

The Benefits of Companion Planting

What is companion planting and how can you benefit?

This practice has been successfully adopted by gardeners and growers for many years because there are distinct advantages to growing certain plants within the close vicinity of other plants, and for all types of reasons. In essence, companion planting is exactly what you might expect it to be and is both beneficial to the plants concerned and to the gardener.

Exactly why this should be the case, requires some explanation, especially to the novice gardener. So, here we look at the different types of plants that can play a vital part in this useful exercise and why the whole idea of companion planting makes a lot of sense in terms of increased yield, healthier plants and the natural control of pests and diseases. Companion planting is an eco-friendly strategy that is gathering interest and momentum amongst both amateur and commercial fruit and vegetable growers everywhere.

Good companions and bad companions

To be able to adopt this practice effectively, either on your allotment or in your vegetable garden, you must first know and understand what plants are going to be of benefit to others and why. With this insider knowledge, you will be able to plan your vegetable garden layout much more successfully, increasing crop productivity, making the most of available space and helping to deter any number of potential garden pests and diseases. There are of course good companion plants and bad companion plants. Unless you are aware of the advantages and disadvantages of companion planting, and especially which ones are going to make the best company then you could be setting yourself up for a few unnecessary problems.

Benefits of good companion plants and why

Plants that make good companions for other plants do so because they or the companion plant or both plants, will in some way benefit. For example, some plants can add nitrogen to the soil, which other plants can access freely, helping them to grow stronger and healthier. Plants that require pollination, such as tomatoes, will benefit from being planted close to other flowering plants like nasturtium. The obvious reason being, that bees will home in on the large nasturtium flowers and then pop over to the neighbouring tomatoes, which on their own may not look too inviting. Another example is tomatoes with lettuce. Lettuce will help protect tomatoes from most known tomato pests, whilst offering some shade to the lower growing lettuce.

Good companions in the vegetable garden

The vegetable plot or allotment is probably the most important place to begin using the companion strategy as it's generally here that space is limited and crops are more susceptible to attack by a variety of pests. Also, because vegetable growing space is considered highly valuable or "prime real estate", it's a good idea to try and

maximise your yield for minimum cost and effort. So, here is a worthy guide for good companion vegetable planting, including some popular salad and herb plants.

- **Cabbages and Tomatoes** – Every gardener who has grown cabbages will have, at some time, noticed mysterious holes appearing in the leaves of their plants. This is caused by the Diamondback moth larvae. Tomato plants emit a chemical odour that will repel these pests.
- **Cabbages and Dill** – Another good companion for cabbages, Brussel sprouts and broccoli is dill, which uses the firm brassica plants for shelter. In return, dill attracts wasps, which will attack cabbage worms, which are the larvae of the cabbage white butterflies.
- **Spinach and Radishes** – Leaf miners love the soft green tissue of spinach leaves and can ruin a crop in a very short time. However, they would much prefer to burrow into tasty radish leaves. So by growing radishes amongst spinach plants, the leaf miners will generally ignore the spinach plants and get to work on the radish leaves instead, which doesn't affect the radishes growing in the ground.
- **Beans and Sweet Corn** – Bean plants need support, which the stiff corn plant stems can offer and in return, the bean plants will provide the corn with additional nitrogen in the soil and attract a number of carnivorous insects, such as lacewings and damsel bugs, which will feast on corn pests such as leaf hoppers.
- **Potatoes and Broad Beans** – Potatoes are a very important crop for many gardeners so by planting in alternate rows with broad beans they will benefit from the additional nitrogen the broad beans naturally produce.
- **Chives and Lettuce** – No salad is complete without lettuce but unfortunately aphids have a liking for them too. So, plant chives amongst your lettuce plants to deter and repel aphids, who hate any strong odorous type plants like chives or garlic.
- **Tomatoes and Basil** – Tomatoes that are planted in close proximity to basil will develop a very distinctive flavour. Also basil, like many other strong odorous plants, will deter aphids and other pests from attacking your tomatoes.
- **Mint and Onion** – Onion fly can be a real problem in some areas but if onions are planted close to mint then this seems to deter the fly from laying their eggs, which can later develop into highly destructive larvae.
- **Leeks and Carrots** – These two make ideal partners in the vegetable plot. The odour given off by carrots deters the troublesome leek moth, whilst the smell of leeks will ensure the carrot root fly gives your precious carrot crop a very wide berth.

The list above is by no means final and there are other good companions, which include planting vegetables with specific flowering plants. Here are some of the best known examples.

- **Marigolds and Courgettes** – This applies to the English marigold (*Calendula*) and not French marigolds. These bright orange flowering plants attract a large number of

pollinating insects, which are essential for the pollination and setting of your courgettes. However, the smell of French marigolds will deter whitefly from attacking other crops.

- **Nasturtium and Cauliflower** – Nasturtiums can also be planted with other brassicas such as cabbages and Brussel sprouts, kale and broccoli. The idea is that the nasturtiums are sacrificed to the cabbage white butterfly, whose larvae would much prefer them over your brassica crops. Aphids love nasturtiums too, so consider planting them next to any vegetables that are likely to be attacked by aphids.

Bear in mind that many strong smelling plants, such as herbs, chives, garlic and mint will help to deter a wide range of vegetable garden pests. Also, crop rotation still remains a practice that should be continued in order to reduce the spread of soil borne diseases.

Bad company in the vegetable garden

There are, unfortunately, a few plant combinations that should never be considered because some plants can attract numerous pests, which can prove to be detrimental to its neighbours. For example, don't plant very tall plants next to shorter plants that need full sun. Here are a few more examples.

- **Potatoes and Tomatoes** – In fact, any plant that is related to the *solonaceae* family (Nightshade), which includes aubergines and peppers, should not be planted together. They are all susceptible to the same fungal, bacterial and viral diseases so any infection would spread rapidly.

- **Cabbage and Cauliflower** – Again plants that are closely related can spread the same diseases and pests. This group would include most brassicas like broccoli and sprouts. These vegetables can, of course, be grown on the same plot but it's best if they are not next to each other.

- **Broccoli and Basil** – Broccoli does not seem to like being planted with basil or beans for some reason, which it's not exactly clear. Also, tomatoes and peas can hinder the growth of broccoli.

- **Carrots and Celery** – These two tasty veggies do not seem compatible in any way as both plants tend to suffer if planted close together. Dill can also have a detrimental effect on the growth of carrots.

Basil is not too friendly towards cauliflowers and yet many other herbs thrive next to these leafy plants. Basil can also affect the growth rate of cucumbers but as many experimental gardeners know only too well, garlic is king of the companions. This pungent smelling herb will happily grow next to most other plants, keeping them free from pests and diseases. It's worth experimenting yourself because companion planting is not a perfect science and there's still much to learn from how and why some plants react to each other and why some pests will avoid them.

Good and bad companions in the fruit garden

Although most allotment space and many vegetable plots are dedicated to the cultivation of a wide variety of vegetables, there's always room for some soft fruit, which have their own good and bad companions. Here are some of the most popular ones to consider.

- **Strawberries and Sage** – Strawberries appreciate the company of sage together with onions, borage and perhaps thyme, as these strong smelling plants will help to keep many pests away. Plants that do not get along with strawberries include any that are prone to attracting leaf devouring pests such as most of the brassicas.

- **Raspberries and Garlic** – Although garlic is deemed as the saviour of all companions, both rue and marigolds are both quite acceptable neighbours. However, avoid planting raspberry canes next to any of the nightshade family such as potatoes, tomatoes or peppers, which can spread verticillium wilt, to which raspberries are particularly susceptible.

- **Blackcurrants and Marigolds** – For black and redcurrants plant some French marigolds nearby to help draw away any attention from visiting pests. The pungent smell of marigolds works well with many types of fruits and vegetables. It's best not to plant any blackcurrants near gooseberries because they can infect each other with gooseberry mildew.

Good companions in the flower garden

Both bedding plants and perennials are liable to attack by certain pests at some point during the growing season but with a little forethought and planning, you could virtually eliminate any possibility of problems. It also makes for quite a pleasant combination when you consider growing some of your favourite flowering plants alongside some of your favourite herbs. You will benefit from having both a range of colours and a variety of minty and spicy aromas. Here are a few examples of good companions for your beds and borders.

- **Petunias and Basil** – These two candidates make excellent companions in the flower garden due to the natural pesticide effect of petunias. Petunias are also good companions for many vegetables too, such as all the brassicas, beans, tomatoes, corn and peppers.

- **Roses and Chives** – Aphids love roses but plant a few chives below and they'll stay well away. Once again the strong smell of this specific herb demonstrates its beneficial effect on one of the country's favourite flowering plants.

- **Aster and Lavender** – Asters and also gazanias tend to grow well if planted near lavender because this unmistakable scented plant is known to keep many species of damaging moths at bay. The heavily scented lavender foliage is also a useful slug and snail deterrent.

Here is a shortlist of some good flowering companions for a selection of annuals, biennials and perennial plants, which can be planted in any order or combination.

- Celosia with ageratum, marigold or petunia.

- Dahlia with alstromeria and agapanthus.
- Fuchsia with begonias.
- Marigolds with roses.
- Solomon's seal with meconopsis.
- Zonal and regal pelargoniums with lavender or marigolds.
- Sweet peas with lavender, alyssum or lobelia.

As a general rule, virtually any plant that gives off a strong aromatic odour or smell will act as guardian over your treasured annuals and perennials. This applies to many vegetables too with a few exceptions, as already mentioned.

Even some herbs need friendly companions

Most herbs are quite able to fend for themselves when it comes to dealing with pests such as aphids, weevils, mites and moths but with some thoughtful planting, you can ensure your herb garden remains virtually pest free all summer long.

- **Rosemary and Garlic** – Rosemary has its own problems to contend with in the form of the fairly recently discovered Rosemary Beetle, which is why you should plant garlic or onions nearby to help mask the smell of the rosemary. Other plants affected by the rosemary beetle include thyme, sage and lavender. Whilst onions and garlic may offer some protection, they are by no means a cure as this particular beetle is quite a stubborn pest.

- **Coriander and Petunias** – Coriander can be liable to an attack by aphids but plant a few petunias nearby and you can reduce the risk of an attack significantly. Chives and fennel will also do the same job, that's if you prefer to grow only herbs in your dedicated herb garden.

- **Basil and Hyssop** – Basil, like coriander and most other herbs with soft green leaves, are susceptible to attack by aphids. One of the best biological remedies is to plant other flowering herbs nearby that will, in turn, attract beneficial insects like hover flies and lacewings, which will devour the aphids.

Plants that make useful pest control companions

Some of the most useful companion plants are those that repel pests, especially when planted close to vegetables. Nobody likes to apply chemicals on or near vegetables they intend to eat and so in that respect, these plants offer an eco-friendly, biological pest control option.

- **Alliums** – These include onions, garlic and chives, amongst a few others, which will repel carrot fly, aphids and loopers, cabbage worms and slugs.

Peas & Beans – And many other leguminous type plants can help repel Colorado Beetle.

Radish – Shown to repel flea beetles and cucumber beetles. Especially good for growing with lettuce.

Basil – Will repel thrips, asparagus beetle and hornworms, which are the caterpillars of the hawk moth and have an unhealthy liking for tomato plants.

Catnip – Great for repelling aphids and flea beetles. Catnip will also deter ants from joining the honeydew party, which is often created by aphids.

Chives – Perfect for repelling aphids, carrot fly and cabbage worms, which are basically the caterpillars of cabbage white butterflies.

Dill – An attractive and graceful herb that packs a punch in repelling aphids, spider mites and cabbage loopers.

Garlic – Well known for keeping away a large variety of pests including aphids, mites, cabbage loopers, ants, Japanese beetles and fruit boring pests.

Peppermint – Another arch-enemy of the aphid and cabbage looper plus ants and onion fly.

Spearmint – Also works to repel troublesome aphids, ants, onion fly plus cabbage root fly.

Rosemary – A very useful shrubby herb to have around your beans, as they repel the bean beetle.

Sage – A wonder plant for repelling a wide variety of pests including cabbage maggot, cabbage looper, carrot fly, flea beetle, bean and brassica parasites.

Thyme – A very useful herb in many ways not least in repelling aphids, cabbage loopers, cabbage weevils and cabbage worms plus whitefly.

Marigolds – Can be very beneficial when planted near many types of vegetables as they will deter the damaging cabbage root fly and onion fly. Leaf hoppers are not too fond of them too, along with cucumber beetles.

Nasturtiums – These plants look great when in flower but the work they do in repelling pests is invaluable. They will deter aphids, carrot flies, cabbage worms, cabbage loopers, Colorado beetles, Japanese beetles, pumpkin beetles, flea beetles, cucumber beetles and many more. Nasturtiums are highly recommended for planting in and around your vegetable crops.

Tansy – Also known as bitter buttons, golden buttons or cow bitter is a yellow flowered, herbaceous perennial. It can be quite invasive and has quite a pungent smell, which is why it is also a very effective pest repellent. It is known to repel a whole host of garden pests such as cutworm, cabbage worm, flea beetle, cucumber

beetle, asparagus beetle, carrot fly, Japanese beetles, cabbage white butterfly, cabbage maggot and ants plus numerous flying insects. Tansy is certainly worthy of consideration in your biological pest control programme.

Summary

It's worth carrying out a little research before adopting a companion planting strategy so that you are sure you are selecting the right plants for all the right reasons. Remember, some plants will benefit other plants but might not be quite so helpful with all plants. We have looked at those that are recommended for their beneficial abilities but with some experimentation, you may well find other beneficial combinations yourself.

Keep notes and build up a list of good companions and perhaps keep a diary so you can refer back to your own experimentations.