Companion planting benefits

Companion planting is a bit more than just the general notion that some specific plants can benefit others if they are planted close to each other. It has been defined as planting two or more crop species together to achieve benefits such as higher yields and pest control.

The goals of companion planting:

- Make the most of your space
- Improve environmental conditions for neighbouring plants
- Maintain fertility in your growing areas
- Repel, confuse or distract pests
- Attract beneficial wildlife

To Make the Most of your space

Making the most of your space can involve a range of different options, and planting different crops and companion plants in the same area is one. Examples include planting quick growing crops between slower growing ones in annual beds. Or placing plants with different root systems and requirements alongside others. Or layering plants with shorter non-competitive ones below taller ones.

Improve environmental conditions for neighbouring plants, and maintain fertility

One plant may improve the environment for another by providing support, increasing humidify, providing shade, reducing water loss by providing ground cover, or by providing nutrients or attracting certain pollinators to an area. An example is the 'three sisters planting scheme' where corn provides support for climbing beans and squash provides ground cover to reduce water loss.

Repel confuse or distract pests

Certain plants have strong scents which can mask the scent of other plants growing nearby, thereby making them harder for some pests to 'find'. Some of these aromatic, strongly-scented plants are also said to repel certain species.

There are also plants that are 'trap crops that can help keep main crops safe by drawing pests to them.

Attract beneficial wildlife

Companion plants can help attract beneficial predatory insects and other wildlife which will eat pest species (like aphids for example) and keep their numbers down. Encouraging in as wide a range of wildlife in your garden is a good thing. The greater the biodiversity within a system, the greater number of beneficial interactions between species there can be. And the greater number of beneficial interactions, the more stable and resilient the system will become. Companion plants also attract bees, which are wonderful pollinators.

Companion Planting With Flowers

Of course there are many flowers which can work very well in polycultures a polytunnel, or elsewhere in your garden. Here are some excellent options to consider:

Alyssum – intercrop as a living mulch with brassicas, lettuce, for example. Helps attract predatory insects to reduce aphid and other pest populations.

Borage – excellent nectary plant for bees and other pollinators and attracts predatory insects – companion plant widely in fruit and vegetable gardens (perhaps allowing to self-seed). Also edible.

Calendula – beautiful edible and useful annual also good for intercropping or companion planting with a range of common crops.

Clovers – nitrogen fixing, good for living pathways or as cover crops.

Comfrey – excellent perennial for edge planting – deep rooted dynamic accumulator which can be used for mulches and liquid feeds in your polytunnel. Also attracts bees and has medicinal uses.

Cosmos – attract pollinators, trap crop for aphids. Good close to insect pollinated plants or for borders of beds as trap crop.

Echinacea – good for bees and other pollinators, placed in perennial edge planting. Useful medicinal plant.

French Marigolds – great universal companion plant for vegetable gardens. Attract beneficials and may help control nematodes in the soil.

Lavender – fragrant and useful insect attracting perennial plant for edge planting.

Lupins – nitrogen fixing legume, good for bees, used for intercropping or interspersing.

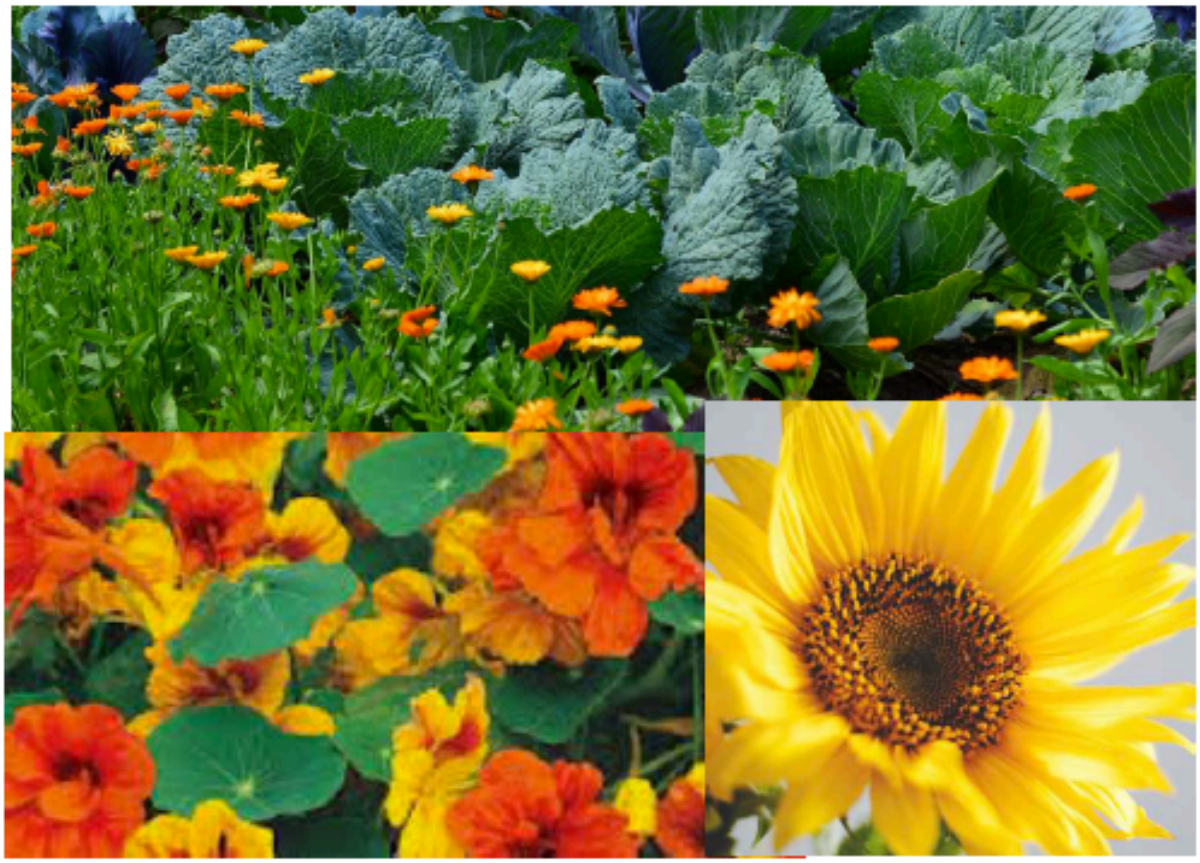
Nasturtiums – edible, trap crop for aphids and distracts, repels or confuses many pests. Plant with squash, courgettes, cucumbers, brassicas etc...

Phacelia – shallow rooted nectary plant, good for living mulch or potentially as a cover crop/ green manure.

Sunflowers – trap crop for aphids, thrips etc., great with corn, beans etc..Edible flower, seeds.

Sweet Peas – nitrogen fixing, attracts pollinators, good near brassicas, spinach, lettuce (trellised it can provide shade as well as nitrogen)...

Vetch – nitrogen fixing companion plant or used in cover crops.



Common fruits and vegetables that grow well together

Crop	Plant with	Avoid
Beetroot	Chard, spinach, lettuce, brassicas, smaller legumes, root crops	Runner beans and other tall plants which restrict sunlight.
Beans	Most leafy and nitrogen-hungry crops. Plant climbing beans with sweetcorn for them to climb, and squash for ground cover	Onions and other alliums
Broccoli, Brussels sprouts, cauliflower, Pak choi Turnips	Other brassicas, beets, lettuce, most legumes, onions, celery, cucumber, chervil, dill, coriander, mint, thyme	Tomatoes, peppers, courgettes, squash, other nitrogen hungry crops
Carrots	Onions and other alliums, radishes, perhaps other roots like parsnips	Potatoes, dill.
Celeriac, Celery	Leeks, other alliums, root crops. Lettuce, radish or other quick crops to make the most of the space between these slower growing crops and cover the soil to retain moisture. Tall, climbing plants e.g legumes for shade	Make sure celery is not immediately adjacent to celeriac and vice versa, as they are closely related.
Chard	Beetroot, lettuce, leafy greens, brassicas, alliums, beans, radish, celery	Potatoes, cucumber sweetcorn, squash, courgettes
Courgettes	Sweetcorn, beans, radish	Avoid planting with other cucurbits if you wish to collect seeds
Cucumbers	Shallow-rooted crops like lettuce below. Beans, peas, cordon tomatoes potentially on same support	Avoid planting with other cucurbits if you wish to collect seeds
Garlic, Leeks, Onion	Many crops due to the strong smell and pest-repelling properties, basil, mint	Legumes, sage
Kale, Kohlrabi	Other beets, brassicas, most legumes, onions and other alliums, celery, cucumbers	Tomatoes, peppers, courgettes, squash – other particularly nitrogen hungry crops
Parsnips	Other roots (including carrots if not directly adjacent) onions, other alliums	Potatoes
Peas	Most leafy and nitrogen hungry crops, for nitrogen fixation, coriander, mint	Onions & other alliums, chives
Peppers	Legumes, alliums, carrots, spinach, lettuce, basil	Brassicas, potatoes
Radish	Many other crops (as a trap crop for pest control and as a quick crop to make the most of the space),	
Spinach	Alongside other leafy greens, below taller/climbing crops which help prevent bolting, coriander	Potatoes, larger squash
Squash	Sweetcorn, beans, radish	Avoid planting with other cucurbits if you wish to collect seeds
Sweetcorn	Beans, squash, courgettes, cucumbers, peas	Tomatoes
Tomatoes	Legumes and cucumber on trellis with cordon tomatoes. Alliums, carrots, lettuce, peppers, basil	Brassicas, potatoes, sweetcorn