

All questions are answered by Dr Christopher Teh, soil biologist and senior lecturer at Universiti Putra Malaysia.



Dear Plant Doctor

Your gardening questions answered by an expert. Send your queries to faqs@eatshootsandroots.com.

Q What is the best growing medium for potted edible plants? Does it need to be changed after some time?

A IT is not easy to simultaneously get all the good factors in one potting media. Commercial soil-less media have been formulated to be rich in specific nutrients needed for certain plants, but they can be too light, so they may be unable to support taller and heavier plants like tomato plants.

These media also dry out faster than soil, so more frequent watering is required, which in turn can also lead to more water wastage as these media may not hold onto the water as well as soil.

One good option is to mix your garden soil. If you don't have a garden or if your garden soil is infertile, try buying soil from nurseries. Avoid the red soils you often find at these places as they contain too much clay and are generally not fertile. Instead, look for soil that looks dark and has a rich, fertile smell; and the soil should also be heavy.

Mix one part garden soil with one part peat moss and one part perlite or coarse (not fine) sand. You can buy peat moss and perlite (or coarse sand) from most hardware stores or nurseries. The advantage of this soil mixture is that it is able to support heavier and taller plants, and it holds onto water and nutrients longer.

How often you change your potting media depends on how aggressively you use the media to grow your plants and how well you protect your soil – for instance, adding mulch or compost will prolong soil use. Once you find your plants are no longer growing as well as before, you should change the media; this happens anyway after a few years.

Q Is it true that the water from washing rice is good for watering plants? What other types of kitchen water waste can be recycled for plants?

A Using rice water is a good way to reuse and, thus save, water. Rice water contains nutrients needed by plants, and the starches in it will promote beneficial microorganisms in the soil that will, in turn, promote plant growth in the long run. So by using rice water, you are actually simultaneously watering and fertilising your plants.

Whatever source of water you use, make sure it does not contain harmful chemicals. Substances to avoid are salts, soaps, strong acids (like vinegar), and oils. If you are unsure of your kitchen water content, it's best to avoid watering your plants with it.

Q Can kitchen waste like fish parts or coffee grounds be used to fertilize plants?

A Burying fish parts will aid in decomposition, and as they decompose, they will release nutrients into the soil for your plant. How deep you should go depends on your plant: the parts shouldn't be buried so deep that the plant's roots cannot reach the nutrients; but neither should they be buried so shallowly that they attract flies or dogs and cats that might dig the parts up again. This usually works out to between 15cm and 30cm deep.

The coffee beans can be buried as well or just applied over the soil's surface. If you find yourself doing this often, you should try composting.



Beatrice Yong (left) of Eats, Shoots & Roots working with Lee's older two children, Jodi (centre), nine, and Jora, seven, to set up one of the raised beds.



Urban livestock can include hens; these happy ones live in a coop below the raised bed and are let out to forage.

Ready, set, grow!

By Eats, Shoots & Roots

OVER a year ago, Dian Lee, 33, embarked on her gardening journey to feed her family with food grown in her backyard. Here's a Q&A telling the story behind her edible garden, the challenges she's faced and the successes she's reaped.

What do you do?

I am a mother of three kids, yoga teacher, and founder/managing director of boutique development company The Clearwater Group.

How long have you been interested in gardening?

I used to keep bonsai pots in my apartment during my university days, that was the only gardening exposure I had before starting the edible garden.

What made you want to start an edible garden of your own?

I love nature and the idea of sustainable living. Then, when Chef Jeff Ramsey worked with Eats, Shoots & Roots to build a rooftop edible garden for our restaurant Babe, I thought to myself, "Why not have one at home too?" I think it's also a great opportunity for our kids to be exposed to nature and learn how much nurturing goes into growing food.

Tell us a little bit about your edible garden.

I started the garden in February 2016 with 13 Grow Tong bins. A year on, we are now using whatever flat land we have to plant and grow, and we have also recently started our own patch of corn. (Grow Tong bins are metal containers of various sizes used to create raised beds.)

How did you choose what kind of vegetables to grow?

Planning what to grow in the garden was easy as my family and I focused on vegetables and produce that we usually eat at home like kangkung, sweet potato leaves.

My kids love to eat carrots so I experimented: I obtained carrot seeds from Thailand and managed to sprout them but when I transplanted the seedlings from their tray to the Grow Tong, it proved unsuccessful due to Malaysia's hot tropical climate.

My husband and I were recently in India and brought back seeds of plant that we love to eat over there, like mustard leaves, non-GMO multi-coloured corn, and tulsi.

What has it been like taking care of the garden?

It's been a steep learning curve for me, researching the dos and don'ts, what works and what doesn't. The trial and error doesn't faze me, though, as I'm still continuing to experiment with different types of seeds and plants – at this very moment, I am experimenting with different types of melons (like winter squash).

Has the garden changed your lifestyle?

Having our own edible garden has made us so much more appreciative of food and all the effort that goes into growing it.

I have so much respect for organic farmers everywhere, and now we are very mindful about not wasting food and trying to recycle or compost as much as we can.

What challenges did you face taking care of the garden?

Dian's green jour

Welcome to *Star2's* new gardening column, brought to you by a social enterprise that champions urban edible gardeners' journey in the hopes of inspiring more Ma



The before (inset, left) and after (above) with Prem, her faithful helper, in her r



Growing fruiting plants like okra and eggplant is the trickiest because they attract more pests. Because of this, they require extra love and care. Keeping pests from attacking the vegetables and plants was one of the biggest challenges; snails used to be the biggest issue but we have managed to get it under control.

There was an overproduction of Brazilian spinach in the first few months of starting the garden. We had to pull out half the bed because it became too much for us to keep up with. We replaced it with kangkung because it's easier to grow and maintain, and we harvest more of it compared

with the Brazilian spinach.

What is your go-to pest control method? My favourite (and most consistent) method is to use fossil shell flour (FSF). The shells' sharp edges help get rid of them or they come in contact with them or

Before discovering the fossil shell flour, I used organic pesticide spray but it washes away with rain.

I still use neem spray as a pesticide. It works well to get rid of certain pests. I also use fossil shell flour – I sprinkle it on the beds and it stays for a few days, even after rain.

Any plans to expand?

We now grow almost 30 different types of herbs, vegetables and fruits in our garden. We have the help of our amazing gardener, Prem, who wants to make sure we give the pla



Jaan the three-year-old water police!



Butterfly pea, mustard greens from India, and eggplant plants coming up in a bed.

Irney

it to you by Eats, Shoots & Roots, the lening. Each month, we will feature a Malaysians to grow their own food.



above) photos of Lee's urban edible gardening journey. She's pictured above her roughly year-old garden. — Photos: Eats, Shoots & Roots

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care and love they deserve so there are no plans to expand for now – although if my husband and our neighbours agree, I would love to have a cow so we get fresh milk every day!

Do you have urban livestock?
We have a chicken coop just below the Grow Tong bins with a number of happy chickens.

Other than cooking, what do you do with the produce that you grow – do you use it for teas, herbal remedies, etc?
Right now, we mainly grow to cook.

What do you enjoy the most about growing your own food?
Ever since we started this garden, we rarely buy vegetables from the market or store anymore, with the exception of carrots and broccoli, which are the kids' favourite.

Apart from that, everything else is from the garden. From Malabar spinach and kangkung to



A luscious winter melon almost ready for harvesting.



Bananas ripening on the stem.

sweet potato and amaranth, we rotate between the vegetables, in terms of consumption.

We really love the idea of knowing where our food comes from and the sustainability part of eating what you grow.

This is also a great way to stay in tune with nature specially for our kids who live in an urban environment – our three-year-old son Jaan is the watering police, while our nine-year-old son Jedi is the pest/snail hunter.

In your own words, why do you think urban gardening is important?
Because it brings awareness of our environment and the ecosystem in the city. It's not just about growing food but being really ecoconscious in the way we live.

In our household, we are always looking at ways to recycle and reduce our carbon footprint as much as we can. For instance, our food waste and gardening waste go into the composting bin to make compost for our garden.

We also try not to use any toxic products in our household; instead of mosquito fogging, for example, we recently added lotus ponds around the house to attract dragonflies as they are a great mosquito predator.

Do you have any advice for someone that's just getting started?
Be patient, and have fun with it!

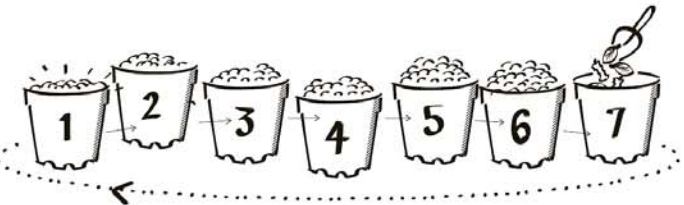
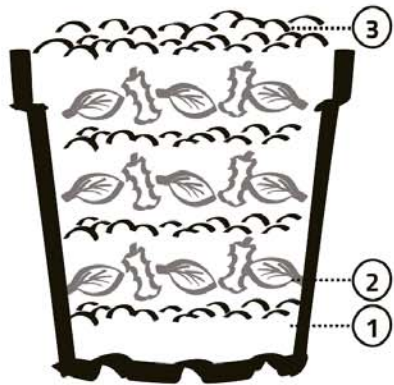
How To ... make your own COMPOST IN-A-POT

Ingredients

Pots: minimum 20cm diameter, with holes at the bottom for drainage.
Black soil: store-bought or dug up from your garden.
"Greens" (nitrogen-rich materials): fruit and vegetable peel, eggshells, coffee grounds, tea leaves.
"Browns" (carbon-rich materials): crushed dried leaves, shredded cardboard.

Method

1. Line the bottom of your pot with soil.
2. Add a layer of "greens" into the pot; then add a layer of "browns" or soil over the greens; continue alternating these layers until the pot is full. (If you don't have enough waste, then just leave it covered with browns until you have more greens another day.)
3. The last layer should always be a brown or soil layer. (If it smells bad, add more browns or soil until it stops smelling.)
4. Once your pot is full, start another pot. You can have as many pots as you like, but seven is usually a good number.



Location

Your pots should be outdoors or in your porch or balcony area.

Uses (after about two months)

Top up your soil: Use the compost material to top up the soil in your existing plant pots.
Plant in it: Use it as a potting mix and plant your seeds, seedlings, cuttings or any other planting material directly into it.



Care

Occasionally, stir the contents of the pot to mix it up and add water to help it break down faster.

Green events

THE MAGIC OF NO-DIG GARDENING

A half-day practical introduction to home gardening and soil nutrition with compost coach, Harbir Gill.

This workshop is designed for anyone who is interested in getting started on growing fresh vegetables in their house/apartment or anyone who has already been bitten by the gardening bug but wants to see better results.

The course is hands-on and will introduce you to the basic principles of composting, making your own healthy soil, no-dig gardening, and the benefits that come with it.

You will also get two bags of special potting mixes for starting your own seedlings and growing.

Date: April 22, 2017
Time: 9am–noon
Location: Eats, Shoots & Roots HQ, Bukit Gasing, Petaling Jaya, Selangor (full address disclosed upon registration)
Price: RM180 (mention *Star2* for a special price, RM165)
Registration is required: E-mail Clarice at workshops@eatshootsandroots.com