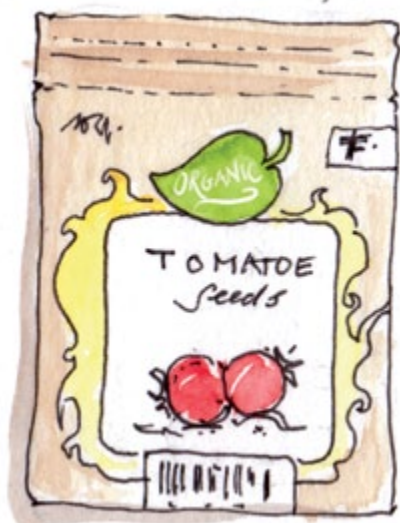
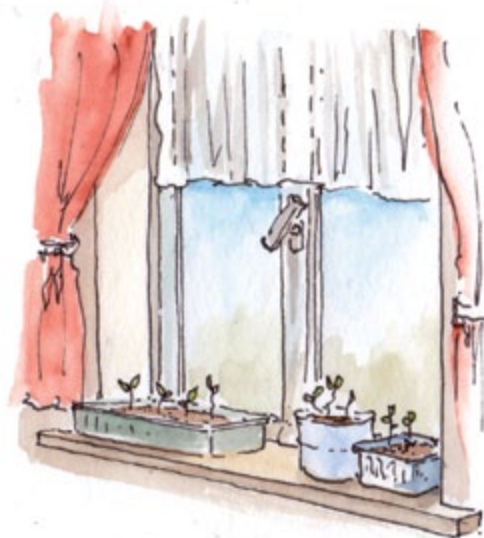


4

Sowing, Seedlings and Planting

Some plants can go straight to your garden patch, while others need to be sprouted first. High quality seeds are needed for healthy plants and a fruitful harvest.



Organic seeds

Always use organic and biologically active seeds. It's best to get them from a fellow organic gardener. These types of seeds develop into plants that have a better genetic code. Not only are they stronger than genetically modified ones, your plants will have a much higher micronutrient content.



Don't use hybrid seeds

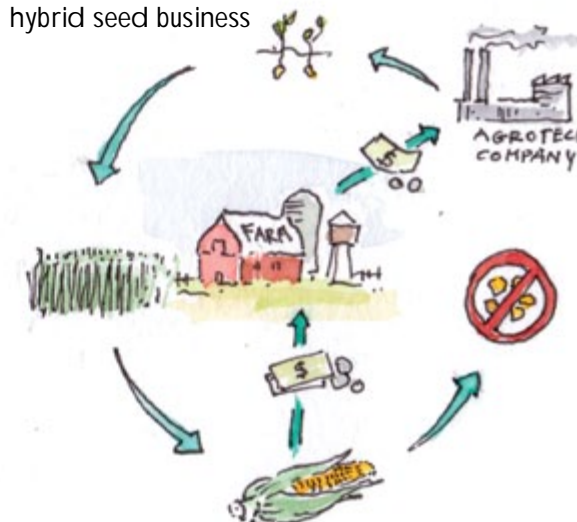
Hybrid seeds are artificially bred and can't reproduce naturally. So farmers who use them are forced to buy new seeds every year. This means they are kept economically dependent on the big seed companies. Such a business model only benefits the companies selling the seeds, it doesn't benefit us as gardeners and consumers.



organic seed circle



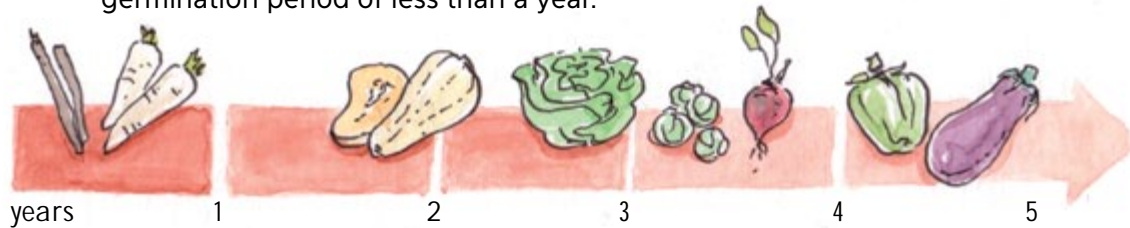
hybrid seed business



Hybrid seeds produce plants that are low in micronutrients. They have a weak immune system, they taste bland, and don't contribute to a well-balanced diet. When you buy seeds make sure they have a small 'F' after their name. The F stands for 'Filia', which is Latin for 'daughter'. These plants have a natural 'mother' plant and are not genetically modified. It's a sad fact that 70% of all vegetable plants in supermarkets today come from hybrid seeds.

Germinability

The germinability of a plant varies according to its type. For example, eggplants and green peppers have a long germinability; their seeds stay fertile for up to five years. Seeds for cabbage, butternut, cucumber, pumpkin, lamb's lettuce, Brussels sprouts and beetroot stay fertile for up to 4 years. Those for chives, parsnips and black salsify have a shorter germination period of less than a year.



If you have some seeds and don't know how old they are, don't panic! Here are four steps to help you find out whether you can still use them:



1. Take 10 seeds out of the packet and put them on a wet paper towel.
2. Wrap the paper towel carefully and put it in a plastic bag.
3. Store the bag in a warm place.
4. Wait for five days, then open the bag.

About 8 seeds from the 10 should have enlarged or sprouted. If there are 6 or less, your seeds are of low quality and don't have the right germinating power. Low quality seeds develop into weak seedlings and plants.

Seedling soil

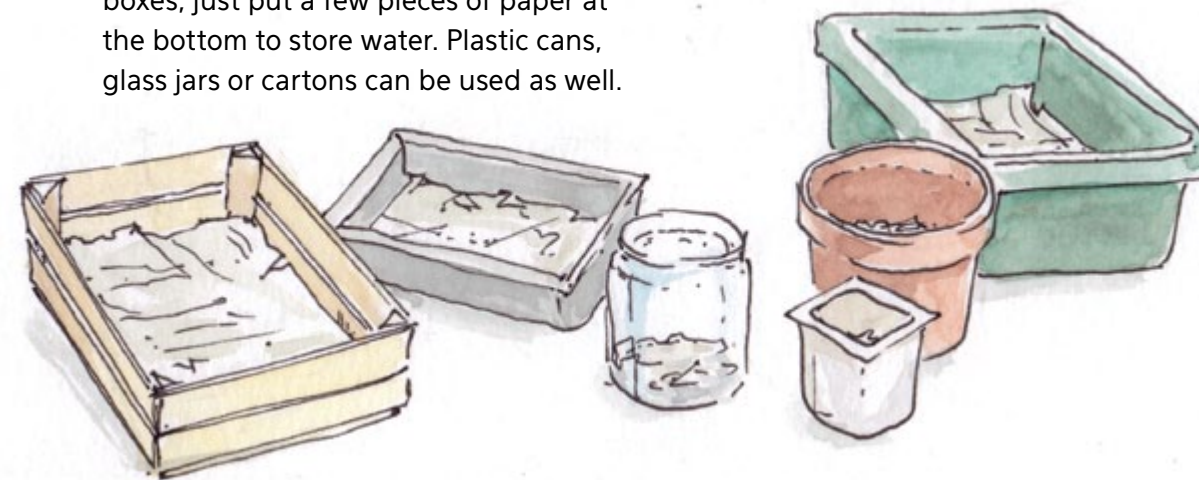
The first soil your seeds are planted into should be a mixture of compost, sand and rock flour. To prepare this you will need a sifter, a spade and a wheelbarrow. Slowly push the compost through the sifter. Make sure it gets soft and has no chunky parts in it. Mix one third of sand with a bit of rock flour, this will give you the right mineral level. Congratulations, your baby plant nursery soil is now ready for use!



By the way: The soil in molehills is of excellent quality! So if you get molehills in your garden, add the soil from them to your nursery mix.

Pots and sowing boxes

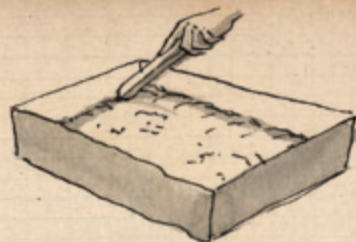
Old wooden boxes make great sowing boxes, just put a few pieces of paper at the bottom to store water. Plastic cans, glass jars or cartons can be used as well.



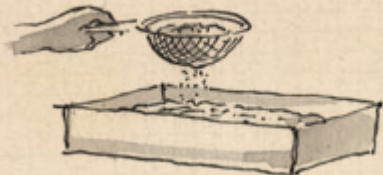


It's best to choose a sunny spot such as a windowsill for your nursery. Take a pen and label your containers with the names of the seeds they contain, as well as the date.

While filling the containers make sure to firmly squeeze the soil at the edges, as it will sag when watering. Press the soil gently with a piece of wood.

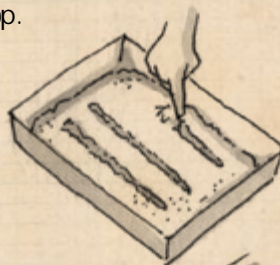


Then take a small kitchen sifter and scatter a thin layer of soil on top.



Next, use your finger to draw a fine line in the soil.

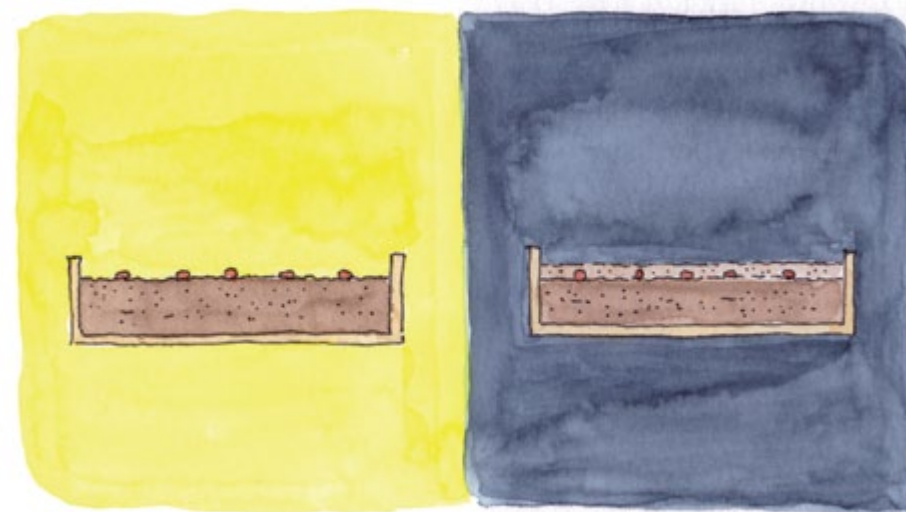
Take the seeds and place them one by one into the line you drew. The correct distance to leave between each seed varies. For example, while smaller plants and herbs such as parsley and chives don't need a lot of space, pumpkins or beans do.



See the table at the end of this chapter for more details.

Light or dark sprouting

There are basically two different types of sprouts: ones that grow best in the dark, and ones that prefer light. The ones that grow best in the dark include green peppers, tomatoes, cabbages, leeks, cucumbers, pumpkins, and flowers such as tulips and lilies. Sprouts that prefer growing in the light include basil, all types of salads, carrots, radishes, celery and peony. You will usually find a set of instructions on the seed packet that give an indication of which growing conditions they prefer.



It's important to know that sprouts preferring light are best left uncovered, you just need to sprinkle a bit of lukewarm rainwater on top of them.

For sprouts that prefer the dark, cover them with a thin layer of soil before adding the water.

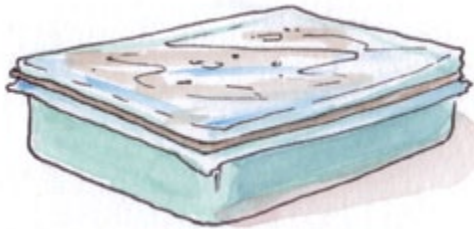
You will usually find a set of instructions on the seed packet that give an indication of which growing conditions they prefer.

Watering

Adding water to your seeds should be done very gently. You need a small watering can with a soft sprinkler and some rain- or river water. Try to avoid tap water as it often contains chemicals and chlorine, which are poisonous for baby plants.



Only add enough water to make the soil moist, but not wet. After watering, place a thin layer of plastic over the top of the container. This will store moisture and keep the soil warm. These are ideal conditions for sprouting.



Keep a close eye on your container and check it daily. When the first small sprouts appear, remove the plastic. It takes a lot of strength for young seedlings to push through the soil. Gentle rinsing with water helps to remove soil from their delicate first leaves. Make sure your containers are in a light spot that doesn't have too much direct sunlight.

Selection of seedlings

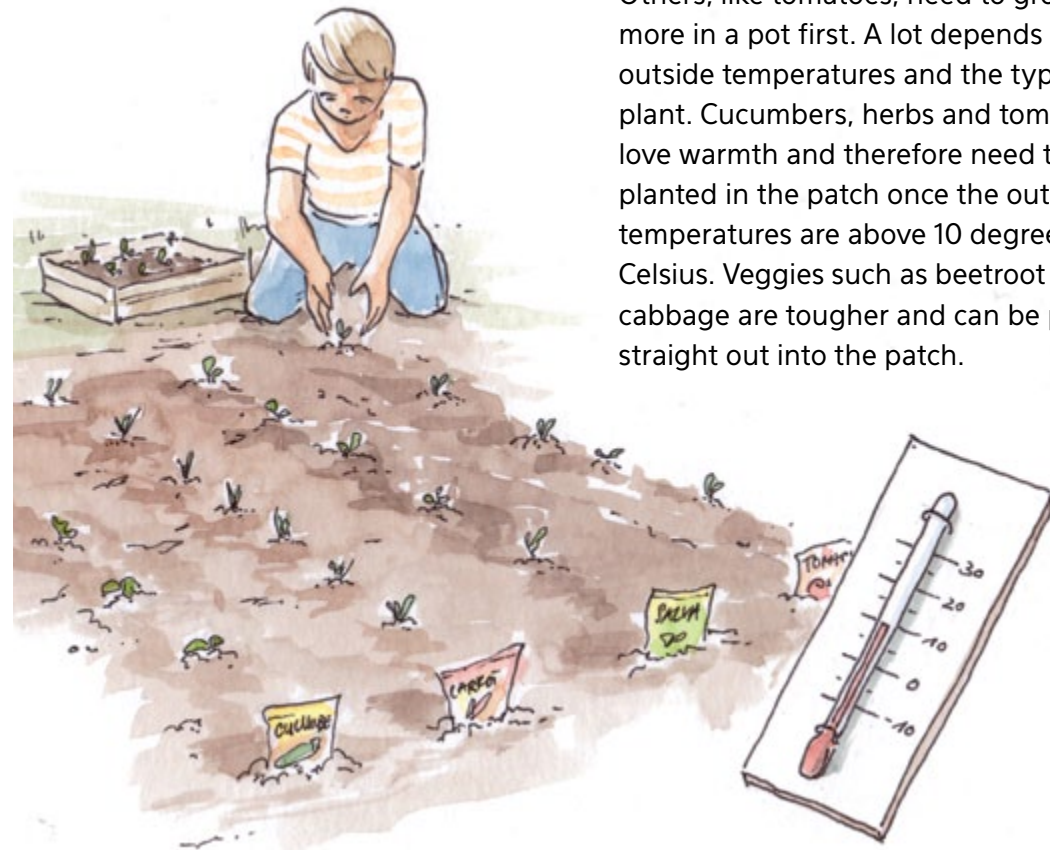
After one or two weeks the seedlings are ready to be selected and planted in bigger pots before moving them into your garden patch. Only use the biggest and strongest seedlings, the rest can be added to your compost heap.



Put two or three seedlings together in one container and make sure they have enough space to grow. Push your finger a few centimeters into the soil to form a hole, then put the seedling in it. Place the seedlings in the same size space they had when they were sprouting.



Some veggies, such as carrots, can be planted straight into the veggie patch. Others, like tomatoes, need to grow a bit more in a pot first. A lot depends on the outside temperatures and the type of plant. Cucumbers, herbs and tomatoes love warmth and therefore need to be planted in the patch once the outside temperatures are above 10 degrees Celsius. Veggies such as beetroot and cabbage are tougher and can be put straight out into the patch.



Preparing the patch





Start to clean the patch with a fork and hoe and make sure to remove all the weeds. The deeper roots of the weeds must be removed carefully. If you don't do this the weeds will grow again. Make the entire soil area loose and smooth without any chunks. If you can easily dig your hand into the soil up to the wrist then it is ready for planting. You should begin by sprinkling a thin layer of compost on top.









Rows

Take a large broomstick and make long rows in the patch. Make sure the rows are straight, later on this will help you to differentiate between weeds and plants. If the patch is very large you can use some sticks and stretch a string between them to mark out your rows. Leave some distance between the rows as this will ensure your plants have enough space to develop properly. The table shows the various growing requirements for most common veggies.



Plant	Plant seedlings, or straight to the patch?	Sprouting period -days	Distance between plants / rows	Timeline	Blossoming	Lifespan
Artichoke	seedlings	8-12	39 x 39 inches	February to April sowing; mid May to mid June seedlings	July-September 	annual and biennial
Eggplant	seedlings	6-8	19 x 19 inches	March to April sowing; May to June seedlings	July-August	annual
Cauliflower	seedlings	4-6	19 x 23 inches	February to July sowing; May to June seedlings	July-September 	biennial
Beans	patch	8-14	40 x 15 inches	April to June	June-September	annual
Broccoli	seedlings 	4-6	19 x 15 inches	April to June sowing; April to July seedlings	June-October	annual and biennial
Chinese cabbage	seedlings	4-6	12 x 12 inches	June sowing; July to August seedlings	July-September	annual and biennial
Peas	patch	8-12	15 x 3 inches	March and April	May, June	annual
Lamb's lettuce	patch	5-25	6 x 8 inches	August and September	April, May	annual and biennial
Fennel	seedlings	12-16	19 x 8 inches	May to August	July-October 	annual
Kale	patch	4-5	16 x 18 inches	April to June	August, September	annual and biennial

Plant	Plant seedlings, or straight to the patch?	Sprouting period -days	Distance between plants / rows	Timeline	Blossoming	Lifespan
Cucumber	patch	4-8	16 x 24 inches	April to June	July, August 	annual
Potato	bulb	-	24 x 12 inches	April to May; harvest Sept	June	annual
Kohlrabi 	patch	8-10	14 x 16 inches	March to June	June, July	biennial
Garlic	bulb	-	10 x 5 inches	March to September	June to August	annual
Cress	patch	2	wide sewing	Whole year indoors	June, July	annual
Leeks	patch	14-16	8 x 10 inches	April to July	June, July	biennial
Swiss chard	patch	8-10	10 x 6 inches	March to June and September to Spring	June-September	biennial
Carrots 	patch	21-28	10 x 2 inches	March to May	June, July	biennial
Green peppers	seedlings	8-12	20 x 16 inches	January to April sowing; May and June seedlings	June, August	annual
Turnips	patch	21-28	12 x 4 inches	March to May	August	biennial
Radishes	patch	8-14	5 x 2 inches	March to August	June-August	Annual

Plant	Plant seedlings, or straight to the patch?	Sprouting period -days	Distance between plants / rows	Timeline	Blossoming	Lifespan
Rhubarb	patch	-	30 x 30 inches	March to April	May 	perennial
Horseradish	patch	14-21	10 x 4 inches	March to August	August	biennial
Red cabbage	seedlings	5-6	20 x 24 inches	March to May sowing; May and June seedlings	August	biennial
Beetroot	patch	10-15	12 x 4 inches	March to May	June-October	annual
Lettuce	seedlings	6-10	12 x 12 inches	January to March sowing; April to July seedlings	June-September	annual
Black salsify	patch	15-20	10 x 2 inches	March to April	August	biennial
Celery	patch	12-15	15 x 20 inches	March to June	August-November	annual
Spinach	patch	8-14	8 x 10 inches	March to April and September to October	May, June, October-November	annual
Tomato 	seedlings	6-8	24 x 20 inches	April sowing; May and June seedlings	July-October	annual
Zucchini	seedlings	5-8	24 x 30 inches	April and May sowing, June and July seedlings	August, September	biennial
Onions 	patch	14-21	10 x 4 inches	March and April	June to October	biennial