Seedway Capital Training

HomeStyle Farming

First Edition - Training Manual - 2025

A Guide to Growing Food at Home for Health and Sustainability

SKILLS DEVELOPMENT TRAINING S

The *Homestyle Farming* course by Seedway Agri College equips individuals and families with the knowledge to grow food right at home. Covering practical skills in vegetable gardening, composting, poultry care, and basic food preservation, this course promotes self-sufficiency, nutrition, and sustainable living—ideal for both rural and urban households.

Table of Contents

1. Introduction to Harvesting 3
2. Harvesting Methods T 3
3. Harvesting Equipment 3
4. Guidelines to Harvesting Crops 5
5. Home Vegetable Gardening 7
6. Other Vegetables that can be Regrown from Available Produce: 9
7. Growing Vegetables from seed 12
8. Five Seed Starting Mistakes to Avoid 22
9. Growing Plants from a Cutting 23
10. Microgreens 24
11. Building a Wick System 27
12. Making Your Own Compost 28
13. Recycled Items Used in Home Gardening 30

Summary: Home Vegetable Gardening and Harvesting 31

1. Introduction to Harvesting

The nutritional value, freshness, and flavour of fresh produce depend on maturity and harvest timing. Overripe produce can be tough and stringy, while underripe items may lack flavour. Harvest readiness varies by crop, climate, and season, so check gardens regularly near harvest time. Handle vegetables carefully to prevent bruising and decay. Since vegetables continue life processes after picking, it's important to slow these to maintain quality.

Except for ripening, storage of vegetables generally does not enhance produce quality. Vegetables need to meet certain quality standards and be cultivated appropriately to be considered suitable. Identifying when specific crops have reached optimal quality can be challenging. Maintaining detailed records—such as the varieties planted and planting dates—can assist in determining the best harvest time. Some crops are more susceptible to damage during harvesting than others. Nevertheless, it is important to avoid bruising and cutting all crops during handling. Produce exhibiting signs of decay or rot should be removed and discarded. Washing some vegetables in cold running water immediately after harvesting can remove soil, dust, and other contaminants, as well as help reduce their temperature. The addition of a suitable sanitizer may further eliminate microbial contaminants. When storing vegetables, temperature, moisture levels, and ventilation should all be considered.

- Temperature
- Moisture
- Ventilation

2. Harvesting Methods T

The crop type and expected yield determine the best harvesting method. Some crops are picked by hand, while others can be harvested manually or with machines. Hand harvesting typically results in higher quality. This manual will show you how to harvest your garden using available resources.

3. Harvesting Equipment

Harvesting equipment includes various tools and containers. For crops like lettuce and cabbage, sharp, clean knives are used to make a single cut between the first and second leaves to remove the head from the stem. Knives should be sanitized regularly during use.

Store all equipment in the designated clean, dry area for harvesting tools; do not leave it on the floor.

Pruning shear

The most common tools used for harvesting fruit are steel pruning shears. They are used to cut the stem of the fruit as close to the button, or calyx, as possible without injuring the shoulder of the fruit. Some vegetable fruits, like tomatoes, can easily be

picked by a simple twist of the hand, while pruning shears are used on others like peppers.

Specialised shears and snips are used for harvesting some crops. Pruning shears, with rounded points and curved blades, prevent fruit damage and have springs for quick use. Before and during harvest, check that springs work, blades are sharp and aligned, and regularly clean and sterilise the shears.

Garden Fork

For smaller cultivation areas where mechanical harvesters are impractical, a garden fork serves as an effective tool for lifting produce. The fork should be inserted into the soil at an appropriate angle near the crop, allowing both the plant and surrounding soil to be carefully elevated. It is important to ensure that the tines do not damage tubers, bulbs, or similar produce during the process.

4. Guidelines to Harvesting Crops

The section below summarises harvesting guidelines for selected crops.

Citrus

Once harvesting commences, the following essential guidelines should be observed:

- Pickers must walk when carrying full picking bags; running is prohibited as it may cause the fruit to bounce and chafe, potentially resulting in oleocellosis.
- When emptying picking bags, they should be placed adjacent to or on top of existing fruit in the bulk bins or picking trailers before unloading, which minimizes the risk of injury to the fruit.
- After emptying, each bag should be opened and shaken thoroughly to remove any loose twigs, leaves, or sand accumulated during the picking process.
- Fruit that has fallen during picking must not be collected from the ground and mixed with export fruit. Likewise, fruit lying on the ground and in contact with soil should not be included with export-quality produce.

Soft fruits such as tomatoes

Only harvest fruits that are properly coloured and ripe; leave unripe ones for the next round. Separate poor quality or damaged fruits to prevent bruising and contamination of healthy fruit.

Ears, heads and pods –

Since these are already dry, it is essential to handle them carefully to avoid premature seed loss from the heads or pods prior to threshing. At this stage, certain diseases may have affected the ears, heads, or pods. It is important to be able to recognize such conditions and to separate any diseased pods or cobs accordingly.

Vegetable Crops

Harvest vegetables in the cool morning hours and store them promptly. For market, follow proper storage guidelines; for processing, cool and refrigerate produce to preserve quality. Be familiar with the basic harvest practices for each crop. Below are examples for different crops.

Beans – green – Harvest when the green pods reach approximately the diameter of a pencil and before seeds develop in the pod. To assess readiness, bend the pods at the middle; if they snap easily, they are suitable for harvesting.

Beetroot should be harvested when they reach a diameter of approximately 5 to 8 cm. For markets that require smaller sizes, harvesting can occur at around 2 to 3 cm

in diameter. The leaves typically measure about 10 to 15 cm in length. Beet tops may also be consumed as greens.

Broccoli - Harvest dark green heads when they reach about 15 cm in diameter, before buds open or yellow flowers appear. Cutting the main head encourages smaller side shoots for ongoing harvests.

Cabbage - Cabbage should be harvested when the heads are firm and solid. If harvesting is delayed, the heads may crack or split. Cut the heads from the stem just below where they attach, using a clean and sharp knife that has been sanitized with an appropriate solution. Sprouts developing after the initial harvest may also be collected as a subsequent crop.

Cucumbers should be harvested when the fruits are deep green and before any yellow colour appears. For sweet pickles, cucumbers are typically picked at 5–8 cm in length; for dill pickles, at 13–16 cm; and for slicing pickles, at 16–20 cm. Harvesting 4 to 5 times per week supports ongoing production. Leaving mature cucumbers on the vine may inhibit further fruit development from the plant.

Lettuce – Harvest outer leaves of leaf varieties when about 12 cm long. Pick heading types when heads are moderately firm, before seed stalks develop.

Onions - Harvest when tops fall and yellow. Dig up, sun-dry for several days until skins toughen. Brush off soil, trim stems to 4–5 cm, and store in a net bag in a cool, dry place.

5. Home Vegetable Gardening

Having covered methods of harvesting, we will now explore techniques for cultivating various vegetables in your home garden. Specifically, we will focus on vegetables that can be regrown from food scraps.

We will be looking at the following:

Steps to regrow – Lettuce, celety, cabbage and green onions.

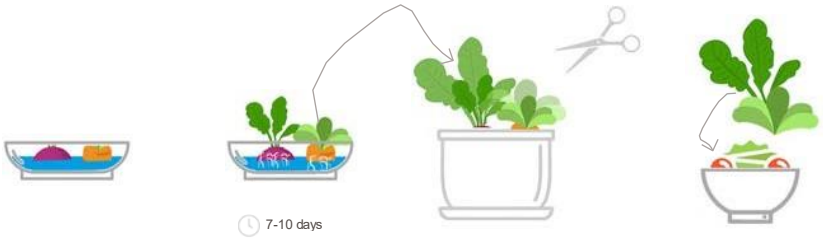
- Cut the bottom part of cabbage, celery, romaine lettuce, while leaving about 5cm. For green onion cut the bottom leaving 2cm.

- Place the cutting bottom down in water and place in a sunny location.
- Leave in water for 7- 10 days (roots should start to show) then transplant into soil.
- Harvest in 4 to 8 weeks.

Steps to regrow – Beetroot and carrots leaves

- Start with Carrots and beetroot that still have leaves.
- Trim the leaves off. You can use them in salads or cook them.
- Cut the top part leaving at least 2cm of the vegetable attached.

- Put the cutting face down in shallow water and place in a sunny spot.
- Change the water regularly every 2 to 3 days.
- After 7-10 days, Transplant them into soil.
- You can keep collecting the leaves as they grow. Since more leaves will grow back.



6. Other Vegetables that can be Regrown from Available Produce:

Ginger

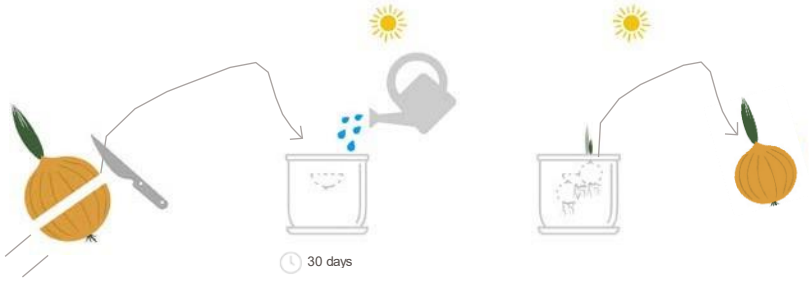
- The best time to plant ginger is mid spring.
- Use at least a 2.5cm piece with eyes
- Plant in soil (70% compost) 3cm deep and water
- Place in semi-shade, while keeping the soil moist and well drained.
- Harvest after 6 to 10 months.

Potatoes

- Take a jute (e.g. rice bag) or a bucket with drainage holes to plant the potatoes in or plant them directly in your garden in well drained loose soil.
- Start with potatoes that have eyes already. Fill the bag or bucket 3/4 the way with a mixture of potting soil and compost (50/50)
- Plant the potatoes and water them.
- After about 10 weeks they are ready to harvest. The plants will become droopy and topple over.

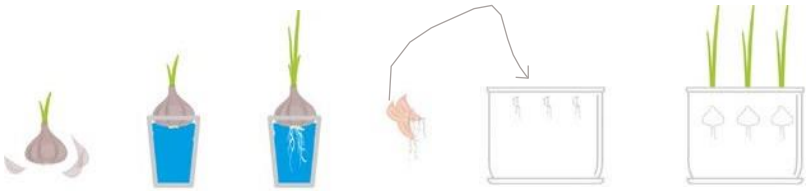
Onions

- Cut the onion bottom off, while leaving 3cm of the onion on the root.
- Place the onion in soil in sunny location, making sure to cover the top with soil with the bottom part facing down. Then water sufficiently.
- Make sure to keep the soil moist.
- They should be ready to harvest in about 4 weeks



Garlic

- Starting from a garlic head that you have at home, remove the outside peel without breaking it.
- Fill a glass with water and place the garlic inside. The water should stand up to the bottom of the garlic.
- Leave in water for 7-10 days, until roots and shoots should start to appear.
- Break the cloves and plant them in soil and water daily. Spacing between them should be a min. of 10cm.
- Make sure to cut any flowers that start to develop.
- Harvest after about 8- 10 months. Use immediately or dry for one week.



7 – 10 days

30 – 36

7. Growing Vegetables from seed

Tomatoes

- Collect the seeds from a tomato that you have at home and rinse them.
- Place the seeds in a pot and cover with soil. Use rich potting soil and place them indoor in a warm sunny location.
- After 2 months the seedlings are about 15- 20cm tall and can be transplanted outdoors. Make sure that they are planted in a sunny spot and are watered regularly.
- If you would like to keep them in a container, make sure the container is at least 45 cm in diameter and 40cm deep and the pot has holes for drainage in the bottom.
- As the plants grow, they will require support with a stake.
- It would typically produce new tomatoes between 40- 60 days after planting.
- Cherry tomatoes are the fastest to grow

Cucumbers

Take a cucumber and cut it in half lengthwise.

- Scrape the middle part which contains the seeds out with a spoon.
- Rinse the seeds with water. The good seeds will stay at the bottom.
- Place the seeds in a warm, dry area away from direct sunlight to dry them.

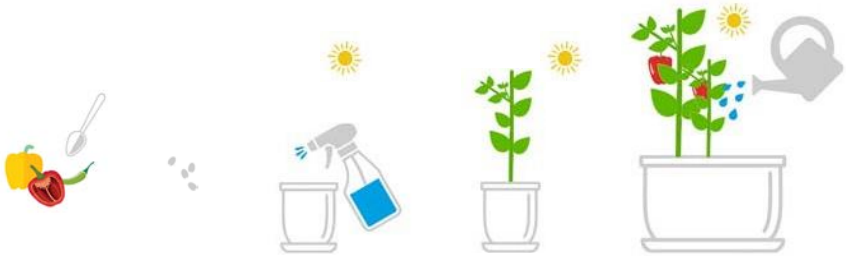
- Plant the seeds in loose growing medium about 2.5 cm deep.
- Place in a bright location and keep the soil moist.
- Seedlings should pop out in a matter of days. It takes 7 to 10 days for seeds to germinate.
- When transplanting them make sure to space the seedlings about 60cm apart.
- Plant in a sunny location and water regularly.
- Cucumbers should be ready for harvest after about 3 months.

Peppers

Cut the pepper and take out the seed pod.

- Scrap the seeds into a bowl and place in a warm, dry area out of direct sunlight to dry.
  They are ready to plant once they snap when folded between your fingers.
- Plant seeds 0.5cm deep in moist and loose growing medium.
- Water regularly and place in a warm and sunny location. Seeds germinate best when the temperature is between 21-30 °C.
- Keep the soil moist and use a spray bottle to water.
- Transplant the seedings into a pot (if planting in a smaller seed starting container).
- Keep in a sunny location and water regularly.

- These steps can be applied to all kinds of peppers.



Pumpkin

Pumpkins are best planted directly in the ground or in a raised bed. Wait until the temperature is warm enough to grow.

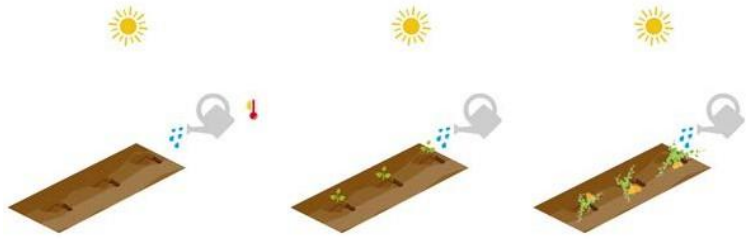
The ideal soil temperature to grow pumpkins is between 21- 30°C (30 °C is the optimum). Pumpkins are very sensitive to cold weather. The soil should be loose and mixed with compost before planting the seeds.

- Collect the seed from a pumpkin you have.
- Plant the seeds in rows or pumpkin hills in a sunny location. A pumpkin hills is a small mound of soil.
  It helps the soil to stay warm, which speeds up the germination.

- Plant the seeds 2.5cm deep, with spacing of120cm - 200cm apart and water sufficiently.
- The seedlings should show after 5 to 10 days.
- When the plants are about 7cm tall, cut most of them off leaving only 2 or 3 per hill, without disturbing the roots.
- Water regularly, pumpkins require a lot of water.
- Harvest when the pumpkin reaches the desired size and

when they are ripe.

- Pumpkins take 4 months to mature.



Eggplants / Brinjal

Eggplants

- Take an overripe eggplant (typically hard and shriveled). Slice the eggplant and collect the seeds.
- Put the seeds in a glass of water to rinse then collect the seeds and spread them on a tray in a dry area away from direct sunlight.
- Eggplant seeds have to be started indoors. Place the seeds in growing medium 0.5cm deep and loosely cover the seeds and water.
- Plant the seeds in a plastic container with a cover or in a pot and then cover with a plastic bag or a clear recycled plastic bottle.
- Water using a spray bottle and place in a sunny spot.
- Generally, eggplants germinate in 7 to 14 days.
- Transplant into bigger pots once the seedlings have grown and regularly water them.
- Harvest the eggplants once ready, it would take about 70 days after planting.

Peas

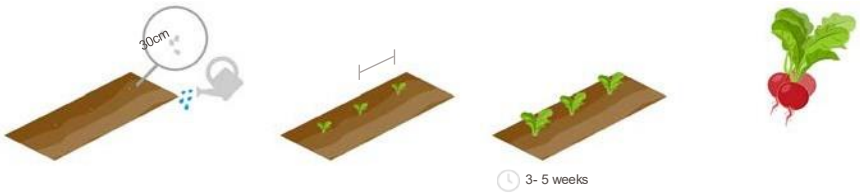
- Peas are best planted in spring.
- Fill a plastic container with potting soil.
- Plant pea seeds 1.5cm deep and 7.5 cm apart and place them in a sunny location.
- Water the seeds using a spray bottle and close the container.
- After three days the seedlings become visible. Open the lid and keep watering regularly.
- After two weeks the seedlings are 15cm tall and are ready to be transplanted into a bigger pots or outside.
- Scoop up the soil and seedlings to transplant.
- Transplant the seedlings 30cm apart. They need a structure to climb on, so make sure to provide them with a trellis-like structure.
- Water regularly and keep the soil moist.

- The peas will grow up to 150cm tall.
- After 3 months the peas will be ready to harvest.

Radish

Radish is best to grow in spring and autumn.

- Place radish seeds in soil 30 cm apart and 1-1.5cm deep. Plant them in drained and loose soil.
- Water regularly.
- Harvest after 3-5 weeks.

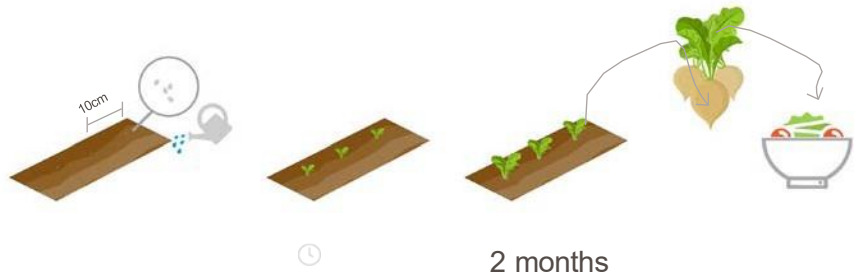


Tunips

Turnips are best planted in spring or autumn.

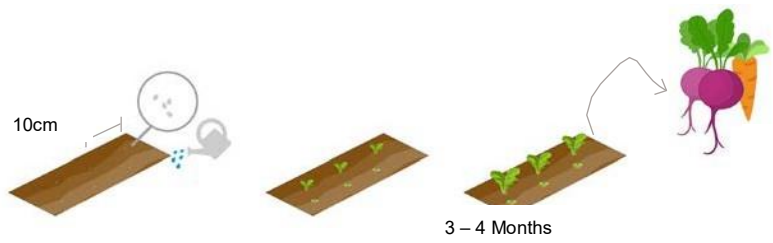
- Plant the seeds in well drained and loose soil 1-1.5 cm deep and 10cm apart.
- Water regularly.
- Seeds take 2 weeks to germinate.
- After 2 months the turnips are ready to harvest.

- The leaves are also edible. 😊



Beetroot and Carrots

- Beetroot and carrots can easily be grown from seeds.
- Plant the seeds in well drained and loose soil 1-1.5 cm deep and 10cm apart.
- Water regularly.
- After 3-4 months they are ready to harvest.
- Their leaves are also edible.



Spinach

- Spinach can be grown in spring or fall.
- You can, first plant spinach indoors or plant them directly outside. You can also plant it in containers or in the ground.
- Plant seeds in a sunny location, in well drained soil. (If growing spinach in container indoors make sure to place the container next to a window in direct sunlight).
- Cover lightly with soil and water.
- Keep the soil moist until the seeds germinate.
- Spinach is fast growing and can be harvested as the leaves grow. Typically, you can start harvesting them 6 weeks from sowing. Make sure to not harvest everything at once.

Parsley

- For better germination soak the seeds overnight before planting.
- Plant the seeds in moist, rich and well drained soil. You can first plant parsley indoors and then transplant it or plant them directly outside. (If growing Parsley in container indoors make sure to place them next to a window in direct sunlight).
- Cover lightly with soil and water.
- Keep the soil moist until the seeds germinate. The best soil temperature to grow parsley is about 21°C.
- Parsley is a slow starter - it can take up to 3 weeks for seeds to sprout.
- Water regularly.
- It can be harvested as the leaves grow. Typically you can start harvesting them 70-90 days from sowing.

Parsley Plant

Zucchini

- Take a Zucchini you have at home and cut in half lengthwise.
- Using a spoon scoop the middle part which contains the seeds.
- Put them in a glass and rinse them well with water.
- Place the seeds in a warm, dry area, away from direct sunlight.
- Plant two to three seeds together in a loose growing medium about 2.5cm deep.

- Place it in a bright location, while keeping the soil moist.
- Zucchini, similar to pumpkins, like warmth. Therefore, creating a little hill for the seeds helps the seeds to germinate faster.
- Seedlings should pop out after 7 to 14 days.
- When transplanting, make sure to space the seedlings about 60cm apart.
- Plant them in a sunny location and water regularly.
- The zucchini should be ready for harvest after about 55 days from sowing.

8. Five Seed Starting Mistakes to Avoid

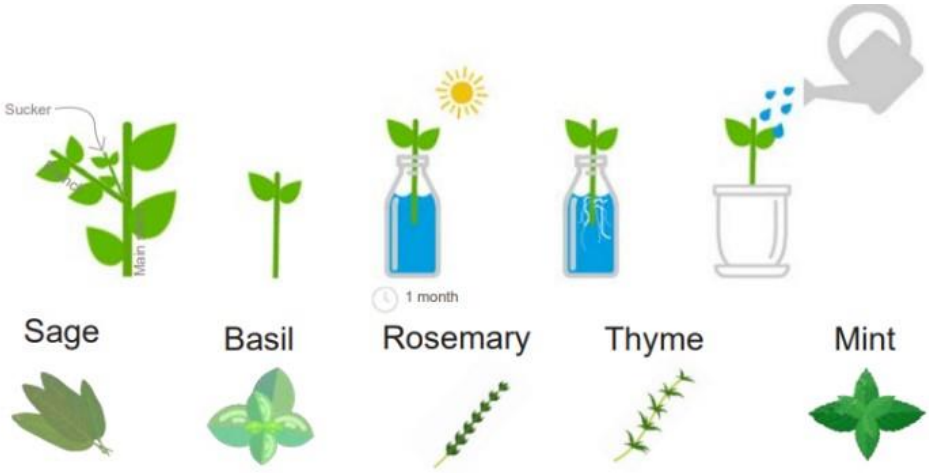
When starting plants from seeds here are some important points to take into consideration

- **Growing medium:** You can not directly plant seeds in heavy garden soil, because it is too compact. What you need is a light and fluffy soil made of 70% organic material (compost) which is called “growing medium”. Alternatively,it can also be coconut coir and perlite. The growing medium should be able to absorb excess moisture.
- **Watering:** Watering is all about balance. Under watering will not help your seeds to germinate and over watering could cause seeds to rot. For this reason, using the right growing medium is important. You want something that absorbs excess moisture while making sure that the soil is moist. Daily watering is recommended. Yet, before doing so, check the so moisture and adjust the water quantity. Use a spray bottle or a watering can to water the seeds. It is gentle and will not force the seeds deeper into the soil.
  Use clear plastic containers with a lid to create humidity for the seeds to germinate. This creates a greenhouse effect and retains the humidity in the container.
- **Light and heat:** Keep the seedlings in a sunny location. Heat and light helps the seedings to germinate and grow strong and healthy.
- **Wind:** If the seedlings are becoming thin and weak make sure that there is a light breeze by placing them in a sunny spot outside or ensure air movement so that the stems become stronger.

9. Growing Plants from a Cutting

Tomatoes

- Cut off a big sucker (growth coming out between the main stem and a branch) while making sure you don't cut a sucker that has fruits or flowers.
- Remove any extra growth making sure to only leave 3 to 4 leaves on top of the stem.
- Put the stem in filtered water submerging the stem deep in the water.
- Keep away from direct sunlight for a couple of days then place it next to a window in the sun.
- Change the water every 2 to 3 days.
- It takes about a month for roots to develop from a cutting.
- Plant the newly rooted stem in soil and water. Make sure that the stem is healthy and free from rot or fungus before planting.
- Water regularly making sure that the soil never dry up for at least one month.

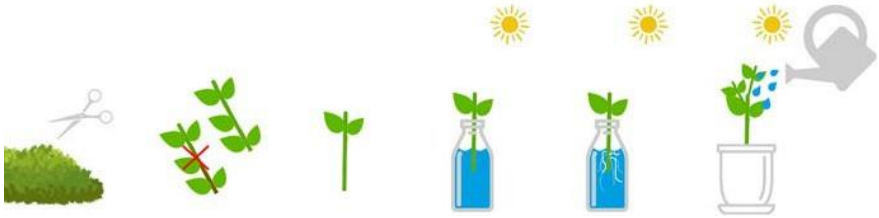


- Simply take a cutting from the plant, cut the bottom at 45 degrees.
- Remove the lower leaves of the cutting.
- Place the cutting in filtered water.
- In two weeks, root would have developed and you can transplant into a pot or into open soil.

Notes:

- For mint make sure to plant it in a pot or in contained area, as it is a pioneering species and could overgrow other plants.
- For rosemary and thyme make sure to use a green branch as a cutting (avoid woody ones).

- Sage takes about a month to develop roots.



10. Microgreens

Microgreens are fast and easy to grow and are rich in nutrients. You can use them in salads, soups or sandwiches.

They include:

- Sunflower
- Pea shoots
- Radish, beet
- Broccoli, cauliflower, cabbage
- Cress, arugula, chives, cilantro

When planting any of the above prepare a recycled plastic container with growing medium. Use a mix of 70% organic material (compost) and 30% soil.
Alternatively, you can use coconut coir

Steps for growing sunflower microgreens - 10 days

- Soak sunflower seeds in water for 24 hours.
- Place the seeds evenly on top of the growing medium, ensuring a flat surface.
- Leave the seeds uncovered by the medium; instead, cover them with another container or cardboard to block light and apply weight.

- Remove the cover after 2 days.
- Water every other day using a spray bottle.
- After 7 days, cut the greens (approximately 7 cm from the top) with scissors or a knife.

Every 48hr Day 10

Steps for growing pea shoots microgreens in 10 days:

- Soak seeds in water for 24 hours.
- Spread seeds evenly on the growing medium.
- Cover with more growing medium.
- Level the surface and water thoroughly.
- Mist every other day.
- After 7 days, harvest greens by cutting 10 cm from the top.

Every 48hr Day 10

Steps for growing radish microgreens (6 days):

- Sprinkle seeds evenly on the medium, leaving gaps.
- Lightly cover with more medium.
- Flatten and water well.
- Mist every other day.

Harvest after 6 days by cutting greens 5 cm from the top.

Every 48hr Day 6

Steps for growing broccoli microgreens - 8 days

- Spread seeds evenly on the growing medium.
- Do not cover with soil; instead, block light and add weight using a container or cardboard.
- After 2 days, uncover the seeds.
- Mist with water every other day.

After 6 days you can cut the greens (5cm from top) with scissors or a knife

Every 48 hours D 48hr

Steps for growing cress microgreens in 7 days:

- Soak cress seeds in water for 24 hours.
- Place the seeds, together with their gelatinous coating, evenly on the surface of the growing medium.
- Do not cover the seeds with additional growing medium.
- Use a spray bottle to water the seeds every other day.

After 6 days you can cut the greens (3cm from top) with scissors or a knife.

Every 48hr Day 7

11. Building a Wick System

A drip system, or drip irrigation, delivers water directly to plant roots via tubes or pipes, reducing evaporation and runoff for efficient, sustainable watering.

a simple method for providing plants with a continuous water supply through capillary action, allowing them to self-water.

To build your own wick system you will need the following:

Steps to assemble the wick system:

- *Cut the bottle 10 cm from the top.*
  - *Make a hole in the cap with a screwdriver or knife, approximately 0.5 cm wide, or large enough for the twine to pass through.*
  - *Cut a piece of twine measuring about 30 cm.*

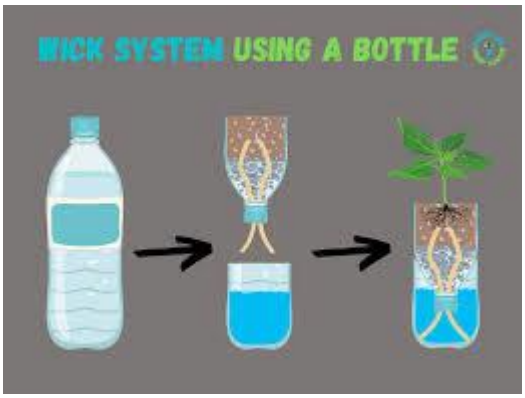
Feed the twine through the hole in the cap so that there is an equal length of 15 cm on each side.

- Add a nutrient mix and water to the bottom of the bottle as directed by the instructions on the nutrient mix packaging.

To prepare your own mix, combine 1.8L of distilled water, 300g of water-soluble fertilizer, 150g of Epsom salt, and 0.75g of Sodium Benzoate. When preparing the mixture, wear a mask and gloves, and use a wooden spoon or stick for stirring.

Position the top part of the bottle upside down (with the cap facing downward), ensuring that the lower half of the twine is submerged in the liquid.

- Fill the upper section with a mix of 30% organic material and 70% compost, or use coconut coir, perlite, or peanut hulls as alternatives. Ensure the twine's end is embedded in the medium. Add up to 3 seeds to the growing medium.



12. Making Your Own Compost

Making your own compost offers several benefits:

- Recycles food scraps.
  - Naturally enriches soil, boosting plant growth.
  - Reduces pollution.

To compost, you need a bucket, green materials (lawn clippings, fruit, legume, and vegetable scraps—rich in nitrogen), and brown materials (fallen leaves, straw, wood chips—high in carbon dioxide).

Steps to make compost:

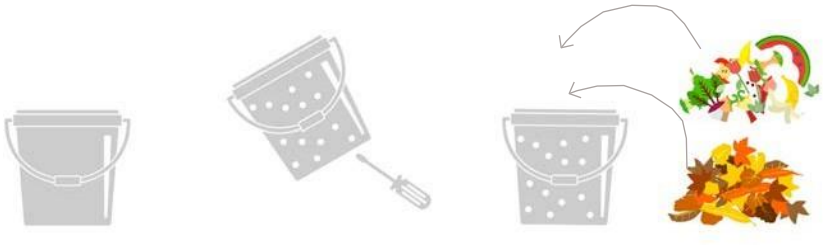
- Use a bucket (plastic, metal, or wood) with holes for airflow.
  - Layer brown and green materials, starting and ending with brown; break everything into small pieces for faster composting.

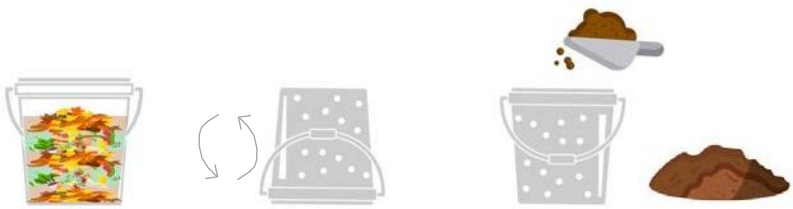
Place the bucket on soil in the shade, and keep adding green and brown materials as needed.

Regularly flip the container to insure proper and faster composting.

Compost is ready when it's brown, soil-like, and reduced to a third of its original size.

- Use two buckets: fill one with new material while the other composts.





13. Recycled Items Used in Home Gardening

There are a number of items that can be recycled and used in home gardening.

Items that can be re-purposed and used to grow seeds:

Toilet and paper towel rolls are biodegradable materials. When seedlings have grown, they can be planted together with the roll. Paper towel rolls should be cut into four pieces to ensure an appropriate length for planting.

Egg shells are biodegradable and can be used to plant seedlings. It is recommended to gently break the shell before planting to avoid damaging the seedlings.

When choosing egg trays, plastic trays are more suitable because carton trays tend to absorb moisture. Transparent plastic egg trays can also be used to cover seedlings during the first few days to create a greenhouse effect.

This approach can be applied to other transparent plastic containers as well; closing the lid creates a moist environment similar to a greenhouse for initial seedling growth. Plastic containers and yogurt cups are reusable options for starting seedlings.

Recycled items that can be used as platers:

When using any container as pots or raised planters make sure to make holes at the bottom to allow excess water to escape.

Summary: Home Vegetable Gardening and Harvesting

This guide covers essential practices for harvesting and growing vegetables at home. It explains how to determine produce maturity, handle crops gently to avoid spoilage, and use proper tools for harvesting. The document outlines methods for regrowing vegetables from kitchen scraps, such as lettuce, onions, and garlic, and provides step-by-step instructions for growing various crops from seeds, including tomatoes, cucumbers, peppers, pumpkins, eggplants, peas, radishes, turnips, beetroots, carrots, spinach, parsley, and zucchini.

Advice is given on avoiding common seed-starting mistakes, such as improper soil, overwatering, and insufficient light. The text also details how to propagate plants from cuttings, grow nutrient-rich microgreens, and build a simple wick irrigation system for efficient watering. Composting at home is encouraged for soil enrichment, and numerous household items—such as toilet paper rolls and egg shells—are suggested for repurposing as seed starters or planters to promote sustainable gardening.

THE END.