

MAKE IT YOURSELF
HERBAL TEA GARDEN



*Skill Development:
Gardening basics, from seed starting to harvesting*

 Lee Valley

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Skill Development: Gardening basics, from seed starting to harvesting

The best way to start gardening is to start. Our herbal tea garden is a perfect endeavor for the new gardener since it lets you start small. Your growing adventure begins with planting six different herbal seed varieties into fiber pots. You will learn how to use Wonder Soil soilless potting mix and plant seeds following the specifications noted on each seed packet. To help you deal with the main challenges between germination and harvest, we offer plenty of resources that will make you feel like you have your own personal gardening coach. Then, as harvest time approaches, and in anticipation of your first cup of homegrown herbal tea, you will make a low-tech herb drying rack with a dowel and sisal twine, and then learn how to air dry the leaves and flowers. The included tea infuser makes it easy to savor the results of your herb growing adventure.

Note: This project kit was developed in partnership with **West Coast Seeds**, a family-owned company founded in 1983 in Vancouver, British Columbia, that offers over 1000 varieties of untreated, non-GMO, non-GEO, open pollinated and hybrid seeds.

Skill Level: Beginner to intermediate. 14+

Time to Complete: Several months



CONTENTS

- 6 Fiber pots, 3 1/2"
- 6 Wooden plant markers
- Dowel, 18"
- Seedling tray
- 1 Grease pencil
- Sisal twine, 240'
- 8 Wonder Soil wafers, 2"
- Seedling sprayer
- Tea infuser
- 6 Seed Packets*
- Micro shears

***Note:** The seed packets include four perennials (peppermint, lemon bergamot, lemon balm and orange balm) and two annuals (calendula and chamomile). Perennials are plants that return year after year, from three to five years. Annuals, on the other hand, are plants that complete their entire life cycle in one single year, and then die with the onset of frost.

Other items you will need (not included):

- Stir stick
- Light source
- Knob, hook or peg
- Water
- Small fan

1 PREPARING THE WONDER SOIL WAFERS

TIME TO COMPLETE: 30 MINUTES

Note: While you can start your herb tea garden at any time, the ideal time for starting seeds indoors for transplanting outdoors is 6 to 8 weeks before the last frost. Last frost dates are based on average historical data of when frost is no longer a risk to plants living outside. To find your last frost dates, search online for "frost date" plus the name of your town/city. Keep in mind that these dates are averages and can fluctuate year to year. Once the risk of frost has passed, usually once daytime temperatures are steadily above 50°F (10°C), it is safe to sow seeds directly outdoors.

Wonder Soil is an environmentally friendly, dry compressed coconut coir mixed with organic amendments. This lightweight soilless growing medium can be used for indoor and outdoor plants, and has outstanding water retention capabilities. It promotes a strong root system, fast germination and enhanced plant growth. Each 2" wafer will expand to fill one 3 1/2" pot.

- a. Place the fiber pots in the seedling tray, which will collect excess water while protecting surfaces.
- b. Drop one Wonder Soil wafer into each fiber pot, and slowly pour 3/4 cups of water over each wafer to moisten it. The wafer should fully expand in 1 to 1 1/2 minutes.



Tip: Alternatively, you can pour 6 cups of water over all eight wafers at once in a container, and then fill each pot as required.

- c. Stir the soilless mix well with a small stir stick (or the non-writing end of the grease pencil) to loosen it.
- d. Top up with more soilless mix, if needed.

2 SEEDING THE POTS

TIME TO COMPLETE: 30 MINUTES

- a. Place several seeds in each fiber pot.

Tip: Refer to the seed packet for the specific requirements for each variety. While most seeds can be planted to a depth that is 2 1/2 times their size, each seed packet will recommend how deeply that particular variety should be planted, as well as any supplementary planting conditions, such as whether to soak the seeds before planting. Save your seed packets, as these have information that will be useful to have on hand throughout the growing season.

- b. Use the grease pencil to write the herb name on a wooden plant marker. Place a plant marker in each pot.
- c. Water the pots with the seedling sprayer.



Tip: Watering after seeding softens the hard outer shell of the seed. Once water has been absorbed, enzymes inside the seed are activated and the plant embryo uses its stored food supply to germinate. Seeds contain just enough of that stored food to produce a root and unfurl the first leaf or leaf pair (the cotyledons).

The 1 1/4" rose on the seedling sprayer produces a soft spray as you gently squeeze the silicone bulb, giving a light surface watering without disturbing the soil or seedling roots. To fill the seedling sprayer, squeeze the bulb, submerge the rose in water and release the bulb.

- d. Set the pots on the seedling tray and place the tray near an indirect light source. The ambient air temperature should be between 75°F to 80°F (24°C to 27°C) to ensure optimum germination.

Tip: Most seeds require 6 to 16 hours of light to germinate, while others require complete darkness. Be sure to consult the seed packet for lighting requirements. To make sure the seedlings are not overheated, avoid placing them in direct sunlight.

3 GERMINATION

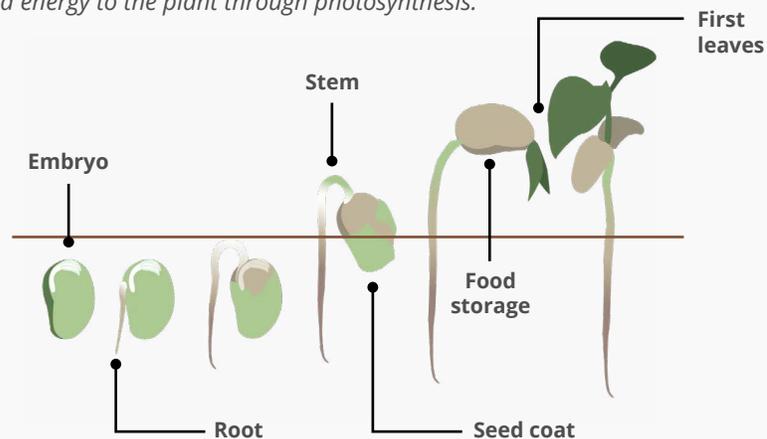
TIME TO COMPLETE: 6 TO 21 DAYS

- a. Keep an eye on your seeded fiber pots, making sure they do not dry out. Water with the seedling sprayer as required.

Tip: Germination rates are noted on the seed packets. These rates were determined by taking samples from specific lots of seed and germinating them in a controlled environment. The rate refers to the number out of 100 (or more) seeds that germinate successfully within an acceptable period.

- b. Once the seeds have germinated and their true leaves are established, thin to keep only the strongest plant.

Tip: The first leaves to appear are called cotyledons. They are the leaves contained within the seed. The true leaves are the first leaves to provide fuel and energy to the plant through photosynthesis.



Tip: Thinning seedlings means removing the weakest and smallest plants, leaving more space for the strongest plant to establish its roots and grow. You can either snip the weakest-looking seedling at the soil level with micro shears or gently tweak it out by the stem with your fingers or with a narrow tool, such as a chopstick or pencil.



4

CARING FOR YOUR SEEDLINGS

TIME TO COMPLETE: A FEW MINUTES EACH DAY

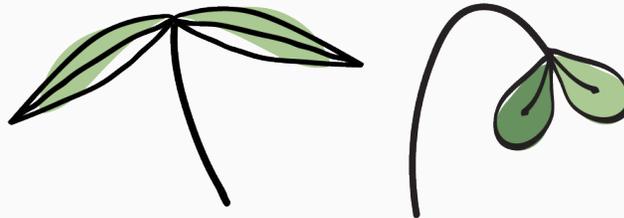
Seedlings require adequate light, water, heat and airflow. Seedlings grown in Wonder Soil do not require fertilizer, since the mix already contains all the nutrients they will require during this development stage. If seedlings are drooping or turning yellow, ensure they are receiving the proper amount of light, water and oxygen.

Tip: Potted plants have a tendency to grow toward the light (sun). To ensure they grow upright, be sure to rotate them often.

Light

If using fluorescent or LED grow lights, these should be put 2" to 3" above the plants to ensure the lights don't burn the seedlings. Make sure you raise the lights as the plants grow. You will know when more light is required if your seedlings become leggy.

Tip: Leggy plants occur when the stems stretch upward in search of more light instead of branching outwards and growing leaves. If you see signs of leggy plants, increase the amount of light per day.



Water

Check the moisture in the soil twice per day by putting your fingertips just below the surface. It should feel like a moist sponge – neither muddy nor dry. If it is muddy, let it dry to the consistency of a moist sponge, and reduce the amount of water you use going forward. Avoid letting it dry out completely. Use the seedling sprayer to water the seedlings; it gives a light surface watering without disturbing the soil or seedling roots.

Tip: When seedlings are overwatered, fuzzy mold can develop on the soggy soil, causing the seedlings to sag, wither and die. To prevent damping-off mold, always use soilless mixes (such as Wonder Soil) for seed starting and only water if the soil is dry. If possible, water from the bottom of a seedling tray (but don't let the pots sit in water). Also, make sure the ambient air is adequate – neither too cold nor too dry. To increase air circulation, place a small fan nearby to create a gentle breeze for a couple of hours per day. This will simulate outdoor conditions and strengthen the stems.



Caution: If your seedlings do become infested with damping-off disease, remove the affected plants immediately before it has a chance to spread to other seedlings. There is no saving a seedling that has developed this fungal disease.

Heat

Keep seedlings warm during this stage; the ambient air temperature should be between 75°F to 80°F (24°C to 27°C) to ensure optimum germination and growth.

5 HARDENING OFF

TIME TO COMPLETE: 1 WEEK

After 4 to 8 weeks of growing indoors in pots, the seedlings will have grown to a significant size and will be ready for transplanting in larger containers to give them more room to grow outdoors. Before doing this, they will need to be hardened off to avoid transplant shock. This is achieved by gradually exposing them to outdoor temperatures, wind and direct sunlight over several days.

Tip: For more information about hardening off seedlings, read our article [Hardening Off – Boot Camp for Seedlings](#).

6 TRANSPLANTING

TIME TO COMPLETE: 1 HOUR

Transplanting is the act of moving seedlings from their starter pots and replanting them in a permanent location, such as in a garden bed or a grow box. Burlap bags, terracotta pots or anything that will provide a stable receptacle for soil can also be used, provided there is drainage. Keep in mind that plants don't want to sit in water, so drainage holes at the bottom of your container will allow excess water to drain out and oxygen to get in.

Note: Pots should be well watered prior to planting to prevent surrounding soil from drawing moisture from the roots.



Caution: Mint, lemon balm and orange balm will grow rapidly and have a tendency to spread out and take over a garden bed. They should be grown in their own garden box or pot.

Tip: Peppermint and calendula will attract earthworms and beneficial insects, including hoverflies and predatory wasps when flowering. However, these herbs also repel cabbage moths, aphids and flea beetles, so planting these in any garden can be beneficial to all other plants. As an example, since chamomile is sometimes affected by aphids, you can plant these near peppermint or calendula to deter the threat of aphids.

All the herbs in this kit are suitable for growing outdoors in direct sun, so choose a growing site that receives 6+ hours of sunlight per day. Refer back to the seed packet for specific growing requirements for each herb variety. For example, lemon balm and orange balm prefer partial sun, which is equivalent to about 4 to 6 hours of sun per day. Peppermint will tolerate partial shade, as well as full sun exposure.

Tip: A dedicated herb garden, such as the one described in our article, [Growing a Kitchen Herb Garden](#), can be used to grow all your tea herbs outside in one convenient spot.

If transplanting the herbs into containers, choose containers that are at least 1 cubic foot (12" diameter and 12" deep). Deeper is better – the more room you can give the plants, the larger their root systems will grow.

Tip: When planted in outdoor containers, plants can be moved around to make the most of the available sunshine.

- a. Dig a hole in your container of choice (or grow box or directly in a garden bed). The hole should be slightly larger than the seedling's fiber pot.
- b. Optional: Mix a little slow-release, organic fertilizer (following the product's directions) into the growing medium. A fertilizer will supply nutrients to plants and encourage healthy growth.

- c. Place the seedling (fiber pot and all) into the hole.
- d. Fill in with soil and firm around the top of the transplanted seedling.
- e. Water the transplanted seedlings.

Tip: A wet garden at night is the perfect environment for woodlice, slugs and snails to prosper. By watering in the morning, you can reduce the risk of these unwanted pests.



7 CARING FOR YOUR PLANTS OUTDOORS

TIME TO COMPLETE: A FEW MINUTES EACH DAY

Tea herbs require the same care as most garden plants. The best defense against pests and diseases is companion planting with umbellifers or a trap crop.

Umbellifers are plants that bloom with a flower structure in a shape called an umbel — scores of tiny flowers arranged on a more or less flat or umbrella-shaped plane. Cilantro and dill are both good examples of umbelliferous plants. Because of their flowers, all of these plants attract beneficial predatory insects.

Trap crops are plants that are strategically planted to attract pests away from your main crops. Examples of trap crops are nasturtiums, sorghum, and sunflowers.

For useful tips and techniques that will help your garden flourish, while avoiding pests and diseases, be sure to turn to our [gardening videos](#).

Tip: Where summers are long, bergamot is prone to mildew, so avoid overhead watering these plants.

8 HARVESTING

TIME TO COMPLETE: A FEW MINUTES AT A TIME

Tip: You can pick leaves and flowers throughout the growing season once the plant has grown large enough and has enough foliage. In fact, many tea herbs will benefit from a frequent harvest pruning. It will encourage new and compact growth throughout the growing season. You can safely harvest up to 25% of a plant's total volume each time you trim. If harvesting for immediate use, cut in the morning when the plants are most hydrated. If harvesting for drying, cut mid-day when plants are at their driest already.

- a. Use the micro shears to make clean cuts, cutting down to the next set of leaves and removing any damaged ones.
- b. Clean and disinfect shears after use.



HERB	HARVEST METHOD
Chamomile	Harvest the small fragrant flowers when fully open.
Lemon Bergamot	Harvest leaves just before the flowers open, when essential oils are at their highest by cutting stems back by two thirds. You can also let the flowers fully open and harvest them for a pink-purple blossom that can be dried and steeped for tea.
Lemon Balm and Mandarinina Orange Balm	Pick leaves to the stem. Use them quickly after drying when the aroma is most intense. You can also pinch stems just above the leaves to promote branching for bushy growth.
Peppermint	Clip leaves and branches as needed. Cut up to one third of the plant at a time, down to 1" from the ground. This hardy plant will grow right back. The flowers are also edible.
Zeolights Calendula	Harvest calendula blooms by cutting off the flower where it meets the stem.

9 MAKING THE HERB DRYING RACK

TIME TO COMPLETE: 15 MINUTES

- a. Cut a strand of twine about 24" to 30" long.
- b. Tie the twine about 1" from each end of the dowel.
- c. Suspend the midpoint of the twine from a knob, hook or peg that protrudes a few inches from a wall to allow for good air circulation.



10 AIR DRYING THE LEAVES AND FLOWERS

TIME TO COMPLETE: SEVERAL DAYS

Air drying allows moisture to evaporate slowly and naturally, leaving the flavorful essential oils behind.

- a. Pinch off and discard any blemished, discolored or moldy leaves.
- b. If the herbs are dirty, rinse the herbs and gently pat dry with a tea towel; otherwise, gently shake the sprigs to remove any loose debris or insects.
- c. Bundle several sprigs of an herb variety together and tie their stems at the base with twine.



Tip: Since dehydrated herbs are often unrecognizable or can look and smell similar to each other, be sure to place a small identifier tag on each bundle.

- d. Suspend the bundles upside down on the drying rack, ensuring adequate space between each bundle to allow for good air circulation and prevent rot.
- e. Place your drying rack away from direct heat and light.

Tip: When hanging herbs to dry, choose a dry, well-ventilated room that receives a minimum of light; herbs placed in a moist or dank environment will simply rot. The smaller the bundle, the faster the herbs will dry. If the stalks bend, or if the leaves feel soft and pliable, continue the drying process.

- f. Depending on environmental conditions, herbs may dry in as little as 5 days.
- g. Rotate the bundles as needed to ensure even drying.
- h. Once the herbs are brittle and can crumble between your fingers, strip the sprigs by sliding your thumb and finger down the stalks, starting from the tip.
- i. Store the herbs in dark, airtight containers for up to 2 years.*

***Note:** After 2 years, the dried herb's flavor and aroma will be somewhat diminished. At that point, tea infusions will need larger amounts of dried herbs to achieve the desired flavor.

11 MAKING HERBAL TEA

TIME TO COMPLETE: 15 MINUTES

You can make an herbal tea infusion with fresh or dried leaves and flowers, using a single herb or in combination with others. The quantity of each herb used in your tea blend is entirely up to you.

- a. Fill tea infuser with herbs*, leaving some space for the leaves to expand.



***Note:** Proportions of herbs used will vary according to your taste, and whether you are using fresh herbs or dried herbs. Fresh herbs are 80% to 90% water. As the water evaporates, the herb's flavors will become more concentrated, resulting in a stronger tasting herb than when fresh. A good baseline ratio is to use three times as much fresh herbs than the amount of dried herbs; e.g., 3 teaspoons of fresh herbs would convert to 1 teaspoon of dried herbs.

- b. Let the herbs steep in hot water for 10 to 15 minutes to allow the essential oils to flavor the brew.
- c. Remove the tea infuser.

Note: Leaving the infuser in the water too long releases the tannins from the herb, turning your infusion bitter.

Tip: There are plenty of other uses for these herbs besides their use in tea. These leaves and flowers can be incorporated into soups, sauces, main meals, pastas and baked goods, as well as used for a bath soak.

NOW WHAT?

We hope you enjoyed the experience of growing herbal tea from seed and that you will be inspired to continue to develop your gardening skills.

We invite you to explore our **seed starting supplies** on our website, where you will discover our broad range of plant propagation supplies designed to meet your gardening needs.



CREATED BY LEE VALLEY. MADE BY ME.

We would love to hear about your experience and see what custom tea blends you concocted.

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MK201 Herbal Tea Garden

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