loves heat. Days must be over 80F to produce decent crops. The soil must be over 70F. If you have cool summers wait to plant Okra at the end of May or 1st week in June. Sow seeds 1" deep. If possible, plant next to heat sinks like rock walls or south sides of structures. Try placing a few bricks or rocks at the base of established plants as heat sinks.

Once established Okra is very drought tolerant. However, watering every 7-10 will produce higher yields. However, don't over water. Okra does like drier soils than most of your veggies. Avoid planting Okra in wet, soggy soils. Okra will grow best in soil that has been worked down to a level of 10".

Thin plants to about a 12" apart. Fertilize your bed with composted manure beforehand, but do not feed too much nitrogen was established. This will cause luxuriant growth and few blooms/pods.

Emerald



Geography/History:

For those of you in the South where I come from you will have no problem growing okra, but if like me you now find yourself in an area with cool summers like the Pacific Northwest growing okra can be a tricky business. Try starting it in a greenhouse and transplanting into the garden about May. At best you'll get a taste of okra for a few weeks on stunted 2' plants depending on your micro climate. To improve your okra plants, you need to improve the heat units. To do that try planting next to heat sinks like houses, brick/rock walls or anything that will absorb and radiate heat.

Nutritional Value:

Okra contains vitamin A and calcium. The seeds are rich in protein and edible oil.

Sun:	Full to partial
Spacing:	12"
Height:	36"-72"
Optimum Soil Ph:	6.5 – 7.5
Days To Maturity:	56
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Okra is from Africa. Okra loves heat. Days must be over 80F to produce decent crops. The soil must be over 70F. If you have cool summers wait to plant Okra at the end of May or 1st week in June. Sow seeds 1" deep. If possible, plant next to heat sinks like rock walls or south sides of structures. Try placing a few bricks or rocks at the base of established plants as heat sinks.

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Thin plants to about a 12" apart. Fertilize your bed with composted manure beforehand, but do not feed too much nitrogen was established. This will cause luxuriant growth and few blooms/pods.

Onion

White Sweet Spanish



Geography/History:

Bulbing onions probably originated in the region of the world now known as Pakistan. The Egyptians were said to have built the pyramids on a diet that included a generous supply of onions. Onions have been an important food item in Egypt since 3200 BC. Onions came to the New World with the Spaniards and shortly thereafter we discovered how great they were in sour cream and on a hamburger. The rest is history.

Nutritional Value:

This food is very low in Saturated Fat, Cholesterol and Sodium. It is also a good source of Dietary Fiber, Vitamin B6, Folate, Potassium and Manganese, and a very good source of Vitamin C.

Sun:	Full
Spacing:	5" to 6"
Height:	12" to 18"
Optimum Soil Ph:	6.0 to 7.5
Days To Maturity:	110
Sowing Method:	Start Indoors or Direct Sow Outdoors

Planting/Growing Tips:

Choose a dry day to sow onion seed when the soil is moist but not too wet, then plant the seed very thinly into drills $\frac{1}{2}$ inch deep. If you are planting more than one row then each row should be at least 9 inches apart.

Carefully cover the onion seed with soil and gently water in. Germination should then take approximately 21 days to occur. Once the new seedlings have begun to push through the soil, they can be thinned out to between 1 and 2 inches apart. After a couple more weeks these can be further thinned out to one plant to every 4-5 inches. Remember to clear away all of your discarded thinning so as not to attract onion fly.

Onion

Burgundy Red



Geography/History:

Bulbing onions probably originated in the region of the world now known as Pakistan. The Egyptians were said to have built the pyramids on a diet that included a generous supply of onions. Imagine straining to move stones that weighed tons when you and all of your co-workers had a steady diet of onions – not a pretty picture. Regardless, onions have been an important food item in Egypt since 3200 BC.

Nutritional Value:

Onions are a good source of vitamin C, potassium and calcium and contain a variety of beneficial phytochemicals. The green leaves are rich in vitamin A.

Sun:	Full
Spacing:	2" to 3"
Height:	12" to 18"
Optimum Soil Ph:	6.0 to 7.0
Days To Maturity:	70
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

When growing onions from seed, the secret is in the preparation. If you look at how the most exhibitors grow their prize-winning onions, it's always from seed so you are already on for a good start. To begin with you need a sunny site with good drainage but the key is to grow them in a permanent bed in order to build up the soil fertility. There is a down side to this however as you can also encourage the buildup of diseases. With that in mind it's advisable to periodically rotate your onion bed with the rest of the vegetable garden.

Parsnip

Harris Model



Geography/History:

The parsnip (*Pastinaca sativa*) is a root vegetable closely related to the carrot. It is a biennial plant usually grown as an annual. Its long tuberous root has cream-colored skin and flesh and can be left in the ground when mature as it becomes sweeter in flavor after winter frosts. In its first growing season, the plant has a rosette of pinnate, mid-green leaves. If unharvested, it produces its flowering stem, topped by an umbel of small yellow flowers, in its second growing season. By this time the stem is woody and the tuber inedible. The seeds are pale brown, flat and winged.

Nutritional Value:

Parsnips have 36mg Calcium and 71 mg phosphorous per 100gm. The vitamin C level though is 17mg per 100gm which is almost 3 times the level of vitamin C in carrots.

Sun:	Full
Spacing:	3" – 6"
Height:	18" to 24"
Optimum Soil Ph:	6.0 to 6.5
Days To Maturity:	130
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Parsnips grow best in full sun, but they also tolerate light shade. The soil should be of average fertility, moist and well-drained. For good, straight roots, dig the soil at least a foot deep, incorporating compost to lighten it and improve the texture; roots develop poorly in heavy soil. Mulch to suppress weed growth and to help retain soil moisture. While people tend to think that parsnips and carrots are very similar, the green tops that parsnips produce are much larger and thicker than those produced by carrots. Be sure to give them enough room to grow. The upside is that, once they're growing, these tops do a nice job of shading the soil, which inhibits weed growth and helps keep the soil moist.

Pepper

California Wonder



Geography/History:

California Wonder Pepper is a traditional ferry Morse item. This thick-walled old time favorite pepper is one of the exotic varieties of peppers and in fact the standard of bell peppers. Also known by its Latin name *Capsicum Annum*, this highly productive pepper variety adds flavor, color and crunch to dishes.

Nutritional Value:

California Wonder Pepper apart from being a delicious edible also incorporates many health benefits. It is packed with many useful nutrients. It is a good source of vitamin C, folic acid, vitamin B6 and Thiamine and possesses excellent anti-oxidant activity.

Sun:	Full
Spacing:	12" – 18"
Height:	18" – 12"
Optimum Soil Ph:	6 to 6.8
Days To Maturity:	75
Sowing Method:	Start Indoors

Planting/Growing Tips:

Start these vegetable seeds indoors about 6-8 week ends before your last frost date. Plant approx. 1/4" deep in individual cells or 4" pots. Be sure to keep them in a warm place so that the soil temperature stays above 75°. Provide plenty of light once seeds have germinated. Young heirloom pepper plants like it to stay warm and will develop well if kept happy.

Only transplanted after the seedlings have shown several sets of their true leaves and only once you are sure the outside soil temperature is consistently above 65°.

Early Jalapeno



Geography/History:

The Jalapeno is named after the city of Xalapa, in Mexico where it was traditionally cultivated. In Mexico, it is also known by several different names like huachinangos, cuaresmenos and chiles gordos.

Nutritional Value:

The Jalapeno Pepper, known for its excellent flavor, is the best-known peppers used extensively in the catering industry. The Jalapeno Pepper is a good source of dietary fiber; one ripe pepper provides almost the daily gross requirement of vitamin C. It also contains other vitamins such as A, B1, B2 and D as well as potassium and folic acid. The antioxidants provided by the Jalapenos are helpful even in fighting cancer.

Sun:	Full
Spacing:	12" – 18"
Height:	2" – 3"
Optimum Soil Ph:	4.5 to 7
Days To Maturity:	60 green 83 red days
Sowing Method:	Start Indoors

Planting/Growing Tips:

Start seeds indoors about 6-8 weeks before your last frost date. Plant approx. 1/4" deep in individual cells or 4" pots. Be sure to keep them in a warm place so that the soil temperature stays above 75°. Provide plenty of light once seeds have germinated. Young heirloom pepper plants like it to stay warm and will develop well if kept happy.

Only transplanted after the seedlings have shown several sets of their true leaves and only once you are sure the outside soil temperature is consistently above 65°.

Pumpkin

Small Sugar



Geography/History:

Pumpkins, like other squash, are native to North America. Pumpkins are widely grown for commercial use, and are used both in food and recreation. Pumpkin pie, for instance, is a traditional part of Thanksgiving meals in the United States, although commercially canned pumpkin puree and pumpkin pie fillings are usually made from different kinds of winter squash than the pumpkins frequently carved as jack o'lanterns for decoration around Halloween.

Nutritional Value:

This food is low in Saturated Fat, and very low in Cholesterol and Sodium. It is also a good source of Vitamin E (Alpha Tocopherol), Thiamin, Niacin, Vitamin B6, Folate, Iron, Magnesium and Phosphorus, and a very good source of Dietary Fiber, Vitamin A, Vitamin C, Riboflavin, Potassium, Copper and Manganese.

Sun:	Full
Spacing:	48"
Height:	12" to 18"
Optimum Soil Ph:	6.5 to 7.0
Days To Maturity:	48
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Most pumpkins, even the smaller heirloom pumpkins like Small Sugar, need a lot of room to grow. Plant in hills to allow for the most space once the soil warms to 65-70°. Plant 3-6 seeds per hill and later thin them back to the strongest 3 seedlings. Pumpkins, especially some of these heirloom pumpkins like the Mammoth Gold, can get really big with a lot of manure. If you want to grow a giant don't hold back!

Radish

Cherry Belle



Geography/History:

Records are available to prove that cherry belle radish was in use, even during Roman era. Its roots can be traced all over west Asia and Europe, giving credentials to the fact that cherry belle radish has always been in use.

Nutritional Value:

Cherry belle radish is a rich source of ascorbic acid, folic acid and one can expect potassium in good quantity too. Vitamin B6, copper and calcium are also present, making the cherry belle radish, a health food indeed.

Sun:	Full
Spacing:	4" to 6"
Height:	3"
Optimum Soil pH:	5.5 to 6.8
Days To Maturity:	20-30
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Sow seeds approx. 1/2" deep, 1" apart. Thin to 4" after seedlings are 2" tall. Cool weather is needed for best development. Sow seed directly wherever there is extra space in the garden. Radishes make good, living row markers for slower germinating crops like carrots.

Radish

French Breakfast



Geography/History:

French Breakfast radish was first mentioned by B.K. Bliss and son of New York in 1870. It kind of reminds me of one of those bullet Popsicles I used to get when I was a kid because of its cool red and white colors. French Breakfast is an oblong radish that grows 1 1/2 to 2 inches, scarlet up top in color with a bright white tip. Sweet, tender and mild.

Nutritional Value:

Radishes contain Vitamin C, calcium, magnesium, folate, and potassium. The bright red coloring indicates the presence of anthocyanidins, which are antioxidants. Natural medicine practitioners recommend radishes for stimulating digestion. Radish is one of the nutritious root vegetables featured in both salads as well as in main recipes. This widely used root vegetable belongs to the family of Brassica.

Sun:	Full
Spacing:	1" – 3"
Height:	5" – 6"
Optimum Soil pH:	5.5 to 6.8
Days To Maturity:	23
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Radishes are a cool season crop and are quick to mature. These heirloom seeds can be planted in spring or fall. Due to the small size of these seeds and vegetables, most people will use a furrow technique when planting. Sow in shallow furrow and cover with 1/4" of sifted compost or light sand. Later after the first few true leaves appear, it is best to then thin to final spacing. Remember larger spacing will result in larger heirloom radishes but will take longer to mature. Be sure to seed every few weeks if you desire a steady crop of heirloom radishes out of your garden.

Rutabaga, American Purple Top



Geography/History:

The rutabaga evolved as a cross between wild cabbage and the turnip. Its name is derived from the Swedish word “rotabagge”, meaning “round root”. Rutabagas became a crop in America as early as 1806, and are primarily grown in the Northern states, as they are a cool season crop.

Nutritional Value:

Rutabagas are low in calories and almost fat free. Fresh Rutabagas contain about 85-90% of water content, which makes it good filling food. It also offers wide range of nutrients. It contains about 2.5% by weight of dietary fibers. Rutabaga is rich source of Vitamin C; around 250 grams of Rutabaga would give you enough daily vitamin C required. Rutabaga roots also supplies Vitamin B6, Thiamin and Folate. It contains good dose of Potassium. Almost all minerals are present, though in small quantities – calcium, iron, magnesium, manganese, phosphorus, sodium, zinc, copper, selenium. Rutabaga greens supplies vitamin A and Vitamin K.

Sun:	Full
Spacing:	4" – 6"
Height:	9" - 16"
Optimum Soil Ph:	5.5 to 6.5
Days To Maturity:	60 – 90
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Rutabaga is a cool weather crop and so this vegetable seed can be planted in spring or fall. Sow rutabaga in the ground 1 week or so before last frost date in spring or in autumn for fall harvest. Rutabaga will generally take 60-90 days to be harvest ready.

These seeds can be planted 1/2 inch to 1 inch apart in furrows and then thinned to final spacing. Make sure to water rutabagas regularly so that water gets to the roots steadily. Do not let soil dry out completely.

Spinach

Bloomsdale Long Standing



Geography/History:

Bloomsdale is an old variety of spinach, introduced in the 19th century by David Ladreth, who named the greens in honor of his Bristol, Pennsylvania, farm.

Nutritional Value:

An excellent source of vitamin A, vitamin C, vitamin B, calcium, iron, and potassium.

Sun:	Full to Partial
Spacing:	12"
Height:	10" – 12"
Optimum Soil Ph:	6.5 to 7.5
Days To Maturity:	39
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Spinach is a cool weather crop and can either be planted in spring or fall. For a spring crop, be sure to start these vegetable seeds indoors 6-8 weeks before the last frost date so that they can be transplanted in very early spring. For a fall harvest, these heirloom seeds can be directly sown. For best results it is very important to keep soil evenly moist with regular light watering.

When direct seeding, you should plant these heirloom seeds 1-2" apart. Once they have shown several true leaves and are about 4" tall, you should then thin to final spacing. For continual harvests, stagger plantings every 2-3 weeks for delicious spinach all season long.

Squash

Early Prolific Straight Neck



Geography/History:

Yellow crookneck squash is one of the many cultivars of *Cucurbita pepo*, the species that also includes some pumpkins and most other summer squashes. The plants are bushy, and do not spread like the plants of winter squash and pumpkin. It is most often used as a summer squash, and is characterized by its bumpy, yellow skin and sweet yellow flesh, as well as its distinctive curved stem -end or “crooked neck”.

Nutritional Value:

All varieties of summer squash have fewer nutrients than winter squash because the latter have a longer period of maturity and time to develop. Nonetheless, summer squash has a good combination of vitamins and minerals, especially manganese, vitamins C and K, folate, and potassium, and many of these nutrients have been found to be helpful in the prevention of heart disease. The skin is where most of these nutrients are found, and fortunately the entire squash – flesh, seeds, and skin – are edible.

Sun:	Full
Spacing:	24” – 36”
Height:	24” – 36”
Optimum Soil Ph:	6 to 6.5
Days To Maturity:	48
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Heirloom summer squash are warm weather crops, as the name implies and the germination temperature verifies. Only plant once the soil temperature warms to at least 70 degrees. Mounding up small hills will create the right soil consistency and allow the soil to warm quicker. Mix in a shovelful of compost with handfuls of bone meal and wood ash to create the perfect soil environment for these heirloom seeds.

Plant 3-6 heirloom squash seeds per hill. Once they have shown true leaves and grown in size, you should thin out to the 3 strongest plants. Remember, harvest these summer squash continually in order to keep the plant producing.

Squash

Table Queen



Geography/History:

Dark green Acorn type fruit. Iowa Seed Co. introduced this variety in 1913, possible Native American origin. The small fruits have sweet, orange flesh.

Nutritional Value:

A serving of table queen squash contains 37 percent of the DV for vitamin C, 23 percent of the DV for thiamin and 20 percent of the DV for vitamin B6. It also contains 18 percent of the DV for vitamin A, 10 percent of the DV for folate and 10 percent of the DV for pantothenic acid. A serving of acorn squash contains 26 percent of the DV for potassium, 25 percent of the DV for manganese and 22 percent of the DV for magnesium.

Sun:	Full
Spacing:	24" – 36"
Height:	10" – 12"
Optimum Soil Ph:	6 to 7.5
Days To Maturity:	80
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Heirloom winter squash don't mind the heat as much as their name implies. Only plant once the soil temperature warms to at least 70 degrees and keep in mind that most heirloom varieties of winter squash take 110 days to mature. So be sure to leave enough time to allow them to fully develop. Plant 3-6 squash seeds per hill. Once they have shown true leaves and grown in size, you should thin out to the 3 strongest plants. Harvest these winter squash continually in order to keep the plant producing.

Squash

Zucchini – Dark Green



Geography/History:

The zucchini or courgette is a summer squash which can reach nearly a meter in length, but which is usually harvested at half that size or less. Along with certain other squashes and pumpkins, it belongs to the species *Cucurbita pepo*. Zucchini can be dark or light green. A related hybrid, the golden zucchini, is a deep yellow or orange color. In a culinary context, the zucchini is treated as a vegetable, which means it is usually cooked and presented as a savory dish or accompaniment. Botanically, however, the zucchini is an immature fruit, being the swollen ovary of the zucchini flower.

Nutritional Value:

The zucchini fruit is low in calories (approximately 15 food calories per 100 g fresh zucchini) and contains useful amounts of folate (24 µg/100 g), potassium (280 mg/100 g) and vitamin A (384 IU[115 µg]/100 g).

Sun:	Full
Spacing:	24" – 36"
Height:	24" – 36"
Optimum Soil Ph:	6.0 to 7.5
Days To Maturity:	45 – 65
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Heirloom summer squash are warm weather crops, as the name implies and the germination temperature verifies. Only plant once the soil temperature warms to at least 70 degrees. Mounding up small hills will create the right soil consistency and allow the soil to warm quicker. Mix in a shovelful of compost with handfuls of bone meal and wood ash to create the perfect soil environment for these heirloom seeds.

Plant 3-6 squash seeds per hill. Once they have shown true leaves and grown in size, you should thin out to the 3 strongest plants. Remember, harvest these summer squash continually in order to keep the plant producing.

Swiss Chard

Ruby Red



Geography/History:

Swiss chard isn't native to Switzerland. Its actual homeland of chard lies further south, in the Mediterranean region; in fact, the Greek philosopher, Aristotle wrote about chard in the fourth century B.C. This is not surprising given the fact that the ancient Greeks, and later the Romans, honored chard for its medicinal properties. Chard got its common name from another Mediterranean vegetable, cardoon, a celery-like plant with thick stalks that resemble those of chard. The French got the two confused and called them both "*carde*."

Nutritional Value:

Chard is known to be a nutritional powerhouse vegetable packed with vitamins, nutrients and health benefits. Red Swiss chard contains high levels of vitamins C, K, E, beta-carotene, calcium and the minerals manganese and zinc. As noted, it also contains betalain. Betalain pigments have repeatedly been shown to support activity within the body's detoxification process, activating and processing unwanted toxic substances. Betalians are not heat-stable, though, so longer cooking times can decrease their presence.

Sun:	Full
Spacing:	20 – 40 cm
Height:	1' – 2'
Optimum Soil Ph:	6.0 to 7.0
Days To Maturity:	53 – 60
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Plant chard seeds 2 to 3 weeks before the last spring frost date. Continue planting seeds at 10-day intervals for a month.

For a fall harvest, plant chard seeds again about 40 days before the first fall frost date.

Before planting, mix 1 cup of 5-10-10 fertilizer into the soil for every 20 feet of single row.

Plant the seeds 1/2 to 3/4 of inch deep in well-drained, rich, light soil. Space the seeds about 18 inches apart in single rows or 10 to 18 inches apart in wide rows. Sow eight to ten seeds per foot of row.

Thyme, Winter



Geography/History:

There are different versions of where the name Thyme comes from. Some say it is derived from a Greek word, meaning 'to fumigate'. Others derive the name from the Greek word 'thumus' signifying 'courage'. In ancient Greece the fine flavor of the honey at Mount Hymettus near Athens was said to be due to the Thyme that grew there. Pliny tells us that 'when burnt it puts to flight all venomous creatures'.

Nutritional Value:

Thyme may also interact with agar, Alzheimer's herbs and supplements, analgesics (pain relievers), antibacterials, anticancer herbs and supplements, antifungals, anti-inflammatory herbs and supplements, antioxidants, antiparasitics, antispasmodics, antivirals, anxiolytics, basil, caffeine, cardioactive herbs and supplements, carrageenan, cholesterol-lowering herbs and supplements, dental herbs and supplements, fatty acids, fenugreek, grape juice, herbs and supplements that affect GABA, herbs and supplements that affect the thyroid, herbs and supplements used for osteoporosis, herbs and supplements used for cough, hormonal herbs and supplements, hydrophilic herbs and supplements, immune suppressants, iron, ivy, muscle relaxants, oregano, potato, probiotics, rice, rosemary, sage, salicylate-containing herbs and supplements, shrimp, soy sauce, sunflower oil, vasorelaxants (herbs and supplements that increase dilation of blood vessels), vitamin E, and xanthum gum.

Sun:	Full
Spacing:	12" – 18"
Height:	24" – 36"
Optimum Soil pH:	6.5 to 8.5
Days To Maturity:	90
Sowing Method:	Start Indoors

Planting/Growing Tips:

Sow thyme seed in sterilized growing medium either in shallow rows or scatter on top with little or no covering. After they take root, have been transplanted to 2- 1/4" peat pots and reach a height of 2-3 inches, they may be moved outside to cooler weather. For small gardens, space plants about 9 inches apart, for field production space plants 12-18 inches apart in rows 3 feet apart.

Tomato

Beefsteak Red



Geography/History:

Beefsteaks are always grown for their flavor and size for slicing and summer sandwiches. This variety produces large, meaty red fruit over a long season on indeterminate plants. Because it matures late compared to many other tomatoes, it will provide a fresh harvest in the latter part of the season. This is an old favorite beloved by gardeners in the Northeast and grown throughout the country. Vigorous vines grow best in tall cages. Resistant to fusarium wilt (F) and nematodes (N).

Nutritional Value:

The red tomato is listed on most nutritional lists as a superfood. It is packed with the antioxidant vitamins A and C, potassium and the B vitamins for heart health, and above all a powerful carotenoid called lycopene. This phytonutrient, which is responsible for the bright red color of tomatoes, has been studied for its role in fighting various cancers, and its ability to lower cholesterol. When tomatoes are cooked, even more lycopene is made available. Lycopene has been shown to be especially effective when eaten with fat-rich foods such as avocado, olive oil, or nuts. There are the ingredients for a powerhouse salad!

Sun:	Full
Spacing:	24" – 36"
Height:	6" – 8"
Optimum Soil Ph:	5 to 6
Days To Maturity:	69 – 80
Sowing Method:	Start Indoors
Type:	Indeterminate

Planting/Growing Tips:

Most gardeners want to get the most out of these delicious heirloom tomatoes and therefore give them a head start on the growing season. Start these vegetable seeds indoors in sterile potting mix being sure to keep the temperature above 70 degrees. Some people prefer to use a grow pad but the top of the fridge has been known to be quite effective as well. Once the first true leaves appear on your tomato seedlings, transplant into 4" pots until you have completely hardened them off in the garden.

Tomato

Floradade



Geography/History:

This tomato was made for the South and thrives there. Floradade's ability to withstand 90-100F temperatures and still produce heavy crops is legendary. Floradade was bred to excel in the heavy calcareous soils of Dade County Florida so yields may be reduced in highly sandy soils.

Nutritional Value:

The red tomato is listed on most nutritional lists as a superfood. It is packed with the antioxidant vitamins A and C, potassium and the B vitamins for heart health, and above all a powerful carotenoid called lycopene. This phytonutrient, which is responsible for the bright red color of tomatoes, has been studied for its role in fighting various cancers, and its ability to lower cholesterol. When tomatoes are cooked, even more lycopene is made available. Lycopene has been shown to be especially effective when eaten with fat-rich foods such as avocado, olive oil, or nuts. There are the ingredients for a powerhouse salad!

Sun:	Full
Spacing:	24" – 36"
Height:	24" – 36"
Optimum Soil Ph:	5 to 6
Days To Maturity:	78
Sowing Method:	Start Indoors
Type:	Indeterminate

Planting/Growing Tips:

Most gardeners want to get the most out of these delicious heirloom tomatoes and therefore give them a head start on the growing season. Start these vegetable seeds indoors in sterile potting mix being sure to keep the temperature above 70 degrees. Some people prefer to use a grow pad but the top of the fridge has been known to be quite effective as well.

Once the first true leaves appear on your tomato seedlings, transplant into 4" pots until you have completely hardened them off in the garden. Hardening is a process of exposing the plants more and more to outside temperature until they are hardy enough to tolerate a complete outdoor move. Generally speaking, by early summer heirloom tomatoes should be transplanted into the garden.

Tomato

Red Cherry Large



Geography/History:

1966 Burrells' Seed Catalog Says about large red cherry tomato... "Attractive, high quality the size of a half dollar". Extensively used for eating fresh and in salads. A good home garden variety and is now very popular with Western growers for marketing in berry boxes. Vigorous plants produce heavily over a long period.

Nutritional Value:

The red tomato is listed on most nutritional lists as a superfood. It is packed with the antioxidant vitamins A and C, potassium and the B vitamins for heart health, and above all a powerful carotenoid called lycopene. This phytonutrient, which is responsible for the bright red color of tomatoes, has been studied for its role in fighting various cancers, and its ability to lower cholesterol. When tomatoes are cooked, even more lycopene is made available. Lycopene has been shown to be especially effective when eaten with fat-rich foods such as avocado, olive oil, or nuts. There are the ingredients for a powerhouse salad!

Sun:	Full
Spacing:	36"
Height:	24" – 36"
Optimum Soil Ph:	5 to 6
Days To Maturity:	75
Sowing Method:	Start Indoors
Type:	Indeterminate

Planting/Growing Tips:

Most gardeners want to get the most out of these delicious heirloom tomatoes and therefore give them a head start on the growing season. Start these vegetable seeds indoors in sterile potting mix being sure to keep the temperature above 70 degrees. Some people prefer to use a grow pad but the top of the fridge has been known to be quite effective as well.

Turnip

Purple Top White Globe



Geography/History:

Purple globe turnip came into prominence in 1880. It is grown and consumed in nations across the world today. Turnips are biennials usually grown as annuals. Although turnips are more of a staple in European kitchens, many southern gardeners like to grow them for their greens. Turnips grow best in a temperate climate but can endure light frost. Different varieties can be used to lengthen the harvesting period.

Nutritional Value:

Purple top globe turnip has numerous health benefits. Purple top globe turnip is low in fats and cholesterol but has a high dietary fiber content. Vitamin A, B, C and K are also found in the turnip in moderate amounts.

Cancer fighting micro nutrients are also found in purple top globe turnip in considerable amounts. Doctors recommend a moderate serving of purple top globe turnip to those suffering from cancer.

Sun:	Full
Spacing:	4" – 6"
Height:	6" – 12'
Optimum Soil pH:	6 to 7
Days To Maturity:	57
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Heirloom turnip seeds can be planted in early spring or early fall. Plant turnip seeds 1" apart and thin weakest seedlings to desired spacing. Keep soil evenly moist to prevent roots from getting woody. For longer harvest, stagger turnip plantings every 2-3 weeks.

Turnip

Shogoin



Geography/History:

Turnip greens are definitely the leaves of the turnip plant, also known because of its delicious root. Turnip, that clinically referred to as *Brassica rapa*, is probably the Cruciferae family, a cousin to many other health-protective giants which includes kale, collards, cabbage as well as broccoli. Turnip greens are smaller sized and much softer compared to their cousin, collards. Their somewhat bitter taste is delightful. Turnip greens are an essential veggie in conventional Southern American cooking.

Nutritional Value:

From a nutritional standpoint the leaves are the most important part. They are rich in vitamins A, C, E, B6 and K folate, chlorophyll and some important phytochemicals (including isothiocyanates). They are also an excellent source of the minerals: calcium, copper and manganese. In addition, turnip greens are an excellent source of dietary fiber. The roots contain vitamin C, complex carbohydrates, soluble fiber, lysine and tryptophan.

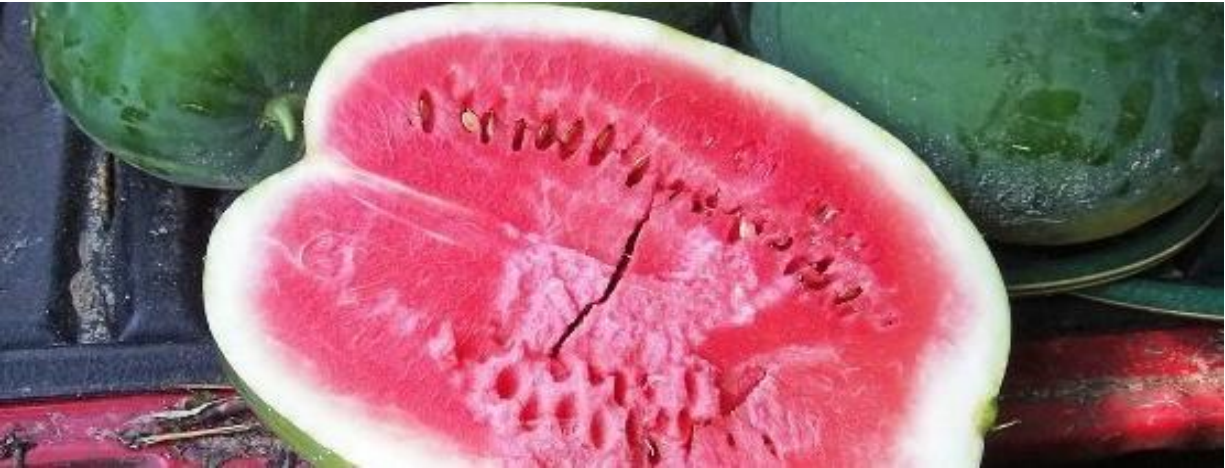
Sun:	Full
Spacing:	4" – 6"
Height:	16" – 22"
Optimum Soil pH:	6.5 to 6.8
Days To Maturity:	42
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Heirloom turnip seeds can be planted in early spring or early fall. Plant turnip seeds 1" apart and thin weakest seedlings to desired spacing. Keep soil evenly moist to prevent roots from getting woody. For longer harvest, stagger turnip plantings every 2-3 weeks.

Watermelon

Black Diamond



Geography/History:

Perfect for those hot Texas summers. Especially, in rich sandy soil. Hempstead, Texas and the surrounding area is famous for Texas size watermelons. This is one of the best heirloom watermelon seed varieties for Texas.

Nutritional Value:

From a nutritional standpoint the leaves are the most important part. They are rich in vitamins A, C, E, B6 and K folate, chlorophyll and some important phytochemicals (including isothiocyanates). They are also an excellent source of the minerals, calcium, copper and manganese. In addition, turnip greens are an excellent source of dietary fiber. The roots contain vitamin C, complex carbohydrates, soluble fiber, lysine and tryptophan.

Sun:	Full
Spacing:	36" – 60"
Height:	8" – 10"
Optimum Soil pH:	6 to 7
Days To Maturity:	85 -95
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

In warmer climates, can be direct sown 1" deep once soil is above 75. For cooler climates, start seedlings 2-3 weeks before last frost and place in final spacing of 3-4ft. on 6 ft. rows. Loose, fertile soil in full sun will ensure a good crop. For sweeter melons, reduce watering in the last month before harvest.

If direct seeding, don't plant seed till the soil temperature is 70 degrees or more. Watermelons are originally from Africa and need heat to grow well.

For Best Eating: Water until the fruits are about the size of a tennis ball then only water if the plant totally dry. The best tasting organic melons are concentrated in flavor because they are not over-watered.

Watermelon

Crimson Sweet



Geography/History:

Quality and reliability make this an excellent variety for gardeners and growers alike. A classic, oblong, 10x12" striped melon. Weighs in at 15-25 lbs. with bright red, juicy sweet flesh.

Nutritional Value:

While watermelon is quenching your thirst on a hot summer's day, it is also providing a good amount of vitamins C and A, antioxidants important in fighting disease, as well as potassium, believed to help control blood pressure and possibly prevent strokes. Red-fleshed watermelon is high in lycopene, another potent antioxidant with cancer-preventing properties. The yellow-fleshed variety is high in beta-carotene, likewise a powerful disease fighter. Lycopene and beta-carotene appear to work with other chemicals in fruits and vegetables to provide health-supporting effects.

Sun:	Full
Spacing:	48" – 72"
Height:	6" – 12"
Optimum Soil pH:	6 to 7
Days To Maturity:	85
Sowing Method:	Direct Sow Outdoors

Planting/Growing Tips:

Watermelons need a lot of space so plant where there is plenty of open ground. Space watermelon plants 48 to 72 in. (12 to 200 cm) apart, with at least 8 ft. (2.4 m) between rows. Include organic matter such as compost or humus to the soil and add a balanced fertilizer that's high in nitrogen. (Ask your local garden center to recommend a fertilizer.)