
seed
saving
LEARN HOW TO SAVE YOUR OWN SEED

Hello. I'm Bec

I am the urban hillbilly behind Growing Home. For almost 10 years I have been growing my own food, raising chickens + bees, cooking from the garden, and preserving the harvest.

Being able to save seed from home grown vegetables has so many benefits, but it's not without it's challenges. Let me show you how you can learn to save your own seed...

contents

GETTING STARTED

Growing your own fresh produce like vegetables and herbs is an awesome experience, but you can take it up a level by saving your own seed to use when growing too.

Seed saving is collecting seed from your home grown edible produce, like vegetables and herbs. You can allow certain produce, like basil or rocket, to flower and 'go to seed' then you collect the seed from the pods. Or when harvesting and cutting certain produce, like pumpkins or tomatoes, you collect the seed from inside of the mature fruit to dry and store. You can then use the saved seed to grow with next season!

Although it might seem easy to just scoop out some seeds from a pumpkin and keep them, it takes a little effort to ensure that you save seed that will grow into good quality, consistent produce the next season. It is worthwhile learning how to handle the challenges, like cross pollination and how to collect different type of seeds, as there are lots of great benefits to saving your own seed.

Let's understand the essentials of why and how to save seed, along with understanding plant taxonomy to avoid cross pollination (it can be tricky but I'll walk you through it). There are also step by step instructions on how to save dry seed, wet seed and seed from tomatoes, as well as create your own seed bank.

For all the great benefits that come from learning how to save your own seed, there are some challenges (but of course, also solutions)

- It takes time, especially if you need to use a method like bagging and hand pollination, though there may be easier options
- It takes space – some varieties need to be kept at least 500m up to 1000m away from others in the same species – there are methods to counter this, or choose to plant select varieties to save seed from instead
- Often the plant needs to stay in garden until it is beyond mature, longer than the normal harvest point – this can take up room and if you are already lacking in space or need room for next seasons plantings, this could be a nuisance – however, sometimes this means letting the plant 'bolt and go to flower, which may increase pollinators coming to your garden
- You will need somewhere to store your seeds whilst they are drying, and then once dry and packaged – but really, seeds are mostly very small and there are ways to minimise the space they take up (see Create a Seed Bank).

Also remember that not all veges and herbs that you want to grow can be grown from seed, or have seed saved from them. You propagate them from roots, bulbs, crowns, cuttings and divisions because they are difficult or slow to germinate from seed, or won't grow true to type. Some examples include potatoes, sweet potatoes, lemongrass, garlic, asparagus, Jerusalem artichoke and certain 'hard' herbs.

GETTING STARTED

BENEFITS

Saving your own seed has many benefits, including:

An exciting wide range of unique varieties to choose from that you may not be able to source as seedlings

Save seed from produce that has grown well in the conditions of your garden, so it is acclimatised

It can save you money (instead of buying seedlings, or buying new seed all the time)

Reduce negative impact associated with packaging, distribution and production of conventional seed or seedlings

BACK TO CONTENTS

I instagram.com/bec_growinghome
F facebook.com/growinghomeaustralia
W growinghome.com.au

TYPES OF SEED

There are some seeds which are not ideal to save from year to year, such as

- **Hybrid seeds** (i.e. F1) which are a cross between 2 plants to get the 'best' from both, such as higher yield or disease resistance. The seed from these plants can be sterile or highly variable if they do germinate.

However, seeds that you can buy, swap and save are:

- **Open Pollinated** – when pollination occurs naturally, not manipulated; they may be more genetically diverse; may be adapted to local conditions, and resulting seeds will produce plants roughly identical to their parents.
- **Heirloom or Heritage** – genetically strong open pollinated seed that have been around for a long time.

Some options to find suitable seed to start growing with (to then start saving your own) include

- Look for seed swapping groups or Seed Savers Networks in your area who may have excess they will happily give away
- Barter with your neighbours, family or friends
- Buy seeds (from an online company or perhaps a local nursery)

Carefully check the label on any seed packets you are considering buying from a hardware store or nursery. Conventional brands may be selling hybrids, which are not good to grow if you want to save seed from them.

There are seed companies that specialise in heirloom and organic seeds, and may even be one in your region. In Australia, seed companies that I have used and recommend:

- The Lost Seed
- Green Harvest
- Herb Cottage (seed and herb seedlings)
- Southern Harvest

(Remember that there may be quarantine restrictions for some interstate posting of seeds).

You can find a list of other seed companies (or contribute to it) in The Growing Home Community, a free group hosted on Facebook.

You might be tempted to save seed from produce you've bought at the shops, or farmers markets, but you may find that seeds from produce that has been stored in cool rooms or gassed, will not have a good germination rate.

The produce may be from a hybrid variety, or may have gotten cross pollinated at the farm and saved seed won't grow true to type. Sure, you can give it a go but it may end up being a waste of time, especially if you have limited space and time to experiment. Certain species that self pollinate may be suitable to try this with.

TYPES OF SEED

POLLINATION

Pollination is required to produce fruiting crops and produce seed in other crops.

For root and leaf vegetables, and herbs, when we grow their stem and leaves, or roots and leaves, if we don't harvest at the right point (or we leave the plant in the garden) they go to flower. The flowers have to be pollinated to produce seed, which we can then collect.

For edible plants that produce fruit (like zucchini, pumpkins, tomatoes) the seeds are inside. First the stem, vines and leafy parts of the plant grows, then it produces flowers. The flowers need to be pollinated, so the fruit can grow and we can collect the seeds.

Edible plants can be self-pollinated, cross-pollinated (or sometimes both).

In self-pollinated plants the pollination process occurs within each flower as they have both male and female parts. Pollination can occur before the flower opens. These plants include lettuce, peas, beans, tomatoes and chillies. (This is why you might hear advice to gently shake your tomato plants to help release the pollen within the flower to encourage the pollination process).

In cross pollinated plants, the pollen from one flower fertilizes another flower, either on the same or a different plant from the same species. Either wind or insects carry the pollen. When growing your vegetables to harvest, this is necessary but generally isn't even a consideration. It doesn't affect how the current generation will grow, form and taste.

However, if you want to save your own seed, cross pollination can create a bit of havoc. Let's understand it, so we can avoid saving seed that ends up producing mutants!

WHY IS 'CROSS POLLINATION' BETWEEN DIFFERENT VARIETIES BAD?

Cross-pollination means genetics have been shared between plants, during the pollination stage. The genetics determines what the plant grows like, and they are saved in the seed. Diversity in genes from different plants in the *same variety* within a species can reduce inbreeding issues. That's good.

But if you are saving seed, it's not good for cross pollination to occur with a *different variety* within the same species, as the genetics can be mixed up. If you grow seed saved from a plant which has been cross pollinated with different varieties within a species, it could negatively affect the 'next generation' by not growing true to type.

This means you could grow odd-shapes, colours and flavours, and could be a waste of your growing space and time! Sometimes it can be something better, or you could find a bland, odd shaped squash delicata growing like I did years ago before I understood seed saving!

Note, corn (Zea mays) is one of the few edible plants where the current generation (that which is growing) can be affected by cross pollination. Eg. Sweet corn (*Zea mays* var. *Rugosa*) genes will be dominated by Flint corn (*Zea Mays* var. *Indurata*) or Popcorn (*Zea mays* subsp. *everta*) genes if grown together and the harvest may not be what you expected.

POLLINATION

PLANT TAXONOMY

To avoid any negative side effects of cross pollination, we need to learn more about plant taxonomy, or classification, so we can identify the species and any different varieties within them. The hierarchy that plants are classified by (from higher order, to lower) that we are concerned with is:

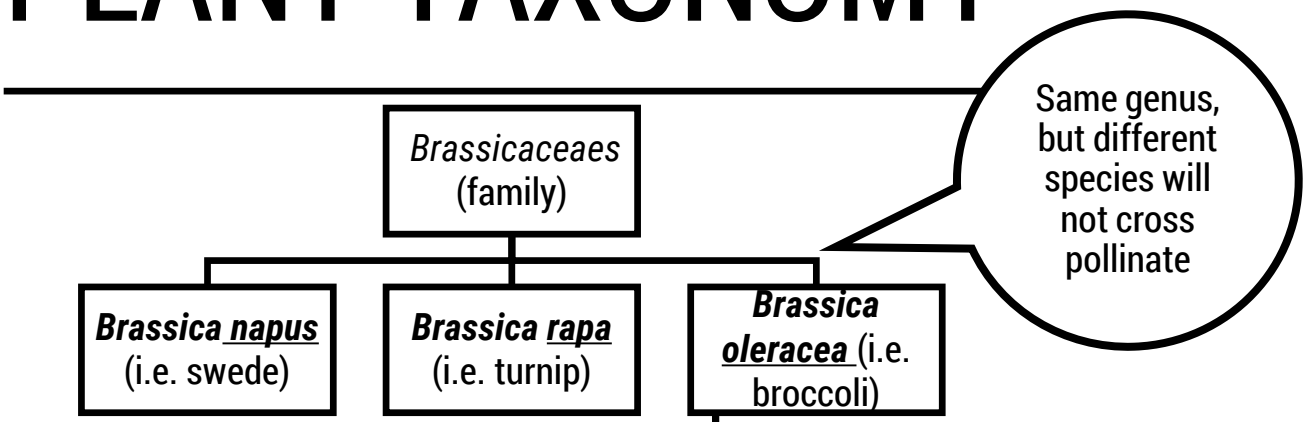
- Family
- Genus and Species
- Variety (or Cultivar – see explanation)

For example, broccoli is from
- Brassicaceae (Family)
- Brassica oleracea (Genus and species)
- Italica (Cultivar group)

Those long Latin names, especially the species, become relevant when you want to avoid cross-pollination.

Plants are classified by	**FAMILY**	**GENUS AND SPECIES**	**CULTIVAR OR VARIETY**
Broccoli, for example	*Brassicaceae* (family)	*Brassica oleracea* (genus and species)	*Italica* (cultivar group)

PLANT TAXONOMY



Cross pollination will not occur between different species when grown together. Cross pollination can occur between different varieties/ cultivars within the same species when grown together.

For example, the Brassica genus has several species besides Brassica oleracea (broccoli) including Brassica rapa (turnip) and Brassica napus (swede).

These cannot cross pollinate with each other, as only the genus (Brassica) is the same, the species are different (oleracea, rapa and napus).

Broccoli can cross-pollinate with other oleracea species, like kale or cauliflower, because they are the same species. Being different varieties doesn't prevent cross pollination.

- *Brassica oleracea Acephala* – kale and collard greens
- *Brassica oleracea Alboglabra* – Chinese broccoli
- *Brassica oleracea Botrytis* – cauliflower, Romanesco broccoli
- *Brassica oleracea Capitata* – cabbage
- *Brassica oleracea Gemmifera* – brussels sprouts
- *Brassica oleracea Gongylodes* – kohlrabi
- *Brassica oleracea Italica* – broccoli

Varieties/ cultivar groups within the same species can cross pollinate!

HOW DO I KNOW WHICH FAMILY, GENUS, SPECIES AND VARIETY MY EDIBLE PLANTS ARE FROM?

Now we know that finding out the species of the plant we want to save seed from is important. This can help us to determine which varieties of those edible plants can cross pollinate with each other and what we can do to avoid that happening. But how do you know what the species is without being a botanist?

You can do some quick research by checking on the seed packets, in gardening books, or do research online. Here are Edible Plant Families tables where you can see the family that your commonly grown vegetables belong. This includes the Latin family name and common name, as well as the genus, species and varieties within the family. Knowing the species and variety your vegetable plants belong to are the most important ones to work out when it comes to seed saving.

Please note, the Edible Plant Families are not complete tables, but a quick reference guide. There may be other edibles you want to grow and save seed from which are not covered there.

WHICH SPECIES SHOULD I BE MOST MINDFUL OF?

- Brassica oleracea
- Cucurbita pepo
- Beta vulgaris

These species are cross pollinated by insects or wind. As they have multiple varieties within their species, you are more likely to be, or intend to be growing something that will cross.

PLANT TAXONOMY

DIFFERENCE BETWEEN A VARIETY AND CULTIVAR

As part of scientific classification and nomenclature (naming) you may see the terms ‘variety’ and ‘cultivar’. Sometimes they are used interchangeably but they do mean different things. For seed saving, it isn’t such an issue as we are mostly focused on what the species is, rather than whether it is a ‘variety’ or a ‘cultivar’ within the species. If you know two plants are from the same species, they can cross pollinate, whether they are a variety or cultivar.

‘Variety’ is a naturally occurring variation of individual plants within a species. This means the differences between it, and another of the same species, arose in nature. The distinguishing characteristics are reproducible in offspring.

A variety is written in Latin, is not in quotes and is preceded by var. Such as ***Brassica oleracea*** **var. *gemmifera*** which are Brussels Sprouts.

‘Cultivar’ comes from the term ‘cultivated variety.’ These plants are selected through specific hybridization, plant selection, or mutation, to achieve specific characteristics or traits. Cultivar refers to the result of human intervention in a variety.

A cultivar is written in vernacular/ common language, has a capital and is in single quotes. Such as ***Daucus carota*** **subsp. *sativus* 'Red Cored Chantenay'** a type of carrot.

PLANT TAXONOMY

AVOIDING ‘BAD’ CROSS POLLINATION

Now that we have a better understanding of how cross pollination works in our edible plants and why it may be a bad thing when saving your own seed, we need to learn how to avoid it.

First you work out how a plant is pollinated. If it self pollinates, they have reduced risk of cross pollination issues as pollination has often occurred before their flowers even open. These include bean, pea, tomato, and lettuce. You don’t have to do anything special to collect seed from them and will have a higher chance that seed will grow true to type next season.

For those plants that require cross pollination, it can be a bit tricker. You need to identify which species the plant is from and what variety in that species it is, and if you are growing (or intend to) other varieties from the same species. If you plan to save seed, you can choose to only grow one variety from that species to reduce the chances of cross pollination issues in the seed you will save. (If you have neighbours or members of a community garden growing varieties from the same species, that may be a problem).

For example, if you grow Brassica oleracea, choose only one cultivar or variety from the oleracea species i.e. Brassica oleracea Italica, which is broccoli, but don’t also grow Brassica oleracea Botrytis, which cauliflower, if you want to save seed.

If you do want to grow more than one variety or cultivar of a species (as we often do) there are things we can do to reduce cross pollination between varieties of the same species.

- **Distance Isolation** - they need to be kept a certain distance from each other (500m, up to 1000m). That can be hard in an urban setting, and you may not know what is growing in your neighbourhood (vegetable gardens or wild varieties). You could also try planting a barrier between insect pollinated varieties, of a different species, or even on opposite sides of the house.
- **Exclusion methods** - bagging, or caging to cover the plants, then hand pollinating them. You can use fine mesh produce bags, special vegetable netting or drawstring bags and cover them before the flowers have opened. Remember to open the bag to hand pollinate once flowers are open and then re-bag until seed collection time.
- **Stagger planting times (Time Isolation)** - so members of the same species are not flowering at the same time.
- **Restrict flowering** – only let certain varieties 'go to seed' (this only works on non-fruiting produce).

AVOIDING CROSS POLLINATION

POLLINATION BY HAND

If you have covered your plant to prevent cross pollination issues because you intend to save seed, you will need to do the pollination by hand. Hand pollination requires transferring pollen from a male flower onto the female flower. This is not generally required for self pollinating plants with the male and female parts in the same flower. It can be done on plants which have both female flowers and male flowers (monoecious).

step one

Identify the male and female flowers from the correct species and variety as each other.

The male has no bulb below the flower, and inside the flower you will see a stamen with pollen on it.

step two

You can carefully snip or break the male flower off and rub the stamen on the stigma of open female flowers (you may be able to do several stigma with one stamen).

The female will have a bulb below the flower (the fruit forming) and inside a stigma.

step three

Or you can use a dry paint brush or cotton tip to wipe the pollen from the male and then wipe it on to the female flower.

In some species the male flowers can be used to pollinate the female flowers on the same plant, or use flowers from different plants of the same variety. These include the Cucurbitae family – pumpkins, zucchini, cucumbers etc.

In some species are 'self incompatible' and can only be pollinated by flowers from different plants of same species and variety to each other, including Brassicas family - broccoli, cabbage, cauliflower, turnips, radishes Umbelliferae family - including carrots, celery, dill, parsnips, fennel etc. This helps genetic diversity and reduce inbreeding issues.

step four

Don't forget to re-cover the flowers/ plant with the bag to prevent cross pollination occurring by an insect or wind from the wrong variety!

I instagram.com/bec_growinghome

F facebook.com/growinghomeaustralia

W growinghome.com.au

SEED SAVING GUIDE

You may see 'beginner level' seed saving, this is usually in terms of success of saving seed that will grow true to type (not how hard the method to actually collect the seed is). Several factors may influence the success you have with saving true to type seed.

- Low Chance of Cross Pollination - Self pollinators have both male and female elements within their flowers and may pollinate before flowers even open, so less chance of cross pollination.
- Higher Chance of Cross Pollination - Insect pollinated means a higher chance of cross pollination – if they are fruiting plants with big open flowers (pumpkins, squash) that increases chances of cross pollination between varieties too.
- Highest Chance of Cross Pollination - Wind pollinated means cross pollination can happen more easily

Other factors to consider when you set to saving seed

- Species with only one variety will not cross pollinate with anything else
- How frequently they produce seed (annual vs biennial) as to how long you have to wait and keep the plant in the garden
- Lack of genetic diversity or 'in breeding' you have to grow many plants of that variety, so that can be harder.

CHOOSING GOOD QUALITY SEED

Besides avoiding the negative affects of cross pollination, we also want to choose plants and fruits with the best flavour, size, colour, disease and pest resistant, early bearing or late bolting etc.

If you notice a tomato plant, that was in the same position as other tomato plants of the same variety, but it seem to have resisted succumbing to early frosts, save seed from those tomatoes, as it may have genetics that make it less frost sensitive.

If you notice that one broccoli plant has not 'bolted' but all the others have, mark that broccoli plant (with tape/ garden tie) to save seed from a plant that doesn't go to flower so easily.

You may want to mark the plants that you are going to save seed from, so you don't accidently harvest everything from it, without letting some of the produce get fully mature or go to seed, or forgetting which one it was you noticed had the good traits. Use garden ties/ coloured ribbon or tape.

SEED SAVING GUIDE

SEED SAVING GUIDE

LOW CHANCE OF CROSS POLLINATION	HIGHER CHANCE OF CROSS POLLINATION	HIGHEST CHANCE OF CROSS POLLINATION
• Self pollinating • Require no separation, exclusion or staggered planting methods	• Insect pollinated • Grow only one variety per species • Isolation (500m), Exclusion, Stagger planting times	• Wind pollinated • Grow only one variety per species • Isolation (1000m), Exclusion, Stagger planting times
Solanum Lycopersicons (Tomatoes)	**Cucurbita Pepo** (Zucchini, Crookneck squash, Cocozzelle zucchini, Scallopini/ patty pan squash, Squash Delicata, Spaghetti Veg/ Squash)	**Beta Vulgaris** (Beetroot, Swiss Chard/ Silver Beet, Sugar beet)
Capsicum annuums (Capsicum, some chillies)	**Brassica Oleracea** (Kale and Collard greens, Chinese broccoli, cauliflower, Romanesco broccoli, cabbage, Brussels sprouts, kohlrabi, broccoli)	**Spinacia oleracea** (Spinach) – requires multiple spinach plants (some will be female, some will be male)
	Brassica rapa (Turnip, Bok Choy, Pak choi, Raab)	**Zea mays** (Sweet corn, Popcorn, Flint corn etc)
Phaseolus vulgaris (Beans - green/ French/ snap)	**Raphanus raphanistrum subsp. Sativus** (Radishes)	
Lactuca sativa (Lettuce)	**Daucus Carota subsp. Sativus** (Carrots)	
Pisum sativum (Peas, Snow & Sugar Snap Peas)	**Apium graveolens (**celery, Celeriac, Chinese celery)	
	Cucumis sativus (Cucumbers)	
	Ocimum basilicum (Basil)	
	Coriandrum sativum (Coriander)	
	Anethum graveolens (Dill)	

A NOTE ON SELF SEEDING

When the plant goes to flower, the seeds form, then the pods (and plant) dry out, allowing the seed to fall to the ground/ garden bed, they germinate if the conditions are right, and start growing again.

If you have a fruiting plant, like a tomato, that drops a mature fruit onto the ground/ garden bed, the fruit breaks down, and next time the conditions are right, the seeds germinate and start growing again.

The benefits are that you don't have to manually collect and store the seed, or plant it again the following season. You may notice that plants that spontaneously spring up without you planting them (from self seeding or from a compost pile) are hardier, prolific producers.

The challenges are that if this self seeding may occur in your garden beds, where you planned to put other seeds/ seedlings. Or that you are not sure of the variety or any cross pollination until it is well grown.

AVOIDING CROSS POLLINATION

SAVING DRY SEED

Some fruiting plants, like beans and okra, you need to leave the fruit on beyond the normal eating size, allow it to be fully mature and the seeds grow fat inside the pod. Some vegetables and herbs need to matured beyond normal harvest point, and 'gone to seed', such as herbs, carrots, beetroot, lettuce, leeks. They are 'dry' because they can dry out easily (on or off the plant) and can be collected without further washing or fermenting.

step one

Once the harvest is winding up, leave some pods on the plant to fully mature and dry, or allow a plant to go to flower and develop seed pods.

step two

Pick the dried pods, remove beans/ seeds and make sure the seeds inside are dry. Lay out onto a plate or tray to dry further, if needed.

step three

Or shake the pods and seed into a paper bag, or transfer into an appropriate container. Gently rough up the pods to release the seeds, if necessary

For some seed heads, you may need to cover them with a fine mesh bags before they fully mature or dry, because when they are mature, they will start to fall or pop off (or birds will eat them). An alternative method, if you cannot leave the seed heads/ pods on until dry (if they are being eaten by pests or there are frosts or rain predicted), is to cut the mature flowers or seeds pods off, and then dry in a paper bag or tray.

step four

Put into appropriate containers, like paper or plastic envelopes, or small jars.

step five

Label and store. If kept in the right conditions, dried seed can last and be viable indefinitely.

I instagram.com/bec_growinghome

F facebook.com/growinghomeaustralia

W growinghome.com.au

SAVING WET SEED

For seed that are found in the edible 'fruit' part of the vegetable, such as squash, zucchini, cucumber, pumpkin, capsicum, chilli and tomatoes, you will find they are 'wet' with flesh and/or tissue from inside the fruit. You can do tomato seed this way, or refer to instructions on the next pages.

step one

Make sure you have a mature specimen, or let the edible part grow beyond when you would normally harvest, to ensure the seeds are mature.

step two

Cut open, scoop out the seeds and flesh, then place in a sieve. Rinse and remove the seed from the fleshy parts or pods, and discard the tissue.

step three

Allow the seeds to drain, then spread the seeds on a plate or tray to dry, and LABEL the seeds immediately (drying time could be a few days to a week or so).

step four

Leave them in an area that is low humidity, light filled but not too warm, and where you can easily observe the seeds.

step five

Once the seeds are VERY thoroughly dry, put them into an appropriate container. Label and Store.

I instagram.com/bec_growinghome

F facebook.com/growinghomeaustralia

W growinghome.com.au

SAVING TOMATO SEED

Saving Tomato Seed

When you save tomato seeds you can 'ferment' the seeds, to remove the gel-like coating on the seed (and it can kill off some disease too). Some people also ferment cucumber and melon seed before drying and storing too.

step one

Scoop out the seeds from a ripe tomato, place in a jar, bowl or container and label them.

step two

Leave them in a safe, clean area that you can observe them, like a kitchen bench. Watch for the 'mould' to form in a few days.

step three

When they start to appear foamy and a white mould forms on top, rinse the seeds and drain.

step four

Dry on a plate or greaseproof paper, making sure you label them. (Avoid paper towel, they stick to it, unless you want to make seed mat).

step five

When thoroughly dry, place in appropriate containers. Label and store.

STORING SEED

After you have gone to the effort of saving your seed, we need to make sure it is stored properly so it is viable next season.

WHAT TO STORE SEEDS IN

Some container options include:

- Paper envelope (reuse envelopes from bills) or you can buy small paper ones
- Sterile jar, such as old baby food jars – be sure your seeds are very dry as moisture can get trapped and your saved seed could go mouldy
- Small plastic envelope (buy or from those you get buttons in on new clothes)
- Seed mats (make your own by gluing the seed on to tissue or paper towel, spread out from each other, allow to dry, fold and store – they can planted as a whole mat, or cut out squares around the seed to plant)

Don't forget to include THE LABEL, with type of seed, dates, any other information.

To create a 'seed bank' you can keep individual envelopes in containers/ box/ old filing box, in order of planting seasons. My system includes Warm Season Direct, Warm Season Transplant, Cool Season Direct and Cool Season Transplant boxes. Plus a Herbs and Flowers. Some 'year rounder' seeds just float between boxes!

You could consider adding a couple of silica or other moisture absorbers in to the boxes too.

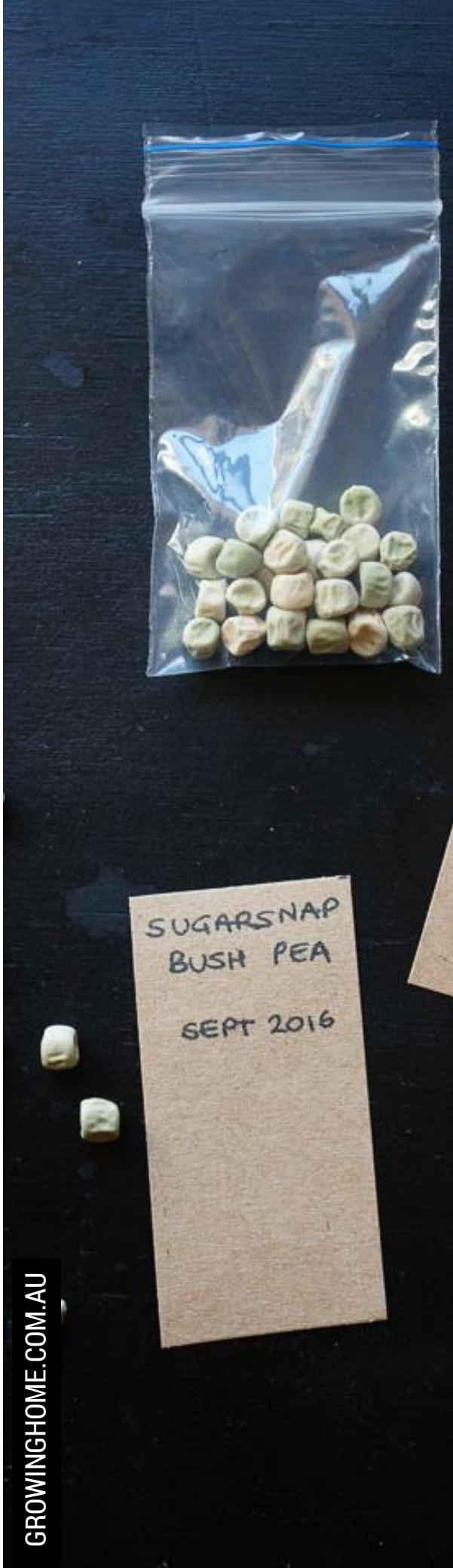
WHERE TO STORE YOUR SEED

To keep our seed viable, there are optimal conditions of cool, dark, dry, consistent temperatures, i.e. laundry cupboard, linen cupboard or fridge door.

Avoid putting them near hot water systems, stoves or ovens or the shed, or near clothes dryers, where they could get overheated or humid.

Some people store their seeds in the freezer, and keep them for years, with good germination rates.

STORING SEED



CREATE A SEED BANK

Storing, organising and adding to your seed collection can be a fun hobby or downright addiction. Ask me how I know.

step one

Keep your seeds in paper or plastic envelopes that can be more easily 'stacked' upright. Make sure they are labelled!

step two

Find some sturdy containers, old ice cream or plastic containers, even small plastic pots, or some fancy tins like these I have from an office supplies store.

Use a label maker or just write on them

step three

If you grow 'by the seasons' divide your seeds into 'warm season' and 'cool season' seeds, as per your climate zone.

step four

You can even divide them again into 'direct sow seeds' and 'transplant seeds' if you have four containers, or use dividers within the containers.

step five

Keep them in a basket or box with some 'seed saving gear' (envelopes, marker/ pen, labels) and some 'raising seedlings gear' as well as scissors + gloves.

EDIBLE PLANT FAMILIES

FAMILY	SOLANACEAE				
COMMON NAME	POTATO OR NIGHTSHADE FAMILY				
POLLINATION	SELF POLLINATION (INSECT MAY BE POSSIBLE)				
GENUS	SOLANUM			CAPSICUM	
SPECIES	LYCOPERSICUM	TUBEROSUM	MELONGENA	ANNUUM	FRUTESCENS
COMMON NAME	TOMATO	POTATOES	EGGPLANT	CAPSICUMS/ CHILLIES	CHILLIES
VARIETY	Cerasiforme (Cherry tomatoes)		Esculentum (Common eggplant)		
			Depressum (Dwarf eggplant)		
			Serpentium (Snake eggplant)		
CULTIVARS EXAMPLES	Brandywine, Hillbilly, Cherokee Purple (heirloom cultivars), Cherry Camp Joy (Cherry tomato cultivar)	Bintje, Desiree, Fingerling	Rosa Bianca and Thai eggplant	Capsicum, Bell/ Sweet peppers, Jalapeno, Cayenne, and New Mexico group	Piri piri (Birdseye) and Tabasco chillies
NOTE	Older varieties/ cultivars (potato leaf foliage) may rarely cross pollinate	Potatoes are grown from pieces of tuber, no cross pollination	Varieties/ cultivars within this column may rarely cross pollinate	Varieties/ cultivars within this column may rarely cross pollinate	Varieties/ cultivars within this column may rarely cross pollinate

EDIBLE PLANT FAMILIES

FAMILY	FABACEAE (LEGUMINOSAE)				
COMMON NAME	PEA + BEAN FAMILY				
POLLINATION	SELF POLLINATION (INSECT MAY BE POSSIBLE)				
GENUS	PHASEOLUS			PISUM	ARACHIS
SPECIES	VULGARIS	LUNATUS	COCCINEUS	SATIVUM	HYPOGAEA
COMMON NAME	GREEN BEAN/ FRENCH/ SNAP BEANS	LIMA OR BUTTER BEANS	RUNNER BEANS	PEA	PEANUT
VARIETY	Nanus (Cherokee Wax bean)			Saccharatum (Snow pea)	
VARIETY				Macrocarpon (Sugar snap pea)	
VARIETY					
CULTIVARS	Blue Lake, Rattlesnake, Butter Cherokee Wax, Climbing Purple King, Kidney, Cannellini, Borlotti, Haricot	Christmas Lima Bean, Madagascar Beans	Scarlet Runner, Painted Lady	Greenfeast (pea)	
NOTE	Varieties/ cultivars within this column may rarely cross pollinate	Varieties within this column may rarely cross pollinate	Varieties within this column may rarely cross pollinate	Varieties/ cultivars within this column may rarely cross pollinate	Varieties/ cultivars within this column may rarely cross pollinate

EDIBLE PLANT FAMILIES

FAMILY	CUCURBITACEAE				
COMMON NAME	GOURD OR MARROW FAMILY				
POLLINATION	INSECT POLLINATION				
GENUS	CUCURBITA			CUCUMIS	
SPECIES	PEPO	MOSCHATA	MAXIMA	SATIVUS	MELO
COMMON NAME	SQUASH	SQUASH	SQUASH/ PUMPKIN	CUCUMBER	MELON
VARIETY	Subsp. Pepo (Pumpkin/ Winter squash)				
	Cylindrica (Zucchini/ Summer squash)				
	Fastigata (Marrow)				
	Torticollia (Crookneck squash)				
	longa (Cocozzelle zucchini)				
	Clypeata (Scallopini/ patty pan squash)				
CULTIVARS EXAMPLES	Delicata (Pepo), Spaghetti Squash (Fastigata)	Butternut pumpkin and Trombocino/ Rampicante squash	Buttercup, Turban, Kabocha, Jarrahdale	Telegraph, Pickling, Lebanese, Apple cucumbers	Honeydew and Rockmelons
NOTE	Varieties/ cultivars within this column may cross pollinate	Varieties/ cultivars within this column may cross pollinate	Varieties/ cultivars within this column may cross pollinate	Varieties/ cultivars within this column may cross pollinate	Varieties/ cultivars within this column may cross pollinate

EDIBLE PLANT FAMILIES

FAMILY	BRASSICACEAE				
COMMON NAME	CABBAGE OR MUSTARD FAMILY				
POLLINATION	INSECT POLLINATION				
GENUS	BRASSICA				RAPHANUS
SPECIES	OLERACEA	RAPA	NAPUS	JUNCEA	RAPHANISTRUM
SUBSPECIES		Rapa (Turnip), Chinensis (Bok choy/ Pak choi), Pekinensis (Napa cabbage) Ruvo (Raab)			subsp. sativus (Radish)
VARIETY/ CULTIVAR GROUPS	Acephala (Kale and collard greens)		Napobrassica cultivar group (Swede AKA rutabaga)	Rugosa (Chinese leaf mustard)	
	Alboglabra – Chinese broccoli			Niposinica (Mizuna)	
	Botrytis – Cauliflower, Romanesco broccoli				
	Capitata – Cabbage				
	Gemmifera – Brussels sprouts				'French Breakfast', 'Easter Egg', 'Champion' and 'Daikon'
	Gongylodes – Kohlrabi				
	Italica – Broccoli				
NOTE	Varieties within this column may cross pollinate	Subspecies and varieties within this column may cross pollinate	Varieties within this column may cross pollinate	Varieties within this column may cross pollinate	Varieties/ cultivars within this column may cross pollinate

EDIBLE PLANT FAMILIES

FAMILY	APIACEAE (UMBELLIFERAE)					
COMMON NAME	CARROT FAMILY					
POLLINATION	INSECT POLLINATION					
GENUS	DAUCUS	APIUM	PASTINACA	CORIANDRUM	ANETHUM	FOENICULUM
SPECIES	CAROTA Subsp. SATIVUS	GRAVEO LENS	SATIVA	SATIVUM	GRAVEO LENS	VULGAR E
COMMON NAME	CARROT	CELERY	PARSNIP	CORIANDER	DILL	FENNEL
VARIETY		Dulce (stalk celery)				Azoricum (Florence or bulb fennel)
VARIETY		Rapaceum (Celeriac)				Rubrum (bronze fennel)
VARIETY		Secalinum (Chinese celery)				
CULTIVARS	Nantes, Danvers, Imperator, Chantenay and Ball					
NOTE	Varieties/ cultivars within this column may cross pollinate, also can cross with Queen Anne's Lace	Varieties/ cultivars within this column may cross pollinate	Varieties/ cultivars within this species may cross pollinate	Varieties/ cultivars within this species may cross pollinate	Varieties/ cultivars within this species may cross pollinate	Varieties/ cultivars within this column may cross pollinate

EDIBLE PLANT FAMILIES

FAMILY	ASTERACEAE (COMPOSITAE			
COMMON NAME	DAISY OR SUNFLOWER FAMILY			
POLLINATION	SELF POLLINATION		SELF POLLINATION	SELF POLLINATION
GENUS	LACTUCA	HELIANTHUS	CICHORIUM	
SPECIES	SATIVA (LETTUCE)	TUBEROSUS (JERUSALEM ARTICHOKE)	ENDIVIA (ENDIVE)	INTYBUS (CHICORY)
VARIETY	Leaf			
VARIETY	Longifolia (Cos or Romaine)			
VARIETY	Iceberg			
VARIETY	Butterhead			
VARIETY				
VARIETY				
VARIETY				
	Varieties within this column may rarely cross pollinate	Grown from tubers, no cross pollination		

EDIBLE PLANT FAMILIES

FAMILY	ALLIOIDEAE				
COMMON NAME	ONION FAMILY				
POLLINATION		INSECT POLLINATION			
GENUS	ALLIUM				
SPECIES	SATIVUM	CEPA	AMPELOPRASUM	SCHOENOPRASUM	FISTULOSUM
COMMON NAME		ONION	LEEK	CHIVES	SCALLIONS SPRING ONIONS OR SHALLOTS
VARIETY	Garlic	Aggregatum (French Shallot or Eschalot)	Ampeloprasum (Elephant garlic)		
VARIETY					
VARIETY					
VARIETY					
	Grown from bulbs, no cross pollination	Varieties within this column may cross pollinate	Varieties within this column may cross pollinate	Varieties within this column may cross pollinate	Varieties within this column may cross pollinate

EDIBLE PLANT FAMILIES

FAMILY	**AMARANTHACEAE**		
COMMON NAME	AMARANTH/ BEETROOT FAMILY		
POLLINATION	WIND POLLINATION		
GENUS	BETA	CHENOPODIUM	SPINACIA
SPECIES	VULGARIS	QUINOA	OLERACEA (ENGLISH SPINACH)
VARIETY	Vulgaris Conditiva (Beetroot)		
VARIETY	Cicla (Swiss Chard or Silver Beet)		
VARIETY	Crassa (Mangelwurzel)		
VARIETY	Altissima (Sugar beet)		
VARIETY			
VARIETY			
VARIETY			
NOTES	Varieties/ cultivars within these column may cross pollinate	Varieties/ cultivars within this species may cross pollinate	Varieties/ cultivars within this species may cross pollinate

BACK TO CONTENTS

E bec@growinghome.com.au
W growinghome.com.au
F facebook.com/growinghomeaustralia
I instagram.com/bec_growinghome

find yourself in the dirt

DISCLAIMER

1.Copyright
1.1 Copyright © Growing Home (ABN 65 191 900 970), 2018. All rights reserved. All trademarks and trade names are proprietary to Growing Home and must not be downloaded, reproduced or otherwise used without the express written consent of Growing Home.
1.2 This website, and products sold by Growing Home, contain material which is owned by or licensed to us. This material includes, but is not limited to, the content, design, layout, appearance, look and graphics of the website and products. Any reproduction of the website's material, or any digital publications or products, is prohibited other than in accordance with the copyright notice, which forms part of these terms and conditions.

2. Access
2.1 You may access and display Growing Home guides, digital publications and other materials on your computer, monitor, mobile phone or other video display device, and make one printed copy of any whole page or pages for your **personal use only**. Information on this website, guides or digital publications are not for public display, reproduction, distribution or resale, and anyone found breaching these terms, whether intentionally or not, may be liable.
2.2 Other than for the purposes of and subject to the conditions prescribed under the Copyright Act 1968 (Cth) (or any other applicable legislation throughout the world), or as otherwise provided for herein, you may not use these materials in any manner without the prior written permission of the copyright owner.
2.3 Every effort is made to keep the website up and running smoothly. However, we take no responsibility for, and will not be liable for, the website or products being temporarily unavailable due to technical issues beyond our control.

3. Limitations of Content
3.1 Growing Home and the author have used reasonable care and skill in compiling the content of these materials. However, Growing Home makes no warranty as to the accuracy or completeness of any information contained therein nor does Growing Home accept responsibility for any acts or omissions in reliance upon these materials.
3.2 The content of this website is for your general information and use only. Your use of any information or materials on this website is entirely at your own risk, for which we shall not be liable. It shall be your own responsibility to ensure that any products, services or information available through this website meet your specific requirements.
3.3 These materials are intended to be a guide only and no part is intended to be advice, whether legal or professional. It is subject to change without prior notice. All persons are advised to seek professional advice to keep abreast of any legal or other reforms and developments.
3.4 This website may also, on occasion, include links to other websites which are not controlled by us. These links are provided for your convenience to provide you with further information. You acknowledge that they are used at your own risk. They do not signify that we recommend or endorse the websites. We have no control over the nature, content and availability of those websites.

4. Limitation of Liabilities
4.1 To the extent permitted by applicable law, Growing Home, its employees, agents and consultants exclude all liability for any loss or damage claims and expenses including but not limited to legal costs, indirect special or consequential loss or damage (including but not limited to, negligence) arising out of the information in the materials. Where any law prohibits the exclusion of such liability, Growing Home limits its liability to the resupply of the information.
4.2 Unauthorised use of this website may be a criminal offence and/or give rise to a claim for damages. You may only use the website for lawful purposes and in a manner consistent with the nature and purpose of the website.
4.3 You indemnify us from and against all claims, suits, demands, actions, liabilities, costs and expenses (including legal costs and expenses on a full indemnity basis) resulting from your use of the website. In no event will we be liable for any loss, damage, cost or expense including legal costs and expenses (whether direct or indirect) incurred by you in connection with the use of this website.
4.4 This agreement and this website are subject to the laws of Australian Capital Territory and Australia. If there is a dispute between you and Growing Home that results in litigation then you must submit to the jurisdiction of the courts of ACT, Australia.

5. Disclaimer Specific to Recipes
5.1 I have used reasonable care and testing when creating recipes, however, due to variations in ingredients, equipment, measurements and skill, Growing Home cannot guarantee the results or outcome for users.
5.2 The user is responsible to ensure the recipes, ingredients and materials they use are suitable to handle and consume, in regard to any allergies or dietary requirements.
5.3 The information and materials on this website, or any digital publications bought from this website, are intended to be a guide only and not intended to replace professional consultation, whether regarding nutritional or medical advice, diagnosis, or treatment.

6. Disclaimer Specific to Guides
6.1 I have used reasonable care and testing when creating guides, however, due to variations in location, equipment, measurements and skill, Growing Home cannot guarantee the results or outcome for users.
6.2 The user is responsible to ensure the materials, equipment and instructions they use are suitable to handle in terms of food safety, preserving, gardening, backyard livestock and other urban homesteading safety.
6.3 The information and materials on this website, or any digital publications bought from this website, are intended to be a guide only and not intended to replace professional consultation.