



# Planting Guide

# 135 Variety Seed Bank

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# Alfalfa (VNS)



## **Geography/History:**

Alfalfa, *Medicago sativa*, also called lucerne, is a perennial flowering plant in the pea family Fabaceae cultivated as an important forage crop in many countries around the world. The English name alfalfa is widely used, particularly in North America and Australia. But in the UK, [3] South Africa and New Zealand, the more commonly used name is lucerne. It superficially resembles clover, with clusters of small purple flowers followed by fruits spiraled in 2 to 3 turns containing 10-20 seeds. Alfalfa is native to a warmer temperate climate such as that of Iran (where it is thought to have originated). It has been cultivated as livestock fodder since at least the era of the ancient Greeks and Romans.

## **Nutritional Value:**

This food is low in Saturated Fat and Sodium, and very low in Cholesterol. It is also a good source of Protein, Vitamin A, Niacin and Calcium, and a very good source of Dietary Fiber, Vitamin C, Vitamin K, Thiamin, Riboflavin, Folate.

## **Planting/Growing Tips:**

Primarily consumed as a sprout, follow general sprouting directions for your particular sprouting system. Alfalfa sprouts are known as "The King of Sprouts"!



# Amaranth, Red Garnet



## Geography/History:

In ancient Greece, the amaranth (also called chrysanthemum and helichrysum) was sacred to Ephesian Artemis. It was supposed to have special healing properties, and, as a symbol of immortality, was used to decorate images of the gods and tombs. In legend, Amaranthus was a hunter of Artemis and king of Euboea; in a village of Amarynthus, of which he was the eponymous hero, there was a famous temple of Artemis Amarynthia or Amarysia. It was also widely used by the Chinese for its healing chemicals, curing illnesses such as infections, rashes, and migraines.

## Nutritional Value:

Cooked amaranth leaves are a good source of vitamin A, vitamin C, and foliate; they are also a complementing source of other vitamins such as thiamine, niacin, and riboflavin, plus some dietary minerals. Amaranth seeds contain lysine, an essential amino acid, limited in other grains or plant sources. Most fruits and vegetables do not contain a complete set of amino acids, and thus different sources of protein must be used. Amaranth seeds are therefore promising complement to common grains such as wheat germ, oats, corn because these common grains are abundant sources of essential amino acids found to be limited in amaranth.

Sun:	Full Sun
Spacing:	10 – 11"
Height:	24 – 36"
Optimum Soil Ph:	5.5-7.0, Ideal 6.0-6.5
Days To Maturity:	25 – 55
Sowing Method:	Start Indoors

## Planting/Growing Tips:

Seeds should be sown in spring and can be started in an indoor seed raising tray earlier, if kept warm enough. The seeds require a soil temperature of at least 20 C to germinate. Sow or plant out with spacing of 10 inches and water well until the plants are established. It takes 55 days from seed to harvest but young leaves can be picked from as early as 25 days. Flowers should appear on straight stems from mid-summer until the weather grows too cold and/or frosty. The colors should become more intense as the plant ages.



# Arugula, (*Eruca sativa*)



## Geography/History:

Grown as an edible herb in the Mediterranean area since Roman times, salad rocket (Arugula) was mentioned by various classical authors as an aphrodisiac, most famously in a poem long ascribed to Virgil, *Mortem*, which contains the line: “the rocket excites the sexual desire of drowsy people”. Some writers assert that for this reason during the Middle Ages it was forbidden to grow rocket in monasteries. It was listed, however, in a decree by Charlemagne of 802 as one of the pot herbs suitable for growing in gardens.

## Nutritional Value:

Arugula looks like a longer-leaved and open lettuce and is eaten raw, in salads with oil and vinegar, or as a garnish, as well as cooked as a leafy green vegetable. It is rich in vitamin C and Potassium. In addition to the leaves, the flowers (often used in salads as an edible garnish), young seed pods, and mature seeds are all edible.

Sun:	Full Sun
Spacing:	10 – 11”
Height:	10 – 14”
Optimum Soil Ph:	5.5-7.0, Ideal 6.0-6.5
Days To Maturity:	55 – 60 Days
Sowing Method:	Direct Sow Outdoors

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## Planting/Growing Tips:

Although arugula likes cool weather, it can be damaged or stressed by frost or snow. Keep the row covers handy and protect your plants if extreme weather is predicted. Gardeners in USDA Zones 8 and up will have better luck with fall sowings, succession sowing into winter. Even cool season gardeners can start seed in late summer, to harvest up until frost.

The seeds are small and should barely be covered with soil. Sprinkle them on dampened soil or potting mix and press firmly. Then dust with some more soil and keep moist. They should germinate within 2 weeks. Arugula is shallow rooted and makes a good choice for growing in containers. You'll have more control over sun exposure in a container, but they will dry out more quickly.

# Asparagus, Mary Washington



## **Geography/History:**

Asparagus has been used as a vegetable and medicine, owing to its delicate flavor, diuretic properties, and more. It is pictured as an offering on an Egyptian frieze dating to 3000 BC. Still in ancient times, it was known in Syria and in Spain. Greeks and Romans ate it fresh when in season and dried the vegetable for use in winter; Romans would even freeze it high in the Alps, for the Feast of Epicurus. Emperor Augustus reserved the “Asparagus Fleet” for hauling the vegetable, and coined the expression “faster than cooking asparagus” for quick action.

## **Nutritional Value:**

It is a good source of vitamin B, calcium, magnesium and zinc, and a very good source of dietary fiber, protein, beta-carotene, vitamin C, vitamin E, vitamin K, thiamine, riboflavin, rutin, niacin, folic acid, iron, phosphorus, potassium, copper, manganese and selenium, as well as chromium, a trace mineral that enhances the ability of insulin to transport glucose from the bloodstream into cells. The amino acid asparagine gets its name from asparagus, as the asparagus plant is relatively rich in this compound.

Sun:	Full Sun in spring and fall/ Partial Shade in summer
Spacing:	12-18in
Height:	18cm (7in) Soil Ph: 6.5-7.5
Days To Maturity:	730
Sowing Method:	Direct Sow Outdoors

## **Planting/Growing Tips:**

Keep the asparagus bed weed free by hand, rather than using a hoe, as the shallow roots are easily damaged. Mulch the bed in late winter with weed-free compost to discourage weeds and to retain moisture. Consider covering the bed from autumn to winter with an opaque weed mat to prevent annual weeds germinating.

In early spring, apply 100g per sq m (3oz per sq yd) of general fertilizer such as Growmore, or fish, blood and bone. If growth is weak, repeat this application once harvesting has finished.

# Basil, Italian Large Leaf



## Geography/History:

There are many varieties of *Ocimum basilicum*, as well as several related species or species hybrids also called basil. The type used in Italian food is typically called sweet basil, as opposed to Thai basil, lemon basil (*O. X citriodorum*) and holy basil (*Ocimum tenuiflorum*), which are used in Asia. While most common

varieties of basil are treated as annuals, some are perennial in warm, tropical climates, including holy basil and a cultivar known as 'African Blue'. Basil is originally native to India and other tropical regions of Asia, having been cultivated there for more than 5,000 years.

## Nutritional Value:

Basil is a very good source of vitamin A (through its concentration of carotenoids such as beta-carotene). Called "pro-vitamin A," since it can be converted into vitamin A, beta-carotene is a more powerful anti-oxidant than vitamin A and not only protects *epithelial cells* (the cells that form the lining of numerous body structures including the blood vessels) from free radical damage, but also helps prevent free radicals from oxidizing cholesterol in the blood stream.

Spacing:	6-8in (15-20cm)
Height:	24-30in (60-75cm)
Width:	12in. (30cm)
Exposure:	Full Sun – 6+ hours direct sun
Sowing Method:	Start Indoors

## Planting/Growing Tips:

Basil can be planted outdoors after the danger of frost has passed.

Choose a sunny location (6+ hours of sun) and dig a hole about two times as wide as your pot.

Remove your plant from the pot by loosening the soil and tipping it out into your hand. Place your plant in the soil about as deep as it was in the pot.

Refill the space around your plant with soil and press lightly to compact the dirt, keeping your plant firmly in the ground.

Water immediately to settle the soil, and add more soil as needed, bringing it level to the rest of your garden.

# Bean

## Blue Lake (Bush)



### Geography/History:

Blue Lake beans received their given name as they were originally cultivated in the early part of the 20th century in the Blue Lake District near Ukiah, California. They were brought to Oregon in 1923 where they were extensively researched, resulting in the development of the new string-less bean varieties. The first commercial string-less Blue Lake bean variety was developed by Asgrow Company in 1962.

### Nutritional Value:

An excellent source of vitamin A, vitamin C, calcium, iron, and potassium. Growth Habit: Bush

Sun:	Full Sun
Days to Maturity:	58 days
Height:	15-20 inches
Spread:	10 inches
Thinning:	6 inches
Sowing Method:	Direct Sow Outdoors
Fruit Size:	6 inches

### Planting/Growing Tips:

Green beans are generally direct seeded in the garden. The most important point about growing green beans is not to plant them too early. They will rot in cool, damp soil. To get an earlier start with your green bean seed packets, you can put down black plastic to warm the soil. When bush beans begin producing, they often come in all at once. Staggered planting every 2 weeks will keep your heirloom bush beans going longer. Beans like a moderately rich, loose, moist soil with a slightly acidic pH of about 6.0 to 6.2.

Plant after all danger of frost is past. Plant bush beans in either rows or blocks, with 4-6 inches between each seed. Plant the seeds 1-2 inches deep and be sure to water the soil immediately and regularly, until it sprouts.



## Fava – Broad Windsor



### Geography/History:

Fava beans are one of the oldest crops known, with their recorded cultivation extending into prehistoric times. A bean in name only, botanically the fava is a type of vetch. Like the bean, the vetch is also a legume but the vetch is a climbing or twining plant that prefers a cool moist climate and is even tolerant to a light frost, unlike the bean that thrives best in the heat of long and nurturing summer days.

### Nutritional Value:

Fresh fava beans can significantly increase your intake of folate, iron, manganese and dietary fiber, all nutrients that can benefit your health in a variety of ways.

Sun:	Full Sun in spring and fall/ Partial Shade in summer
Spacing:	8 to 10 inches
Height:	2 to 6 feet
Soil pH:	4.5 and 8.3
Days to Maturity:	80 to 90 days
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Heirloom / Open Pollinated Fava beans are hardy cool season plants that can tolerate some frost but do not tolerate heat (above 70°F) well. Direct plant Heirloom / Open Pollinated Fava Bean Seeds in spring as soon as soil can be worked, 1" deep, 4-6" apart, in rows 18-30" apart, in full sun.

Germination occurs in 5-10 days at 60-70°F. Thin Fava Bean plants to 8-10". In mild winter climates, Fava Beans can be fall planted for spring harvest. Harvest as Snap Beans when Fava Bean Seeds in pods are the size of a pea. For shelling beans harvest when the Fava Bean pods are thick and well-filled with seeds, while the pods are still green. For dry beans, leave pods on Fava Bean plants until pods are dry, brown, and crisp, and beans are hard and rattle in pod.

## Golden Wax



### Geography/History:

One of the oldest known wax beans, Golden Wax was first introduced sometime around 1871. There have been many variations over the years, but Golden Wax was also known as Topnotch or Rustproof Golden Wax. Golden Wax bean is a bush type plant that produces excellent yields of golden yellow wax beans. Good for northern climates as well as the south.

### Nutritional Value:

In terms of nutrition, wax beans provide a considerable amount of vitamins A and C, while containing little fat and few calories. A 4 oz. (113.39 g) serving of these yellow beans contains about 20-25 calories.

Sun:	Full Sun
Spacing:	1 inch apart
Height:	12-18 inches
Days To Maturity:	50-60
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

50-60 days for green, 100+ days for dry beans. Beans typically need warm soil of 65° or higher. Grows best in full sun with well-watered soil. Regular harvesting of the young pods will ensure a greater yield. Boost yields and germination by adding inoculants. Avoid planting in soil that stays wet. Heirloom bean disease thrive in wet conditions, and the roots may not get enough oxygen.

Heirloom beans like soil that is slightly acid, about 6.5. This can be achieved by adding mulched pine needles, peat moss or sulfur.

Try wide row growing for bush beans. Make your heirloom bean rows three across instead of just one. Three wide is perfect because most people can reach across that width. You can grow 3 times the amount of heirloom beans in the same space, you reduce the amount of area for weeds, and you'll save on water.

Heirloom seeds are hardy but always take care with your garden seeds to give them the appropriate amount of moisture – not letting the vegetable seeds dry out prematurely or overwatering and possibly having them rot.

## Lima – King Of The Garden (Pole)



### Geography/History:

This old standby was developed by Frank S. Platt of New Haven, Connecticut, in 1883, but not made known commercially until 1885, when an article describing it appeared in the *Farm Journal* (1885, 27). The original picture from that article is shown. The advantage of this variety is that it was developed in lower New England and is therefore better suited to northern gardens than many of the old varieties like Carolina Lima, or even more recent ones like Dr. Martin's.

### Nutritional Value:

Lima Beans owe high medicinal properties and high nutritional value. Explore here the details about the Nutritional Facts, Calories and Nutritional Value of Lima beans. Lima beans are also known as butter beans and they are the seed of a plant, eaten like vegetables for food. Lima bean's taste is like soft meaty flesh and slightly mushroom. Lima beans are high nutritious so it is effective against a number of diseases and ailments. Lima beans are also used for the general strengthening of the immune system.

Sun:	Full Sun
Spacing:	4 inches apart
Height:	8 – 10 feet
Days To Maturity:	88
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

50-60 days for green, 100+ days for dry beans. Some vines can reach 12' long, so provide adequate support. Not cold tolerant, beans need warm soil of 65 degrees or better. Regular harvesting of the young pods will ensure a greater yield. Grows best in full sun with well-watered soil. Boost yields and germination by adding inoculations.

Make sure to provide adequate support for these vigorous climbers! A strong fence or twine hung on a strong pole will give them plenty of room to grow and good harvest yields.



# Beet

## Chioggia



### Geography/History:

All cultivated beets are descendants of the sea beet (*B. maritima*), a wild seashore plant found growing along the Mediterranean and Atlantic coasts of Europe and North Africa. The Chioggia beet is an Italian heirloom variety established circa 1840. It was named for the town in which it was first cultivated, the island fishing village of Chioggia, near the Lagoon of Venice. It is an open-pollinated variety, allowing for the potential of cross-breeding once plants have flowered or have run to seed. Beet varieties should be grown biannually and be planted at least 1-2 miles apart to avoid accidental hybridization

### Nutritional Value:

Beet greens contain concentrated amounts of oxalic acid. Thus, when eaten in excess, they can interfere with the body's ability to metabolize calcium.

Sun:	Full Sun
Spacing:	3"
Height:	8-10 inches
Optimum Soil Ph:	neutral (7.0)
Days To Maturity:	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.

## 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.

## **Detroit Dark Red**



### **Geography/History:**

Detroit Dark Red beet is an old-time heirloom favorite dating back to 1892. Gardeners today still contend this is their favorite variety for a dependable root harvest.

### **Nutritional Value:**

It contains a number of nutrients including Iron, Calcium, Folic Acid and Vitamins A, B and C vitamins. It is also a good anti-oxidant that can help to fight off cancer. They have one of the highest sugar contents of all vegetables, yet are low in calories.

Sun:	Full Sun
Spacing:	3
Height:	8 – 10 inches
Optimum Soil Ph:	7.0
Days To Maturity:	59
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.



## 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.

## Ruby Queen



### Geography/History:

Beets have been cultivated since pre-historic times in the Mediterranean area and were originally grown only for their leaves. During the Roman empire, people began to eat the roots as well. Today, beets and beet dishes are still widely popular throughout Europe.

### Nutritional Value:

One cup (250 mL) of cooked diced beets contains 50 calories. Beets are a good source of folacin and a source of Vitamin C and potassium.

Sun:	Full Sun
Spacing:	3"
Height:	10 – 12 inches
Optimum Soil Ph:	7.0
Days To Maturity:	52
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Beet seeds can be planted in early spring or early fall. 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.

# Borage (Borago officinalis)



## Geography/History:

Traditionally borage was cultivated for culinary and medicinal uses, although today commercial cultivation is mainly as an oilseed. Our great grandmothers preserved the flowers and candied them. Henslow suggests that the name is derived from *barrach*, a Celtic word meaning 'a man of courage.'

## Nutritional Value:

This herb is also the highest known plant source of gamma-linolenic acid (an Omega 6 fatty acid, also known as GLA) and the seed oil is often marketed as a GLA supplement. It is also a source of B vitamins, beta- carotene, fiber, choline, and, again, trace minerals. In alternative medicine it is used for stimulating breast milk production and as an adrenal gland tonic; thus, it can be used to relieve stress.

Sun:	Full Sun
Spacing:	12" – 18"
Height:	1'- 3'
Optimum Soil Ph:	5.5-7.0, Ideal 6.0-6.5
Days To Maturity:	50-60
Sowing Method:	Start Indoors or Direct Sow Outdoors

## Planting/Growing Tips:

Seeds are best sown in full or partial sun under ½ inch (1 cm) of soil so it's easy to sprinkle a patch with seeds and then cover it with a few handfuls of soil or compost. The plants can easily grow to be 3 feet (91 cm) tall and 2 feet (61 cm) wide, so give them room to grow, and let them shade your partial sun plants. Treat this easy-to-keep herb well and it will reward you with scores of beautiful flowers, lush foliage, and fertile soils.



# 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.

## 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.



## Pak Choi



### Geography/History:

Pak Choi was introduced to Europe in the 1800's. It is now readily available in supermarkets throughout North America. Pak Choi is widely popular in the Philippines, where large numbers of Chinese immigrated following Spain's conquest of the islands in the 1500's. While Pak Choi is grown in the United States and several Canadian provinces, it remains firmly associated with Chinese cooking.

### Nutritional Value:

Pak Choi is made up of the same chemicals as broccoli and cauliflower, because it is also a cruciferous vegetable. It is a delicate leaf-stalk vegetable that is cultivated mainly in China, Korea, Japan, and the USA. The plants grow to about sixteen to twenty inches tall and are ready for harvest just two months after planting. The darker the leaf, the more beta-carotene it contains. Beta-carotene is found in dark green and dark yellow fruits and vegetables.

Sun:	Full Sun to Light Shade
Spacing:	8"
Height:	12 – 16"
Optimum Soil Ph:	7.0
Days to Maturity:	28 – 50 Days
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Can be grown all year Pak Choi is a cool-season crop typically grown in autumn and early winter, though in warmer climates harvest can continue well into winter. It will germinate at temperatures between 13 to 24°C (55 to 70°F). Sow thinly, direct into finely raked, moist, weed free soil 6mm (0.25") deep in rows 30cm (12") apart. Thin the resulting seedlings, leaving the strongest, by degrees to a final spacing of 20cm (8") apart.

# Caraway, (*Eruca sativa*)



## Geography/History:

The origins of the name caraway come from the Arabic al-caraway seeds; which some presume is the origin of the Latin word carve and from Caria, where caraway may have first been used. In German folklore, parents placed a dish of caraway seeds beneath their children's beds to protect them from witches.

## Nutritional Value:

Today, caraway is still recommended as a treatment for flatulence. Some parts of the world serve caraway seeds after meals much like an after-dinner mint. As a culinary herb, caraway is frequently used in German and Austrian cooking as a seasoning for cheese, dumplings, port, goose and sausages

Sun:	Full Sun
Spacing:	18"
Height:	24"
Optimum Soil pH:	6.0 to 7.0
Days to Maturity:	60 Days
Sowing Method:	Direct Sow Outdoors

## Planting/Growing Tips:

The caraway plant is a biennial. This means it takes two years for the plant to mature, produce seeds, then die. In practical terms, you start the plants two years in a row from seed. You won't get seeds until the second year so starting those two years in a row will give you an ongoing crop.

During the winter you may not see any evidence of the plant even though the roots are preparing for spring. Mark your spot carefully so you don't accidentally dig them up in the spring. Caraway will grow about 20cm (8in) the first year and up to 60cm (24in) in the second. Seeds can be started early indoors, or can be sown directly where they are to grow.

The plant prefers warm, sunny locations and well-drained soil rich in organic matter. In warmer regions it is planted in the winter months as an annual.

# 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.

## Red Cored Chantenay



### Geography/History:

A gourmet selection for heavy soils. Red Cored is a thick rooted variety with wide shoulders and a tapered root ending in a nicely rounded, blunt tip. Roots average 6" long and have a characteristic red core. Sweet, old fashioned carrot flavor and fine-grained texture. A great variety for soups, freezing, canning and storage, sweetening up the longer it's stored. Introduced to the US from France in the late 1800s and used for many years as the standard carrot for the processing industry.

### Nutritional Value:

Red cored chantenay Carrots make a healthy, nutritious addition to your daily diet. They are high in Vitamin A and beta-carotene, and rich in antioxidants.

Sun:	Full Sun
Spacing:	18-24"
Height:	8.0-10.0"
Optimum Soil Ph:	6
Days To Maturity:	65
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.



## Royal Chantenay



### Geography/History:

Royal Chantenay carrot was created by Northrup King Seed Company. They selected their breeding stock from 'Red Cored Chantenay' and released Royal Chantenay in 1952. The black and white photo here is actually from the test fields.

### Nutritional Value:

Carrots are famous for their high content of beta carotene, which the body converts into vitamin A (it is a powerful antioxidant). The orange color is caused by carotene (a precursor of vitamin A), so the redder the root the more nutritious it is. Carrots are also a good source of potassium and contain calcium pectate, which can lower blood cholesterol. Eating 4 raw carrots daily has been known to reduce blood cholesterol level by 10% in only 4 weeks.

Sun:	Full Sun
Spacing:	2"
Height:	5.85 inches
Optimum Soil Ph:	6
Days To Maturity:	60 – 75
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.

Heirloom Carrot Climatic Requirements: The heirloom carrot is a hardy, cool season crop that can be planted in the garden as soon as the organic soil can be prepared in the spring. Organic carrots require relatively large amounts of moisture and are not tolerant of drought. Prolonged hot weather in the later stages of development may not only retard growth but result in an undesirable strong flavor and coarseness in the roots. At the other extreme, prolonged temperatures below 55 degrees F tend to make the roots longer, more slender and paler in color than expected. The best temperature for highest quality organic roots is between 60- and 70-degrees F.

## 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,  $\alpha$ -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.

## Shin Kuroda



### Geography/History:

Chantenay style bright orange carrot with wide shoulders tapering to a blunt point. Medium long and very uniform with sweet crisp texture and a small orange core. Popular Japanese selection. Ideal for summer sowing with harvesting through autumn and winter.

### Nutritional Value:

Carrots are famous for their high content of beta carotene, which the body converts into vitamin A (it is a powerful antioxidant). The orange color is caused by carotene (a precursor of vitamin A), so the redder the root the more nutritious it is. Carrots are also a good source of potassium and contain calcium pectate, which can lower blood cholesterol.

Sun:	Full
Spacing:	3' – 4'
Height:	6" – 15"
Optimum Soil pH:	5.5 to 6.5
Days To Maturity:	68-100
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.

Heirloom Carrot Climatic Requirements: The heirloom carrot is a hardy, cool season crop that can be planted in the garden as soon as the organic soil can be prepared in the spring. Organic carrots require relatively large amounts of moisture and are not tolerant of drought. Prolonged hot weather in the later stages of development may not only retard growth but result in an undesirable strong flavor and coarseness in the roots.



# 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.

# Chervil, Curled



## Geography/History:

A member of the Apiaceae, chervil is native to the Caucasus but was spread by the Romans through most of Europe, where it is now naturalized. The plants grow to 40–70 cm (16–28 in), with tripinnate leaves that may be curly. The small white flowers form small umbels, 2.54–5 cm (1.00–2.0 in) across. The fruit is about 1 cm long, oblong-ovoid with a slender, ridged beak.

## Nutritional Value:

This food is low in Sodium, and very low in Saturated Fat and Cholesterol. It is also a good source of Dietary Fiber, Thiamin, Riboflavin, Niacin, Vitamin B6, Magnesium, Phosphorus and Selenium, and a very good source of Vitamin A, Vitamin C, Folate, Calcium, Iron, Potassium, Zinc and Manganese.

Sun:	Full Sun/Part Sun
Spacing:	8 – 10"
Height:	12 – 24"
Optimum Soil pH:	6.5
Days to Maturity:	60
Sowing Method:	Start Indoors or Direct Sow Outdoors

## Planting/Growing Tips:

Chervil is a green herb, like cilantro, basil or parsley, not a woody herb like thyme or rosemary. This means it is usually raised as an annual and planted each spring (and often in mid-summer for a fall crop). This means it likes sun and can be damaged by frost. The seeds are tiny. Plant them about 1/8" deep in well worked soil.

They will take from two to four weeks before you start seeing little green things. When they are 2" or so, thin them out a bit. Each plant needs about 8" – 10" of space.

# 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 anti-oxidants 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 B<sub>2</sub>, B<sub>3</sub>, B<sub>6</sub> 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.

# Coriander (Cilantro)



## Geography/History:

Coriander grows wild over a wide area of the Near East and southern Europe, prompting the comment, "It is hard to define exactly where this plant is wild and where it only recently established itself." Fifteen desiccated mericarps were found in the Pre-Pottery Neolithic B level of the Nahal Hemel Cave in Israel, which may be the oldest archaeological find of coriander.

## Nutritional Value:

The nutritional profile of coriander seed is different from the fresh stems and leaves. However, the seeds do provide significant amounts of calcium, iron, magnesium, and manganese.

Sun:	Full Sun
Spacing:	6 – 8"
Height:	18" – 24"
Optimum Soil pH:	6.5 – 7.5
Days to Maturity:	25 – 55
Sowing Method:	Start Indoors or Direct Sow Outdoors

## Planting/Growing Tips:

Plant cilantro in the spring after the last frost date or in the fall. In the Southwest, a fall planting may last through spring when the weather heats up again.

Do not grow in summer heat as the plants will bolt (so it is past harvesting). The leaves that grow on bolted plants tend to be bitter in flavor.

It is best to choose a sunny site that will allow cilantro to self-seed as it is ought to do. Plant in an herb garden or the corner of a vegetable garden. When the weather gets warm, the plant will quickly finish its life cycle and send up a long stalk which will produce blossoms and later seeds. Little plants will sprout during the season and the next spring.

Plant the seeds in light, well-drained soil and space them 1 to 2 inches apart. Sow the seeds at 3-week intervals for continued harvest. Space rows about 12 inches apart. It is important to keep the seeds moist during their germination, so remember to water the plants regularly.

# Corn, Golden Bantam



## **Geography/History:**

Corn is the name we use in the United States, Canada, and Australia for the grain maize. In England, as well as most of the English-speaking world, the term “corn” is a generic term for cereal crops, such as wheat, barley, oats, rye and of course, maize.

In Native American lore, maize was one of the “three sisters.” Along with beans and squash, the three sisters were planted and grown together, supporting each other in their life cycle and providing a very balanced diet of carbohydrates, proteins and vegetable fats to their cultivators.

## **Nutritional Value:**

Sweet Corn is rich in carbohydrates, as well as soluble fiber, folate, niacin, thiamin, phosphorus and various useful phytochemicals. Yellow Corn contains vitamin A.

Sun:	Full Sun
Spacing:	10 – 11”
Height:	5”
Optimum Soil pH:	6.5 – 8
Days to Maturity:	25 – 55
Sowing Method:	Direct Sow Outdoors

## **Planting Tips:**

Plant in short rows in a way that creates a rectangle formation of multiple rows. Several short rows benefit in the pollination process as opposed to a small number of long rows. Plant seeds approx. 1” deep, spaced 6” apart. When seedlings reach approx. 6” high, thin out the weaker ones to approx. 12” – 18” between the strongest ones. When ears begin to develop, side dress with compost or desired fertilizer to promote even kernel development.

# Cress, Curled



## **Geography/History:**

AKA Pepper Grass, this spicy mucilaginous Brassica (the same family as Broccoli, Cabbage, Mustard, Radish...) is, in flavor, something like Watercress and is a very fast grower which, because it is mucilaginous, should Not be Soaked when grown straight.

## **Nutritional Value:**

Vitamins A, B, C and E Calcium, Iron, Magnesium, Niacin, Phosphorus, Potassium. All Essential Acids  
Antioxidants Protein: 20-25%

Sun:	Full Sun
Spacing:	6"
Height:	24"
Optimum Soil pH:	6.0 – 6.8
Days To Maturity:	55 – 70
Sowing Method:	Start Indoors

## **Planting/Growing Tips:**

Curled Cress is a mucilaginous seed. It prefers considerably less water in the sprouting stage than most other micro greens seeds. If the seeds get too wet, you will end up with a very low germination rate. Use less water initially in the tray (half a cup, instead of 2 cups of pH balanced water). Instead of soaking the grow pad and flipping it, just lay the grow pad in the tray on top of the water. Use the mist bottle to evenly dampen the top surface (seeds should stick and not bounce when sowing). Once you have spread the seed evenly over the dampened grow pad, mist all the seeds, but not as thoroughly as other seeds. Germinate in the blackout dome as normal, but mist more frequently (3 times a day), but with less mist in each application. The goal is to keep the seeds damp but not wet/soggy. You may need to experiment with a few crops to get it right.



# 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 Picking 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.

## Poinsett



### Geography/History:

The Poinsett 76 Cucumber is an excellent slicing cucumber that is perfect for salads. Released in 1976, the Poinsett 76 is an improved version of the Poinsett Cucumber that is resistant to most cucumber diseases such as downy mildew, powdery mildew, angular leaf spot and anthracnose.

### Nutritional Value:

Cucumbers with the peel are an excellent source of Vitamin K. The caffeic acid in cucumbers is said to soothe skin irritations and swelling.

Sun:	Full Sun
Spacing:	6"
Height:	11.7"
Optimum Soil Ph:	7.2 – 7.5
Days To Maturity:	70
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 cucumber vines.

## Straight Eight



### Geography/History:

Straight Eight Cucumber was introduced by Ferry Morse in 1935. Straight 8's are extremely dependable at producing a crop. Bad luck with other cucumbers last season, then this is the one to try this year.

### 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:	6 – 8"
Optimum Soil Ph:	6 -7
Days To Maturity:	58
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.



# Cumin



## Geography/History:

Cumin is native to Egypt and has been cultivated in the Middle East, India, China and Mediterranean countries for millennia. Throughout history, cumin has played an important role as a food and medicine and has been a cultural symbol with varied attributes. Cumin was mentioned in the Bible not only as a seasoning for soup and bread, but also as a currency used to pay tithes to the priests. In ancient Egypt, cumin was not only used as a culinary spice, it was also an ingredient used to mummify pharaohs.

## Nutritional Value:

Cumin seeds contain numerous phyto-chemicals that are known to have antioxidant, carminative and anti- flatulent properties. The seeds are an excellent source of dietary fiber. Its seeds contain certain health- benefiting essential oils such as cuminaldehyde (4-isopropylbenzaldehyde), pyrazines, 2-methoxy-3-sec- butylpyrazine, 2-ethoxy-3-isopropylpyrazine, and 2-methoxy-3-methylpyrazine. The active principles in the cumin may augment the motility of the gastro-intestinal tract as well as aids in the digestion power by increasing gut enzyme secretions.

Sun:	Full
Spacing:	6" to 10"
Height:	12" to 18"
Optimum Soil Ph:	4.5 to 8.3
Days To Maturity:	120
Sowing Method:	Direct Sow Outdoors

## Planting/Growing Tips:

Sow the seeds indoors in plugs or pots in early spring. After the frosts, plant out your seedlings 4 inches (10cm) apart into a prepared bed. Alternatively, after the frosts, sow them in shallow drills directly into the ground and cover with soil or compost. Water well in dry weather and about four months later you'll be ready to harvest.

**Note:** Sow them fairly thickly and don't worry about the plants crowding as they'll support each other. To harvest; cut the stalks and place 5-6 flower heads in a paper bag. Tie and hang upside down in a warm, dry place. After 7-10 days the pods will have dried. Rub the pods between your fingers and the seeds will drop out ready for immediate use or storing in a jar out of direct sunlight.

# 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 14<sup>th</sup> 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 *nasunin*.

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.

## 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 14<sup>th</sup> 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 *nasunin*.

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.



# Fennel, Florence



## Geography/History:

Fennel is native to the Mediterranean, where wild (a.k.a., “bitter”) fennel still grows. Although exact dates are lost to the sands of time, fennel was likely first cultivated in either Greece or Italy and was used for both medicinal and culinary purposes. The ancient Greeks and Romans had quite a thing for fennel, eating the seeds, blossoms and the fronds.

## Nutritional Value:

Fennel bulbs are a good source of vitamin C, manganese and potassium and (like a whole lot of veggies) are really high in fiber. Fennel seeds are high in manganese, iron, calcium and magnesium. In herbal medicine, fennel is used a remedy for menstrual pain, coughs, to strengthen eyesight and for stomach pain.

Sun:	Full Sun
Spacing:	12"
Height:	24"
Optimum Soil pH:	5.5-7.0
Days To Maturity:	80
Sowing Method:	Direct Sow Outdoors

## Planting/Growing Tips:

Florence fennel is a cool-weather perennial grown as an annual. Fennel can be sown in the garden as early as 2 to 3 weeks before the average last frost date in spring. Seeds germinate best at 60°F. Fennel will tolerate heat and cold but does best when it comes to maturity in cool weather. Fennel requires 90 to 115 frost-free days to reach harvest. For an autumn crop sow fennel in mid- to late-summer.

# 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.

## Red Russian



### Geography/History:

Red Russian Kale was introduced into America via Siberia by Russian traders in the 19th century. It is very frost resistant and has a distinctive sweet flavor compared to the other varieties.

### Nutritional Value:

Red Russian Kale is rich in the nutrients your body needs for its daily activities, containing more than 100 percent of your daily requirement of Vitamins A, C and E. It also contains 10 percent of your daily copper needs and 26 percent of your manganese.

Sun:	Full Sun
Spacing:	12" – 18"
Height:	18" – 24"
Optimum Soil ph:	6.5-7.0
Sowing Method:	Start Indoors or Direct Sow Outdoors

### Planting/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.

You can direct seed in cold climates, in the spring, as soon as the soil can be worked and the soil temperature is at least 45 degrees F. Kale matures quickly, in about 2 months or less, so if you prefer you can start your plants later or even plant multiple crops in succession. In warm climates, kale can be direct seeded in late summer / early fall, as well as in the spring. A winter crop of kale in warmer climates can be much sweeter than a summer crop.



## Vates – Dwarf Curled Blue Scotch



### **Geography/History:**

Blue Curled Scotch Kale is a variety that is delicious, nutritious, and attractive. An extremely strong producer – especially in cooler climates. Use Blue Curled Scotch Kale in salads or stir-frys.

### **Nutritional Value:**

An excellent source of vitamins C and A.

Sun:	6 hours of full sunlight
Spacing:	1-2"
Height:	12-14"
Optimum Soil ph:	5.8-6.5
Days To Maturity:	53-55 days
Sowing Method:	Direct Sow Outdoors

### **Planting/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.

You can direct seed in cold climates, in the spring, as soon as the soil can be worked and the soil temperature is at least 45 degrees F. Kale matures quickly, in about 2 months or less, so if you prefer you can start your plants later or even plant multiple crops in succession. In warm climates, kale can be direct seeded in late summer / early fall, as well as in the spring. A winter crop of kale in warmer climates can be much sweeter than a summer crop.



# 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.

## White Vienna



### Geography/History:

Kohlrabi (White Vienna) (German turnip) (*Brassica oleracea* Gongylodes group) (Olkopi in Assamese and Bengali) is a perennial vegetable, and is a low, stout cultivar of cabbage. Kohlrabi can be eaten raw as well as cooked.

### Nutritional Value:

It is a good source of vitamin C and potassium and are low in both sodium and calories. One cup of diced and cooked kohlrabi contains 140% of the recommended daily allowance for vitamin C and only 40 calories.

Sun:	Full Sun
Spacing:	12-14"
Height:	18-24"
Optimum Soil ph:	5.8-6.5
Days to Maturity:	53-55 Days
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

This variety has a light-green skinned exterior, white interior, and is a bit smaller than the Purple Vienna Kohlrabi, but with a slightly faster growth rate.

Plant kohlrabi in rich soil about 1/4 inch deep. They love moisture once established and will benefit from an ample side dressing of compost. Continue to sow every 2-3 weeks for a continuous crop.

# 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.

## Iceberg



### Geography/History:

SALINAS, Calif. (May 24, 2007) Synonymous with growing up in America, Iceberg lettuce is, in a way, the ultimate comfort food. It's simple, reliable, and its incredible staying power has allowed it to be a cultural culinary icon for over 100 years. Even James Beard – the father of American gastronomy – was a fan, saying, “Many people damn it, but it adds good flavor and a wonderfully crisp texture to a salad.”

### Nutritional Value:

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

Sun:	Full Sun
Spacing:	14-16"
Height:	7.5-8"
Optimum Soil ph:	5.8-6.5
Days To Maturity:	55-75 Days
Sowing Method:	Start Indoors or Direct Sow Outdoors <b>Error! Bookmark not defined.</b>

### Planting/Growing Tips:

When beginning transplants, stagger the start of your seedlings to spread out the crop. For example, if you are going to grow 24 plants, sow six in the seed tray today, sow six more a week later, etc.

Transplant lettuce seedlings into the garden after all danger of frost has passed. Ideally, transplant them on a cool or cloudy day. Water well after transplanting. Space plants 12" apart in rows 18" apart.

The trick to successfully growing lettuce, is to keep it growing fast, with lots of water and fertilizer. The soil should be rich and fertile, and well-draining. Keep the soil moist. Frequent use of nitrogen rich fertilizer is recommended. The plants respond well to regular applications of liquid fertilizer.

## 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.



## Prizehead



### Geography/History:

Around 1889 in Maule's Seed catalog. It may be older, but seems to be carried by most major seed companies after this time. Prizehead produces luscious heads of green lettuce with outer leaves that are loose and curled. The inner leaves are lime green and the outer fringed leaf tips are purple to bronze. Prizehead is perfect for salads and garnishes.

### Nutritional Value:

An excellent source of Chlorophyll, Iron, Calcium, and Vitamins: A, B1, B2, C, and Niacin.

Sun:	Full Sun
Spacing:	12-18"
Height:	7.8-8.5
Optimum Soil ph:	5.6-6.0
Days To Maturity:	45-50 Days
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

The Prizehead is a fast-growing lettuce with large loose leaves. The leaves are green with a reddish tint toward the ends. The heads are hefty and have crumpled, curly leaves.

Plant Prizehead lettuce very early in the spring in a sunny location as soon as the ground may be cultivated and enriched with organic material. Press soil firmly over seeds.

Sow Prizehead seeds sparingly and repeat every two weeks as long as the weather is cool (Spring/Fall)



## Red Romaine



### Geography/History:

Finding the ancient origin of a popular food is always intriguing, especially if it leads to a new adventure in the kitchen. Take ordinary lettuce. The oldest lettuce type is the upright, long-leaved Romaine, its ancestor on full display in Egyptian bas-reliefs from the third millennium B.C. The French name Romaine, a reference to its presence in papal gardens, merely points to a step along the journey to modern times. Its other common name, cos lettuce, links it to the Greek Island of Kos. But that, too, was a way station, according to William Woys Weaver in "100 Vegetables and Where They Came From.

### 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.

# Melon

## Banana



### Geography/History:

Banana Melons were being sold in American seed catalogues as early as 1885 (by J.H. Gregory Co.)

### Nutritional Value:

Good source of Thiamin, Folate, Magnesium and Phosphorus, and a very good source of Dietary Fiber, Vitamin C, Vitamin B6.

Sun:	Full Sun
Spacing:	9-10 ft
Height:	11-14"
Optimum Soil pH:	6.1-7.5
Days To Maturity:	85-90 Days
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Select a location in full sun, with well-drained soil. Spread a 2-inch layer of compost or well-rotted manure over the planting area. Work it in as you till the soil to a depth of 6 to 8 inches.

Sow seeds when the soil has warmed to 75 degrees F and the danger of frost has passed. Mound the soil into a low, broad hill about 8 inches high, mixing in 1 to 2 tablespoons of complete fertilizer per hill. Plant three to four seeds in each hill, forming a circle with seeds about 5 inches apart. Plant the seeds an inch deep. Space the hills about 4 feet apart.

Water the melons weekly with a soaker hose. Allow the water to seep into the soil until the top 6 to 8 inches of soil are wet. Water in the morning so the foliage is wet for a limited period of time. This helps prevent leaf diseases.

Thin seedlings once they have two sets of true leaves on them. Leave two large, healthy plants in each hill and pull out the others.

Water the melons less frequently in late summer. This encourages the fruit to mature and eliminates cracking melons.

## 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 climes, 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.



## Honey Dew Green Flesh



### Geography/History:

“Honeydew” is in fact the American name for the White Antibes cultivar which has been grown for many years in southern France and Algeria. In China, honeydews are known as the Bailan melon; they are a locally famous product near Lanzhou, the capital city of Gansu province in China’s northwest. According to Chinese sources, the melons were introduced to China by a Mr. Wallace, who donated melon seeds to the locals while visiting in the 1940s (probably 1944).

### Nutritional Value:

The fruit is an excellent source of Vitamin A, (100 g provides 3382 IU or about 112% of recommended daily levels) one of the highest among fruits. Vitamin A is a powerful antioxidant and is essential for vision. It is also required for maintaining healthy mucus membranes and skin. Consumption of natural fruits rich in vitamin A is known to help to protect from lung and oral cavity cancers.

Sun:	Full Sun
Spacing:	60-72"
Height:	6-12"
Optimum Soil pH:	6.0-6.8
Days To Maturity:	75-95 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.

## Honey Rock



### Geography/History:

Honey Rock Melon produces incredibly sweet fruits that are up to six inches in diameter with a tough, coarsely netted skin. The flavorful sweet salmon colored flesh of honey Rock melon will certainly be a fantastic addition to any breakfast in bed (mmm I'm getting ideas!).

### Nutritional Value:

Honey Rock Melon is an excellent source of vitamin C. Just 100g has a whole day's supply. It is a good source of beta carotene and the deeper the orange color of its flesh, the higher the level. Beta carotene is converted to vitamin A in the body. It is a good source of potassium so it helps balance too much sodium that comes from salty foods. 100g of Rock Melon has 120kJ.

Sun	Full Sun
Spacing	36 – 48"
Height	12 – 18"
Optimum Soil Ph	6.0-6.8
Days To Maturity	74 – 88
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.

## Rocky Ford Green Flesh



### Geography/History:

Sometimes known as Eden's Gem. This melon was selected/created from the old "Netted Gem" variety and introduced in the Victorian Era. Rocky Ford has a fine-grained sweet flavored green flesh. A firm melon with a fine melting quality and choice spicy flavor. Heavily netted and slightly ribbed. Fruits average 2-3 pounds and keep for a long time. Excellent for the home gardener and market grower. Highly resistant to rust.

### Nutritional Value:

The fruits contain Vitamin C, beta-carotene, potassium, pectin and several beneficial phytochemicals, including lycopene and zeaxanthin.

Sun:	Full Sun
Spacing:	36-48"
Height:	12 – 18"
Optimum Soil pH:	6.0-7.0
Days to Maturity:	75 – 90
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.

# 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.



## Old Fashioned



### **Geography/History:**

Old Fashioned Mustard is THE mustard typically found in Southern gardens of yesteryear. It is still widely grown in the South for its reliability and great flavor. Bright green, frilled and quick growing.

### **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:	12" to 18"
Height:	24" to 27"
Optimum Soil pH:	5.5 to 6.5
Days To Maturity:	42
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.

## Southern Giant Curled



### Geography/History:

Mustard greens originated in the Himalayan region of India and have been grown and consumed for more than 5,000 years. Mustard greens are a notable vegetable in many different cuisines, ranging from Chinese to Southern American. Like turnip greens, they may have become an integral part of Southern cuisine during the times of slavery, serving as a substitute for the greens that were an essential part of Western African foodways. While India, Nepal, China and Japan are among the leading producers of mustard greens, a significant amount of mustard greens are grown in the United States as well.

### Nutritional Value:

Southern Giant has an excellent flavor packed full of vitamins A, B, and C! Slow to bolt. Typically used later in the season for its superior cold tolerance.

Sun:	Full to partial
Spacing:	6"
Height:	10" to 20"
Optimum Soil Ph:	6.0 – 7.5
Days To Maturity:	56
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.

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.



## Perkin's Long Pod



### Geography/History:

Okra is native to Northwest Africa, though some believe it was possibly in Asia or Ethiopia before that. It was being used in Egypt by the 1100s. One story has Okra being brought to America by slaves from Africa, who smuggled the seeds in their hair. Other stories have it being brought to the Southern US by French colonists in the early 1700s.

### Nutritional Value:

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

Sun:	Full
Spacing:	12"
Height:	36"-72"
Optimum Soil Ph:	6 -7.5
Days to Maturity:	55
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.

## Red Burgundy



### Geography/History:

Native to Africa, okra is a member of the Malvaceae or mallow family that includes hollyhock, cotton, rose of Sharon and hibiscus. Red or burgundy okra is a relatively new variety. In varying shades of color, okra may be chunky or slender and have ribbed or smooth surfaces.

### Nutritional Value:

Okra provides a good source of vitamin C, vitamin A, folacin and other B vitamins plus magnesium, potassium and calcium. It is fat-free, saturated-fat-free, cholesterol-free and low in calories. A substantial source of dietary fiber, okra provides over five grams per three and one-half ounce serving. The extra folate supplied by this vegetable is beneficial to pregnant women.

Sun:	Full
Spacing:	12"
Height:	36"-72"
Optimum Soil Ph:	6.0 to 6.5
Days To Maturity:	65
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.

# 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.

## Evergreen Bunching Nebuka



### Geography/History:

Onions have the distinction of being one of the oldest cultivated plants in recorded history. Although it is unclear where they originated, it is believed to have been Asia. We do know that the ancient Egyptians ate them commonly, as there is an inscription on one of the Great Pyramids stating that a sum amounting to “1600 talents” had been paid for onions, radishes and garlic to feed the workers who were building it.

### 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:	1"
Height:	10" – 14"
Optimum Soil pH:	6.0 to 7.0
Days To Maturity:	55
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Plant bunching onion seeds by sprinkling them into the furrow. Push soil over the top of the seeds so they are buried 1/4 to 1/2 inch deep. Firm the soil with your hand or the back of a hoe. Water the newly planted seeds with a hose nozzle set to a fine mist. Check the seed row daily, and mist as necessary to keep the soil moist until the seeds germinate in approximately seven to 14 days. Thin the seedlings to stand 1 inch apart when they are approximately 2 to 3 inches high. Use the thinned onion seedlings the same way you would use chives. Water the onions regularly if rainfall is scarce. Ensure they receive 1 1/2 inches of water per week.

Spray the foliage with water-soluble, all-purpose fertilizer every 10 to 14 days, beginning when the seedlings are 6 inches high. Mix the fertilizer with water, and apply it to the foliage with a hose-end sprayer. Spray the plants early in the morning so they can dry before exposure to the midday sun.



## 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.

## Yellow 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:

Onions are a good source of Dietary Fiber, Vitamin B6, Folate, Potassium and Manganese, and a very good source of Vitamin C.

Sun:	Full
Spacing:	3" 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:

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.

If you can, start preparing your onion bed in the autumn by digging in plenty of well-rotted farm manure. This will give the ground a chance to settle over the winter period and allow frosts to break down the soil clods.

# Parsley, Moss Curled



## Geography/History:

Parsley or garden parsley (*Petroselinum crispum*) is a species of *Petroselinum* in the family Apiaceae, native to the central Mediterranean region (southern Italy, Algeria, and Tunisia), naturalized elsewhere in Europe, and widely cultivated as an herb, a spice, and a vegetable. Where it grows as a biennial, in the first year, it forms a rosette of tripinnate leaves 10–25 cm long with numerous 1–3 cm leaflets, and a taproot used as a food store over the winter.

## Nutritional Value:

Parsley is one of our richest sources of vitamin C and it also contains vitamin A and minerals such as iron. These all build the immune system and two tablespoons of parsley a day (chopped, infused or added to salad) provides strong protection against colds and flu.

Sun:	Full
Spacing:	6" – 12"
Height:	12"
Optimum Soil pH:	5.5-7.0, Ideal 6.0-6.5
Days to Maturity:	80
Sowing Method:	Direct Sow Outdoors

## Planting/Growing Tips:

Sow seed from May 1st. to July 1st.; every two weeks, for a fresh supply, till the snow flies, Plant seed in rows 15 in./38 cm. apart, 1/4 in./6 mm. deep. Seed should be sown @ 5 seeds per inch or .25 mm, as parsley seed takes up to 5 or 6 weeks to sprout. Most growers mix a little radish seed with their parsley seed to prevent the ground from "crusting" and mark the rows for cultivation. Plants should be thinned to 2 – 4 in./8 – 10 cm apart, depending on type. Parsley will succeed in any type of good garden loam that does not dry out too fast or is too alkaline

# 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.



## Hollow Crown



### **Geography/History:**

When root vegetables were cultivated as much for livestock feed as human food, the parsnip was horse candy. Sweet, distinctive tasting, and nutritious, it had been standard garden fare in Europe since antiquity. When consumed by cows, as in the English Channel islands, they gave richer milk in greater quantity than any other food and butter noted for its piquant sweetness. When farmers fattened pigs or beeves for slaughter, they often fed the creatures on barrows of parsnips.

### **Nutritional Value:**

Good source of energy boosting carbohydrates. High in vitamin C and potassium.

Sun:	Full
Spacing:	3" to 5"
Height:	12" to 14"
Optimum Soil Ph:	6.05 to 6.5
Days To Maturity:	95-110
Sowing Method:	Direct Sow Outdoors

### **Planting/Growing Tips:**

Sow in shallow furrow and cover with ¼" of sifted compost or light sand. Best fall planted, but can withstand cooler summers, germination can take up to 3 weeks. Careful weeding is important because of the long germination. Needs consistent watering and loose soil. Not happy when transplanted, best direct sown.

# Pea

## Green Arrow



### Geography/History:

There are a number of theories that outline the origin of green arrow pea, but the prominent one says that the Greeks and Romans started cultivating this plant during 500 to 400 BC. Its high yielding qualities and nutritious values were not just limited to these countries, spread all over the world and became popular.

### Nutritional Value:

Green Arrow peas are rich in fiber, eight vitamins and seven minerals. The peas stay sweet for a long time and offer you with a great taste. They are resistant to fusarium, powdery mildew and other pea diseases. Also, these help in regulating lipid, protein levels and carbohydrate.

Sun:	Full
Spacing:	6"
Height:	48" – 72"
Optimum Soil Ph:	6.0 to 7.0
Days To Maturity:	65 – 70
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

To get the best head start, turn over your pea planting beds in the fall, add manure to the soil, and mulch well. As with other legumes, pea roots will fix nitrogen in the soil, making it available for other plants. Peas will appreciate a good sprinkling of wood ashes to the soil before planting. Sow seeds outdoors 4 to 6 weeks before last spring frost, when soil temperatures reach 45 degrees F. Plant 1 inch deep (deeper if soil is dry) and 2 inches apart. Get them in the ground while the soil is still cool but do not have them sit too long in wet soil. It's a delicate balance of proper timing and weather conditions.

For soil that stays wet longer, invest in raised beds. A blanket of snow won't hurt emerging pea plants, but several days with temperatures in the teens could. Be prepared to plant again. Peas are best grown in temperatures below 70 degrees F. Be sure to trellis!

## Little Marvel



### Geography/History:

Peas are a cool weather vegetable grown in the spring and fall by gardeners across the United States. In Mediterranean and other mild climates, peas are also grown in the winter. While peas generally grow outdoors, bush varieties such as “Little Marvel” (*Pisum sativum*) make interesting and fruitful potted plants for indoor or patio gardens. “Little Marvel” is an heirloom variety, grown by gardeners for the last 100 years.

### Nutritional Value:

Green garden peas are a valuable source of protein, iron and insoluble fiber. Insoluble fiber helps to reduce serum cholesterol thus reducing the risk of heart disease and stroke. Sugar snap peas and the like, contain much less protein, but they are an excellent source of iron and vitamin C that work to keep your immune system functioning properly.

Sun:	Full
Spacing:	2” to 3”
Height:	36” to 60”
Optimum Soil Ph:	6.0 to 7.08
Days To Maturity:	70
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Plant seeds 2 inches deep and keep the soil moist but not soggy while the seed is germinating. You should see sprouts in 7 to 10 days. To save space, you can plant a double row, staggering the plants with a trellis in between.

## Sugar Snap



### Geography/History:

Sugar Snap Peas are part of a family with a long and exotic history. Yet while traces of primitive pea varieties dating back to 5000BC have been found, the Sugar Snap is a relative newcomer, developed in China some thousands of years ago. It is still a popular addition to Chinese cooking today, and is widely available in Australia and many other countries.

### Nutritional Value:

1 cup or 10 raw Sugar Snap Peas equals 1 serving, and is an excellent source of vitamin C, fiber, and Potassium. Also known as “mange tout”, French for “eat the lot”, snow peas provide all the nutrition of both the pod and the pea. All that and only 90kJ per 50 g serve (20 peas/pods).

Sun:	Full to partial
Spacing:	1" to 2"
Height:	6' – 7'
Optimum Soil pH:	6.0 to 7.0
Days To Maturity:	48
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Sugar snap peas are broadly speaking a mixture of the snow pea and the English pea. They are considered relatively easy to grow and can be eaten raw straight from the garden. Sugar snap peas enjoy cool weather, which means you can plant them in early spring and late summer. You should sow the seed about an inch deep and take into account circumstances such as space for the harvest and the direction of sunlight. Sugar Snap vines are aggressive climbers, so be sure to provide trellising. Trellising need not be heavy duty, as vines and mature peas are not very heavy. If possible, you should try to sow the seed in an area that receives an adequate amount of sunlight during the day.



# Pepper

## Banana (Sweet)



### Geography/History:

Banana peppers are native to South America. They come in several different varieties ranging from mild and sweet to hot and pungent. The peppers are about four to six inches long and they resemble a banana in shape and are pale yellow-green to yellow in color becoming bright red when mature.

### Nutritional Value:

This sweet mild pepper, like all peppers sweet or hot, has a high vitamin content in a high-fiber, low-calorie package. Banana peppers are especially high in vitamin C, vitamin B6, and folate, all found to be important in heart health and associated with a reduced risk of some cancers. Even a small amount of banana pepper is a great way to get your vitamin C, essential to the health of our bones, blood vessels, tendons, and ligaments – and an important antioxidant in the fight against cancer.

Sun:	Full
Spacing:	18 to 24
Height:	18" – 24"
Optimum Soil Ph:	6.2 – 7.0
Days To Maturity:	75
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.

When the soil is consistently 60° F or more, set banana pepper transplants 12-24" apart in rows 24-36" apart in well-drained loam amended with compost. If the soil is low in magnesium, dig in a dusting of Epsom salt. Plant sweet and hot banana pepper varieties as far away from one another as possible to avoid cross-pollination.

You can expect sweet banana peppers to have a mildly tangy flavor from cross-pollination.

## 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 Annuum*, 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°.

## Cayenne – Long Red Thin



### Geography/History:

This is truly an heirloom as the Cayenne is known to be Pre-Columbian in origin. It is said to be named after the Cayenne River in French Guyana. First offered in the seed trade by Joseph Breck & Son in 1883.

### Nutritional Value:

These little hot peppers have it all: a lot of flavor, heat, and big doses of the antioxidant vitamins A and C. Vitamin A-rich foods promote lung health, and both A and C are antioxidants that neutralize free radicals in our body, important for the prevention of cancer. A phytonutrient called capsaicin, which is found in the seeds and ribs of hot peppers and is responsible for their heat, has been found to be a strong anti-inflammatory agent, helpful in digestion of fats, and effective against sinus infections.

Sun:	Full
Spacing:	12" – 18"
Height:	12" to 18"
Optimum Soil pH:	5.5 to 6.5
Days To Maturity:	70
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°.

## Cubanelle



### Geography/History:

Cubanelle is another type of sweet pepper that is a yellow/green when at its youngest and a vivid red color at its most mature. The flesh of a cubanelle can be quite thin and is a longer fruit than the bell pepper. Cubanelles are widely used in Puerto Rican recipes although it is the Dominican Republic that is currently the chief exporter of the pepper.

### Nutritional Value:

The cubanelle pepper is a sweet, mild pepper. Cubanelle peppers provide an excellent source of vitamins A & C.

Sun:	Full
Spacing:	12" – 18"
Height:	8" to 12"
Optimum Soil pH:	6 to 8.5
Days To Maturity:	70 -80
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°.



## 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°.

## Hungarian Hot Wax



### Geography/History:

The Hungarian Wax Pepper, a pod type of *Capsicum annuum*, is also known as the Yellow Wax Pepper, the Hot Hungarian Wax Pepper and the Hungarian Wax Chile Pepper. These peppers are often confused with the milder banana pepper or guero. It was sometime between 1538 and 1548 when Hungarians first began to use hot peppers in their cooking. The Hungarian Wax varieties were developed from the milder Hungarian Banana pepper. The Wax pepper was introduced into the United States and Canada from Hungary in 1932. It is presently grown all over North America and grows well in cool climates.

### Nutritional Value:

Hungarian wax pepper, 1 pepper (27g) contains

Calories: 7.8

Protein: 0.2g

Carbohydrate: 1.8g

Total Fat: 0.1g

Fiber: 0.6g

Sun:	Full
Spacing:	18"
Height:	24"
Optimum Soil pH:	5.5-7.0, Ideal 6.0-6.5.
Days to Maturity:	90-120
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°

## Serrano



### Geography/History:

The Spanish word *serrano*, which means “from the mountains”, describes the **serrano pepper’s** origin in the Mexican mountains of northern Puebla and Hidalgo. The **serrano pepper** is most commonly green, red, orange, yellow or brown in color and, at between 10,000 and 25,000 Scoville Heat Units, is about five times hotter than its lookalike, the jalapeño.

### Nutritional Value:

Good source of Vitamin E (Alpha Tocopherol), Thiamin, Riboflavin, Folate, Iron, Magnesium, Phosphorus and Copper, and a very good source of Dietary Fiber, Vitamin A, Vitamin C, Vitamin K, Niacin, Vitamin B6, Potassium and Manganese.

Sun:	Full to partial
Spacing:	18”
Height:	18” to 24”
Optimum Soil pH:	7.0 to 8.5
Days To Maturity:	60 – 110
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°.

Serrano peppers take 10-20 days to germinate and will yield green peppers in about 60 days and red pepper in 80-100 days.

# Pumpkin

## Mammoth Gold



### Geography/History:

When Pilgrims arrived in the New World one of the many interesting discoveries, they made was the Native American's use of pumpkins. It is known that American Indian tribes grew pumpkins to use as food many years before European explorers arrived. In fact, information relative to pumpkins dates back many centuries. Archaeologists in Mexico discovered pumpkin fragments that date back to 7000-5500 BC. The word pumpkin originates from the Greek word "pepon", meaning "large melon". The word "pepon" was pronounced in different languages several ways before the American colonists called it "pumpkin". Early Americans would slice off the pumpkin top, remove the seeds, fill it with milk, spices and syrup, and bake it for hours in hot ashes. Thus, we have the first version of pumpkin pie. Settlers would also dry out slices of pumpkin and store them for later when the snow was high and food was hard to find.

### Nutritional Value:

Pumpkins are a good source of nutrition. They contain Vitamin A & B and potassium.

Sun:	Full
Spacing:	48"
Height:	18" – 36"
Optimum Soil pH:	6.0 to 6.5
Days To Maturity:	110
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!



## 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

## Champion



### Geography/History:

Radishes probably originated in China. They are certainly revered and highly appreciated in the Orient, particularly in Japan where the long, white daikon radish is a major food. The ancient Greeks prized radishes above all root crops, even making replicas of them in gold. The root crop was a common food in Egypt long before the pyramids were built, and was popular in ancient Rome as well. The word "radish" is a derivation of the Latin word "radix," or root. Columbus and the early settlers brought radishes to America. Today, radishes remain a favorite crop for home gardeners because they're so easy and quick to grow.

### Nutritional Value:

Radishes are an excellent source of vitamin C, calcium, and iron.

Sun:	Full
Spacing:	1" to 3"
Height:	4" to 5"
Optimum Soil Ph:	5.8 to 6.8
Days To Maturity:	20-30
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  $\frac{1}{4}$ " 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. Nothing can be easier to grow. Consistent watering will tend to eliminate woody roots and a better tasting 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.

## China Rose



### Geography/History:

Radishes have had a long relationship with man. Southern Asia is believed to be the country of origin since truly wild forms have been found there. Middle Asia and India appear to be secondary centers where many different forms developed subsequently. Third-century B.C. Greeks wrote of their radishes, and by 100 A.D., Roman writers described small and large types, mild and biting varieties, and round and long forms. A German botanist in 1544 reported radishes of 100 pounds. Radishes appear to be one of the first European crops introduced into the Americas, closely behind the arrival of Columbus. The white daikon ("big root" in Japanese) is common in Japan, and gardeners in increasing numbers are growing it here. The daikon has a milder, sweeter flavor than ordinary radishes.

### Nutritional Value:

Radishes and radish sprouts are a very common ingredient in Chinese and Japanese cuisine, where they are eaten raw, simmered in soup, and used in sushi. They are rich in many vitamins and minerals.

Sun:	Full
Spacing:	3"
Height:	6"
Optimum Soil Ph:	5.5 to 6.8
Days To Maturity:	45
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

When preparing the soil, avoid fresh manure and organic materials or fertilizers high in nitrogen. An overly rich soil will encourage lush foliage at the expense of crisp, tasty roots. When the radish seedlings are about two inches tall, thin the plants to three-inch spacings. If not thinned, you're likely to end up with shriveled, inedible roots. Mulch the radishes with compost enriched with wood ashes. This not only keeps root maggots at bay, but also helps the soil retain moisture that could mean the difference between perfect and pitiful radishes. Water in moderation. If the soil is too dry, radishes will bolt and become pithy and too pungent to eat. If too wet, the roots will split and rot. Never let the soil dry out, but don't keep it mucky, either. Radishes are superb companion plants, particularly when used to draw aphids, flea beetles, and other pests away from peppers, squash, cukes, and other vegetables.



## Comet



### Geography/History:

A very popular market radish in the 1950's, the Comet radish has a long history, including an All-American Selections Win in 1936. Comet radish has a ruby red skin and crisp snow-white flesh, with a globed and almost perfectly round shape, making it a popular super market variety for years. Comet radish is early at 25 days and many enjoy its crunchy flesh earlier at only 3/4" to 1" in diameter. One of the few radishes that can be grown in hot weather and still develop to size Comet fills the bill; the roots are globe to olive-shaped, small tap-roots, bright scarlet and for eating and keeping qualities it is surpassed by none; it will remain crisp and solid for a long time."

### Nutritional Value:

Radish sprouts are a very common ingredient in Chinese and Japanese cuisine, where they are eaten raw, simmered in soup, and used in sushi. They are rich in many vitamins and minerals.

Sun:	Full
Spacing:	1" – 3"
Height:	1" – 3"
Optimum Soil Ph:	5.5 to 6.8
Days To Maturity:	25
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. Nothing can be easier to grow. Consistent watering will tend to eliminate woody roots and a better tasting 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 anthocyanins, 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.

## White Icicle



### Geography/History:

Also known as an Oriental radish and Chinese radish, the icicle variety is a type of Daikon root vegetable believed to have originated in the Mediterranean region. Sometime around 500 B.C. it was taken to China where it was cultivated. Today Daikon is produced in Japan on a large scale. Requiring plenty of moisture to assure crisp texture and good flavor, icicle radishes mature in about 27 days after planting from seed.

### Nutritional Value:

Low in calories, a three-ounce serving contains about 18 calories. A source of vitamin C, icicle radishes contain active enzymes that aid digestion. The nutritious leaves are rich in vitamin C, beta carotene, calcium and iron.

Sun:	Full
Spacing:	2" – 3"
Height:	8" - 12"
Optimum Soil Ph:	5.5 to 6.8
Days To Maturity:	25
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

When preparing the soil, avoid fresh manure and organic materials or fertilizers high in nitrogen. An overly rich soil will encourage lush foliage at the expense of crisp, tasty roots. When the radish seedlings are about two inches tall, thin the plants to three-inch spacing. If not thinned, you're likely to end up with shriveled, inedible roots. Mulch the radishes with compost enriched with wood ashes.

This not only keeps root maggots at bay, but also helps the soil retain moisture that could mean the difference between perfect and pitiful radishes. Water in moderation. If the soil is too dry, radishes will bolt and become pithy and too pungent to eat. If too wet, the roots will split and rot. Never let the soil dry out, but don't keep it mucky, either. Radishes are superb companion plants, particularly when used to draw aphids, flea beetles, and other pests away from peppers, squash, cukes, and other vegetables.

# 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.



# Salsify, Mammoth Sandwich Island



## Geography/History:

Salsify is a root vegetable native to the Mediterranean region of Europe, where it has been cultivated and used in food for centuries. This plant has also been widely introduced to other regions of the world, although it is primarily popular in Europe. Some specialty markets carry salsify, especially in the fall, when it is in season, and it can also be grown in a home garden, for people who live between USDA zones six and 10.

Formally, this plant is known as *Tragopogon porrifolius*, and it also goes by Purple Goatsbeard and Oyster Plant. It has blade-like leaves and slender stalks which produce distinctive purple flowers in the second year of growth. In addition to the root, the greens and stalks are also edible. Salsify root has a slightly oyster like flavor, explaining one of its common names, and the greens and stalks are mildly sweet.

There are a number of uses for salsify. Young roots can be grated and served on salads, while older roots need to be cooked to soften. The roots can be added to soups and stews, peeled and mashed, or used in root vegetable gratins. The greens can be used raw or cooked in salads and other dishes, while the stalks benefit from a light steaming or quick roasting, much like asparagus.

## Nutritional Value:

The root contains vitamin C, folate, manganese, potassium and lots of fiber.

Sun:	Full
Spacing:	4" – 6"
Height:	24" – 36"
Optimum Soil Ph:	6 to 6.8
Days To Maturity:	120
Sowing Method:	Direct Sow Outdoors

## Planting/Growing Tips:

The roots of Mammoth Sandwich Island Salsify are about 8 to 9 inches long and tapered. The white flesh of these roots is great for use in soups when peeled and boiled and have a flavor similar to oysters, thus this variety is sometimes called vegetable oyster. A good keeper that can be overwintered! Average water needs. Direct sow outside in early spring. Can be fall planted. Plant 2" apart and 1/2" below soil surface. Can sow closer and thin later. Plant Height: 24 to 36 inches.

# Savory, Summer



## **Geography/History:**

Savory species are native to the Mediterranean region and have been used to enhance the flavor of food for over 2,000 years. During Caesar's reign, it is believed that the Romans introduced savory to England, where it quickly became popular both as a medicine and a cooking herb. The Saxons named it savory for its spicy, pungent taste. According to some sources, it was not actually cultivated until the ninth century.

## **Nutritional Value:**

The Savory herb has many minerals and vitamins which make it an excellent herb to use for medicinal purposes. The shoots and leaves of this herb are a rich source of zinc, magnesium, calcium, iron, potassium, manganese, and selenium. The vitamins that this herb contains include Vitamin A, Vitamin B-complex group vitamins, Vitamin C, pyridoxine, niacin and thiamin. It is a well-known fact that the intake of Vitamin C helps to build up one's resistance while Vitamin A is an antioxidant and also helps to maintain one's vision. One Tablespoon, about 4.4 grams of dry savory will provide you with the following vitamins and minerals:

12 calories; 3 grams carbohydrates; ; 0.3 grams protein; 0.3 grams fat; 2 grams fiber; 93.7 milligrams calcium (9 percent DV); 1.6 milligrams iron (9 percent DV); 0.1 milligrams vitamin B6 (5 percent DV); 16.6 milligrams magnesium (4 percent DV); 2.2 milligrams vitamin C (3 percent DV)

Sun:	Full
Spacing:	8" – 12"
Height:	12" – 18"
Optimum Soil pH:	6.7 – 7.3
Days To Maturity:	60
Sowing Method:	Direct Sow Outdoors

## **Planting/Growing Tips:**

Winter Savory is stunning in front of the perennial border. It will thrive in your garden even when the temperature dips to minus 18 degrees. It grows to a height of 15 inches. Summer savory will depart as soon as there is frost in the air. Or you can grow summer savory or lemon savory (a summer variety) in a hanging basket or pot so it can trail over the side inside by a sunny kitchen window.

# 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.



## Noble Giant



### Geography/History:

The Giant Noble is an inbreeding result of a monoecious plant found in the Gaudry variety. It was released by Zwaan and Van der Molen of Voorburg, Netherlands in 1926.

### Nutritional Value:

A good source of Chlorophyll, Iron, and Vitamin: C

Sun:	Full to partial
Spacing:	12"
Height:	12" – 18"
Optimum Soil Ph:	6 to 6.5
Days To Maturity:	48
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

## Blue Hubbard



### Geography/History:

An extensive group, Hubbards are a very old type of winter squash and are members of the *Curcubita maxima* genus. The original variety of this well-known and popular squash is thought to be native to South America or the West Indies.

### Nutritional Value:

All squashes provide vitamin A and vitamin C, some of the B vitamins, iron and are a good source of riboflavin and dietary fiber. Deep-colored squashes have the most beta carotene. About 100 calories are in one cup of cooked squash.

Sun:	Full
Spacing:	4" – 6"
Height:	12" – 18"
Optimum Soil Ph:	5.5 to 6.8
Days To Maturity:	110
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Squash grow best in warm soil. Winter squash seed should be sown up to 15 weeks before the first expected fall frost (Example: plant in June for September harvest). Sow seeds 2 weeks after the last expected spring frost, or when soil temperatures reach 60° F (16° C). In short-season climates, start seeds indoors in individual containers 2 to 3 weeks before planting, and plant in soil that has been prewarmed with black plastic for a week or two. When the soil is warm enough, remove the black plastic and plant seedlings.

Plant seeds 1 to 2 inches (2.5 to 5 cm) deep, in pre-dampened hills, for bushy cultivars: plant 3 to 4 plants per hill, in hills 18 to 24 inches (45 to 60 cm) apart. For vining types: plant 3 to 4 plants per hill, in hills up to 5 feet (1.5 m) apart. You can use the same spacing when planting out seedlings or transplants.

## Cocozelle



### Geography/History:

For well over 100 years, gardeners have been enjoying the super-tender, delectable flavor of this Italian heirloom. An open-pollinated summer squash that may be picked young or allowed to mature to full size, this zucchini is everyone's favorite for rich, satisfying flavor.

Perfect for small-space gardens, this bush-form plant takes off early and begins setting fruit abundantly. Dark green with lighter green stripes, the little zukes look as good as they taste, and you can begin harvesting them at just an inch or so long for baby squash. You never tasted such succulence!

### Nutritional Value:

An excellent source of vitamin A, vitamin C, vitamin K, folate, manganese, and potassium.

Sun:	Full
Spacing:	24" – 36"
Height:	18" – 24"
Optimum Soil Ph:	5.6 to 7.5
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 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 summer squash continually in order to keep the plant producing.

## 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.

## Early White Bush



### Geography/History:

First documentation we can find is a reference 1835 in New York where scallop white bush is said to be en vogue at the time and popular in the New York Markets. Later it is mentioned by B.K. Bliss and son of New York in 1870. Flying saucer shaped fruits look like they will soon spin right out of your garden. Kids love the look of these great little squashes and makes it easier to get them to eat them. Scallop early white bush is born on productive bushes that bear all summer long if picked. Easy to grow and unbothered by most insects. Creamy, tasty texture makes these little squashes great for many dishes.

### Nutritional Value:

Pattypan squash is low in saturated fat and sodium and contains no cholesterol. It provides an excellent source of vitamins and minerals. One cup of cooked pattypan squash provides 38 calories and 43 percent of your daily value of Vitamin C, 13 percent of your daily value of folate, and substantial amounts of vitamin B6, magnesium, potassium and Vitamin A. Additionally, one serving of pattypan squash provides 5g of fiber.

Sun:	Full
Spacing:	24" – 36"
Height:	24" – 36"
Optimum Soil Ph:	5.6 to 7.5
Days To Maturity:	46
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. Harvest these summer squash continually in order to keep the plant producing.



## Table King (Bush)



### Geography/History:

Table King Bush Acorn Squash was developed by the University of Connecticut, Storrs campus, from Royal Acorn squash and another one referred to as “Uconn” squash.

### Nutritional Value:

Table King squash is a good source of vitamin C, vitamin B6, and manganese. It is a fair source of niacin, pantothenic acid, and potassium.

Sun:	Full
Spacing:	24" – 36"
Height:	10" – 12"
Optimum Soil pH:	5.5 to 6.8
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 heirloom 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.

## 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.

## Vegetable Spaghetti



### Geography/History:

The word “squash” is of Native American Indian origin. And the squash plant is generally known to be native to North and Central America from ancient times (along with maize and beans). So, it is entirely reasonable for most people to think that spaghetti squash originated in North America. However, it was actually developed in Manchuria, China during the 1890’s. We are not sure when or how squash was first introduced to China.

### Nutritional Value:

One of the reasons for the popularity of squash is its nutritional makeup. One cup of the vegetable has: Only 42 calories, making it attractive to those watching their calories (just watch the butter or sauce). Only 10 grams of carbohydrates (and complex carbs at that), making it attractive to those on low carb or low glycemic index diets. 0 grams fat or cholesterol, making it attractive to those watching their cholesterol. Only 28 mg of sodium, making it attractive to those watching their sodium intake. Vitamins A, B1, B2, B3, B5, B6, C, potassium, and trace amounts of zinc, phosphorus, iron, calcium, magnesium, and copper—things everybody needs.

Sun:	Full
Spacing:	4’ – 6’
Height:	18” – 24”
Optimum Soil Ph:	5.5 to 7.0
Days To Maturity:	90 – 100
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Spaghetti squash are relatively easy to grow, thriving in gardens or in containers. The plants are monotonous, with male and female flowers on the same plant. Male flowers have long, thin stems that extend upwards from the vine. Female flowers are shorter, with a small round growth underneath the petals. This round growth turns into the squash if the flower is successfully pollinated. Spaghetti squash plants may cross-pollinate with zucchini plants.

## Waltham Butternut



### **Geography/History:**

It is the most popular variety among other butternut squashes and originates from Waltham Massachusetts and was developed by Robert E. Young at the Waltham Experiment Station.

### **Nutritional Value:**

Waltham Butternut Squash is sweet and rich in taste. It is good for health especially for the adolescents. It is rich in vitamin A and also vitamin B-complex. It also has proteins and minerals and is undoubtedly beneficial.

Sun:	Full
Spacing:	3' – 4"
Height:	12" – 18"
Optimum Soil Ph:	5.5 to 7.5
Days To Maturity:	95
Sowing Method:	Direct Sow Outdoors

### **Planting/Growing Tips:**

Germination temperature: 60 F to 105 F – Will not germinate in cold soil. Wait to plant until soil reaches at least 65 F — preferably 70 F or more. Germinates best at 95 F. Days to emergence: 5 to 10 – Should germinate in less than a week with soil temperature of 70 F and adequate moisture.



## 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.

## Zucchini – Golden



### Geography/History:

When European explorers came to the Americas, squash was one of the 3 major foods the native Indians used, along with beans and corn. They had never seen them before so they thought they were melons. Squash seeds have been found in Archeological digs in Mexico, that date back to between 9000 and 4000 B.C. Columbus brought squash seeds back to Europe in his explorations.

### Nutritional Value:

Zucchini is low in calories and has lots of vitamins. It is considered a great food for a diet because it is a “Filling Food” and for the amount of calories, about 17 per 100g or 4 ounces, it creates a feeling of being full. Most of the vitamins are in the peel, which is also a good source of fiber. Zucchini is a great source of potassium and B vitamins. The golden zucchini is a great source of beta carotene. The flexibility of the zucchini lends itself well if you are vegetarian or on a diet as you can use it for so many things.

Sun:	Full
Spacing:	2' – 3'
Height:	12" – 18"
Optimum Soil Ph:	5.5 to 6.8
Days To Maturity:	41
Sowing Method:	Direct Sow Outdoors

### Planting/Growing Tips:

Start seeds indoors 2 to 4 weeks before last spring frost in peat pots. Do not seed or transplant seeds outside until the soil temperature is 55 to 60° F for successful germination. Usually, you can seed any time from one week after the last spring frost to midsummer. You may be able to have two crops per season if you time it right. The outside planting site needs to receive full sun; the soil should be moist and well-drained, but not soggy. Work compost or aged manure into the soil before planting for a rich soil base. To germinate outside, use cloche or frame protection in cold climates for the first few weeks. When you transplant, take care not to damage the root ball. Plant seeds one inch deep and 2 to 3 feet apart. Most summer squashes now come in bush varieties, but winter squash is a vine plant and needs more space. They will need to be thinned in early stages of development.

# Swiss Chard

Ford Hook



## Geography/History:

We've become accustomed to thinking about vegetables as great sources of phytonutrients. Indeed they are! But we don't always appreciate how unique each vegetable can be in terms of its phytonutrient content. Recent research has shown that chard leaves contain at least 13 different polyphenol antioxidants, including kaempferol, the cardio protective flavonoid that's also found in broccoli, kale, strawberries, and other foods.

## Nutritional Value:

Swiss chard, which is also known as white beet, strawberry spinach, seakale beet, leaf beet, Sicilian beet, spinach beet, Chilean beet, Roman kale, perpetual spinach, silverbeet and mangold (and that's just in English!) is bursting with nutrients, including vitamins K, A, C and E, plus several B vitamins, magnesium, manganese, potassium, iron and dietary fiber.

Sun:	Full
Spacing:	8"
Height:	10" – 12"
Optimum Soil Ph:	6.5 to 6.8
Days To Maturity:	50 – 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.

## Large White Ribbed



### Geography/History:

Heirloom chard is a leafy vegetable that makes a good alternative to spinach. Growing heirloom chard can be easier than growing spinach as it is better able to withstand higher/lower temperatures and droughts. As well as its value as a food crop Swiss Chard also has a very striking value as an ornamental plant and many times it appears in a garden's ornamental borders or ornamental pots.

### Nutritional Value:

Swiss chard stalks are particularly rich in provitamin A or beta-carotene: this *vitamin* is essential for the skin, tissue and vision. It is an excellent source of magnesium and iron, two nutrients often lacking in the diets of women and children.

Sun:	Full
Spacing:	8"
Height:	12" – 18"
Optimum Soil Ph:	6 – 6.4
Days To Maturity:	68
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.



## 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. Betalin 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

Ace 55



## Geography/History:

Developed by Campbell soup Co. Large red fruit, semi-globe medium firm with thick walls and very good interior color; uniform ripening. Vine medium large and very productive. Low in acid and may be eaten by many persons who cannot use ordinary sorts. Adapted for Western areas and should not be used in other sections without trial.

## Nutritional Value:

The red tomato is listed on most nutritional lists as a super food. 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:	36" – 48"
Optimum Soil Ph:	5 to 6
Days To Maturity:	75
Sowing Method:	Start Indoors
Type -	Determinate

## 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.



## 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.



## Cal Ace VF



### Geography/History:

An improved version of Ace that tends to be a bit earlier, has thicker walls, disease resistance and set well in warm weather. The fruits are oblate-shaped, smooth skinned, ripen uniformly and are meaty and sweet. A good tomato for home garden and fresh market sales.

### 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.

Sun:	Full
Spacing:	24" – 36"
Height:	36" – 40"
Optimum Soil Ph:	5 to 6
Days To Maturity:	75
Sowing Method:	Start Indoors
Type:	Determinate

### Planting/Growing Tips:

Tomatoes can be grown easily in patio containers. Be sure to offer a large enough pot, and place it in a full-sun location. Support plants with stakes or cages to ensure proper fruiting. Be sure to monitor water, as containers dry out more quickly than plants in the ground.

Plant tomatoes in the ground 24 to 36 in. (60 to 90 cm) apart in rows. Each row should be spaced 48 inches apart. It's very tempting to put them closer at planting time, but if you get them too close you'll only increase the chance of disease. Use slow-release fertilizer at planting time.

## Floradade



### Geography/History:

This tomato was made for the South and thrives there. Floradade's ability to withstand 90-100°F 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.

## Golden Jubilee



### Geography/History:

“Jubilee – Breeder and vendor: W. Atlee Burpee Co., Philadelphia. Parentage: six-generation selection from Tangerine x Rutgers cross. Characteristics: large orange tomato with very meaty interiors and mild flavor, deep globe-shaped fruit. Similar: Sunray. Adaptation: wide, except in northernmost portions. Burpee Catalog 1943.”

### Nutritional Value:

Yellow tomatoes have valuable amounts of beta-carotene, the pigment that gives orange and yellow tomatoes their color and helps neutralize free radicals that may damage our cells. Besides a good dose of vitamin C, yellow tomatoes have more niacin and folate than other tomatoes and offer a good level of potassium, important for regulating blood pressure, nerve function, and muscle control.

Sun:	Full
Spacing:	36"
Height:	24" – 36"
Optimum Soil pH:	5 to 6
Days To Maturity:	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. 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.

## Homestead 24



### Geography/History:

A hot-weather variety, the Homestead 24 tomato was introduced to the marketplace in 1953 and was grown commercially throughout Florida in the 1950s and 1960s. According to the University of Florida Extension, Florida's tomato crops suffered from a major bout of fusarium wilt in the late 1960s and Homestead 24 and other susceptible varieties were replaced by Walter, which is resistant. Homestead 24 fruit weighs up to 8 ounces and has smooth red skin. These tomatoes are ready to harvest in 80 days.

### 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:	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.



## Manalucie



### Geography/History:

Developed by breeder J.W. Walter, the Manalucie tomato was introduced to the marketplace in 1953. According to the University of Florida Extension, it was a key achievement in tomato breeding, as Manalucie is resistant to most common diseases but still produces high-quality fruit. Fruit is round and red and is heat tolerant, making it a good choice for Southern gardens. Manalucie tomatoes should be ready to harvest in 82 days.

### 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.

Sun:	Full
Spacing:	36"
Height:	24" – 36"
Optimum Soil pH:	5 to 6
Days To Maturity:	82
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.

## Marglobe Improved



### Geography/History:

Marglobe yields tasty, smooth, firm tomatoes on determinate vines. An open-pollinated heirloom that was released by the US Department of Agriculture in 1925, Marglobe has been in demand for generations, and it has served as a parent for many hybrids developed in the twentieth century. Plants in Alabama test gardens, where growing conditions are excellent, bear about 50 pounds of fruit each over a two-month harvest period. Stake or cage for best results.

### 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.

Sun:	Full
Spacing:	36"
Height:	24" – 36"
Optimum Soil Ph:	5 to 6
Days To Maturity:	77
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.

## 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.

## Roma



### Geography/History:

Prized for its use in tomato paste and sauces since its introduction in 1955, Roma produces a large harvest of thick-walled, meaty, bright red, egg-shaped tomatoes about 3 inches long and with few seeds. This tomato is not juicy. This is not a slicing tomato. Instead, the flesh is thick and drier so that it will cook down into a thick sauce. Cooking intensifies flavor, too. If you can, tomatoes make your own spaghetti sauce, or like to chop a tomato into an omelet, this is a great choice.

### 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.

Sun:	Full
Spacing:	36"
Height:	24" – 36"
Optimum Soil Ph:	5 to 6
Days To Maturity:	73 – 80
Sowing Method:	Start Indoors
Type:	Determinate

### 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.



## Rutgers



### Geography/History:

Heirloom. An old favorite, Rutgers is proven to be highly productive. The large, red fruits have a thick flesh with superior flavor. Strong determinate vines yield a large initial crop followed by several flushes of fruit. This is one of those classic tomatoes that has been used as a parent in the breeding of many other hybrids. Seldom has problems with cracking. Resistant to verticillium wilt (V), fusarium wilt (F), and alternaria stem canker (A).

### 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.

## Yellow Pear



### Geography/History:

Long, indeterminate vines produce a seemingly endless supply of mild flavored, pear-shaped tomatoes all summer. The tiny tomatoes are borne in clusters. This is one of the prettiest tomatoes in the garden. It's beautiful in a salad. Bears dependably through summer weather. Vines can grow 8 feet or longer, so give them a tall support or place to ramble.

### Nutritional Value:

Yellow tomatoes have valuable amounts of beta-carotene, the pigment that gives orange and yellow tomatoes their color and helps neutralize free radicals that may damage our cells. Besides a good dose of vitamin C, yellow tomatoes have more niacin and folate than other tomatoes and offer a good level of potassium, important for regulating blood pressure, nerve function, and muscle control.

Sun:	Full
Spacing:	36"
Height:	6' – 12'
Optimum Soil Ph:	4 to 5
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.

# Turnip

## Purple Top White Globe



### Geography/History:

Purple top 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.

## Seven Top



### Geography/History:

Turnip greens are extremely easy to grow, especially in fall. As nights get longer and cooler, turnip greens become crisper and sweeter. Best of all, a new flush of tender leaves will grow after each picking, with plants remaining productive at least until the first hard freeze, and sometimes beyond. They also grow in spring, but plant them early. Lengthening days trigger turnip plants to produce flowers and seeds instead of new leaves. Also, a few days of hot sun can make the greens taste strong and bitter in regions where spring gets hot quickly.

Our pots of turnip greens are thickly sown expressly for greens, although if given the space, plants would also produce turnip roots. We sow them with the greens in mind, but if you harvest your plants by pulling and thinning, you may find some turnip roots in the garden, too, albeit not of prize quality.

### Nutritional Value:

Seven Top turnips are known not for their roots, but for their succulent, tender and high-quality greens. Amazing flavor is packed in these leafy greens that are loaded with vitamins A, B, and C.

Sun:	Full
Spacing:	4" – 6"
Height:	4" – 25"
Optimum Soil pH:	6 to 6.5
Days To Maturity:	44
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.



## 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.

## White Egg



### Geography/History:

Boston seedsman John B. Russell sold seed in 1828 for a turnip called Swan's Egg, which appears to be the immediate predecessor of White Egg. In fact, based on old descriptions, the two are essentially the same. It is a fall variety that remained popular throughout the nineteenth century because of its keeping qualities. True to its name, the turnip is both egg shaped and white, generally about the size of a goose egg. The flesh is snowy white, tender, and very juicy, since there seems to be a higher water content in this turnip than in many other varieties. The flavor is somewhat sweet, and so mild that the turnip can be eaten raw, at least when fresh from the garden. In storage, the flavor intensifies. It has been said that voles destroy the best things first, and something about this turnip makes it extremely attractive to them. Voles will seek it out even when other turnip varieties are nearby. Their fondness for this one may be turned to the gardener's advantage, since the culls make excellent bait for vole traps.

### 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:	14" – 22"
Optimum Soil pH:	6.5 to 7
Days To Maturity:	45 -55
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.

## Charleston Grey



### Geography/History:

The classic oblong watermelon, Charleston Gray has red, fiberless flesh and a tough, medium-thick gray-green rind often used for making watermelon rind pickles. At one time this was the predominant watermelon in home gardens and markets. The seed we use to grow our Charleston Gray watermelon plants originated in 1954 at the USDA Southern Vegetable Breeders Lab in Charleston, South Carolina. It is not a seedless variety. Grow this one for seed spitting contests! Give vines plenty of room to run.

### 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:	36" – 60"
Height:	6" – 12"
Optimum Soil pH:	6 to 7
Days To Maturity:	87
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.



## Congo



### Geography/History:

The rind is tough, medium green with darker stripes, cylindrical in shape with blunt ends. Can reach twelve inches by twenty-five inches and up to fifty pounds. Does extremely well in Southeastern U.S. and has a medium red colored flesh with very high sugar content and white seeds. Bred by the USDA.

### 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:	36" – 60"
Height:	6" – 12"
Optimum Soil pH:	6 to 7
Days To Maturity:	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.

## 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.)

## Sugar Baby



### Geography/History:

This small, round melon is called an icebox type because it is petite enough to fit in the refrigerator. This widely adapted heirloom variety is solid, dark green on the outside with a bright red, firm and fine-grained flesh that is super sweet. Watermelon contains high levels of healthy antioxidants, making Sugar Baby a great sweet way to pack in good nutrition. Vines are compact.

### 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:	4'
Height:	15" – 24"
Optimum Soil pH:	6 to 7
Days To Maturity:	78
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.

## Tendersweet Orange



### Geography/History:

Orange Tendersweet is a very well-known variety of orange fleshed watermelon. Tendersweet Orange Watermelon features a juicy, bright orange flesh with white seeds. Features a very tender flesh. The rinds are stronger than in OrangeGlo Watermelons.

### 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:	4'
Height:	6" – 12"
Optimum Soil pH:	6 to 7
Days To Maturity:	90
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. Because we want to get an early start, we normally plant watermelon seed in four-inch containers inside a greenhouse.

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.



# Yarrow, White



## Geography/History:

Also known as Western Yarrow, the Latin *Mille* means “1000” and *folium* means “leaf”, referring to the numerous leaf segments. An aggressive white flower well adapted in all climates. It is hearty and survives well during drought conditions and prefers prairies, sagebrush plains, open woods, roadsides, and partially disturbed areas. It offers fair forage value for sheep and deer but is unpalatable to cattle. It grows from the semi-desert zone up to the subalpine zone. Adapted to a broad range of soils, but does best on sandy and gravelly loam.

## Nutritional Value:

This perennial wild edible tastes bitter but after all, bitter is generally better for your health. Yarrow contains many vitamins and minerals, and is used in the treatment of a wide range of disorders. Yarrow is particularly valuable for stopping the flow of blood, treating colds, fevers, treating wounds, kidney diseases, menstrual pain, and much more. It also contains the anti-inflammatory agent azulene, though the content of this varies even between plants in the same habitat.

Sun:	Full
Spacing:	18" – 24"
Height:	10" – 36"
Optimum Soil pH:	6 to 6.5
Days To Maturity:	55
Sowing Method:	Start Indoors

## Planting/Growing Tips:

Plant in spring, spacing plants 1 to 2 feet apart. 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. Dig a hole twice the diameter of the pot the plant is in. Carefully remove the plant from its container and place it in the hole so the top of the root ball is level with the soil surface. Carefully fill in around the root ball and firm the soil gently.

Water thoroughly.

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