

# A Four-Bed Crop Rotation System

(from Sustainable Gardening Australia, SGA, adapted by Kath Moller)

Lets get down to the specifics... how to do it.

\*First, we need to know a little bit about plant families. This is a key principle behind crop rotation. Essentially, each area should be planted with a different plant family each season (generally every six months), to help avoid any nasty pest and disease outbreaks. So, who's related to whom?

## **Amaranthaceae**

### **Beetroot family**

Beetroot  
Quinoa  
Spinach  
Swiss Chard

## **Cucurbitaceae**

### **Marrow family**

Cucumber  
Zucchini  
Melon  
Pumpkin  
Squash

## **Solanaceae**

### **Potato family**

Eggplant(Aubergine)  
Peppers (Capsicum and chillis)  
Potato  
Tomato

**1.**Follow one crop with one from a different plant family (Leaf then fruit then root then potato then legume)

## **Compositae**

### **(Asteraceae)**

#### **Daisy family**

Chicory/Endive  
Jerusalem Artichoke  
Lettuce  
Salsify

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## **Umbelliferae**

### **(Apiaceae)**

#### **Carrot family**

Carrot  
Celeriac  
Celery  
Fennel  
Parsley  
Parsnip  
Dill

**2.**Follow a heavy feeder with a light feeder

## **Cruciferae**

### **(Brassicaceae)**

#### **Cabbage family**

Broccoli  
Brussels Sprouts  
Cabbage  
Cauliflower  
Kale  
Kohlrabi  
Mustard  
Oriental Brassicas e.g. Bok Choy, Pak Choi  
Radish  
Swede  
Turnip

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**3.**Plant a green manure crop at least once in every 4 seasons to replenish your soil.

## **Leguminosae**

### **(Fabaceae)**

#### **Pea & Bean family**

Alfalfa  
Beans  
Peas  
Clover  
Fenugreek  
Lupin

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## **Alliaceae**

### **Onion family**

Garlic  
Leek  
Onion  
Shallot

## **Poaceae**

### **Grass family**

Sweet corn  
Maize

**4.**Read the SGA fact sheets on individual plants when planning your next crops

The principle is that one family member shouldn't be followed by another family member in consecutive seasons. For example, once the tomatoes, members of the Solanaceae family, have

finished fruiting and been removed, this area should be planted with a member of another family such as carrots from the Umbelliferaeae family followed by (say) peas from the Fabaceae family.

There is another reason for this type of planting sequence as well. Some plants are referred to as “heavy” feeders, while others are “light” feeders. By introducing a crop rotation system, we can estimate the levels of nutrients remaining in the soil and plant accordingly. For example, the Brassiaceae family are mainly heavy feeders and will take a lot of nutrients from your soil.

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However the Alliaceae family are light feeders and will not do well in a rich soil. It makes sense to plant onions after cabbages! Sounds complicated? Not really! Just think logically and you can’t go wrong!

With these principles in mind, a suitable four-bed crop rotation may look like this:

	Season One	Season Two	Season Three	Season Four
<b>Bed One</b>	<b>Legume</b>	<b>Heavy Feeder</b>	<b>Light Feeder</b>	<b>Green Manure</b>
<b>Bed Two</b>	<b>Heavy Feeder</b>	<b>Light Feeder</b>	<b>Green Manure</b>	<b>Legume</b>
<b>Bed Three</b>	<b>Light Feeder</b>	<b>Green Manure</b>	<b>Legume</b>	<b>Heavy Feeder</b>
<b>Bed Four</b>	<b>Green Manure</b>	<b>Legume</b>	<b>Heavy Feeder</b>	<b>Light Feeder</b>

**Heavy Feeders** include potatoes, tomatoes, cauliflower, broccoli, cabbage, sweet corn, lettuce, cucumbers, zucchini, spinach, lettuce and Asian greens.

**Light Feeders** include onions, leeks, garlic, beetroot, carrots, parsnips and silverbeet.

**Legumes** include peas, snow peas, broad beans, runner beans, snake beans which fix nitrogen.

**Green Manure Crops** are crops grown, not to be harvested, but to be worked back into the soil.

These are generally comprised of thickly sown annual grasses and/or legumes, that are tilled back into the soil before they flower or form seed heads. They add nutrients during their growing period and organic matter to soil in veggie patches, perfect for getting the next seasons edible crop off to a good start! Many nurseries stock pre-packaged green manure seeds.

One commercial mix contains: Fenugreek, Oats, Sub Clover, Woolly Patch Vetch, French White Millet, Buckwheat, Broccoli Rapa

**Keeping Track of the Patch** Like a lot of things, crop rotation works really well, but can prove a little daunting to keep track of. The solution – a chalkboard or whiteboard in the garden shed, or a

gardening calendar or simple notebook, outlining what was planted where during each season. This is a great visual reminder of what's happened in your yummy yard, and will help you keep track of the rotations happening in your patch. (You could use a map format or make a written table)

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