

Gardening with Edibles – Frequently Asked Questions (FAQs)

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	Questions	Answers
	Potting	
1.	How should I plant my seeds? Directly into a big pot?	We recommend starting seeds in trays with one or two seeds per well. A cardboard egg tray is suitable. If using a plastic egg tray, be sure to make small holes in each well to allow water to drain.
2.	Can you grow multiple mature fruited vegetables in a pot?	Fruited vegetables can be grown in planting troughs spaced at least 15cm apart. The pots should be 20-30cm deep. For leafy vegetables, they should be potted in soil around 10-15cm deep.
3.	Will the size of the pot determine how big the plant can grow?	You can plant seeds into a big pot, but you will need to thin them out to facilitate them to grow to full size
4.	If the seedlings are grown in eggshells, is there a need to remove the eggshells or it can be transplanted directly with the egg shells?	We recommend removing the eggshells or crushing them while transplanting to ensure that the roots can grow bigger.
5.	How do I transfer seedlings from an egg tray to the planting bed?	If the egg tray is made of cardboard, cut out the squares individually and pot them directly. If not, gently press the bottom to free the seed plug. More information can be found in this video: https://www.youtube.com/watch?v=lltBHYjyrKg&list=PL1_Eb2Fa0jUfYm8V6ap_WibsDRqHi8l6e&index=9&t=10s
6.	Can Styrofoam boxes be used for growing plants?	Styrofoam boxes are not recommended as they tend to disintegrate over time when exposed to sunlight.
	Seeds	

7.	How long can vegetable seeds be stored?	The seeds have a shelf life of up to a year if the pack is left unopened. Once opened, it would be best to store the seeds in a refrigerator kept at 4 °C (not the freezer). The seeds are best sown within 3 months.
8.	What are the steps to germinate seeds?	You can follow the instructions on the seed pack or learn from our online video: https://www.youtube.com/watch?v=x7J87wY7U6s&list=PL1_Eb2Fa0jUfYm8V6ap_WibsDRqHi8l6e&index=7
9.	How many seeds shall be added into a hole for germination?	Sow around 1-3 seeds per hole. This is to avoid competition among the seedlings and seed wastage. You can learn how to do this at our video on growing leafy vegetables here: https://www.youtube.com/watch?v=lltBHYjyrKg&list=PL1_Eb2Fa0jUfYm8V6ap_WibsDRqHi8l6e&index=8
10.	Do we need to soak seeds before sowing?	It is not necessary to soak seeds. Seeds can be sowed directly.
11.	How long does it take from seed to seedling? How long do seeds of edible plants typically take to germinate?	Germination rate varies among different plant species. Certain plants such as Kangkong might germinate within 3 days after sowing and others such as tomato might take 5-12 days. For leafy edibles, it usually takes around 1-3 weeks for seedlings to develop. You can find more information in the seed pack. There are, however, several factors that cause poor germination such as overwatering/lack of water or planting too deep (more than 3cm).
12.	What should I do if the seeds did not germinate after 2 weeks?	If your seeds did not germinate after 2 weeks, you may dig out the seeds from the soil and check if they are still germinating. If they are not, it is very likely that the seeds are spoilt.
13.	How are seeds collected from a plant?	Seeds can be obtained from mature fruit. To obtain the fruits, the flowers have to be pollinated in order for the flower to develop into a fruit. For long bean, chilli and lady's finger, the mature fruits can be left to dry on the plant before collecting the seeds. For "wet" fruits like tomatoes or cucumbers, seeds need to be extracted from the mature fruit and dried for at least a week. Seeds must be taken from fruits that are mature and ripe. They should not taken from fruits that have been dried for a long time as the seeds may no longer be viable.
14.	Where could we obtain seeds from?	Seeds are also available for purchase in our local nurseries.
15.	How do tell if the seeds are damaged or spoilt?	A seed germination test can be performed to check if the seeds are still viable. Simply select 10 seeds and germinate in a wet paper towel or in your planting bed. Check for sign of germination after a week and calculate the percentage of germination.

16.	Would seeds germinate in hydroponic system instead of potting soil?	You can germinate seeds hydroponically. To learn how, please watch our video here: https://www.youtube.com/watch?v=wzLd2y8zoq0&list=PL1_Eb2Fa0jUfYm8V6ap_WibsDRqHi8l6e&index=12&t=0s
Seedlings		
17.	My bayam seedlings die as soon as they start to mature. What's wrong?	For bayam plants, do ensure that the potting media is not too wet and that water is well drained. If not, this may give rise to fungal issues such as damping-off, which weakens the plant's root system.
18.	When is a good time to provide support for tomato seedlings?	It is best to start trellising tomatoes when they are around 15-20cm tall.
Flowering and Fruiting		
19.	My tomatoes are flowering but not fruiting. What should I do?	For tomatoes, they need to be pollinated to develop fruits. You can consider attract pollinating insects such as solitary bees to your plants by growing colourful and free-flowering plants, such as Indian Snakeweed.
20.	My ornamental and edibles pots are indoors by the window. They do not get full sun. My capsicum flower buds are dropping. They seem to be yellowing at the stalk connecting them to the main stem. What could be the	This is due to a lack of pollination due to the high-rise environment. Reduce exposure to wind to maintain the ambient humidity around the plant. Mist the flowers periodically to increase humidity and brush the flowers to help transfer pollen. This may help to increase fruit production. If your plant is growing outdoors, avoid using chemical pesticides as these may kill pollinators which are vital to the pollination of your edible plants.

	<p>problem and how can I prevent this?</p> <p>My Jalapeno plant has been flowering and the flowers drop within 3 days. When will I be able to see Jalapeno fruiting?</p>	
21.	<p>I have been growing a passionfruit vine for five months, but it has only produced leaves and no flowers. What should I do?</p>	<p>You can try applying some complete fertilisers that promote flowering and fruiting. These can be purchased at plant nurseries.</p>
22.	<p>My dragonfruit plant is growing very well but it doesn't flower, even though I provide it with flowering fertiliser & compost. What's wrong?</p>	<p>Dragonfruit plants need to hang down before they start to flower. Consider building a trellis for it to grow over, rather than up against.</p>
23.	<p>My cucumber plant has only male flowers. What should I do?</p>	<p>Cucumber plants naturally develop the male flowers before the female flowers. If the plant is producing quite a number of male flowers, female flowers will likely develop soon thereafter.</p>
24.	<p>Why do my zucchini flowers keep turning brown and falling off?</p>	<p>The plant may have blossom end rot, which is caused by damaged roots or a lack of calcium within the soil. The flowers may also rot if they are exposed to water for extended periods, either by many days of heavy rain or by overwatering.</p>
25.	<p>How do you make the capsicum bigger and thicker?</p>	<p>Capsicums generally prefer a cooler environment to produce larger fruits. However, you may want to ensure you grow your plants in larger containers so that plants can grow bigger and support a larger crop.</p>

26.	I tried to grow chilli padi & long peppers but they are still so small after many months.	The lack of fertiliser can lead to very slow growth. If the soil that you are growing them in is too compacted, it will lead to poor growth health which will then affect the plant's ability to uptake nutrients to grow well. You may want to incorporate organic matter carefully to open up the soil which will help plants grow better. Finally, ensure your plants receive sufficient sunlight for optimal growth.
27.	My tomato plant grows very well and flowers regularly but there is no fruit formed. How are the flowers being pollinated?	When the flowers are not pollinated, they will eventually fall off and result in no fruit formation. By attracting pollinator-attracting plants such as buzz-pollinating bees like blue-banded digger bees and carpenter bees into the garden, the fruit set rate can be increased. To learn more about bees and pollinator-attracting plants, please visit our resources at: https://www.nparks.gov.sg/gardening/gardening-resources/what-to-grow
Harvesting		
28.	How do I harvest leafy vegetables?	Once the vegetables are ready for harvest, use a clean pair of pruners or scissors to cut off the vegetables from the roots. The harvested vegetable shall avoid touching the soil as much as possible to prevent contamination. To learn about growing and harvesting leafy vegetables, please check out our video at https://youtu.be/lltBHYjyrKg
29.	How do I harvest fruited vegetables?	For fruited vegetables, when the fruit is matured, use a clean pair of pruners or scissors to cut it off.
30.	Which type of vegetables will regrow after harvesting?	Leafy vegetables such as Bayam, lettuce, kangkong, and sweet potatoes can be harvested more than once. Only cut off the leaves but not the main stem.
31.	How long should the soil be rested after harvesting?	The soil shall be replenished with fertiliser to nourish the soil before the next planting.
Propagation		
32.	My basil cuttings have failed to root. What can I do to improve this?	For basil, try sterilising your cutting tools, as contaminated secateurs/scissors will transfer bacteria onto freshly cut stems, causing it to rot. You may also try rooting the stems with rooting hormone for a higher success rate.

33.	What are methods to propagate edibles beside germination of seeds?	Certain edible plants like sweet potatoes and mints can be grown from cuttings, while some like lemongrass and chives can be grown by division. To learn what plants can be propagated by these methods, please do check out our resources on growing plants at https://www.nparks.gov.sg/gardening/gardening-resources/what-to-grow .
Watering		
34.	Can I expose my edible plants to rain?	Edibles are not recommended to be exposed to rain, especially heavy downpours, as too much water will cause root rot due to a fungal disease known as damping-off.
35.	How do we water the plants? Can we water on the leaves?	Water on the soil so that the water can be absorbed by the roots.
36.	How often do we need to water the seeds? Should the plants be watered in the morning or evening time?	It is recommended to water your plant at least once a day in the early morning, to maximise roots absorption and reduce water wastage due to evaporation. Avoid watering your plant in the evening as it will encourage fungal or bacterial growth. A good indication of whether the seedling needs to be watered more often is to either use the finger test or chopstick on the soil surface. Both temperature and wind speed will determine how often you will need to water the seedling.
37.	Can we water the seedlings and plants with water that is rinsed with rice? Is it better to use distilled water or tap water for edibles?	Rice water can be used to water the seedling and plants as it contains minute NPK elements that are needed for plant growth. Both distilled water and tap water can be used to water the edibles.
38.	Can the self-watering system be used for all vegetables like kangkong?	You can use the self-watering system for leafy vegetables.

39.	What should I do if I overwater a plant?	<p>If your plant has been overwatered, do the below:</p> <ul style="list-style-type: none"> • If your plant is potted, trim the tips of the roots that are damaged due to overwatering and repot the plant with new well-drained potting media. • If your plant is planted in the ground, gently remove as much soil as possible without further damaging it, trim the tips of the roots that are damaged due to overwatering, drench the whole plant with fungicide, and replace the soil with new well-drained potting media.
40.	Can I apply nutrient solution beside daily watering?	Basic watering alone will not boost the plant to its optimal growth condition as all plants require regular supply of fertilisers. Applying nutrient solution is one of the avenues for plants to acquire essential nutrients besides applying organic or inorganic fertilisers.
41.	My seedlings are watered regularly but they have remained at the same height for months. Why is this so?	There is likely insufficient light for your plants. Consider moving it to an area with more sun exposure or setting up grow lights in your home.
Light Requirements		
42.	<p>How much light do plants need? Can plants die from too much direct sunlight?</p> <p>What vegetables can be grown in a balcony with a short period of direct sun exposure (less than two hours)?</p>	<p>Different plants can have different thresholds for light exposure.</p> <p>Most leafy vegetables will need at least four hours of sun exposure to grow well. You can consider growing herbs with lower light requirements such as mint, indian borage and pandan. To learn how much light different kinds of edible plants require, you can refer to our resources here: https://go.gov.sg/what-to-grow</p>
43.	Do herbs or plants need sunlight during the germination period?	We recommend exposing seedlings to light during the germination period to prevent the seedlings from getting sickly. If you are unable to give leafy vegetables enough sun to reach their full size, consider eating them as microgreens! Learn more about this from our video at https://go.gov.sg/grow-pea-shoots

44.	Can we use artificial lights to supplement the shortage of sunlight in my home?	You can also consider setting up some grow lights for your plants. They are modified to produce more light in the red and blue spectra to promote plant growth. Read more about grow lights in our brochure on indoor gardening here: https://go.gov.sg/intro-indoorgardening
Soil		
45.	Do we use the same type of soil mixture for germinating seedlings and growing mature plants?	The seed starting mix for germinating seedlings is usually sterile and does not have much nutrients. We recommend repotting the healthy seedlings into potting soil, or edibles growing mix.
46.	What is a good soil mix to use when transplanting seedlings into a larger pot? What soil mix should I use for planting?	A good potting mix for mature seedlings should be well-draining and fertile. This can be achieved by adding compost and either perlite or vermiculite. You can learn how to mix your own soil for growing edibles at www.go.gov.sg/gwe-videos .
47.	What is the ideal type of soil for growing edible plants?	Edible plants require a lot of nutrients for growth and development. Compost added into the soil aids plant growth. You can learn how to mix your own soil for growing edibles at www.go.gov.sg/soilamendments .
48.	Can soil be continuously reused? Can hydroponic solution be added to soil?	Nutrients in the soil tend to be depleted over time. A good practice is to add in more organic matter (e.g. good quality compost) to enrich the reused soil. Adding diluted hydroponic solution to soil is an alternative that is beneficial for many indoor plants.
49.	What is a suitable soil pH, and how do we check for it?	A pH of 6 to 7 is suitable for most edible plants. To test for soil pH, you can purchase pH test kits from commercial nurseries or other online websites. You can also purchase pH litmus paper from the pharmacy.

50.	How do I adjust the soil's pH level?	Lime powder and sulphur powder can be added to increase or decrease soil pH respectively. Apply these very sparingly as such amendments take time to take effect.
51.	How do I tell the difference between moist soil and wet soil?	Wet soil is saturated with water and a layer of water on the soil surface is often visible. Moist soil is only slightly damp to touch.
52.	Why is peat moss often used for germinating seeds instead of potting soil?	Peat moss is generally light, sterile and provides ample drainage for seed germination. On the other hand, potting soil is a heavier substrate and may contain microbes that affect seedling health.
53.	Can we use soil containing large amounts of clay for growing edible plants?	Heavier soil materials like clay can be part of your soil mix for growing edibles, but we recommend adding soil amendments such as perlite or vermiculite to ensure that the final soil mix is still well-draining and pliable enough for the roots to grow.
54.	Can I put charcoal into the soil to increase drainage?	Adding charcoal to your soil mix can help to improve soil drainage and create pockets of air for healthy growth of plant roots.
55.	Is it ok to top up soil up to the lower leaves as the plant grows?	This is generally not recommended. Soil above the collar of the plant will cause the stem to be too wet and rot as a result. If your plant is getting too tall, you should stake the plant with a pole.
56.	What is volcanic soil and how do we store it?	Volcanic soil is derived from the combination of volcanic lava and ash and might take as long as a few hundred years to form depending on the region's rainfall. It is very rich in essential nutrients necessary for plant growth. To store, simply keep it away from direct sunlight exposure in their original packaging bag.
Fertiliser		
57.	How often should I apply fertiliser, and when is the best time to do so?	For fertiliser application, a good rule of thumb is to apply frequently but sparingly. It is not recommended to apply any fertilisers to the newly germinated seedlings as they might damage the developing plant roots and leaves. Do wait till the seedling has grown bigger with at least 4 to 6 leaves. Apply the fertilisers at the base of the plant or use a small spade to mix granular fertilisers into the soil, and water thoroughly after. Plants should preferably be fertilised in the morning so that the roots can absorb the nutrients more efficiently throughout the day.

58.	<p>What is a good fertiliser for growing edible plants?</p> <p>What is the difference between organic and inorganic fertilisers?</p> <p>Can both be used for growing edibles?</p>	<p>For leafy vegetables, apply fertilisers with high Nitrogen content to promote growth of the leaves. For fruited vegetables, apply complete fertilisers with higher Phosphorous and Potassium content to promote development of the flowers and fruits.</p> <p>You can use both organic or inorganic fertilisers. Organic fertilisers are made from natural matters such as animal dung, seaweed and fish emulsion. Inorganic fertilisers are produced using synthetic chemicals with major components consisting of Nitrogen (N), Phosphorus (P), Potassium (K), hence, also known as NPK.</p> <p>You can make a solution of eco-enzymes which can be used as both a fertiliser and pesticide for plants. Watch our how-to video to learn more: https://www.youtube.com/watch?v=S6GWTVpojXc&list=PL1_Eb2Fa0jUfYm8V6ap_WibsDRqHi8l6e&index=16&t=1s</p>
59.	<p>From seedling to adult, at which stage should I add fertiliser to a chilli or capsicum plant?</p> <p>What kind of fertiliser should I get?</p>	<p>You can use a balanced fertiliser with a NPK ratio of 5-5-5 for example. Such a general fertiliser will help to boost plant growth. When flowers appear, switch to a flowering & fruiting fertiliser like 12-12-17+TE. These fertilisers can be applied as pellets available for sale in local nurseries. Apply the fertiliser in moderate amounts to avoid burning the plants.</p>
Other Growing Conditions		
60.	<p>My windowsill tends to get very hot during the day. Can I still grow edible plants there?</p>	<p>If it is very warm, water your plants more to ensure that they do not dry out. You can find more resources on caring for your plants at https://go.gov.sg/caring-for-plants.</p>
Signs and Symptoms		
61.	<p>Why are the leaves of my plant turning yellow or brown?</p>	<p>Yellowing or browning of leaves might be due to a variety of reasons, including:</p> <ol style="list-style-type: none"> 1) Overwatering - which might cause the plant's roots to rot. 2) Aging - only the lower leaves turn yellow or brown but the rest of the plant is green. The plant is fine as this is a natural process. 3) Lack of sunlight - If the plants are sun-loving but there is insufficient light for the plant to grow optimally. 4) Nutrient deficiency, due to incorrect soil pH or soil is too heavy and compacted. 5) Lack of water as the pot is too small can also lead to such symptoms.

62.	The lower leaves of my chilli plant dropped.	<p>The symptoms may indicate a nutrient deficiency. You may want to check your growing media – is the pH between 5.5 to 7.0, is it too compacted and retains too much water? These will affect the availability and uptake of nutrients by your plant.</p> <p>Did you under-water or over-water your chillies? Either condition can lead to the dropping of chilli leaves. Check if your soil is too wet or dry in this case and adjust your watering frequency according to your growing conditions.</p>
63.	<p>Why do my bok choy leaves look so thin, silvery and dry looking?</p> <p>My seedlings are growing tall and thin and have fallen over. What should I do?</p>	<p>Your plant might not have received enough sunlight. Try to place your plant in an area that receives at least 4 hours of sunlight or consider setting up grow lights.</p> <p>You can try moving the plant to a sunnier location, but it may be better to just eat the existing leafy vegetable seedlings as microgreens and try again.</p>
64.	The leaves of my plant seem to have crumpled, turned brown and died. Could there be pests?	If it's the younger leaves that have crumpled and turned brown, it could either be due to overwatering or lack of water. If it's the older leaves, it is a natural process. If pests are suspected, check for signs underside the leaves.
65.	My chilli leaves start to curl and become smaller.	This is a classic symptom of a broad mite infestation. Regular sprays of matrine or neem oil can help to reduce the damage. Do note that damaged leaves will not recover.
Pest Issues		
66.	<p>What are some ways to tackle pest issues, aside from applying pesticides?</p> <p>My plants are frequently attacked by whiteflies/mealybugs. Why is this happening,</p>	<p>Whiteflies and mealybugs are generally attracted to weak plants. It is important to keep your plants healthy by providing the right amount of sunlight, water, and the correct kind of soil to prevent such pests from attacking.</p> <ul style="list-style-type: none"> • Ensure that your plants are well-pruned and spaced apart to encourage ventilation. • Check all your plants regularly for whiteflies and mealybugs and physically remove clusters to prevent them from spreading to other plants. Regular inspection of plants, especially the undersides of leaves and new leaves are necessary to ensure pest issues are found early. • Install netting to prevent pests. You can also try to reduce pests using yellow sticky traps.

	and what can I do to prevent them?	<ul style="list-style-type: none"> Deploy Integrated Pest Management (IPM) in your garden. Practice cultural, mechanical and biological controls. Natural homemade remedies can also be used to repel pests. More information on IPM can be found the “Best Horticultural Practices for Edible Growing” guide (www.go.gov.sg/hortguideforedibles). <p>Some good practices include:</p> <ul style="list-style-type: none"> For safety, it is recommended not to consume edible plants within at least a week of pesticide application. Edible plants should be washed thoroughly with clean water before consuming to remove any surface contaminants. Sterilise cutting tools to avoid spreading diseases. A small pot leading to a small root and soil volume can lead to stressful growing conditions for your plant where it dries out easily and there is a lack of nutrients needed for healthy plant growth. A stressed plant will be susceptible to pest and disease issues. <p>To learn more organic methods of managing pests in your garden, please do visit our resource page at https://www.nparks.gov.sg/gardening/gardening-resources/caring-for-plants/plant-pests.</p>
Hydroponics		
67.	How do I germinate seeds in hydroponics? After seed germination, can seedlings be transferred to hydroponic systems?	<p>To learn about germinating seeds in hydroponics, please check out our video at https://www.youtube.com/watch?v=wzLd2y8zoq0&list=PL1_Eb2Fa0jUfYm8V6ap_WibsDRqHi8l6e&index=11</p> <p>You can transfer seedlings to a hydroponic system. However, fruited vegetables may not grow optimally due to limited space availability.</p>
68.	Do plants grow better in hydroponics or soil?	You can grow plants in both hydroponics or soil as long as they are being grown in their optimal growth condition with regular fertiliser application.
69.	Please share the conditions for growing chillies in hydroponics environment	Hydroponic chillies need to have filtered sunlight for at least 4 hours daily. Plants can be raised in peat pellets and moved into a large net pot with expanded clay pellets. Ensure you keep the roots cool as hot water in the reservoir will lead to low oxygen content in the nutrient solution which may cause roots to die. EC of the water can be kept around 2.0. Protect from rain as you don't want rain to dilute the nutrient solution and damage plants.
Compost		

70.	What is the difference between compost and fertiliser?	Compost is a mixture of decomposed organic matter, and is generally used to improve soil structure and health. It is usually forked into the soil as a form of soil conditioner. Fertilisers refer to materials that provide nutrients for plants and it can either be organic or inorganic.
71.	How is composting being done?	To find out more information about composting, please refer to our website at Gardening Resources (https://www.nparks.gov.sg/gardening/gardening-resources/caring-for-plants/composting). There is also a video to assist you on this topic, which you can access here: https://www.nparks.gov.sg/gardening/gardening-resources/cib-outdoor-gardening-videos and https://www.youtube.com/watch?v=stVtUD6rcWk .
72.	What types of food scraps can I use to improve the soil nutrient content? Should I apply the food scraps directly to the soil? Can I add eggshells and coffee grounds to the soil?	Compost can improve the nutrients level in soil. Some of the common food scraps used in composting include banana skins, tea leaves, coffee grounds, eggshells, and fruit fibres produced after juicing. Egg shells provide calcium, which is beneficial to plant growth, and can help to regulate the soil's pH level. Adding coffee grounds can help to improve soil drainage and nutrient content. However, do apply them moderately as too much of either might make the soil too alkaline or too acidic. It is recommended to compost the food scraps prior to applying them to the soil. To learn about composting, please do visit our resource page at https://www.nparks.gov.sg/gardening/gardening-resources/caring-for-plants/composting .
Species Selection		
73.	What are the recommended indoor plants that are suitable for beginners?	Spider plants, snake plants, and money plants are good indoor plants for beginners to start with. To learn more, please download our indoor gardening brochure .