W.H.PERRON

GROWING PLANTS

FROM SEED

Version 2020

Top quality seeds

Buy small quantities at a time, to avoid having to store them. Seeds should be kept dry and cool, to ensure good germination at planting time.

After Seeding

Put any surplus seed in its pouch, fold the rim two or three times and seal the pouch with duct tape. You can evaluate that the annual seeds of all kinds will be good three years.
Of course, they must be kept in good conditions, i.e., sheltered from air, light, moisture, etc. Metal boxes are great for storing open seed packets. On the other hand, they should not be placed in balsa boxes or other agglomerated wood because they are treated and this can greatly reduce the germination capacity of the seeds.

Tip: Place the pouch in a glass jar. Prepare a small bag of powdered skimmed milk with a corner of the envelope and place it in the jar, then seal the jar. Powdered milk has the ability to absorb any excess moisture that could shorten the life of your seeds. Subsequently, it is sufficient to replace powdered milk once a year.
Finally, **put the jar in the refrigerator**. You have just created a small seed-holding device that is very easy to make and still very efficient.
Or put **a bag of silica**. They are usually found in shoe boxes or in electronic packaging.

HOME GERMINATION TEST

You have seeds from previous years. To find out if they are still good, take a germination test.

You will only need

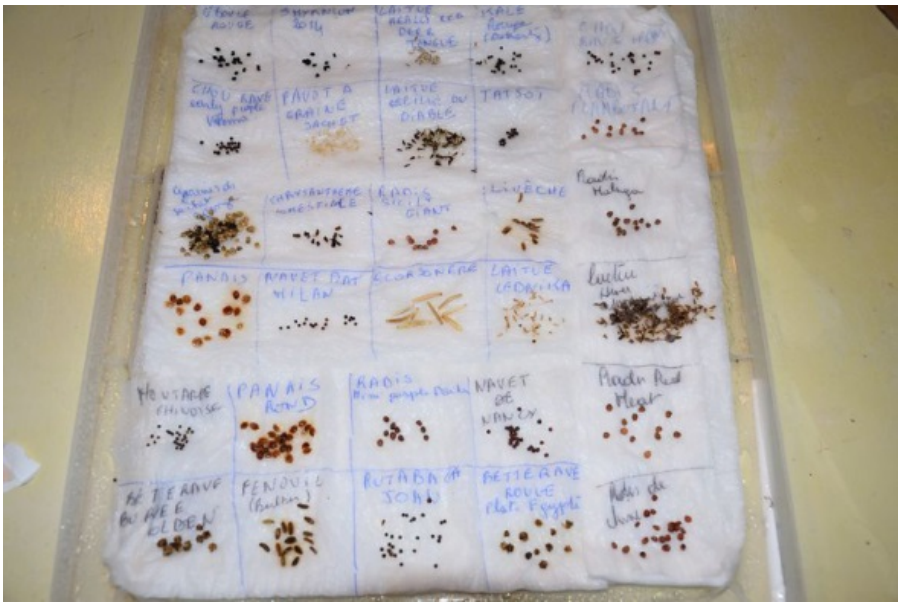
- paper towels or cotton pads to remove makeup;
- a sprayer with water;
- seeds;
- a sufficiently bright and heated room.

Once you have everything you need to carry, you can get to the heart of the matter.

- Start by soaking water (without soaking) your sheets of paper towels or cotton to be removed.
- Place them on a dish or any other flat container then place your seeds, making sure to write down their name.
- You just have to cover with a second sheet of absorbent paper.

To be able to get an idea of the viability of your seeds, test on at least 6 seeds of each variety. In this way, you can deduce that:

- if 6 seeds/6 germinate: it's perfect, your seeds are viable! ;
- if 3 seeds/6 germinate (germination rate of 50%): you will then have to do double sowing to obtain the desired number of plants for the season;
- if fewer than 3 seeds/6 germinate: it is advisable to buy new seeds.



Disease-free growing environment

In clean and shallow containers (5 cm/2") that drain well, use artificial soil. It contains peat moss, vermiculite and sand, is light and retains dampness.

A seed flat with divisions reduces the risk of contamination.

Use peat pots or Jiffy pellets for larger seeds or for seedlings that do not tolerate transplanting.

Apply a fungicide on the soil before sowing, in order to prevent the seedlings from damping off.

Temperature and dampness

For fast and regular germination, cover flat with a plastic dome that will provide higher temperature and dampness.

Remove the dome as soon as seedlings emerge.

Move to a sunny, well-ventilated area where the temperature is 20–22 °C.

Light

Light is essential as soon as seedlings emerge. A shortage of light will produce weak plants.

Twelve to 14 hours of artificial light is beneficial every day, even before the seedlings emerge. Use fluorescent lights and keep them at a distance of 10–15 cm (4–6") from the seedlings.

The three essential: light—watering—fertilization

Plants that need light to germinate

- **Annuals:** Ageratum—Antirrhinum (snapdragon)—Begonia—Coleus—Coreopsis—Flowering kale— Helichrysum— Impatiens— Matthiola—Nicotiana—Petunia—Salvia—Tithonia
- **Vegetables:** celery—chicory—lettuce
- **Herbs:** Dill—Savory
- **Perennials:** Achillea—Alyssum montanum—Arabis— Campanula—Chrysanthemum—Doronicum— Gaillardia—Lychnis— Papaver orientale —Platycodon grandiflorus— Primula

THE DAMPING-OFF OF SEEDLINGS

The damping-off of seedlings is caused either by different species of fungi present in the soil and also the growing region.
In Quebec, damping-off of seedlings is often due to Pythium fungi such as Pythium debaryanum, P.irregulare, and P.ultimum, resulting in Pythian rot. Damping-off can also be caused by the bacteria Rhizoctonia solani or the common rhizoctonia.

TWO TYPES OF DAMPING-OFF

1. Root rot **before** germination**:** the seeds rot before germination or the seedlings die before lifting.
2. Root rot **after** germination**:** rotting of stem and roots tissues at the soil surface.

Seedling damping-off is often observed in cold and wet soil, in open-field or breeding ground. Stagnant humidity is also a factor that will help develop the disease.

This disease will attack seedlings and can appear soon after planting or at the plantlet stage. The tomato, for example, will no longer be at risk after the 2 or 3 leaves stage.

SYMPTOMS

When seedlings seem to be growing healthy one day and dying the next, it is probably being caused by damping off. Damping off can affect the stems of seedlings both below the soil line and above.

- Some seedlings may start to grow and suddenly whither.
- Others will have stems that appear pinched or broken, causing them to collapse while they still have their cotyledons attached.
- You may see some gradual discolouring or it may happen very suddenly. Often it appears the seedling has been pinched off at the soil line.
- Seedlings with root rot can appear to be wilting, even when kept watered.
- Even poor germination may be attributable to damping off.

If your seedlings were growing along fine and suddenly wilt and die, it's a good bet they have succumbed to some form of damping off disease.

*** All means of controlling seedling damping are preventive, rather than curative.**

PREVENTION

- Use a sterile potting mix, rather than soil from your garden. The fungi and moulds that cause damping off can live in the soil and outdoor garden soil can harbour all kinds of fungus spores.
- Start with clean pots. Even the small amount of soil clinging to plant pots is enough to provide a safe harbour for fungal spores. If reusing pots, sterilize in 1 part bleach to 9 parts water.
- Plant your seeds at the proper depth so they don't have to work so hard to germinate. Don't bury the plant's crown.
- Don't crowd your seedlings. Be sure to leave room between them for air circulation. Fungal diseases and mould favour damp conditions.
- Water seedlings from the bottom, by placing the container in a tray of water. This keeps the seedling itself dry and less susceptible.
- Add a thin coating of sand or gravel on top of the potting soil, to keep the surface relatively dry. The soil underneath will remain moist, even if the sand or gravel dries out.
- Don't overwater your seedlings or leave them sitting in water. Drain off any excess.
- If possible, create a breeze by placing a small fan nearby and turning it on periodically each day. This will prevent humidity from settling on your seedlings.
- Give your seedlings plenty of heat and light, so they germinate and grow quickly. Damping off only affects seedlings. If you can get them past the seedling stage, they're safe.

PREVENTION TIPS

* Sterilization

Sterilization of the soil (potting soil) is a sure way to control the disease, however, as it is always to be started again; it is not a long-term solution.

But that is recommended if you reuse the soil from other seedlings or a plant.

Put potting soil in a glass or metal dish, no more than 10 cm thick at a time.
Cover with aluminum foil.
Heat in the oven for 30 minutes at 80 ° C-95 °C.

* Disinfection of tools and containers

A. Boil tools and containers in water at 70 °C for 30 minutes.
Or
B. Bathe them in a solution comprising one (1) part of household bleach for nine (9) parts of water.

* Make your own organic fungicide

You can't use any of these homemade concoctions as prevention. They will not cure damping off once it has started, but they will give you to prevent it from taking hold.

* Chamomile tea

Put 50 g of dried chamomile flowers in boiling water and leave to infuse for 24 hours.

Use
Water and mist your seedlings. Chamomile can be used for prevention, but also after the appearance of the first symptoms to stop the development of the disease. It is not worth saving excessively weakened plants.

* Garlic tea

1. Finely chop 100 g of garlic
2. Place garlic in one (1) litre container with a lid.
3. Cover with boiling water and close.
4. Then place in a warm or sunny place for three days.

Use
Water, the soil with the garlic tea at the time of sowing and each time it is watered. Avoid overwatering.

* Horsetail decoction

1. Dip dried horsetail, 50 g/litre of water and leave to macerate for 24 hours.
2. Boil everything for 20 minutes, cover and let cool.

Use

Put the seed in the horsetail decoction for 10 to 15 minutes.
Dry the seed out of direct sunlight.
Sow the seeds within the next two days.
Water, the seedlings during germination with the decoction.
Spray the decoction of horsetail on the ground.

* Horseradish extracts

1. Finely chop and place in a blender 100 g of horseradish leaves and roots.
2. Put in a litre of water and let stand 24 hours.
3. Extract the liquid using a fine cloth while pressing.

Use

Put 10 drops of extract in one (1) litre of water and stir for 15 minutes.
Deposit the seed in the decoction from 10 minutes to 15 minutes.
Then dry out of direct sunlight.
Sow the seeds within the next two days.

* Broad-leaved dock (Rumex obtusifolius)

1. Harvest flowers that have just hatched.
2. Cut, moisten and pass them through the blender.
3. Extract the liquid using a fine cloth while pressing.

Use

Put 10 drops of extract in one litre of water and stir for 15 minutes.
Put the seed in the decoction from 10 minutes to 15 minutes.
Dry out of direct sunlight.
Sow the seeds within the next 2 days.

Steps to follow

1. Filling the seed flat

Dampen artificial soil before filling.
Fill the seed flat and tamp soil lightly, to level the surface.

2. Seedlings

Large seeds often benefit from soaking in water for several hours or until swollen. Spread seeds with a mini seeder or the seed packet. Very tiny seeds must not be covered.

Cover other seeds with soil or vermiculite at about twice the thickness of the seed.

Label, indicating packet number and sowing date.

3. Germination

Check our web site for germination period.

Cover with a plastic dome and place at a warm temperature (on top of the refrigerator) or under artificial light.

Remove the dome as soon as seedlings emerge and move to a sunny, well-ventilated area.

4. Transplanting

Seedlings are ready for transplantation when 2 pairs of true leaves are formed. At this stage, the plant shows 2 leaves, as well as cotyledons.

Transplant the seedlings in a K804 flat.

Transplant the seedlings of tomato, pepper and eggplant into 8–10 cm (4") biodegradable peat pots.

Handle small seedlings by their leaves because small thin stems break easily.

Pack soil lightly around the plants and water.

Keep the newly transplanted seedlings in the shade for a few days.

5. Growing

Maintain temperature around 22 °C during the day and 18 °C at night. Water and fertilize with (20-20-20) fertilizer.

Allow surface to dry between waterings, because a damp soil produces disease.

Some plants, such as geraniums, will have to be transplanted to larger pots before setting out in the garden.

Before transplanting in the garden, gradually put the plants in cooler temperatures.

When moving plants outdoors, keep them in the shade and gradually move them into sunlight for short periods each day.

Gradually increase the length of exposure.

If possible, transplant on cool cloudy days.

What a pleasure to watch a seed grow and become a beautiful, healthy plant. Many gardeners prefer making their own seedlings indoors during the winter and early spring.

Some species need light to germinate well, others need darkness, but for many, light has no importance.

But one thing applies to every plant: they all need a lot of light to grow. Artificial light is the ideal solution to grow young plants indoors.

It's not expensive and you can place it anywhere you want, even in places with no windows.

Advantages of artificial light

During the winter, sunlight is not sufficient for good plant growth. The addition of artificial light:

- Improves plant quality
- Improves blooming of many plants which tend to stay dormant if light is low
- Helps many seeds to germinate
- Allows you to grow a larger selection of plants indoors

Best sources of artificial light for plants

Jump Start Table Grow Light: The Jump Start light system is ideal for seedlings or cutting, flowers, herbs and houseplants. The super-efficient T-5 fluorescent light makes the plants grow faster by providing 15 to 20% more lumen than traditional grow lights. It features a simple toggle clamp for easy light adjustment and the fixture has an integral reflective finish that directs more light to plants.

T-5 Lightning kit: Considered a revolution for horticulture, T-5 fluorescents let you enjoy gardening every day of the year! Start your vegetables and flowers from seed or grow herbs for the kitchen, or even exotic plants. These fluorescent bulbs produce a full spectrum of light, using 20% less electricity than old-type fluorescents. The light is also brighter (equivalent to 6400 Kelvin degree).

Mini Sunburst HPS 150 W: This compact easy to use light fixtures will work great for any gardener. The high intensity bulb provides the output and colour spectrum required for successful indoor gardening. Grow herbs, flowers or fresh vegetables all year, not just in summer. Includes an ON/OFF switch, a steel powder coated housing, a ballast, a 7 ft. Grounded power cord, chromed wire mounting hangers, a mogul and a bulb.

Mini greenhouse kit: This mini greenhouse makes propagation easy. It includes everything you need to start flower or vegetable seedlings, propagate fresh cuttings, or grow fresh herbs right in your kitchen all year long. Includes instructions and: 1 “SunBlaster™ Nano Dome”, a unique H pattern enabling you to lay your lighting across the dome. One “SunBlaster™ 18” T5HO lamp for indoor growing. One Nanotech Reflector that snaps into place, between the lamp and the ballast on the SunBlaster™ T5HO lamp. One “SunBlaster™ 1020 tray”, twice as thick as standard trays, ensuring good durability to last season after season.

Grow Light Garden: **The Grow Light Garden is the perfect tool for those who like to grow shoots, fresh greens or to start seedlings indoors!** The compact size and shape of this garden unit is ideal for a table or kitchen countertop. The sturdy recycled plastic base acts as a water tank. In its tray, an absorbent cloth covered stand draws the water up to the seedlings by capillarity. It includes four (4) reusable segmented trays for planting. Also, two (2) SunBlaster 6400 Kelvin T5HO fluorescent tubes are inserted in the curved reflective hood, flooding the growing area in full spectrum light. This system uses 20% less electricity than a traditional lighting system. The hood’s height is adjustable so, once the seedlings sprout, you can lower it to about 10 cm (4 in) from the top of the plants allowing them to grow bushy, strong, and compact.

HOW TO INSTALL ARTIFICIAL LIGHTS

With a photometer, you can determine if natural light is sufficient or not.

Special fixtures with reflectors are more efficient.

Twelve to 16 hours of light is needed every day to maintain active plant growth. Use a timer to keep even light periods.

Light intensity decreases rapidly as the light source is moved away. The best distance between light and a plant is about 30 cm (12”) but for seed germination, it’s 15 cm (6”).

FERTILIZERS

A fertilizer product, or fertilizer, is a substance, or a mixture of substances, natural or of synthetic origin, used in horticulture, to improve the grounds, in particular their structure, and to fertilize the cultivated plants.

Kick Start is formulated for seedlings and rooted cuttings. It contains nutrients and micro elements essential for the vigorous growth of seedlings, protecting them from diseases caused by deficiencies. It is suitable for soil or hydroponic cultures.

Sea Magic organic fertilizer : Made from seaweed that comes from the cold waters of the Canadian North Atlantic Coast (Ascophyllum nodosum). “Sea Magic” is a powder concentrate that you dilute in 4 litres of water to produce a liquid concentrate. You will then mix this concentrate with water, as needed, to produce 200 litres of liquid seaweed fertilizer. “Sea Magic” promises to give you a better yield, tastier fruits and vegetables, fewer insects and diseases, and several other advantages.

On the Go fertilizer: Layer hen manure has been recognized for centuries as one of the best natural fertilizers for the garden. Approved for organic agriculture by Ecocert Canada This new fast-acting fine sprinkle-on fertilizer is highly effective and easy to use.
Available for flower plants 4-3-7 and for vegetables 4-2-8

SOIL AMENDMENTS

An amendment is a material made to improve the quality of the soil. Amendments are therefore used for gardening to improve the soil and make it more productive. One of the best known amendments is lime, which is used to reduce the acidity of soils.

Soil Activator: it’s composed of a unique blend of microorganisms naturally found in the soil. They help increase yield by improving the availability of the soil’s nutrients. It will allow for better assimilation and availability of nutrients as well as improving water retention in the soil. Apply preferably at the time of seeding or planting. Organic certified by Ecocert Canada.

Soil Moist Granules: Decrease the need to water your plants by 50%! “Soil Moist” crystals, when mixed in with the soil, act as water reservoirs releasing the water to plants as required. These little crystals store up to 200 times their weight in water and help to maintain vigorous plants even in dry periods. Nontoxic, safe and economical to use.

Mycorrhizae : The mycorrhiza fungi have always existed. However, in soils disturbed by human activity, the quantity of these falls drastically, where the importance to reincorporate them at the plantation state. The mycorrhizae live in symbiosis with the plant, they form a network of filaments connected to the roots which allow them to draw the less accessible nutrients. This will promote growth and also make the plant less susceptible to soil pathogens and other environmental stresses such as drought and salinity.

Sowing guide of annuals flowers

Indoor sowing month
Garden direct seeding
Transplant in the garden
Flowering
Vegetative mode of grasses
Grass flowering

Common name	Jan.	Feb.	Mars	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Germination days	Soil T °C
Begonia													14-21	14-21
Datura													30	25
Dracena													40	21
Hollyhock													10	20
Angelica													4-5	23
Asarina													10-15	20
Bunny Tail													15	12-15
Canna													14-21	24
Cape Daisy													7-10	20
Cuphea													5-6	21-24
Gaura													5-6	21
Geranium													11	23
Grass													21	18-20
Impatiens N.G.													15	24
Juncus													14	18-24
Laurentia													14-21	18-20
Pampas Grass													10	14-20
Ptilotus													7	24-26
Statice													8	21
Vinca													18	26
Calamintha													10-28	20
Ageratum													12	22-24
Anise Hyssop													7-14	18-20
Bacopa													3-5	20-23
Ballon Vine													13	20
Black-eyed Susan													8	22
Calibrachoa													7-10	22-24

Common name	Jan.	Feb.	Mars	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Germination days	Soil T °C
Cerinthe													7-14	15
Cloud grass													14-21	18-20
Coleus													11	22
Cosmos													6	24
Craspedia													14	20
Diascia													7	18-21
Dicondra													4-7	22-24
Euphorbia													6	18-22
Flowering tobacco													10-20	21
Héliotrope													17	19
Hibiscus													7-10	20-24
Lavender													10	15-18
Lobelia													18	24
Love in a mist													8-15	19
Melinis													7	22-25
Mimulus													18	20
Pansy													10-20	17
Passion flower													30-60	20
Pennisetum													14-21	22-25
Petunia													10	24
Pink													5-21	21
Poppy-California													12	16
Purslane													9	22
Rice													15-21	20-24
Salpiglossis													14	20-24
Salvia													13	24
Sweet William													10	16
Tree mallow													15-20	22
Verbena													3	25
Viola													18	17
Wild dagga													14-21	18-20
Cosmidium													10-14	20-25
Melampodium													7-15	18
Mexican sunflower													20	20

Common name	Jan.	Feb.	Mars	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Germination days	Soil T °C
Acroclinium													14-20	20
Alyssum													12	25
Aster													9	21
Baby's breath													13	23
Blanket flower													19	15
Bidens													10	20
Brachycome													10-18	21
Calandria													10-15	15
Calendula													10-14	21
Calfornia blue belles													12-30	18
Chrysanthemum													8-20	20
Cleome													10-14	20
Climber Nasturtium													13	22
Cockscomb													10-15	25
Corncokle													14	18
Cornflower													8-14	17
Dahlia													14	25
Gazania													12	21
Globe amaranth													10-15	25
Hypoestes													7	22
Impatiens													8-16	21
Kochia													10	19
Larkspur													25	12
Love lies bleeding													15	24
Mariglod													8	22
Nasturtium													10-15	15
Némophila													14	20
Nicandre													14-20	20
Phlox													12	15
Snapdragon													12	21
Stock													8	20
Strawflower													7-14	22
Rudbeckie													17	17
Tickseed													14-21	15-18
Zinnia													7	25

Common name	Jan.	Feb.	Mars	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Germination days	Soil T °C
Flax													15-18	14-21
Ornemental corn													6-10	22-25
Castor bean													17	19
Dolique													7	22
Flowering kale													10	25
Four o'clock													10	20
Kale and Palm													10	25
Morning glory													13	22
Ornemental Millet													3-5	22-25
Pennisetum													3-5	22-25
Poppy													14	15
Sunflower													10	17
Cat grass													7-10	18
Eucalyptus													14-30	22

	Indoor sowing month
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Sowing guide of Biennials and Perennials flowers

Flowering month

Common name	Zone	Germination (days)	Germination T °C	Flowering year	Growth T °C	May	June	July	Aug.	Sep.	Oct.	Comments
Achillea	2	7-14	20-24	1	16		✿	✿	✿	✿		
Aquilegia	3	14-30	30 J / 21 N	2	10	✿	✿					Slow and irregular germination.
Arenaria	3	10-14	18-20	1	15-18	✿	✿	✿				
Asclepiad	3	21-24	21-28	1	18		✿	✿	✿	✿		Slow and irregular germination.
Baby's breath	4	7-10	21	2	10		✿	✿	✿			
Beebalm	4	14-21	18-21	1	16			✿	✿	✿		
Blanket flower	3	5-15	20-24	1	10		✿	✿	✿	✿		
Candytuft	3	16-20	16-18	2	10	✿	✿					
Calamintha	5	10-28	20	1	18-20			✿	✿			
Campanula	3	14-21	18-21	2	13-15		✿	✿				
Cardinal flower	4	17	21	1	21		✿	✿	✿			Sow in may.
Chinese lantern	3	14	18-24	1	18							Need constant warm temperature.
Chrysanthemum	3	10-14	18-20	2	15-18		✿	✿	✿			
Cinquefoil	4	7-14	20	2	18-20			✿	✿			Sow in may.
Clover	2	15	18	1-2	18			✿	✿			
Coneflower	4-5	5-10	15-18	2	13-16		✿	✿				
Delphinium	3-4	14-18	18-24	1	15-18		✿	✿	✿	✿		
Gentian	5	15	15	2	15			✿	✿			Sow in may.
Heliomeris	5	20	18-20	1	18-20				✿	✿		Flower within 12 weeks from sowing.
Lavender	5	21-28	18-21	2			✿	✿	✿			If no germination occurs after 3 weeks, a cooling period of 2 weeks at 5 °C is recommended.
Lupine	3	16-20	21-25	1	10		✿	✿				
Maltese cross	3	14-21	21 J / 16 N	1	14-21			✿	✿			
Mexican hat	3	10-20	20-21	1	20-25			✿	✿	✿		
Must Mallow	3	5	22	1	10		✿	✿	✿	✿		Sow in may.

Common name	Zone	Germination (days)	Germination T °C	Flowering year	Growth T °C	May	June	July	Aug.	Sep.	Oct.	Comments
Penstemon	4	14-28	16-18	1	10		✿	✿	✿			Slow and irregular germination
Perovskia	4	5-7	20-22	1	20			✿	✿	✿		
Poppy-oriental	3	7-14	18-24	2	10-13	✿	✿					
Primerose	4-5	21-28	15-18	2	7-10	✿						
Red hot poker	5	21-28	18-24	1	20			✿	✿	✿		Sow in may.
Rose Mallow	5	3-5	18-25	1	21-30				✿	✿		Need constant warm temperature (21-30 day et 18-21 night).
Rudbeckia	3	7-14	21	2	10			✿	✿	✿		
Sage ornamental	4	12-15	21	2	21		✿	✿	✿			
Sneezeweed	3	14-20	18-22	1	15-18				✿	✿		
Stonecrop	3	14-30	21-25	2	21-25			✿	✿			Do not cover the seeds.
Sweet pea	3	14-21	18-21	1	10			✿	✿	✿		
Thyme	3	3-6	21	2	14			✿	✿			

Vegetables

ARTICHOKE

Artichoke is a tender perennial grown as an annual.

CULTURAL PRACTICES: Sow in 8 cm peat pots. Harden off in May. Transplant it, in the ground, 4 to 6 cm deep, when all danger of frost has passed. Mulch heavily.

HARVEST: Harvest buds once they are large and swollen, but before flowers appear. The central bud usually ripens first, followed by the smaller ones that form on the lateral shoots.

ASPARAGUS

Asparagus is a perennial plant whose parts are edible.

CULTURAL PRACTICES: Soak the seeds in water 48 hours before planting. The first year, sow seeds directly in the garden between mid-May and late May.

SPACING: The first year, space on the row is 10 cm and space between the rows is 45 cm. The second year, harvest the claws and place them to their final location, space on the row is 45 cm and space between rows is 1.25 m.

GROWING TIPS: For best result, keep the soil moist and exempt of weeds.

HARVEST: You will begin your harvest in the third year. Thisplant has a life expectancy of 8–20 years.

BEANS

CULTURAL PRACTICES: Sow when all danger of frost has passed, as the seed is tender. Start around mid-May until the end of July. SOIL: Beans require a soil temperature of at least 18 °C but no more than 24 °C. Poor germination will occur if planted too early or if the soil is too wet.

SOIL: The beans prefer a light, well-drained soil.

BROAD BEAN

SPACING: Sow seeds 5 cm deep, in rows 75 cm to 90 cm apart, leaving 20 cm to 30 cm between plants.

HARVEST: The beans should be picked when they have the appearance of being swollen. Beans are used for soups or various hot dishes.

BUSH BEAN

SPACING: Space seeds 5 to 8 cm apart in rows 50 cm apart. Sow every two weeks until July for a continuous harvest.

HARVEST: Do not allow over-maturing. Beans should feel firm and crisp. Pick regularly to encourage the production of new pods. Do not pick beans after a rain or in the early morning as this may cause diseases.

POLE BEANS

SPACING: Pole beans are grown on stakes, fences or trellises and can reach 3 m. in height. They are perfect for gardeners who have limited space as they are great savers of space. Plant in our gardens 2.5 m to 3 m. long stakes, 1 m. apart. Sow 5 to 8 seeds so as to leave only 4 plants per stake after thinning. On a trellis, clear plants to 15 cm apart.

GROWING TIPS: They need water in dry weather or when the plant in full sun. Keep weeds under control.

HARVEST: Do not allow over-maturing. Beans should feel firm and crisp. Pick regularly to encourage the production of new pods. Do not pick beans after a rain or in the early morning as this may cause diseases.

SHELL BEAN

CULTURAL PRACTICES: A true gourmet item! Grow like a bush snap bean. These beans are picked when plants are very dry and beans sound in the pods. Dry beans are used for soups or baked beans. Those beans are great for winter use, as they are easy to freeze or to can.

SPACING: Space seeds 5 to 8 cm apart in rows 50 cm apart.

HARVEST: Harvest them regularly to encourage the production of new pods. Do not pick them after a rain or early morning, this would cause diseases.

BEET

CULTURAL PRACTICES: Sow seeds directly in the garden from May to the beginning of July, mid-June for a full harvest. The beets will have a better taste when they grow quickly and steadily.

SOIL: Light and slightly sandy soil with a pH of6.0 or higher. The soil should be free of stones and clumps to allow the proper development of the root system. Work the soil thoroughly with compost or manure.

SPACING: Sow 1 cm deep. Clear plants 8 cm apart on rows spaced at least 30–40 cm apart.

GROWING TIPS: Heavy rains after a long period of dry weather will result in poor root colour. These drought periods will also cause tough or woody roots. Keep the beets well watered. A full sun exposure is ideal.

HARVEST: Beets are tender as soon as they reach half their size, but harden when larger. When the plants are young, the leaves make delicious greens.

BROCCOLI AND BROCCOLI MINI

CULTURAL PRACTICES: Can be started indoors four to five weeks before the last frost or sown directly in the garden at the beginning of May. It is essential to rotate your crops to prevent diseases.

SOIL: Prepare the garden soil. It should be loose and hold moisture well. Uses the same type of soil, as cabbage but requires more watering because of its rapid development.

SPACING: When transplanting or clearing, leave 30 cm to 45 cm between the plants and 45 cm to 60 cm between the rows, depending on the chosen types.

GROWING TIPS: Use a nitrogen fertilizer. Keep well watered.

HARVEST: Heads should be firm and tight. At this point, cut down on the stalk to encourage side shoots of smaller heads for an extended harvest.

BRUSSELS SPROUTS

CULTURAL PRACTICES: The Brussels sprouts can be started indoors four to five weeks before the last frost or sown directly in the garden at the beginning of May. It is essential to rotate your crops to prevent diseases.

SOIL: The Brussels sprouts prefer a loose, well-prepared soil that retains moisture well. It is recommended to use a fertilizer that includes nitrogen and maintain good watering.

SPACING: When transplanting or clearing, leave 30 cm to 45 cm between the plants and 45 cm to 60 cm between the rows, depending on the chosen types.

GROWING TIPS: To help the development of the upper shoots, pinch the end of the plant at the end of summer.

HARVEST: Pick sprouts from bottom of the stalk when they reach 2.5–3 cm in diameter. Flavour is enhanced when subjected to light frost.

BUNCHING ONION

CULTURAL PRACTICES: Sow indoors in early April or directly in the garden as soon as the soil is well worked.

SOIL: They require a rich and fertile soil (mineral or organic soil). Keep the soil moist but not wet.

SPACING: Spacing between rows is 35 cm to 38 cm. In order to obtain bigger bulbs, thin the plants to 3 m to 5 cm. The removed plants are delicious in salads.

GROWING TIPS: It is recommended to add a fertilizer at the beginning of cultivation and again when the bulbs begin to swell.

HARVEST: Harvest after 5 to 6 weeks, the green onion stems will measure 15 cm to 20 cm and will be ready to be eaten. Harvest them by pulling the stems to tear off the entire plant.

CABBAGE—FALL, SUMMER AND WINTER

CULTURAL PRACTICES: For the cultivation of cabbages, it is important to carry out a good rotation of the crops. It is recommended to wait three years before planting the cabbage in the same plot. Sow it in the ground at the end of May or, sow it inside four to five weeks before the last frost. If the seedlings are hardened before transplanting, they may endure a slight frost.

SOIL: Cabbage requires a fertile, irrigated soil rich in humus with a pH of 6.0 to 6.5. It needs moisture, especially after transplanting or in dry weather. Place it in direct sunlight or light shade.

SPACING: Sow seeds 6 mm deep and as thinly as possible. Thin the seedlings to 30 to 45 cm apart, in rows 61 cm apart.

HARVEST: Better conservation if harvested towards the end of October, or just prior to a major frost. Harvest when the heads are firm. It recommended storing winter cabbage in a cold storage room.

CABBAGE—ORIENTAL

This oriental variety has the texture and appearance of spinach. Plants reach 10 cm to 25 cm in height. It's a variety of deep green colour, very rich in vitamins. Their leaves are thick oval to elongate. Varieties offered have a compact to ultra-compact rapid growth habit. There are ideal for limited spaces. The leaves and stems are edible. Can be steamed or cooked in a wok. They enhance the quality of your meals.

CULTURAL PRACTICES: Sow it in early May or July, because before that time, to avoid a run-up.

SOIL: Sow in rich soil. They are a low-demanding culture.

SPACING: Space at 15 cm to 20 cm in all directions after full-plant growth.

CABBAGE—SAVOY AND KALE

CULTURAL PRACTICES: Sow them early in spring or in June or July. In order to prevent diseases, do not plant them where cruciferous have been grown for the last two years.

SOIL: Prefer a soil with a pH of 6.5 and which retains moisture well. Mature after about 60 days. Their growth is rapid in cool weather.

SPACING: Plant them at a depth of 6 mm and spaced 2.5 cm apart. Seedlings should be thinned to 50 cm.

CANTALOUPE AND HONEYDEW

CULTURAL PRACTICES: Start seeds indoors in early spring. After about six weeks and when all risk of frost has passed, the seedlings should be hardened off and planted in the garden.

SOIL: Melons need a well-drained, fertile soil with a pH of 6.5 to 7, high humus content and a high level of nitrogen.

SPACING: Plant each seedling in slight mounds spaced one metre apart with one metre to 1.5 m between rows. Make sure to protect young plants from wind and cold weather with cloches or plastic tunnels until they are well established.

GROWING TIPS: Soil should be rich in organic matter and kept moist. Choose a warm site in full sun. Pinch end of stems for faster ripening.

HARVEST: Cantaloupe and muskmelon are sweet smelling when mature and fruit stalks crack.

CAULIFLOWER

CULTURAL PRACTICES: Cauliflower does very well in cool weather and it will be affected by the weather more than other vegetables. Sow in a greenhouse from February 1st to mid-March for early crops. In this case, seedlings will need to be hardened off. Or you can also sow directly in the garden as soon as the soil can be worked. For fall crops, sow the seeds outdoors between the beginning and the middle of June.

SOIL: Fertile soil with an abundant supply of moisture.

SPACING: Sow the seeds thinly about 6 mm to 13 mm deep. When the seedlings are about 10 cm high, thin them out to 45 cm to 50 cm apart in rows of 60 cm to 90 cm apart.

GROWING TIPS: Apply boron, as a foliage spray, on small plants. Plants require moisture and full sun with light shade.

HARVEST: To prevent sunburn on the plant, tie the leaves over the centre of the head. Pick when firm and the size are as required.

CARROT

CULTURAL PRACTICES: Sow at the beginning of May for an early crop, in mid-June for a fall crop and even at the beginning of July for young, tender carrots at the end of the season.

SOIL: Carrots prefer fairly rich, deeply worked, stone-free soil with even moisture. Shorter varieties are suitable for shallow or heavy soil; the longer types need deeper soil.

SPACING: Sow 6 mm deep, in rows 40 cm apart. Space carrots to 5 cm. Sow seeds thinly, cover with soil. Hill the soil well up around the plants to prevent burning of the plants.

GROWING TIPS: Keep soil moist for good formation of the root. They prefer full sun or light shade. Light feeders. Hoe the soil over any exposed root crowns to prevent greening.

HARVEST: Root shapes may vary significantly under different environments and growing conditions. Lift carrots when their size is in accordance to the variety and when they have a good orange colour. Baby carrots should be picked at the young stage or they will continue to grow. You can keep the carrots in cool storage for a few months.

CELERIAC

CULTURAL PRACTICES: plant in early March in a light, sandy soil, covering the seeds with 3 mm of soil. There will be germination after 3 weeks at a temperature of 17 ° C. Transplant into individual pots when plants are 2.5 cm tall.

SOIL: rich in organic matter. A lack of boron will cause rot in the center of the fruit and empty roots.

SPACING: towards the end of May, place the plants in the garden in rich soil, at a distance of 20 cm to 30 cm between the plants in rows spaced at least 60 cm apart.

HARVEST: harvest when the diameter has reached at least 10 cm to 15 cm. It keeps well in the winter, in a cool basement.

CELERY

CULTURAL PRACTICES: Sow it inside in early March in a light-sandy soil, covering the seeds with 3 mm of soil. There will be germination after 3 weeks at a temperature of 18 ° C. Transplant into individual pots when the plant is 2.5 cm tall.

SOIL: Rich in organic matter.

SPACING: Towards the end of May, place in the garden in rich soil, at a distance of 20 cm to 30 cm between the plants in rows spaced at least 60 cm apart.

GROWING TIPS: Be sure to mulch, to reduce weed growth and maintain moisture, but ensure that the soil is not permanently wet.

CORN SALAD

Corn salad is an easy growing salad, which requires little space and is accessible to all, even if you have a balcony or terrace.

CULTURAL PRACTICES: Sow early in spring directly to the garden. Its germination is slow. Successive seeding is recommended.

SPACING: Sow only 1 cm deep, thin 5 cm to 10 cm while leaving the small rosettes formed by the dark green leaves intact to reach maturity.

HARVEST: Harvest at 6 cm high, without separating the leaves. When harvesting, it is useless to tear off the root as it is full of soil, cut just above it. By leaving the roots, you should have a second crop. It is essential to harvest before the corn salad flower.

CRESS

CULTURAL PRACTICES: It is recommended to plant every 10 to 14 days, both indoors and outdoors. It is planted in the ground from April to September.

SOIL: It requires a very moist soil, rich in humus and a place in the shade.

HARVEST: It is best to harvest it at the 3–4 leaf stage.

CUCUMBER AND PICKLING CUCUMBER

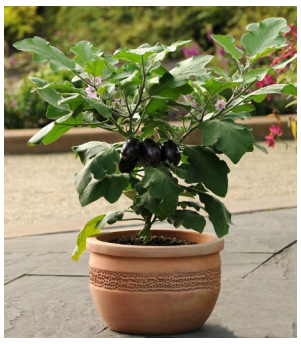
CULTURAL PRACTICES: There are climbing plants that are cultivated, of course, a trellis if you have a restricted space or on the ground if you desire a straighter fruit. Plant at least 3 weeks before transplanting to the garden. Use “Jiffy” jars to reduce shock from transplanting. When sowing directly in the garden, the soil temperature should be around 16 ° C and when there is no danger of frost on the ground.

SOIL: Cucumbers and pickling cucumber require light, well-drained soil.

CULTIVATION TIPS: Place 5 to 6 seeds in mounds in full sun and spaces 1.5 m to 3 m in all directions. Before transplanting, thoroughly water the soil. It is advisable to use a black mulch to protect the seeds and increase the soil temperature.

HARVEST: Table cucumbers are harvested at 15 cm–20 cm in length and pickles at 2.5 cm–7 cm.

EGGPLANT



CULTURAL PRACTICES: Eggplant grows like tomatoes. Sowing within 8 to 12 weeks before the last spring frost, germination will occur after 3 weeks at 24 ° C. Transplants 6 to 8 weeks later in individual pots. In May, the seedlings should be hardened, gradually reducing the temperature without falling below 15 ° C.

SOIL: Plant them in the garden in June, in a rich and warm soil.

SPACING: Spacing the 60 cm plants in rows distant 80 cm to have an ideal flavour harvested before internal seeds develop.

GREENHOUSE VEGETABLES

CUCUMBER

The European type doesn't require pollination. The plants are completely gynoic (100% female flowers) and parthenocarpic (fruit development without pollination). They do not grow outdoors and must be isolated from any source of foreign pollination that can be brought by other plants or insects from outside (pollination would cause a deformity of the fruit).

CULTURAL PRACTICES: Seed individually in peat pots. After 4 to 5 weeks, transplant the plants in place.

SPACING: At a distance of 60 cm in rows spaced 1.5 m to 2 m apart.

CULTURAL TIPS: The size allows a normal development of the fruits.

EGGPLANT

CULTURAL PRACTICES: Start them indoors, then transplant in the greenhouse 6 to 8 weeks later. Germination is slow (up to 3 weeks) and warm temperatures (24^{o} C) are needed. Seedlings should be hardened off, though not at a temperature below 15^{o} C.

SPACING: Space the plants 61 cm apart, in rows 80 cm apart, in warm and rich soil.

HARVEST: The best tasting fruits are obtained by harvesting them before the seeds inside are fully developed.

PEPPER

CULTURAL PRACTICES: Sow indoors. Transplant them into Jiffy jars to begin hardening at a temperature of 21º C.

SOIL: Medium in depth, fertile, well drained with a medium level of nitrogen.

SPACING: Sow approximately 30–45 cm apart in rows spaced 60 cm apart.

GROWING TIPS: Tuck the plants. Water them regularly. Once a month, add a well-balanced fertilizer.

HARVEST: Peppers can be harvested when green or left to turn red or yellow. Cut the stem about 2.5 cm from the fruit. Keep in a cool place when picked.

TOMATO

Tomato varieties recommended for growing in greenhouses are resistant to a greater number of diseases. They are all indeterminate growth. Tasty tomatoes can be harvested almost year-round. Those varieties are specifically developed for greenhouse or tunnel cultivation in the garden.

In the greenhouse, start planting in mid-January for a spring harvest and/or mid-June for an autumn harvest.

GROUND CHERRY

CULTURAL PRACTICES: Sow indoors under grow lights, approximately 6 to 8 weeks before last frost in your region. Harden off before planting outdoors. Grow best at 21–24°C or higher.

SOIL: Prepare the ground by working in plenty of well-rotted manure or compost at least 30 cm deep. Apply a general fertilizer before planting.

SPACING: Set out 45 to 60 cm apart in rows 90 cm apart. The indeterminate types need 38 cm to 45 cm between plants in rows spaced 45 cm to 50 cm apart and they need a stake.

GROWING TIPS: They tolerate a wide range of fertile and well-drained soils. They require even moisture. Be careful, however, not to overwater as this will reduce their flavour. Grow in a warm, sunny spot.

HARVEST: Pick fruits as they ripen. Before frost, pull the plants up by the roots and hang them upside down indoors to help the fruits ripen.

HOT PEPPER

CULTURAL PRACTICES: Plant seedlings indoors in March in a light potting soil. Transplant them in containers when seedlings have two pairs of true leaves. Plant them to the garden, in full sun, as soon as the risk of frost on the ground has passed.

SOIL: Moderately deep, fertile, well-drained soil with medium nitrogen levels.

SPACING: Sow approximately 30–45 cm apart in rows 60 cm apart. GROWING TIPS: Stake for the cultivars over 60 cm tall.

GROWING TIPS: They need water regularly during the flowering period. Fertilize once a month with a fertilizer rich in potassium.

HARVEST: Peppers are best harvested when green; others may be left to turn red or yellow. Cut the stalk about 2.5 cm from the fruit. Once picked, keep the fruit in a cool area.

ITALIAN CHICORY

CULTURAL PRACTICES: resistant to cold, it can be planted as soon as the soil is working. For early harvest, sow in warm or cold layers and transplant directly in May. The germination will be faster and more uniform if the temperature is between 10 and 15 ° C.

SOIL: Rich, well-drained soil is ideal for growing.

SPACING: For main harvest, sow in open ground in rows spaced 40 cm to 45 cm apart. Depending on the variety, leave 20–25 cm between plants.

GROWING TIPS: The addition of decomposed manure, compost or a fertilizer with a high level of nitrogen is beneficial. They require full sun and constant moisture. Mulching to reduce weeds and maintain soil moisture.

HARVEST: Harvest when firms and preferably early in the morning.

KOHLRABI

CULTURAL PRACTICES: Plant early in spring.

SOIL: in rich soil with a pH of about 6.5.

SPACING: Plant them at a depth of 1 cm, space the rows 30 cm - 45 cm and thin the seedlings to 13 cm.

HARVEST: harvest young (diameter 5 cm).

LEEK

CULTURAL PRACTICES: The leek has a slow vegetative development. Sow it in the early March to thin out too dense seedlings. When the leek seedling foliage reaches 6–8 cm in length, cut the ends so that the plants grow.

SOIL: Very rich, very deep, well exposed to the sun.

SPACING: Transplant them to the garden as soon as the soil permits (12 ° C), spacing them 10–15 cm and 25 cm between rows.

GROWING TIPS: Weed and bump your rows regularly to get a long white barrel.

Tip: Dig a trench into the ground. In this trench, dig a hole about ten centimetres deep with a planter to deposit the leek, and form in another right next to thus plug the first. Water the groove very copiously. Bury leeks as they grow.

OKRA

CULTURAL PRACTICES: Plant okra seeds in the garden after the last frost in warm soil. To facilitate germination, soak seeds in water a few hours before planting.

SOIL: Rich in organic matter, drained and deep.

SPACING: Transplant out of the wind, after the last frost, spacing the plants at least 50 cm away from all sides.

HARVEST: Harvest every 2 to 3 days. Okra is rich in protein. Do not hesitate to add it to salads, soups and stews.

LETTUCE

There are over a hundred varieties of lettuce in different shapes, colours and flavours. Five main types are marketed: Boston, leaf, Mesclun, headed and Roman.

LETTUCE—OAK LEAF, LEAF AND MESCLUN

CULTURAL PRACTICES: Lettuce is the first spring crop. Resistant to cold, it can be sown as soon as the earth can be worked. For early harvest, sow in a cold or hot bed and transplant directly in May. The germination will be quicker and more uniform if the temperature is between 10 and 15 ° C.

SOIL: Rich, well-drained soil is ideal.

SPACING: Seeds are buried about 5 mm deep and can be sown densely.

GROWING TIPS: The addition of decomposed manure, compost or fertilizer with a high level of nitrogen is beneficial. They require full sun and constant moisture. Mulching to reduce weeds and maintain soil moisture.

HARVEST: Ideal for harvesting young tender leaves, preferably early in the morning, as they grow. This also delays the moment when the plants rise in seed.

The mesclun is defined by a simple mixture of leaves that are used in salad. It may be a combination of red and green lettuces of different cultivars. In a more sophisticated version, the mesclun contains chicory, chervil, rocket, dandelion or beet leaves, watercress, etc.

LETTUCE BUTTERHEAD CRISPHEAD AND ROMAINE

CULTURAL PRACTICES: Lettuces can be sown indoors in early May. Transplanting will be done when the seedlings have 3 or 4 true leaves. The planting outside is done towards the end of May, when any risk of frost is ruled out.

SOIL: Rich, well-drained soil is ideal for growing.

SPACING: For the main harvest, sow directly in rows spaced 40 cm to 45 cm apart. Depending on the variety, leave 20–25 cm between plants.

GROWING TIPS: The addition of decomposed manure, compost or fertilizer with a high level of nitrogen is beneficial. They require full sun and constant moisture. Mulching to reduce weeds and maintain soil moisture.

HARVEST: Harvest when firm and preferably early in the morning. To harvest a complete lettuce, it is best to cut it with a knife a little above the ground. Thus, the remaining part can in some cases produce a second leaf that can be enjoyed towards the end of summer. Lettuce is eaten fresh and can be stored for about a week in a plastic bag in the refrigerator.

ONION, SPANISH ONION AND FRENCH SHALLOT

CULTURAL PRACTICES: Onion and shallot seed must be sown indoors in February.

SOIL: They need a rich and fertile soil (mineral or organic soil). It must be kept moist but not wet.

SPACING: Spacing between rows is 35 cm to 38 cm. In order to obtain larger bulbs, thin the plants to 7 cm to 8 cm. The removed plants are delicious in salads.

GROWING TIPS: It is recommended to add a fertilizer at the beginning of cultivation and again when the bulbs begin to swell.

HARVEST: harvest onions when leaves fall, brown and dry out. Drying can be accelerated by folding a few sheets. Once picked, place the onions in a dry, warm and well-ventilated place. They are stored in a cool, dry place.

ORIENTAL VEGETABLES

Vegetables typically oriental, with the appearance and texture of spinach.

Those plants are 10 cm to 25 cm high dark green and very rich in vitamins. Their leaves are generally thick to oval to elongate. The majority of varieties have a compact to ultra-compact port as well as extra-fast growth. Those varieties are ideal for restricted area. The leaves and stems are edible. We offer two different types: Pak Choï and the mini Pak Choï.

CULTURAL PRACTICES: is done at the beginning of May.

SOIL: rich in organic matter.

SPACING: Sow only 1 cm deep, once the emergence is complete, thin the plants every 15 cm–20 cm in all directions.

GROWING TIPS: They can be grown during the summer or under drier conditions and tolerate heat and cold well.

PARSNIP

CULTURAL PRACTICES: Sow very early, as soon as the soil is ready (temperature of 16° C).

SOIL: A sandy soil, in which there is not too much fertilizer, is ideal.

SPACING: The seeds must be sown closely enough because germination is difficult.

HARVEST: Pull up roots at the end of October or leave outside, covered with mulch, to be pulled up the next spring.

PEA

CULTURAL PRACTICES: Peas prefer cool weather conditions to grow. Early varieties can be sown as soon as the ground can be worked. Depending on your area and variety, it would be possible to sow from the end of April until mid-May. For autumn harvest, sow in July and August.

SOIL: Rich, well drained and sandy is ideal.

SPACING: Peas are natural climbers and they tolerate being piled up. If space is restricted, use wire mesh between double rows. Sow in double rows spaced 7 to 10 cm. Leave 5 cm between the seeds and cover them with 5 mm of soil. Do seeding successively (pay attention to hot temperatures). For best results, install them on a support, such as our trellis (see Gardening Section). Do not thin the plants.

CULTIVATION TIPS: To ensure optimum germination, the temperature of the soil should be between 10 and 16 ° C. However, if it is too hot, 30 ° C or more, the germination rate will be reduced. Maintain even moisture. Locate them in full sun. Protect from disease with a mild fungicide in prolonged wet spells.

HARVEST: In order to encourage continued production, harvest peas regularly. Young peas are tenderer and have the best flavour.

PEA—SNAP

CULTURAL PRACTICES: Snap peas are grown just like peas, except that the highly fibrous pea pod cannot be eaten. However, snap peas are eaten whole, pod and peas.

HARVEST: harvest when the pods still thin reveal the seeds on the surface.

PEANUT

PLANTATION: Plant three (3) seeds per mound in a warm and sandy soil.

CULTURE: The groundnut grows best when summers are long and hot. Do not sow too deeply.

HARVEST: Harvest after the first frost and let them dry in their hulls. Before eating cook the groundnut in the oven at 150 °C (300 °F).

PEPPER—SWEET

CULTURAL PRACTICES: Plant seedlings indoors in March in a light potting soil. Transplant them in containers when seedlings have two pairs of true leaves. Plant them to the garden, in full sun, as soon as the risk of frost on the ground has passed.

SOIL: Moderately deep, fertile, well-drained soil with medium nitrogen levels.

SPACING: Sow approximately 30–45 cm apart in rows 60 cm apart. GROWING TIPS: Stake for the cultivars over 60 cm tall.

GROWING TIPS: They need water regularly during the flowering period. Fertilize once a month with a fertilizer rich in potassium.

HARVEST: Peppers are best harvested when green; others may be left to turn red or yellow. Cut the stalk about 2.5 cm from the fruit. Once picked, keep the fruit in a cool area.

PUMPKIN

CULTURAL PRACTICES: Plant when all risk of frost has passed and the soil is warm.

SOIL: A nice, fertile soil and adequate moisture are necessary. Protect from the wind.

SPACING: Plant 4 to 5 seeds 2.5 cm deep in hills 2 m apart. Thin out seedlings leaving 2 to 3 plants.

GROWING TIPS: Pumpkins need generous amounts of organic matter in the soil. Watering should be slow and deep. What would autumn be without the presence of pumpkins in the garden!

HARVEST: Harvest when the colour of the pumpkin is dark orange. Storage should be in a cool dry place.

RADISH

CULTURAL PRACTICES: Sowing may be done early in the spring, with successive ones every week afterwards. They prefer cooler temperatures.

SOIL: Ideal growing temperature is from 10 to 18^{o} C in a good, fertile soil.

SPACING: Sow in rows spaced 45 cm to 50 cm apart and cleared 2.5 cm to 5 cm apart.

GROWING TIPS: Keep moist. The faster they grow, the better the taste. They prefer a semi-shade location. Radishes may be sown in wide rows (2 or 3 rows planted together). They may also be sown with slower-growing vegetables to mark rows.

HARVEST: When they have reached the size you wish. However, do not let them grow too large as this will affect the taste (tough or woody).

RUTABAGA

CULTURAL PRACTICES: Crop rotation is a must. Turnips grow well under cool conditions. A first planting can be done from April 15th to May 15th. Sow in July or August for a 2nd harvest in the fall. Turn the soil carefully.

SPACING: Clear plants 8 cm apart on rows spaced at least 30 cm to 45 cm apart.

HARVEST: When the roots reached 7.5 cm to 10 cm in diameter.

SALSIFY

CULTURAL PRACTICES: Sowing salsify very early in the season, as soon as the soil is at a temperature of 16 ° C.

SOIL: A sandy soil, in which there is not too much fertilizer, is ideal.

GROWING TIPS: Be careful not to squeeze the soil, especially when it is damp: regular hoeing and binning are advised. Watering may be necessary to maintain the freshness of the soil. The mulching is here all indicated! **Finally, if floral stems appear, remove them so that they do not exhaust the root.**

HARVEST: Salsify is harvested in November. Proceed with a spade, not forgetting that the root can be quite long. Be careful not to leave half of them in the ground.

Storage: Once harvested, store the roots in wet sand in the basement or in a cold room.

SOYA EDAMAME

CULTURAL PRACTICES: Sow in the garden in full sun when the soil temperature is around 15 to 20 ° C.

SOIL: It requires a well-drained soil, with a pH around 6-6.5. It grows better with a support.

SPACING: Spacing the plants 10 cm apart in rows spaced 30 cm apart.

GROWING TIPS: Tolerates heat and drought well. No need to fertilize. Since all pods mature at the same time, do seedlings every week or every two weeks for a continuous harvest throughout the summer.

HARVEST: Harvest when the pods are still green and turgid.

SPINACH

CULTURAL PRACTICES: Maybe planted as soon as the soil can be worked and again at the end of August or beginning of September for fall crops.

SOIL: It likes well drained and very fertile soils. It is important to enrich the soil with strong organic matter in nitrogen. He likes full sun, but tolerates a little shade.

SPACING: Space rows 60 cm apart with seed 2 cm deep.

GROWING TIPS: Enrich soil with high nitrogen organic matter. Full sun. Tolerates light shade.

HARVEST: Cut young terminal shoots about 15 cm to 20 cm long; this encourages further shoots to develop over several weeks. Eat leaves within two days of picking or refrigerate them for a few days. Good sources of iron and vitamins.

SQUASH—SPAGHETTI, SUMMER, WINTER AND ZUCCHINI

CULTURAL PRACTICES: Squash are a warm-season crop that needs temperatures of 18 to 27° C. You can start them indoors three to four weeks before transplanting. Transplant only when there no longer is a risk of frost.

SOIL: Use a warm, fertile and well-drained soil.

SPACING: Place each seed about 2.5 cm deep in hills that are 1.5 m to 2 m apart. Later thin to two or three of the best plants.

GROWING TIPS: In cool areas, protect young plants with cloches or floating row covers. Add mulch after planting. Trailing types may be grown up on strong supports. Plants need plenty of water. To conserve the soil moisture mix organic matter into soil. Plant the squash in full sun.

HARVEST (summer): Pick the fruit when the blossom end has fallen off the end of the fruit.
HARVEST (winter): Must be entirely ripe and the shell quite hard.
HARVEST (zucchini): Cut the zucchini when they are 10 cm long, with a short stalk. Handle the fruit carefully to avoid bruising them. Regular harvesting will encourage the production of more fruit.

SWEET CORN—BICOLOUR AND YELLOW

CULTURAL PRACTICES: Sow from mid-May to mid-June. Seedlings maybe earlier in light, hot and rocky soils, and should be made later in wet and cold soils such as clay.

SOIL: Sweet corn requires full sun and fresh, fertile, light and humid soil.

SPACING: In pockets of 3 to 4 seeds distanced of 25 cm, in rows spaced 70 cm, to a depth of 1 cm to 3 cm depending on the size of the seed.

GROWING TIPS: In order to have beautiful corn cobs, it is preferable to make 6 small rows than a large row.

Tip: All types of sweet corn must be at least 100 m away from a cornfield to avoid pollination between them.
The SH2 corn must be isolated from other corn's types.

SWISS CHARD

CULTURAL PRACTICES: Swiss chard is sown early in the season directly in the garden in rich and well-prepared soil.

SPACING: sow in rows spaced 45 cm apart and thin seedlings 30 cm apart on the row.

HARVEST: For continuous harvesting, it is sufficient to harvest the outer leaves first and continue harvesting if necessary. A source rich in vitamins, Swiss chard is very similar to spinach for appearance and taste.

TOMATO

CULTURAL PRACTICES: Plant seedlings indoors, under light, approximately six to eight weeks before the date of last frost on the ground in your area. Harden the plants before planting in the garden. Growth is better at temperatures of 21 to 24 ° C or higher.

SOIL: Properly prepare your soil with a lot of rotting manure or compost, at least 30 cm deep. In addition, add an all-purpose fertilizer before planting.

SPACING: Transplant tomato plants 45–60 cm apart, in rows spaced 90 cm apart, plant indeterminate types of sedges, leaving 38–45 cm between plants in single rows, spaced 45 cm apart.

GROWING TIPS Tomatoes tolerate a wide range of fertile and well-drained soils. They require constant moisture, but care must be taken not to over-water, which would have the effect of diminishing the flavour of the fruits. Grow them in a warm, sunny place.

HARVEST: fruits as they ripen. Before freezing, remove the seedlings from the ground by holding them by the roots, and hang upside down inside to allow the remaining fruit to ripen.

TURNIP

CULTURAL PRACTICES: Crop rotation is a must. Turnips grow well under cool conditions. A first planting can be done from April 15th to May 15th. Sow in July or August for a 2nd harvest in the fall. Turn the soil carefully.

SPACING: Clear plants 8 cm apart on rows spaced at least 30 cm to 45 cm apart.

HARVEST: When the roots reached 7.5 cm to 10 cm in diameter.

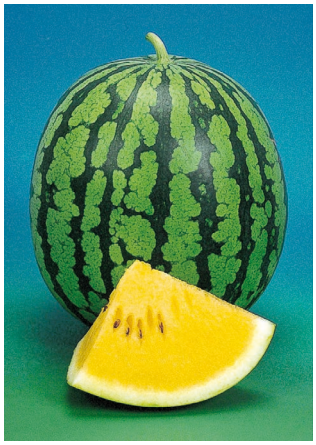
WATERCRESS

Watercress is an aquatic plant that must be sown near calm water or anywhere there is an artificial flow of pure water.

CULTURAL PRACTICES: Cress is sown directly from April to September.

SOIL: They require very moist soil that is rich in humus and they prefer shade.

HARVEST: They should be picked before the blooming period.



WATERMELON AND POLLINATORS

CULTURAL PRACTICES: Start seeds indoors in early spring. After about six weeks and when all risk of frost has passed, the seedlings should be hardened off and planted in the garden.

SOIL: Melons need a well-drained, fertile soil with a pH of 6.5 to 7, high humus content and a high level of nitrogen.

SPACING: Plant each seedling in slight mounds spaced 1 m apart with 1 m to 1.5 m between rows. Make sure to protect young plants from wind and cold weather with cloches or plastic tunnels until they are well established.

GROWING TIPS: Soil should be rich in organic matter and kept moist. Choose a warm site in full sun. Pinch end of stems for faster ripening.

Note: In order to ensure a good pollination, it is essential to plant in your garden one plant of pollinator Ace for every two seedless watermelon plants.

HARVEST: It is best to harvest the melon after a good period of sunshine because it is at this time that it will give the best of it. After a period of rain, you could have melons tasteless and less sweet. Finally, prefer a harvest in the evening rather than in the morning, after a beautiful sunny day, it is the guarantee of having sweeter melons.

GARLIC, ONION SET, FRENCH SHALLOT, POTATO ONION AND POTATO

GARLIC

CULTURAL PRACTICES: Plant the cloves 3 cm deep, tip up, spaced about 10 cm apart in rows 30–35 cm apart. Prefer a well-drained soil where humidity is well maintained without being wet. Harvest the bulbs four to five weeks after harvesting the garlic flowers.

ONION SET

CULTURAL PRACTICES: Sow in the spring when the soil is working well, in a firm bed.

SOIL: Cultivate on an open site, in light to medium to fertile soil and well drained. Prepare the soil with a lot of rotting manure. Do not plant in soil with fresh manure. An all-purpose fertilizer can be added to the bed before seeding. They require little nitrogen.

SPACING: Insert the bulbs into the soil, spaced about 4 cm apart; for winter onions, thin to 12 cm.

GROWING TIPS: Always remove weeds. Onions have relatively few roots and require little water, once established. Plant them in full sun.

HARVEST: When ripe, the onion leaves turn brown and dies. To consume fresh, remove from the ground if necessary. For storage, ensure that the outer peels are completely dry. Handle with care to avoid rot during storage, which is done in a cool, dry environment.

FRENCH SHALLOT AND POTATO ONION

CULTURAL PRACTICES: Sow the onions in the garden as soon as the soil is working well.

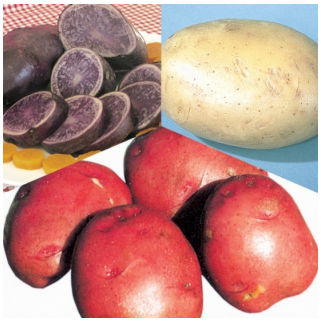
SOIL: They require a rich and fertile soil (mineral or organic soil). Keep the soil moist but not wet.

SPACING: Spacing between rows is 35 cm to 38 cm. In order to obtain larger bulbs, thin the plants to 7 cm to 8 cm. The removed plants are delicious in salads.

GROWING TIPS: It is recommended to add a fertilizer at the beginning of cultivation and again when the bulbs begin to swell

HARVEST: harvest your onions when the leaves fall, brown and dry out. Drying can be accelerated by folding a few sheets. Once picked, place the onions in a dry, warm and well-ventilated place. They are stored in a cool, dry place.

POTATO



CULTURAL PRACTICES: Wait mid-May in soft areas and beginning of April elsewhere before planting begins.

SOIL: The soil must be well loosened before planting in order to lighten the soil as much as possible. So turn the earth about 30 cm. Do not rush to plant; the soil must be sufficiently warmed in depth because the potato needs a ground at 10 ° in depth to grow.

SPACING: Observe a distance of about 30 cm to 40 cm between each tuber by burying them at a depth of 10–15 cm. Also be sure if you have several furrows that they are spaced about 60 to 70 cm each. Position the tuber vertically, ensuring that the seed is directed upwards.

EXPOSURE: The potato needs sun to develop well.

GROWING TIPS: When the plant reaches about 10–55 cm tall, stumble the foot with light soil. This operation of forming a small mound at the foot of the stems aims to keep the plant in the soil, protect it from the wind and allow it to grow as well as possible. Potatoes are especially prone to drought and lack of water for prolonged periods. Watering in the evening is recommended when it is hot and you see the foliage wilting. Do not wet the leaves to avoid the appearance of diseases such as fungi. In order to avoid any risk of dryness in the soil, it is advisable to put mulch at the foot of the potato plants.

HARVEST: It is useless to harvest the potatoes before the foliage is totally yellowed. This indispensable step of yellowing indicates that the crop is imminent. But it also indicates that we should not wait any longer because a complete desiccation of the foliage would be the sign that you have waited too long.

STORAGE: Keep them away from light in a dry, cool and ventilated place.

STRAWBERRIES

STRAWBERRIES FROM SEEDS

Hyb. Ruby Ann

Original and decorative strawberry plants producing fruits all summer long.

CULTURE: Start indoors for best results. Start under glass or plastic and keep moist. Germination will occur after 3–4 weeks at 18 °C. Lightly cover the seeds with vermiculite. Once sprouted, maintain at cool temperatures (night temperatures at 10 °C). Transplant outside using a greenhouse tunnel or plastic non-heated tunnels. Requires lots of light.

BLOOMING: May to September

EXPOSITION: sun

SPREADING: 25–30 cm

USAGE: edible plants, flower box, hanging plants, patio container plant.

Hyb. Toscana

Customized for culture out of containers or hanging baskets, they are ideal for urban gardeners. Since these plants are perennials, you can also have them in your garden.

Hyb. Delizz

Hyb. Gasana

Hyb. Summer Breeze

STRAWBERRIES FROM PLUGS

Grow your strawberries quickly and easily with these large plugs strawberry plants.

CULTURAL PRACTICES: Nothing is easier than growing your own strawberries with these large plugs! In the garden, on a balcony bag, hanging basket or patio containers, these strawberry plants grow faster. The floral initiation period is done in the fall and then the plants are kept in cold storage until planting at spring. The day neutral Albion variety produces fruit until September contrary to short day varieties that give a concentrated production for three weeks. Each plant can bear up to 30 flowers! The firm fruits are bright red, sweet, tasty and have a high level of antioxidant properties which is beneficial for your health. Albion is a well-known variety also used by field growers.

BLOOMING: May to September
EXPOSITION: sun
SPREADING: 25–30 cm

USAGE: edible plant, flower box/pot, hanging plant, patio container plant

GROWING TIPS: The plants are in the growth period. Plant the plugs as soon as possible after the reception. If you cannot plant them quickly, keep them at 5 °C. To produce large fruits, plants should not miss water during the flowering period.
Time from planting to flowering: 5–6 weeks.
Time from flowering to fruits: 5–6 weeks.
Total time to get fruits: 10–12 weeks.

FERTILIZER: Fertilize regularly as you do for your annual flowers plants.

Note: The flowering will be continuous but can decrease in very warm weather conditions.

Companion Planting…

Vegetable Gardening Plant Combinations

Companion planting means putting plants together in the garden that like each other, or help each other out. Companion planting can have a real impact on the health and yield of your plants.

Organic gardeners strive to achieve a balance in their gardens so that they don't require chemicals for pest or disease control.

In nature everything interacts to create a whole life force. This is a basic understanding … that everything organic and living has a mutual influence on every other living thing.

Every plant has an effect on every other plant and every creature has an effect on every other creature.

Nature's Way of Companion Planting

Plants don't like to fight for their food, so shallow rooted plants prefer to grow near deep-rooted plants and each can get their nutrients from different levels. Some smaller plants like a bit of weather protection from bigger plants. Conversely, dry loving plants sulk if grown alongside plants that thrive with wet feet.

FIND OUT WHICH PLANTS LOVE EACH OTHER

Successful companion planting relies on good relationships, often between pairs. Usually one plant has the ability to do one thing, while the other offers something else.

But sometimes it seems that certain plants simply do well together. For example, parsley and asparagus generally both thrive when planted together.

Most vegetables have a handful of favourites they love to be near. For example, carrots love

basil, lettuce, onions, peas, rosemary, sage and tomatoes.

WHAT ABOUT PLANTS THAT HATE EACH OTHER?

Plant the wrong things next to each other and you'll have all sorts of problems!

….. For example, forget about tomatoes and corn together. They just don't get on.

And there's one vegetable plant you should never grow near any other vegetable plant, and a tree which will poison anything you plant near it.

The chart below lists the well-known basic vegetables warm fuzzies … who loves who and who not.

Herbs and vegetables	Companion plants	Enemy plants
Artichoke	beet, bean, lettuce, tomato	parsley, peas, salsify, tarragon
Asparagus	ground cherry, parsley, rocket, sage, tomato	beet, Swiss chard, onion
Basil	ground cherry, okra, pepper, tomato	rue
Shelled bean	artichoke, borage, cabbage, carrot, cauliflower, corn, eggplant, pumpkin, squash, strawberry, Swiss chard, tomato	beet, chive, fennel, garlic, leek, shallot, onion, parsley, potato, tomato
Climbing bean	artichoke, chard, eggplant, marjoram, potato, radish, rosemary, savory, tomato	beet, chive, fennel, garlic, kohlrabi, leek, onion, parsley, shallot, tomato
Bush bean	artichoke, beet, borage, cabbage, carrot, cauliflower, celeriac, celery, chard, chicory, corn, eggplant, melon, potato, radish, squash, strawberry, turnip, rosemary, savory	chives, fennel, garlic, leek, onion, parsley, shallot, tomato
Broccoli	beet, cucumber, dill, mint, oregano, pickling cucumber, rosemary, strawberry, thyme	sage, tomato, zucchini
Brussels sprouts	bean, beet, borage, celery, chervil, dill, marjoram, mint, onion, oregano, potato, rosemary, sage, savory, thyme	chive, garlic, savory, strawberry, tomato
Cabbage	absinthe, arugula, bean, beet, borage, celery, celeriac, chamomile, chard, dill, endive, lettuce, marjoram, mint, onion, oregano, potato, rosemary, sage savory, shallot, thyme,	chive, garlic, fennel, ground cherry, pumpkin, squash, savory, strawberry, tomato
Carrot	absinthe, bean, chicory, chives, coriander, endive, ground cherry, leek, onion, pea, pepper, radish, rosemary, sage, salsify, shallot, tomato	beetroot, dill, garlic, mint, parsley
Cauliflower	borage, bean, beet, celery,dill, marjoram, mint, onion, oregano, potato, rosemary, sage, thyme	chive, garlic, savory, strawberry, tomato
Celery	beet, bean, cabbage, chives, cucumber, endive, fennel, garlic, leek, onion, tomato	lettuce, parsley, potato
Celeriac	bean, cabbage, leek, onion, tomato	lettuce, potato
Chamomile	beetroot, cabbage, cucumber, garlic, mint, pickling cucumber, Swiss chard, onion	mint
Chervil	Brussels sprouts, lettuce	radish
Chicory	bean, carrot, endive, lettuce, radish	fennel, rue
Chive	carrot, celery, cucumber, pickling cucumber, strawberry, tomato	bean, Brussels sprouts, cabbage, cauliflower, garlic, onion, pea, pepper, shallot, shelled bean
Coriander	anise, Brussels sprouts, cabbage, carrot, cauliflower, onion, pickling cucumber, potato	fennel
Corn	bush bean, parsley, pea, pumpkin, shelled bean, squash	Swiss chard, beetroot, earth cherry, mint, rosemary, tomato
Corn salad	leek, onion, potato, strawberry, tomato, turnip,	
Cress	strawberry, radish, tomato	

Herbs and vegetables	Companion plants	Enemy plants
Cucumber and pickling cucumber	bean, broccoli, chamomile, celery, chives, cumin, dill, fennel, kohlrabi, lettuce, marjoram, okra, oregano, peas, radish	mint, sage, savory, Swiss chard, rosemary, rue, tomato, zucchini
Cumin	cucumber, pickling cucumber	
Eggplant	bean, borage, parsley, pea, tarragon, thyme	okra, potato, tomato
Endive	carrot, leek, radish, turnip	artichoke, lettuce, salsify, tarragon
Fennel	celery, cucumber, garlic, leek, onion, turnip	absinthe, bean, chicory, coriander, ground cherry, parsnip, pea, pepper, spinach, tomato, zucchini,
Ground cherry	asparagus, basil, borage, carrot, onion, parsley, peas, sage	cabbage, corn, fennel, potato
Kale	bean, beet, celery, onion, potato, sage , thyme	chive, garlic, savory, strawberry, tomato
Kohlrabi	beet, bush bean, cabbage, celery, cucumber, lettuce, onion, potato spinach, tomato	chives, garlic, climbing bean, hot pepper, sweet pepper
Leek	carrot, celery, celeriac, corn salad, fennel, strawberry, oregano, salsify	beet, bean, parsley, pea, sage
Marjoram	bean, Brussels sprouts, cabbage, cauliflower, cucumber, marjoram, parsley, pepper, squash, rosemary	thyme
Melon d'eau, miel et cantaloup	bush bean, corn, marjoram, okra	potato, Swiss chard
Mint	broccoli, Brussels sprout, cabbage, chamomile, cauliflower, pea, pumpkin, radish, squash, tomato, turnip	carrot, chamomile, corn, cucumber, pickling cucumber,
Okra	basil, cucumber, melon, pea	eggplant, pepper, tomato
Onion	beet, chamomile, cabbage, carrot, celeriac, celery, corn salad, endive, fennel, ground cherry, kohlrabi, lettuce, strawberry, Swiss chard, parsnip, pepper, potato, radish, savory, tomato	asparagus, bean, chives, pea, sage, soybean, tomato, turnip
Oregano	bean, broccoli, Brussels sprouts, cabbage, cauliflower, cucumber, parsley, pepper, squash, rosemary	thyme
Parsnip	lettuce, onion, pea, salsify, tomato	dill, fennel, parsley, potato
Parsley	asparagus, corn, eggplant, ground cherry, marjoram, radish, rosemary, tomato	artichoke, bean, carrot, celery, dill, leek, lettuce, parsnip, pea, potato
Peas and snap peas	carrot, corn, cucumber, eggplant, endive, ground cherry, lettuce, mint, okra, parsnip, potato, radish, spinach, tomato	artichoke, chives, fennel, garlic, leek, onion, parsley, shallot, tomato
Pepper	basil, carrot, marjoram, onion, oregano	chive, fennel, kohlrabi, okra, tomato
Potato	cabbage, kohlrabi, shallot, onion, pea, thyme	bean, beet, celeriac, celery, eggplant, endive, garlic, ground cherry, melon, parsley, parsnip, pumpkin, shallot, spinach, squash, Swiss chard, radish, tomato
Radish	bean, beet, carrot, chicory, cucumber, lettuce, mint, parsley, pea, pumpkin, onion,	chervil, potato, turnip

Herbs and vegetables	Companion plants	Enemy plants
Rocket (arugula)	asparagus, cabbage, sage	
Rosemary	bean, broccoli, Brussels sprouts, cabbage, carrot, cauliflower, marjoram, oregano, parsley, sage, turnip	corn, cucumber, pickling cucumber
Rue	sage	basil, chicory, cucumber, pickling cucumber
Sage	arugula,asparagus, Brussels sprouts, cabbage, carrot, cauliflower, ground cherry, strawberry, rosemary, rue, tomato	absinthe, ail, brocoli, concombre, pickling cucumber, oignon, poireau, sarriette
Salsify	carrot, leek, lettuce, onion, parsnip	artichoke, endive
Savory	bean, Brussels sprouts, cabbage, cauliflower, garlic, onion	cucumber, cornichon sage
Shallot	beet, cabbage, carrot, lettuce, strawberry, potato	bean, chive, pea, soybean, tomato
Soya	cabbage, celeriac, celery, corn, cucumber, strawberry, potato, tomato	garlic, shallot, onion
Spinach	garlic, cabbage, celery, eggplant, kohlrabi, strawberry, turnip, onion, pea, rutabaga	beet, fennel, potato, tomato
Strawberry	bean, borage, chives, corn salad, cress, endive, garlic, lettuce, leek, onion, sage, shallot, spinach, thyme, tomato, turnip	broccoli, cabbage, Brussels sprout, cauliflower
Tarragon	eggplant	artichoke, endive
Turnip and rutabaga	bean, corn salad, dill, fennel, lettuce, mint, peas, rosemary, spinach, strawberry, tomato	garlic, onion, radish
Tomato	artichoke, asparagus, basil, bean, borage, carrot, celery, celeriac, chives, cress, corn salad, kohlrabi, leek, mint, onion, parsley, parsnip, radish, sage, strawberry, turnip, thyme	beet, broccoli, Brussels sprouts, cabbage, cauliflower, cucumber, eggplant, garlic, fennel, corn, onion, okra, pepper, pea, pickling cucumber, shallot, spinach, squash, Swiss chard, potato, zucchini
Thyme	broccoli, Brussels sprouts, cabbage, cauliflower, eggplant, strawberry, potato, tomato	marjoram, oregano
Wormwood	cabbage, carrot	fennel, sage