Lochac

Herb & Garden Guild

Guild Journal, Volume 6, No. 3. Spring 2025.

Another edition

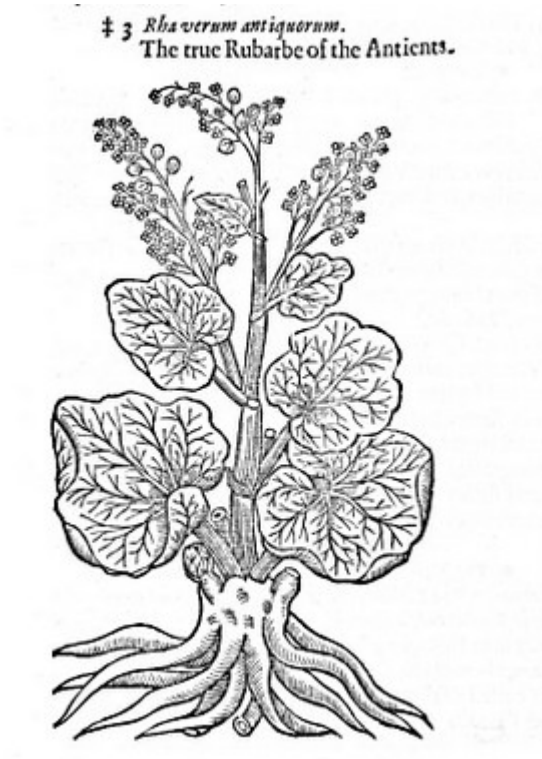
A soggy but not especially cold winter here in the NSW Southern Tablelands, and shaping up for a similar spring. The wattle's out and the trees are budding.

All the gardeners are recharged and getting ready to plant. My broadbeans are already in, and moving at last. We just planted some berry bushes at the new farm – I promise to prune them properly this time, though we had no shortages of berries at the last place.

Please – take some photos of your spring and summer gardening adventures, and send them in.

Master Cristoval, Guild Chronicler

Contents



Gerard's Herbal

Contacts

Website: www.sca.org.au/herb/

Facebook: Lochac Herb & Garden Guild

Email list:
Go to lochac.sca.org/mailman/listinfo/garden
Send Garden mailing list submissions to garden@sca.org.au

Articles: Please send to the Chronicler at rhysh@iinet.net.au.

Patron

The patron of the guild is Master Seger Boom.

Saffron

By Lowrens Wilyamson

This is a summary of my experience of growing saffron in my suburban garden in Christchurch (Southron Gaard), and what I have done or (mostly) not done to do this.

Some years ago, in late spring of 2017 (I think), Mistress Eleonora van den Bogaerde gave me a number of saffron bulbs and suggested that I plant them out.

I planted them around in several clusters in amongst other ornamental plants in my garden. Nothing happened. Recalling Eleanora's advice that these plants only sprout forth in autumn, I thought nothing of this.

Autumn came and some spindly leaves showed forth, but that was it. The leaves died off in the winter, and that was it. I let matters be.

Next year, much the same thing happened. This was still not a major thread of my gardening activity, so I still did not give it much attention.

The next year, re-arranging my beds, I uplifted many of the saffron bulbs, where I could find them (nothing was showing above ground at the time) and replanted them in a tighter cluster in a better part of the garden.

Nothing continued to happen, other than the spindly leaves appearing in autumn. I gave them no special attention other than not digging them up by accident.

Until March of 2023. Suddenly the spindly leaves were accompanied with a violet bloom. And another. And several more.

I had not really thought about the harvesting process, given the general inactivity of the plants. With the help of Mr Google and others, I became informed, and harvesting happened.

Over the space of less than two weeks, from about a dozen plants, we took more than two dozen flowers, and produced a quantity of dried stems which I estimated at 80 micrograms. If this all sounds a bit vague, that probably reflects the amount of organisation that we gave to this.

For anyone not in the know, harvesting means picking the flower when it is fully opened, picking out the stamens with tweezers, and keeping the red parts. Everything else is compost.

Dry the red parts between sheets of paper towels for a week or so inside. Store the harvest in a sealed container to keep it dry.

The flowering passed, but the leaves did not wither away as they had done in previous seasons.

Forward to April of 2024, and harvest season, but not as vigorous as the previous year. Fewer blooms, maybe just one to a plant, and not every plant flowering.

Figure 1 – 2024 season with many shoots but few flowers

Figure 2 – 2024 season blooms are still quite good quality even if sparse

A modicum of research explained to me that it was probably time to lift the corms and thin them out. And so I did, and found the areas where these were planted to be almost solid with corms. I removed about 80% of these smaller daughter plants, and replanted many in new locations around my garden.

After this upheaval, I had no big expectations for 2025 season, but I was mildly surprised to see how well the original plants were producing, and especially how vigorous some of the transplanted bulbs were sprouting, including a few with blooms.

The total crop was on a par with 2024, and still not as good as 2023. I will be interested to see how well the 2026 harvest yields, once the new plants have had a chance to settle in.

The takeaway messages from my experience are, I think:

- it's not necessary to invest a great deal of time in a backyard saffron garden.
- thinning the corms every few years is definitely a Good Idea.
- I suspect that I have not really planted my bulbs deeply enough for best results.

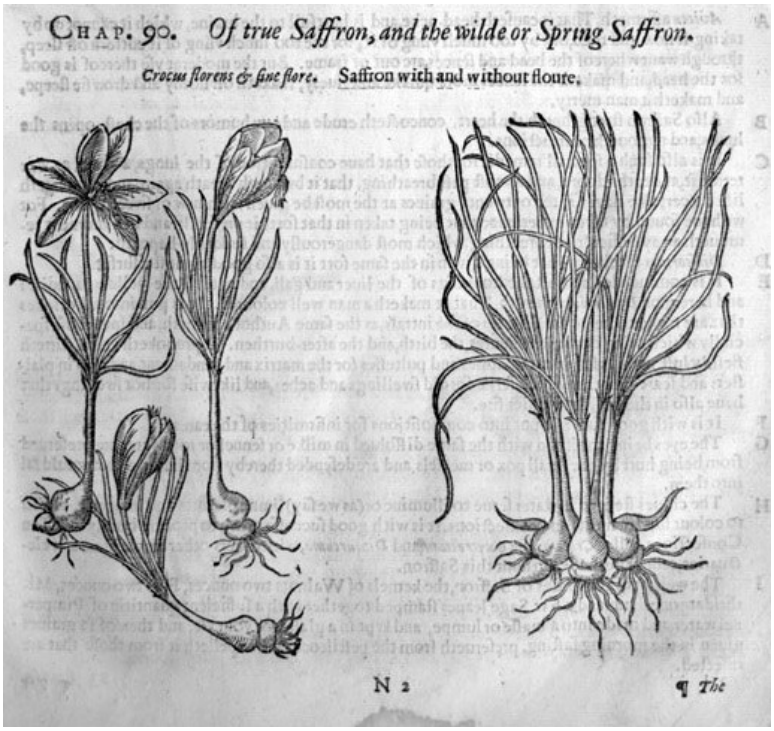
A depth of 100mm for cool climates is suggested by at https://www.callmeishbel.com/2024/03/12/a-simple-guide-to-homegrown-saffron/ .

Most of my plants would be only 50mm deep. Other people in Christchurch have also commented that their saffron plants seem not to be doing much.

It's possible that the delay in flowering between my original planting in 2017 and first flowering in 2023 was triggered by the increasingly mild winters that Christchurch has experienced in recent years.

If I feel motivated enough, I may replant some of the new bulbs more deeply, and see how they fare in the next few years.

In the meantime, it is quite nice to able to mention to guests that the food at the feast is seasoned with locally grown saffron.


CHAP. 90. *Of true Saffron, and the wilde or Spring Saffron.*

Crocus florens & sine flore. Saffron with and without floure.

N 2 ¶ *The*

Substitutes for Saffron

by Master Cristoval

In the early English cookery texts, such as *Forme of Cury*, there's widespread use of saffron as a flavouring and colouring spice. *(See previous article!)*

Saffron has always been wildly expensive, because it has low production quantities and it's labour-intensive to harvest.

There seems to have been two routes for real saffron: one from the Mediterranean, typically via Spain, and another northern route by the vikings from Byzantium.

I've long wondered if turmeric was used as a cheaper substitute, particularly if you weren't on the King's table.

The short answer

I've dug in a bit further, and it seems to me that it wasn't, at least in England in the 14th and 15th centuries.

Forme of Cury specifically mentions "floure of cartamus for colouryng" as an alternative to saffron. That appears to be safflower petals, and there are multiple references to it as "garden saffron" or "bastard saffron". I expect it was a dirty little secret of thrifty cooks. You can still get it, eg here.

Early use of turmeric

Turmeric has a long history in Indian cooking.

It shows up as a medicinal herb from very early on. Matthaeus Platearius was a physician from the medical school at Salerno, and produced a twelfth-century manuscript on medicinal herbs titled *Circa Instans* which mentioned turmeric as a medicinal herb and a food colourant.

As "curcuma", it shows up in 13th century Arabic cookbooks, and 14th century Catalan ones. It shows up in spice trade records, particularly in the Mediterranean area.

Liber de Coquina (13C Italy) mentions curcuma as a colouring agent and alternative to saffron, in several recipes.

Use in England

I found a c1520 manuscript reference (*British Library, Additional MS 48023*) which says:

"Curcuma, called also Indian saffron or saffron from Inde, is a root of great use in dying and cooking, brought from the parts of Calicut [India] by way of Alexandria and Venice. The price in Venice is half that of true saffron, and it yields a like yellow colour but fainter."

Turmeric is not mentioned in early English herbals that I've seen, eg *Banckes' Herbal (*1525).

William Turner's *A New Herball* (c1560) says "There is a roote called by the apothecaries Curcuma, which cometh from Inde, of a yellow hue, not unlike Saffron in effect, but milder. It warmeth the stomacke and driveth away cold humours, and is good for them that suffer from wind or colick."

It's also in *Gerard's Herbal* (1597 edition). It says it is "used in meats to give colour, much like Saffron, but of lesser price." A later edition calls it Indian saffron.

By that time it was imported into England in great bulk, usually as "saffron from Inde" and the like.

Conclusion

I'm sure that English cooks did substitute for saffron, but the evidence is that it was safflower rather than turmeric, at least until the mid 1500s.

I made some "torta bianca" (white cheesecakes) for the 2025 *Bal d'Argent* in Polit. I used a modern redaction of an Italian recipe, which seemed to me to have much less sugar than it should. I did half a test batch with double sugar, and put in just a little turmeric in as a visual cue.

I was right about the sugar, and the turmeric added a really nice flavour, which surprised me. And of course a lovely yellow colour.

Thomasina's Kitchen

Beef with Rosebuds

Recipe redactions by Mistress Thomasina Coke, OP

This recipe is from; Medieval Cuisine of the Islamic World; a concise history with 174 recipes, English Translation, as translated by Lilia Zaouali.

Translated original recipe

41. Beef with rosebuds

Provide yourself with meat, rosebuds, lemons, onions, pepper, mastic, and cinnamon. Blanch the meat, then fry it with the onions.

When it is ready, add crushed pepper, lemon juice, (mastic and cinnamon) and rosebuds that have been crumbled by hand. Moisten with the necessary quantity of broth.

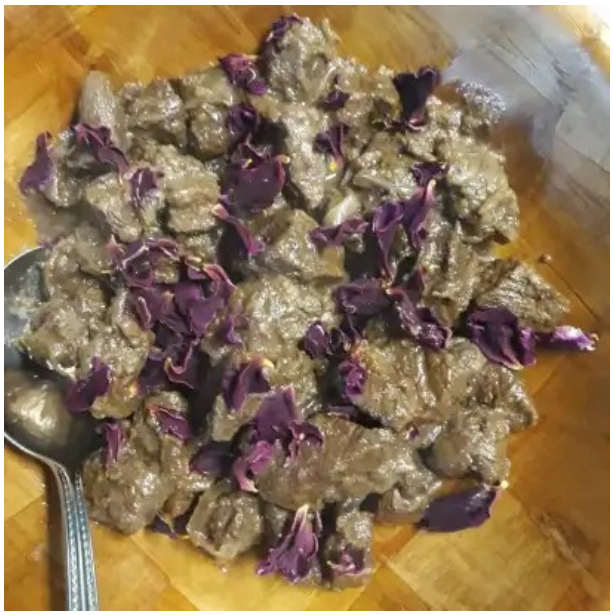
Redacted recipe

- 1kg of beef, fat trimmed, cut into bite-sized pieces
- 1 onion, sliced
- 1-2 tablespoons olive oil
- Juice of one lemon
- 2 Heaping tablespoons of dried rosebuds crushed with a mortar & pestle
- 1/2 teaspoon mastic ground with the other spices
- 2 tsp cinnamon
- 2 tsp of pepper
- 1 cup Beef stock

Blanch the meat by dropping it into boiling water for a minute and then immediately place it into a bowl of cold water. Cook the onions in the oil, on medium high heat, and after 3-4 minutes, add in the beef and get it hot enough so everything's frying together.

Toss well and then add on the pepper, cinnamon, mastic, roses, and lemon juice.

After they've been frying for ten minutes or so, deglaze the pan with beef stock and simmer on medium low heat until the liquid is mostly reduced. Serve with some extra dried rose petals for garnish.



Reference

Medieval Cuisine of the Islamic World; a concise history with 174 recipes by Lilia Zaouali. Translated by M.B. DeBevoise. Foreword by Charles Perry. University of California Press, ISBN-97890520247833

This article is adapted from one at Mistress Thomasina's blog, at **thomasinacoke.wordpress.com**

Restoring the soil

by THL Melissa Wijffels

A thumbnail sketch of fertilisation practices in Rome (Columella's De Re Rustica) and ancient China (Qimin Yaoshu 齊民要術)

Fertility is important for growing crops, but exhausted by continuous cropping. Figuring out how to restore fertility was critical for early agriculturalists.

Very early on, we see archaeological evidence of fertility-restoring systems in the cradles of agriculture:

- Egypt had the flooding of the Nile to restore fertility
- The crop/fallow system was practised in the ancient Mediterranean & Mesopotamia (Semple 1928) as well as China, as recorded by 1st century BC agronomist Fan Shengzhi [氾勝之]
- Stable isotope analysis (δ15N) has found that animal manure was used to fertilise grains in Mesopotamia and Europe since at least 4,000 BCE (Bogaard 2013; Styring 2017) and in China since 5,000 BCE (Wang et al 2018), millennia after the advent of hoe agriculture, but coinciding very closely with the invention of the plough
- Some locations (e.g. Indian sites circa 2,000 BCE), show increased grain nitrogen content without higher δ15N – these sites also contain large numbers of vetch seed, suggesting a practice of green manuring (Nayak et al 2022).

Unfortunately for those interested in experimenting with historical agricultural fertilisation techniques, written evidence of fertilising fields in literature appears long after archaeological evidence, with Roman and Chinese sources providing some of the earliest written insights on how to ensure land remained productive year after year.

These texts let us know that the techniques employed were not foolproof!

Roman texts

Older Roman agricultural treatises, such as Tremelius, describe land which used to be fertile: *"the earth, the mother of all things, like womankind now worn out with old age, is incapable of bearing offspring*" (Columella 2:1:2)

While today, it is easy to think that the only tool medieval and ancient peoples had to hand was animal manure to spread in the fields, this is not the only thing available to our historical farmers.

Although many earlier Greek and Roman agriculturalists do extol the virtues of animal manure as well as green manures, Columella is one of the first western writers to understand the cycle of soil fertility, and says the following of Tremelius' work:

"He observes, undoubtedly, what occurs, but does not understand thoroughly why it happens. For ground that is new and but recently taken out of its wooded state and brought under cultivation should not be regarded as more fruitful on this account, because it has lain fallow longer and is younger; but because, in the leaves and herbage of many years, which it has kept producing naturally, fattened, so to speak, with more plentiful nourishment, it more readily satisfies the requirements for bringing forth crops and supporting them.

But when the roots of the plants, broken by mattocks and ploughs, and when the trees, cut down by the axe, cease to nourish their mother with their foliage; when the leaves which fell from bushes and trees in the autumn season and which were spread over her are presently turned under by the ploughshare and mixed with the subsoil, which is usually thinner, and are used up, the result is that the soil, being deprived of its old-time nourishment, grows lean.

It is not, therefore, because of weariness, as very many have believed, nor because of old age, but manifestly because of our own lack of energy that our cultivated lands yield us a less generous return. For we may reap greater harvests if the earth is quickened again by frequent, timely, and moderate manuring." (Columella 2:1:5-7)

This passage suggests a substantial understanding of the process by which material is broken down and turned back into soil. In modern soil science, he is accurately pointing to soil organic material having a substantial effect on yields, and declining as land is taken under the plough – a reality and struggle that modern farmers still contend with today.

Likewise, by Roman times, farmers had astutely noted that not all crops have the same effect on soil health.

Columella later discusses the different impacts on the soil of different crops:

"But of the crops that I have mentioned, the ... land is fertilised and improved by some, and ... wasted by others; that it is fertilised by lupine, beans, vetch, bitter vetch, lentils, the small chickpea, and peas ...

Of those legumes, too, which are harvested by pulling, Tremelius says that the poisons of the chickpea and of flax are most harmful to the soil, the one because it is of a salty nature, the other because of its burning qualities; and Vergil, too, points this out when he says: "A field is burned by crops of flax, is burned by crops of oats, is burned by crops of poppies with Lethaean slumber steeped."

For there is no doubt that a field is impaired by seeding it with these, just as it is by millet and panic. But for all ground that is exhausted by cropping the aforesaid legumes there is one remedy at hand, namely, to come to its aid with manure, and with this sustenance, so to speak, to restore the strength that has been taken from it..."

Columella then ranks the various available manures from best to worst:

1. Dove and pigeon dung (use directly)
2. Hens and other fowl except ducks
3. Human dung (compost first)
4. Human urine (for young growing shoots)
5. Oil lees (unsalted, in the winter and spring)
6. Donkey dung
7. Sheep dung
8. Goat dung
9. Cattle and other draft animal dung
10. Swine dung

For any of these, other than dove and pigeon dung, Columella stresses that it should be stored for a full calendar year prior to use because after that time *"it still has its strength unimpaired and does not produce weeds"* (Columella 2:14:9). Leaving it longer than this is warned against as the potency of the fertiliser degrades after this time.

Should you not have any animal manure to hand, Columella provides further advice for plant-based fertilisers:

"Moreover, the use of ashes and cinders is reasonably beneficial, while cut lupine plants provide the strength of the best manure. And I am not unaware that there is a certain kind of countryside in which neither cattle nor fowl can be kept; but even in such a place it is the mark of a slothful husbandman to be destitute of fertiliser.

For he may store up any sort of leaves; he may gather any accumulated matter from bramble patches and from highways and byways; he may cut down his neighbour's fernbrakes without doing him harm, or even as a favour, and mix them with the cleanings from his inclosure" (Columella 2:14:5-6)

Chinese texts

The Qimin Yaoshu was written during the Wei Dynasty (544 CE), and is one of the best classical treatises on Chinese agriculture. This text makes the same observations as the Romans about successive cropping being harmful to the land and also recomends manure as a field amendment.

Manure from humans as well as the six animals (horse, ox, goat, domestic fowl, dog, and pig) is mentioned in the text, but in particular pigs seems to have been used based on stable isotope analysis (pig manure contains a higher percentage of 15N compared to other Chinese livestock by a factor of 2-4; Wang et al 2018).

However, the Qimin Yaoshu spends much more time discussing green manures than anumal manures. The author states that using green manures are not just a poor substitute for animal dung, but just as good.

"If manure is unavailable, sow green Dolichos thickly in the 5th or 6th month. Plough the bean-plants in during the 7th or 8th month, just as if using manure-dressings. The effect is as good as ripened compost, and much labour is saved."

This recommendation makes use of the short period of time between harvesting winter wheat (June) and the sowing of a following winter wheat crop (October) – in good years, this would provide a double-crop, and in poorer years, green manure. In both cases, it would have provided essential ground cover for the preservation of soil moisture (Li 2023).

Weeds, when cut and 'killed' were recommended as a good way to improve clay soil. Likewise, late ploughing after weeds have sprouted in the spring was said to cause seedlings alone to grow well, as the weeds rot beneath the soil clods. Several other mentions are made of taking advantage of weeds as future crop fertilisers.

Like Columella's De Re Rustica, the Qimin Yaoshu contains a system of planting legumes prior to cultivating grains – a sort of crop-rotation. The preceding, or foundation, plant (底) is considered for many crops, with favourable and unfavourable options given:

Crop	Most favourable	Moderate	Least favourable
Spiked millet	*Dolichos*, mung beans	Hemp, glutinous panicled millet, sesame	Turnips, soya
Panicled millet	Fallow	Soya	Spiked millet
Soya	Spiked millet		
Mung beans	Wheat, spiked millet		

Note: in 500AD, neither wheat nor rice had become the principal grains they are today in China – several species of millet instead were the staple grains of the people. It is at the somewhat later date of ~700AD that wheat and rice had become popular staple grains in northern and southern China, respectively.

Discussion

In both Columella and the Qimin Yaoshu, in the case where the soil has been exhausted, a fallow period of several years (five in the case of Columella) is recommended, after which more demanding crops can again be grown.

Columella's suggested rotation (according to Scavo 2022) is:

Tilled Fallow -> Wheat -> Winter legume -> Fallow -> Fallow -> Spring legume -> Fallow -> Fallow

The untilled fallow periods would have been a field used to cut hay and pasture livestock, so the land would only be actually unused for a single year out of 8.

This period of tilling without sowing is presumably to kill weed seeds; legumes are competitive with weeds, but wheat is much less so.

Interestingly, the Chinese system is much closer to that used in modern broadacre agriculture, with 2- or 3- year rotations of crops with no or minimal fallow periods.

If you are keen for your garden to be as productive as possible, both using green or animal fertilisers and practicing crop rotation including legumes are good ways to ensure that you continue getting good yields of quality produce year after year.

References

Bogaard, A., Fraser, R., Heaton, T. H., Wallace, M., Vaiglova, P., Charles, M., ... & Stephan, E. (2013). Crop manuring and intensive land management by Europe's first farmers. Proceedings of the National Academy of Sciences, 110(31), 12589-12594.

Nayak, A., Basa, K. K., Boivin, N. L., Fuller, D. Q., Mohanty, R. K., Kingwell-Banham, E., ... & Bogaard, A. (2022). A stable isotope perspective on archaeological agricultural variability and Neolithic experimentation in India. Journal of Archaeological Science, 141, 105591.

Li, C.R. (2023). 「綠豆」生「南亞」，之後往哪去？破解綠豆的傳播路徑 ["Mung Bean" gives birth to "South Asia", where will they go after that? Deciphering the transmission path of mung beans].

Semple EC (1928) Ancient Mediterranean Agriculture: Part I. Agric Hist 2(2):61–98

Scavo, A., Fontanazza, S., Restuccia, A., Pesce, G. R., Abbate, C., & Mauromicale, G. (2022). The role of cover crops in improving soil fertility and plant nutritional status in temperate climates. A review. Agronomy for Sustainable Development, 42(5), 93.

Sheng-Han, S. (1974). A preliminary survey of the book Ch'i min yao shu: an agricultural encyclopaedia of the 6th century. 2nd Ed. Science Press. Peking, China.

Styring, A. K., Charles, M., Fantone, F., Hald, M. M., McMahon, A., Meadow, R. H., ... & Bogaard, A. (2017). Isotope evidence for agricultural extensification reveals how the world's first cities were fed. Nature Plants, 3(6), 1-11.

Wang, X., Fuller, B. T., Zhang, P., Hu, S., Hu, Y., & Shang, X. (2018). Millet manuring as a driving force for the Late Neolithic agricultural expansion of north China. Scientific Reports, 8(1), 5552.

Baroness Buttercup

by Baroness Juliana de Northwood

Gardening on an apartment balcony or a windowsill

Part 3 - Choosing your plants!

This is the fun stuff, and the choice of plants is only limited to your sunlight hours, roof height, and the floor load-bearing capacity. Oh, and your imagination.

The first suggestion I can make about choosing plants is to consult a planting guide or planner.

Planning considerations

An annual plant which grows and dies within a full growing cycle (usually spring - winter), will grow rapidly, but a plant such as a small tree or shrub will take longer, as their life-cycle is different.

Also to consider is dormancy. Dormancy is where the plant shuts down, and preserves energy for a period of time. Like deciduous trees in winter. They shed their leaves, and stop growing for winter, and then grow again from spring, usually triggered by lengthening daylight hours. There are some that will go dormant through the hottest part of the year. The aeonium succulents are an example if this.

Whatever you decide to choose, you can either buy established plants, seedlings or young plants, or grow from seed, although this needs even more planning, and is outside of the scope of this series.

Always check the sunlight requirements, and this is where your notebook will come in handy. Can you provide the conditions that are recommended on the label? If the answer is no, failure is assured.

I have a tomato growing, but no flowers because it doesn't get enough sunshine to prompt the flowering cycle of the plant. So, it might grow, but the desired product of juicy, ripe tomatoes is not going to happen unless I move the plant to a much sunnier spot.

Other things to consider when choosing plants is the overall height of the fully grown plant. While seedlings may look tiny and adorable, and your garden will look well planned and organised to start with, given the right conditions, those plants are going to grow, and they will start to fill in, and share cooties with each other. Very quickly!

Soil

What soil do my plants need?

Unless the plant is an aquatic plant, thus needs submersion in a bucket of rainwater, such as a water lily, lotus, or some swamp loving reeds such as papyrus, your plant will want certain types of soil with sometimes quite distinct characteristics.

Most plants can be broadly separated into two major growing spaces: terrestrial or epiphytes/lithophytes. Essentially, they will either grow in the ground (terrestrial), or attach to things like trees (epiphytes) and rocks (lithophytes).

Then they are botanically subclassified even further based on their flowering habits, reproduction habits, and the list goes on. I am not a botanist, I am simply an amateur hobby gardener that knows how to read the labels and to follow the watering, light, and feeding requirements. Most of my knowledge is gained through trial and error, and a lot of time watching YouTube gardening channels.

So, we now have a pot that will hopefully fit our plant at mature size, and based on the plant/s we chose, we can now look at soil.

Not all bags of potting mix / planting media are made equally. These commercially available soils are usually manufactured with specific plant type requirements in mind. Eg, general all purpose potting mix, tomato mix, orchid mix, citrus mix, succulent mix, fern and indoor plant mix, and the list goes on.

What are the differences? Well… a few examples include:

- Orchid mix is quite chunky, with large pieces of bark, and other fibrous material, with more

perlite, with very little if any soil/dirt in the bag. Perfect for most orchid growth habits.

- Some plants prefer acidic soils such as azaleas, rhododendrons and many cane berries.
- Citrus like a well drained, sandy soil, with a pH of 6-7.

So you will have to decide what planting media to get based on your plant choice. Most of the time, it is the proportions of soil, bark, perlite, compost and other organics that formulate the preferred soil structure and acidity each group of plants prefer.

Once you have identified and acquired the appropriate soil for your desired plants, it is time to put it all together.

Assembling your plant pot

(skip this if you already know how to pot a plant):

Clean your plant pot with simple warm water. You don't need to sterilise it, just get all the grime off it. You can spray it with a vinegar solution if you want to. Just rinse it well.

I personally add a handful of stones to the bottom of the pot to aid drainage and help add weight to prevent tipping over in windy conditions often found on balconies. Soil left standing in water will rot and become poisonous to your plants.

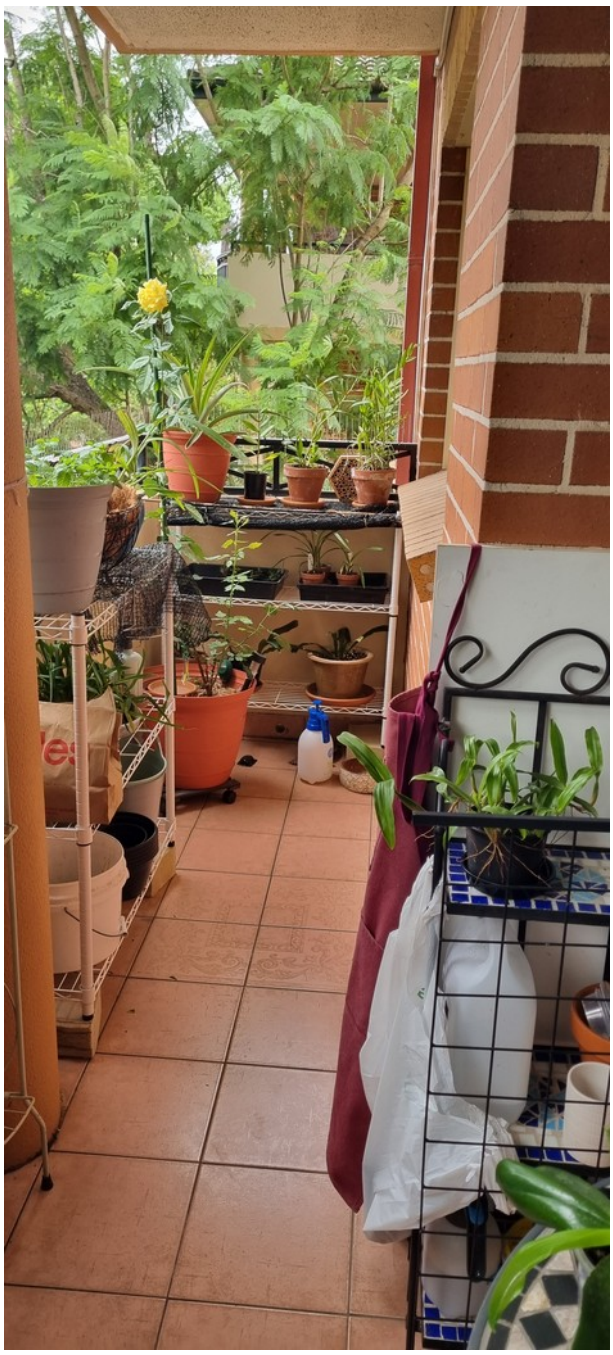
Add a layer of soil.

Unpot your plant and loosen the roots a little and shake off the soil from the nursery pot.

Stand it in your new pot and check the level of the soil mark around the plant stem. Add or remove soil from the pot to adjust the plant height in the new pot, and then back fill so the root ball is covered.

Water it well, and let it drain. I do add a small amount of seaweed extract to help support the plant in its new home.

Place it in the area that you have chosen.



Monitoring

I photograph my plants weekly for a month and compare and monitor their growth. Kind of like baby photos.

Like humans, all plants require three things in appropriate amounts unique to each plant to not only grow, but to thrive.

And with a restricted space, this is where proper planning comes into its own. Helping our plants to thrive in a small or restricted place is going to take some juggling. And that is the topic for the next instalment.