Get Your Garden Growing



Simple Steps to Seed Sowing and Planting

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The author shall not be liable for misuse of this information. The purpose of this book is to guide and educate readers. The steps outlined in this book are to be applied with care and consideration and further research is suggested before completing any suggested activities.

The author is not responsible for information outlined in this book and this information may not suit everyone's individual situation.

Personal protective equipment and duty of care should always be applied when completing outdoor activities.

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"To plant a garden is to believe in tomorrow"

~ Audrey Hepburn ~

~ Choosing Plants for your Garden ~



When deciding on plants for your garden consider your own needs for the area. Are the plants for edible or ornamental gardens? Are they to be used as medicinal? Are they companion or support plants? Do you need more privacy, shade or a nice place to relax? Plants can help us with all these things. A few things to consider when choosing plants for your garden are plant characteristics and growth factors.

PLANT CHARACTERISTICS: How Does the Plant Grow?

Growth Habit:

Annual - one growth cycle then dies, eg Lettuce Perennial - many growth cycles, long growth life, (e.g. Rosemary) Biennial - a plant which blooms in its second life cycle and then dies, (e.g. Parsley) Deciduous – Plants that shed leaves during the colder months each year, and regrow when Spring appears, (e.g. Oak trees) Evergroop – Plants that are leafy all year round (e.g. Lomon Scontod Myrtle - an

Evergreen – Plants that are leafy all year round (e.g. Lemon Scented Myrtle - an Australian species)

Other Considerations:

- Is the plant a climber, growing up a trellis like Beans?
- Is the plant a ground cover, growing flat along the ground like Oregano?
- Is the plant a tree, standing tall and strong?
- Is the plant a shrub, which grows multiple stems up to 5m tall?

This will help determine the location for the plant and how much space is needed for growth.

Plant Size:

What size will the plant be when fully grown?

Consider the height and width of the plant at full growth and when planting allow for this space.

GROWTH FACTORS: What Do Plants Need to Grow?

All plants have their own requirements for *light, temperature, water, correct pH and soil conditions and nutrients*. This will vary between individual plants.

It's also important to consider the season and your climate. Choose plants suitable to grow in the current season and climatic conditions (eg sub-tropical, tropical, temperate or cool).

~ Ways to Grow New Plants ~

There are several ways to grow new plants but the most cost effective is by sowing seeds or growing from existing plant cuttings.

Although they time to sprout, sowing seeds will give you a great result, with minimal cost and growing new plants from cuttings makes many new plants quickly!

Other ways to grow new plants include planting bulbs or rhizomes (e.g. Ginger) dividing plants or by replanting runners, like Strawberries.

Sowing Seeds



Seed sowing is a wonderful way of growing new plants, saving money, continuing heirloom varieties and also choosing exactly which plant species you want to grow.

This is a fun activity for kids!!

Here's how to get started;

Gather this Equipment:

- 1. Quality seed raising mix (further explanation below)
- 2. Pots or punnets (further explanation below)
- 3. A selection of seasonal seeds
- 4. Plant labels
- 5. Permanent marker
- 6. Water sprayer and
- 7. Seedling tray (lined with damp newspaper) to store punnets and pots in.

Additionally, a cover over the punnets will create a warm and moist climate for seeds to germinate in. It also protects the seeds from rats and other little critters.

Seeds:

When choosing seeds and plants for your garden there are many organic options available. Seeds that are not treated with chemicals have a higher germination rate and will not contaminate your soil with anything synthetic that may cause damage to the organisms in the soil.

When purchasing seeds always use **non-GM seeds** - *Genetically Modified* = when genetic material is transferred between plants that wouldn't naturally cross pollinate.

Key to Sowing Seeds Successfully:

To germinate (or sprout), seeds require *warmth, moisture, oxygen* and some also require other factors to overcome dormancy (e.g. water, fire, stomach acids/partial digestion by animals/birds, time, temperature change, harsh scratching.) An example of this is after a bushfire many plant species will grow after the seeds have been burnt.

Some seed must experience a cold dormancy period before germination will take place and this is known as "stratification." When using purchased seeds always read the information on the packet to understand the plants own requirements.

Pots:

Many options for pots include plastic punnets (6 or 8 cells), small tube stock pots, jiffy pots, coco pellets, recycled containers e.g. yoghurt containers, egg cartons, toilet rolls, old plastic drink bottles (add drainage holes) or use a pot maker and make your own recycled pots.



If re-using plastic punnets or pots wash well before use to ensure they are free or any bacteria or diseases. To do this fill a tub with warm water and add lavender or eucalyptus oils or use a natural cleaning product (e.g. all purpose cleaner, preferably something with natural oils or lemon juice that contain natural anti-bacterial properties) and then soak and scrub

pots clean. Rinse well and place in the sun to dry.

Propagating covers can be used in conjunction with seedlings trays to store punnets and provide warmth, moisture and shelter whilst seeds are germinating.

Seed Raising Recipe:

- 8 parts sand
- 1 part peat moss or coco fibre
- 1 Tablespoon of Nutrients blend of blood and bone, crushed manure pellets or organic slow release fertiliser

Quality seed raising mix is also available from all garden centres and hardware stores.

How to Sow Seeds:



- Place punnets/pots on a seedling tray or other flat surface and fill with growing mix to about ¾ of cell/pot.
- 2. Gently pat down mixture, not too firm. If mixture is dry then spray lightly with water.
- 3. Before sowing group the seeds into fine, medium or large seeds as they will have various sowing methods.

Have your seeds ready (make sure they're suitable for the current season) and read packets for growing information.

If the seeds need to be soaked overnight you will need to arrange this the day before sowing.



- a. Fine seeds can be mixed with a small amount of growing mix in a small container. This mix is then sprinkled over the filled pots, using your fingers, as the sowing method.
- b. Medium seeds will be placed directly into the filled pots.
- c. Large seeds can be sown into a larger pot or directly into the ground. If sowing into the ground prepare your soil a few weeks before sowing by adding compost or rotted manures, water well and mulch.

- 4. Usually one seed per pot/cell is enough as you don't want to overcrowd the seedlings. Using a small stick (toothpicks work well) make a small hole in the mix slightly larger than the seed.
- 5. The seed is to be sown the same depth as the seed



width. For a seed 2mm in size, sow the seed 2mm deep into mix.

6. Place seed into the hole and gently cover the seed with a small amount of growing mix.

Do not add extra fertilisers before sowing as there will be enough nutrients in the seed and the soil for the germination of the seed.



When watering seeds use a hand water sprayer as it's important not to disturb the seeds once sown.

By spraying a fine mist of water you are adding enough moisture for the soil to absorb without drowning the seed.

Only use water at this stage as

seeds contain enough nutrients to germinate and grow to the first 2 leaves.

DO NOT MULCH OVER SEEDS as this prevents seeds from germinating.

If you're using a propagating cover place this over the seedling tray and then place the tray in a shaded and warm location. Some examples of this are in a greenhouse/ shadehouse, under the shade of a tree, on a windowsill or on a patio/veranda within close reach. 7. www.soiltosupper.com

The growing mix will need to be kept moist, not soaking, at all times, so keep the trays close to your home for easy access each day. If not using a cover you may need to spray trays morning and afternoon. This is something that you will have to monitor during the germination period.



The time between sowing seeds and seedlings appearing will vary. The instructions and information provided with the seeds will give you the germination time.

Once seedlings appear and have the first two leaves, add a small amount of liquid fertiliser to the sprayer, eg worm farm

liquid or seaweed solution.

Spray the leaves and growing mix daily with the diluted liquid fertiliser.

The seedling will be ready for transplanting when it has about 6 or more leaves or when the seedling is looking strong and healthy.

Planting Seedlings

You must have a garden area well



prepared for planting the seedlings in. Prepare your beds at least 2 weeks before planting seedlings and leave to rest (or fallow). This will ensure the soil, any added soil improvers and the nutrients have had time to blend together. The earthworms and other micro-organisms will move in and help improve the soil ready for new plants.

These methods are suitable for any time of the year, in any location. If you've built no-dig gardens leave for at least 4-6 weeks before planting.

You'll find more information on building a no-dig garden here – <u>www.soiltosupper.com/how-to-build-a-no-dig-garden/</u>

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When to Plant:

During warm season plant in the afternoon or cloudy days, during cool season plant mornings or cloudy days. Consider 'hardening off' plants if they are to be moved outside, inside or to another location. This should be gradual and the plant needs to be introduced slowly to the new environment.

Planting Method

- 1. Soak the punnet or pots in a diluted liquid fertiliser solution (same as spray bottle) for about 15 minutes to ensure all the roots and soil is damp.
- 2. In the garden bed move the layer of mulch back to expose soil.
- 3. Make a small hole, just larger than seedling size, in the soil using hands or trowel.
- 4. Add a small amount of rotted manure, worm castings or compost to the base of hole, mix in and water well.

5. Gently remove seedling from punnet or pot, careful not to disturb roots. Place

directly into hole and then back fill around the roots up to the existing plant's soil depth, not any deeper. (with tomato you can plant deeper to encourage more roots on plant's stem)

6. Sprinkle around a small amount of slow release fertiliser, eg chook manure pellets, blood and bone or other organic fertiliser. Do not place any fertiliser near the plants stem as this could burn the plant's stem or leaves.

- 7. Mulch with a fine cane mulch or other compost around the plant, again not touching the stem.
- 8. Water in gently with a diluted liquid fertiliser. Place a label near the plants for identification, include plant name and date planted.

This is the same process for planting shrubs, just prepare your soil before planting and ensure the hole is bigger than the size of the shrub's pot.





If you have any gardening questions you can join the Soil to Supper Club Facebook Group and post questions and comments for the group. <u>www.facebook.com/groups/soiltosupperclub/</u>

Growing with you,



About the author

Cath Manuel is an experienced Horticulturist, Consultant, and Educator based in Queensland, Australia.

She has many years' experience in the Gardening, Permaculture and Horticulture Industry and has a passion for growing fresh, organic food.

Cath is also a qualified Horticultural Therapist and offers gardening programs for people of all ages and abilities throughout Queensland.

Cath shares her knowledge and experience



worldwide through coaching, events, radio, television, and media publications.