

Benefits of companion planting

- Increase productivity
- Increase essential oils and nutrients
- Reduce destructive pests and diseases
- Attract and provide suitable habitat for beneficial insects
- Nurse damaged plants back to health
- Generally improve garden health
- Condition soil
- Attract earthworms
- Mature garden becomes self-governing
- Improve ecological balance



Roles of companion plants

- Camouflage - mask the scent. Examples: catnip, chamomile, mints, geraniums, lemon balm, onions
- Nurturing – act as nurses, doctors or social workers. Examples: oregano, marjoram, lovage, stinging nettle
- Stimulation – boost essential oils, flavour, vitamins, minerals or productivity. Examples: borage, coriander, morning glory, rosemary
- Sacrifice – act as decoy. Examples: nasturtiums, vegetables left to seed

Plant behaviour

It is important to understand how the companion effect works as that will determine how you plant. For example, if the nurturing is through root secretions, the plants must be planted close together. If it's about aroma, then a wider distance is okay. For nasturtiums to be sacrificed to aphids, they need to be planted at a distance from the plants they are protecting.

Plant guilds

Plants in nature don't form themselves into monocultures; they grow together in diverse groups called guilds that complement and support each other. Plant guilds are very important in permaculture and especially in designing edible food forests and integrating animals into garden design. The use of guilds provides sustainable design for our edible gardens.

To be able to design guilds it's important to understand the functions each plant, animal and insect performs. For example, Native Americans planted corn, beans and squash together (called the "three sisters"). The corn provides a structure for the beans to climb; the beans provide nitrogen to the other plants; and the squash spreads along the ground preventing weeds.



References: www.sgaonline.org.au; "Companion Gardening in Australia" by Judith Collins

*If you want more information or would like to see a demonstration
please contact Kyneton Transition Hub
- KynetonTH@gmail.com or www.kynetontransitionhub.com -
or phone 5422 3023 (Julie)*

Sustainable Gardening Australia presents: The most comprehensive companion planting chart in the known universe (maybe)

Plant	Good Neighbours	How it works	Bad Neighbours
Apple	Nasturtium, Chives	Nasturtium climbs tree and is said to repel codling moth	Potatoes
Apricot	Basil, Tansy, Asparagus	Basil and tansy are said to repel damaging insects	
Asparagus	Apricot, Basil, Chives, Comfrey, Lovage, Marjoram, Parsley, Tomatoes	Basil and Parsley are said to improve flavour. Onions and garlic release substances reducing growth.	Garlic, Onions
Balm (Lemon)	Tomatoes	Attracts bees, said to enhance flavour and growth	
Basil	Tomatoes	Basil said to repel flies and mosquitoes	
Beans (climbing)	Broccoli, Brussel Sprouts, Cabbage, Carrots, Cauliflower, Corn, Lettuce, Lovage, Majoram, Parsley		Beetroot, Chives, Garlic, Gladiolus, Onions, Sunflower
Beetroot	Beans (bush), Broccoli, Brussel Sprouts, Cabbage, Cauliflower, Kohl Rabi, Lettuce, Lovage, Marjoram, Onion, Peas, Potato, Spinach, Silverbeet	Bad Neighbours roots release substances reducing growth	Beans (Climbing), Tomato
Borage	Squash, Strawberries, Tomato	Said to deter tomato worm and improve tomato flavour and yield. Said to increase strawberry yield.	
Brassicas (Incl: Broccoli, Cabbage, Cauliflower)	Beans, Beetroot, Carrots, Chamomile, Coriander, Cucumber, Dill, Lettuce, Lovage, Marjoram, Marigold (French), Mint, Nasturtium, Pea, Potato, Rosemary, Sage, Tansy, Thyme, Tomato, Zinnias	Dill attracts a Cabbage White Butterfly controlling wasp. Nasturtium disguises and repels aphids. Sage repels the Cabbage White Butterfly. Zinnias attract ladybirds, which we love! Bad Neighbours roots release substances reducing growth	Garlic, Rue, Strawberry
Capsicum, Chilli	Carrots, Onions, Tomato		
Carrots	Beans, Chives, Coriander, Cucumber, Leeks, Lettuce, Lovage, Marjoram, Onion, Pea, Radish, Rosemary, Sage, Tomato	Bad Neighbours roots release substances reducing growth	Dill, Celery
Celery	Cabbage, Chives, Dill, Dwarf Beans, Leek, Lovage, Majoram, Onion, Pea, Sage, Spinach, Tomato	Bad Neighbours roots release substances reducing growth	Carrots, Parsnip, Potato
Chamomile	Cabbage, Onion	Deters flies and mosquitoes. Strengthens neighbouring plants	
Chives	Apples, Cucumbers, Lettuce, Peas	Prevents Apple Scab. Said to deter aphids	Beans
Cucumber	Basil, Beans, Borage, Broccoli, Brussel Sprouts, Cabbage, Carrot, Cauliflower, Corn, Dill, Kohl Rabi, Lettuce, Lovage, Marjoram, Nasturtium, Parsnip, Pea, Radish, Sunflower, Tansy	Bad Neighbours roots release substances reducing growth	Potato, Sage, Strongly Aromatic Herbs

Dill	Brassicas (Incl: Broccoli, Cabbage, Cauliflower)	Dill attracts a Cabbage White Butterfly controlling wasp	
Eggplant	Beans, Spinach		
Garlic	Apricot, Cherry, Mulberry, Parsnip, Peach, Pear, Raspberry, Rosemary, Rose	Deters aphids, especially from roses and raspberry. Repels Cabbage White Butterfly	Beans, Cabbage, Peas, Strawberry
Kohl Rabi	Beetroot, Onion		Beans, Tomato
Leek	Carrot, Celery, Lovage, Majoram, Onion, Parsnip, Strawberry		Beans, Peas, Parsley
Lettuce	Achillea, Beans, Beetroot, Cabbage, Carrot, Chervil, Coreopsis, Cucumber, Lovage, Marjoram, Marigold (French), Onion, Parsnip, Pea, Radish, Strawberry, Zinnia	Achillea, Coreopsis & Zinnia attract pollinators and offer shade for lettuce	Parsley
Marigolds (French)	Numerous vegetables, including tomato	Kills root knot nematodes and eel worm	
Melon	Radish, Sweet Corn		
Mint	Cabbage, Tomato	Deters pests such as Cabbage White Butterfly, ants and fleas	
Nasturtium	Cabbages, Fruit Trees, Radishes, Zucchini	Flowers repel aphids and codling moth. Cabbage white butterfly is attracted to this plant, and will seek it out over cabbages	
Onion	Beetroot, Broccoli, Cabbage, Carrot, Chamomile, Leeks, Lettuce, Lovage, Marjoram, Parsley, Parsnip, Silverbeet, Strawberry, Summer Savory, Tomato	Smell of onion said to deter numerous pests Onions release substances reducing growth of Bad Neighbours	Asparagus, Beans, Gladioli, Peas
Parsley	Asparagus, Sweet Corn, Tomato	Said to improve flavour of asparagus and tomato	
Peas	Beans, Beetroot, Brussel Sprouts, Cabbage, Carrot, Cauliflower, Celery, Cucumber, Lettuce, Lovage, Marjoram, Parsnip, Potato, Radish, Sage, Squash, Sweet Corn	Bad Neighbours roots release substances reducing growth. Sweet Corn has traditionally been used as “living stakes” for peas	Chives, Garlic, Onion, Shallots
Potato	Beans, Broccoli, Brussel Sprouts, Cabbage, Cauliflower, Corn, Eggplant, Horseradish, Lovage, Marjoram, Marigold (French), Nasturtium, Parsnip, Peas, Sweet Alyssum, Sweet Corn, Watermelon	Sweet Alyssum and Marigolds attract beneficials and suppress weeds Potatoes release substances reducing growth of Bad Neighbours. Horseradish should be planted at the corners of the patch	Apple, Celery, Cherry, Cucumber, Pumpkin, Raspberry, Rosemary, Squash, Sunflower, Tomato
Pumpkin	Beans, Cabbage, Eggplant, Peas, Radish, Sweet Corn	Bad Neighbours roots release substances reducing growth	Potato
Radish	Beans, Carrot, Chervil, Cucumber, Sweet Corn, Cucumber, Lettuce, Lovage, Marjoram, Nasturtium, Parsnip, Pea, Spinach, Sweet Corn	Radish is said to attract leaf miners from Spinach	Hyssop
Raspberry			Blackberries, Potato, Tomato

Rosemary	Beans, Cabbage, Carrot, Sage	Said to deter Cabbage white butterfly. Attracts beneficials	
Sage	Brassicas (Incl: Broccoli, Cabbage, Cauliflower), Carrot, Rosemary	Sage repels the Cabbage White Butterfly	Cucumber
Silverbeet	Beetroot, Cherry, Lavender, Lovage, Marjoram, Onion		Basil, Wormwood
Spinach	Celery, Eggplant, Strawberries		
Squash	Borage, Lovage, Marjoram, Nasturtium, Peas, Sunflower, Sweet Corn, Tansy		Potato
Strawberry	Beans, Borage, Chives, Leek, Lettuce, Marigold (French), Onion, Pyrethrum, Sage, Spinach		Brassicas (Incl: Broccoli, Cabbage, Cauliflower), Brussel Sprouts, Garlic
Sunflower	Apricots, Cucumbers, Squash		Beans, Potato
Sweet Corn	Beans, Cucumbers, Lovage, Marjoram, Melon, Parsnip, Peas, Potato, Pumpkin, Radish, Squash, Zucchini	Sweet Corn has traditionally been used as “living stakes” for peas. Bad Neighbours roots release substances reducing growth	Cabbage
Tomato	Asparagus, Basil, Celery, Borage, Broccoli, Brussel Sprouts, Cabbage, Carrot, Cauliflower, Celery, Chives, Dill, Gooseberry, Grape, Hyssop, Lovage, Marigold (French), Marjoram, Mint, Nasturtium, Onion, Parsley, Parsnip, Turnip	Marigolds said to repel white fly and root knot nematode. Bad Neighbours roots release substances reducing growth	Apricots, Beetroot, Fennel, Kohl Rabi, Potato, Rosemary, Sweet Corn
Turnip	Cucumbers, Lettuce, Nasturtium, Peas, Tomato		
Watermelon	Potato		
Yarrow	Most aromatic herbs	When planted along pathways, is said to enhance essential oil production and herb flavour.	
Zucchini	Lovage, Marjoram, Nasturtium, Sweet Corn		

and...

a couple of general plants that make great companions for other reasons

- **Basil** helps repel flies and mosquitoes; **Borage** in the strawberry patch will increase the yield.
- **Catnip** repels fleas, ants and rodents; **Caraway** helps breakdown heavy soils; **Chamomile** deters flies and mosquitoes and gives strength to any plant growing nearby; **Chives** grown beneath apple trees will help to prevent apple scab; beneath roses will keep away aphids and blackspot.
- **Elderberry** a general insecticide, the leaves encourage compost fermentation, the flowers and berries make lovely wine!
- **Fennel** (not *F. vulgare* or *F. officinale*) repels flies, fleas and ants; **French Marigold** root secretions kill nematodes in the soil. Will repel white fly amongst tomatoes.
- **Garlic** helps keep aphids away from roses.
- **Hyssop** attracts cabbage white moth keeping brassicas free from infestation.
- **Mint** repels cabbage white moth. Dried and placed with clothes will repel clothes moth.
- **Nasturtium** secrete a mustard oil, which many insects find attractive and will seek out, particularly the cabbage white moth. Alternatively, the flowers repel aphids and the cucumber beetle. The climbing variety grown up apple trees will repel codling moth.
- **Pyrethrum** will repel bugs if grown around the vegetable garden.
- **Rosemary** repels carrot fly; **Rue** (*Rutus*, not *Peganum*) keeps cats and dogs off garden beds if planted round the borders.
- **Sage** protects cabbages from cabbage white moth.
- **Tansy** (*Tanacetum*, not *Senecio*) repels moths, flies and ants. Plant beneath peach trees to repel harmful flying insects. Tansy leaves assist compost fermentation.
- **Wormwood** (*Artemesia*, not *Ambrosia*) although it can inhibit the growth of plants near it, wormwood does repel moths, flies and fleas and keeps animals off the garden.

Information sources: Bagnall, Lyn, *Easy organic gardening and moon planting*, published by Scribe Publications, VIC; www.figtree.org.au