

## Companion Planting

These guidelines to companion planting are just suggestions to keep in mind. Each garden is unique and many factors should be considered during the planning stage. These factors include sun exposure, weather, ecology, pollinators, insect population, soil structure and chemistry, and water supply. West Coast Seeds has conducted significant research into these companion planting guidelines and has defined the best possible results and reasons for each of our recommendations.





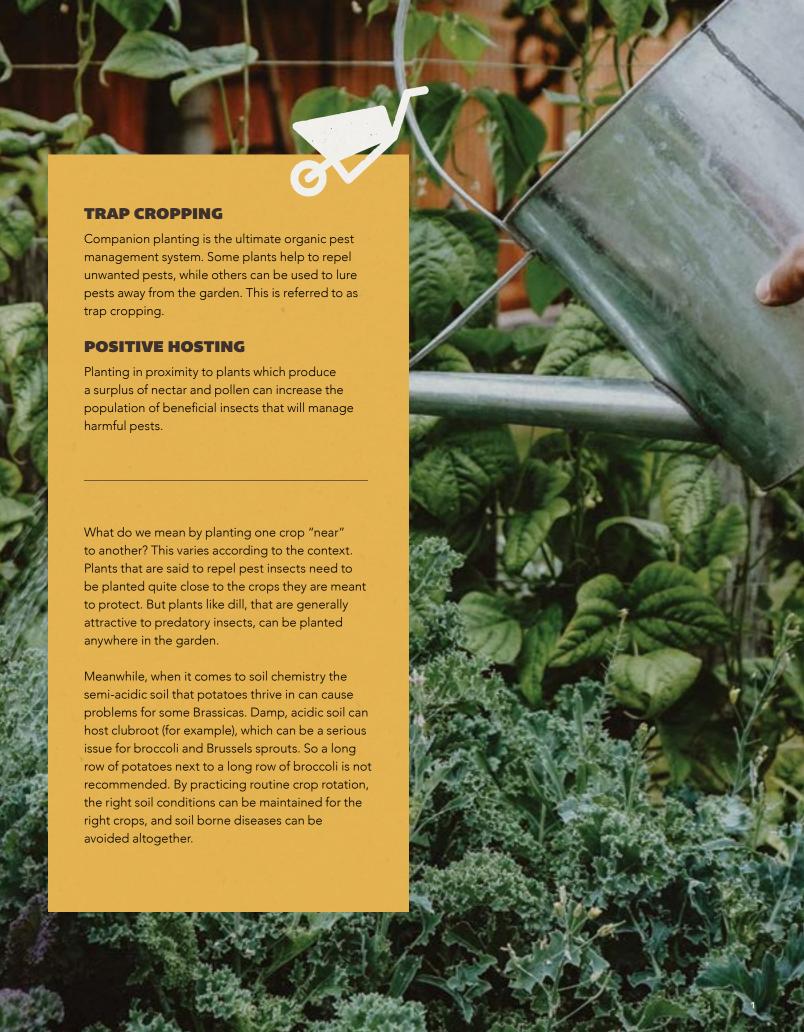
## Companion Planting Benefits

Minimizing Risk: Companion planting increases odds of higher yields even if one crop fails or is affected by natural hardships such as weather, pests, or disease.

Crop Protection: Taller, sturdier plants can provide shelter from weather such as wind or sun to more delicate plants. Some plants can act as a trellis to support neighbouring crops.

Plant Tip: When in doubt, plant umbellifers. Plants with this flower form always attract insects that will benefit the garden one way or another.









Agastache

Agastache is very attractive to bees. Plant a row away from the garden to lure cabbage moths away from Brassica crops. Do not plant near radishes.



Ammi

Plant Ammi as a general pest control plant for the garden. This beautiful plant's flowers attract lacewings, ladybird beetles, and parasitoid wasps.



**Broad Beans** 

Broad beans are excellent for fixing nitrogen in the soil and will benefit any leafy greens. Avoid planting near onions.



Alyssum

Alyssum is highly attractive to pollinators, and useful as a mulch to keep weeds down between rows. Alyssum provides shelter for ground beetles and spiders.



**Asparagus** 

Plant Asparagus with asters, basil, cilantro, dill, marigolds, nasturtiums, oregano, parsley, peppers, sage, and thyme. It repels nematodes that attack tomatoes, and tomatoes repel asparagus beetles.



**Beans** 

Beans fix nitrogen in the soil. Plant with Brassicas, carrots, celery, chard, corn, cucumber, eggplant, peas, potatoes, radish, and strawberries. Avoid planting near chives, garlic, leeks, and onions. Pole beans and beets are said to stunt each other's growth.



**Amaranth** 

Plant amaranth with corn to shade the soil and retain water. Amaranth attracts predatory ground beetles that feed on caterpillars and other soft bodied invertebrates.



Basil

Basil will improve vigour and flavour of tomatoes, planted side-by-side. Also asparagus, oregano, and peppers. It helps repel aphids, asparagus beetles, mites, flies, mosquitoes, and tomato hornworm.



Soya Beans

Soya beans are good for fixing nitrogen, and acting as a mulch against weeds. Grow with corn. Soya beans repel Japanese beetles and chinch bugs.



BRASSICAS



### **Beet**

Beet greens are very good for the compost, returning captured manganese and iron to the soil. Plant with bush beans, Brassicas, corn, garlic, kohlrabi, leeks, lettuce, and mint. Avoid planting near pole beans.



## **Buckwheat**

Buckwheat fixes calcium in the soil. It absorbs nutrients that are not available to other plants, and can then be composted or tilled under, releasing those nutrients. Its flowers attract pollinators and beneficial insects.



## Catnip

Catnip attracts pollinators and parasitoid wasps (and cats!). Catnip repels aphids, asparagus beetles, Colorado potato beetles, and squash bugs.



## Borage

Borage deters tomato hornworm and cabbage moth caterpillars, and is particularly good planted near tomatoes and strawberries. It's attractive to pollinators, so plant it around squash, melons, and cucumbers for improved pollination. It's also excellent for the soil and compost.



## Calendula

Calendula repels soil nematodes and asparagus beetles, but may attract slugs. Plant it with tomatoes and asparagus. It attracts a wide range of pollinators because it provides nectar over the whole growing season.



## Celery

Celery is a good partner for beans, Brassicas, cucumber, garlic, leek, lettuce, onion, and tomatoes.



## **Brassicas**

Brassicas (broccoli, Brussels sprouts, cabbage, cauliflower, collards, kale, kohlrabi, turnip) all benefit from chamomile, dill, mint, rosemary, and sage. Avoid planting near members of the Solanum family, which all prefer fairly acidic soil.



### Carrots

Plant carrots with Alliums, beans, Brassicas, lettuce, peas, peppers, pole beans, radish, rosemary, sage, and tomatoes. Avoid planting with dill, parsnips, and potatoes. Carrots planted near tomatoes may have stunted roots, but will have exceptional flavour.



## Chamomile

Chamomile attracts hoverflies and parasitoid wasps. Plant near onions to improve their flavour.





Chervil

Chervil makes an excellent companion for Brassicas, lettuce, and radishes, but does best in part shade. Chervil helps to repel slugs.



Cilantro

Cilantro repels aphids, potato beetles, and spider mites. If it is allowed to bloom, the flowers attract scores of different beneficial and predatory insects.



Coreopsis

Coreopsis attracts pollinators, but also hoverflies, soldier bugs, and tachinid flies.



## Chives

Chives improve the flavour of carrots and tomatoes. It is a good companion plant for Brassicas and helps to repel aphids, carrot rust fly, and Japanese beetles. Avoid planting near beans and peas.



Clover

Clover fixes nitrogen in the soil, which benefits all leafy greens. It attracts many beneficial insects, and it helps fight cabbage worms. It increases the number of predatory ground beetles.



## Corn

Corn is a companion to beans, beets, cucumber, dill, melons, parsley, peas, potato, soya beans, squash, and sunflower. Avoid planting next to celery or tomatoes. Amaranth makes a great mulch between corn rows.



## Chrysanthemums

White flowering mums repel Japanese beetles. All Chrysanthemums are attractive to tachinid flies and parasitoid wasps.



Collards

Plant collards near tomatoes, which repel the flea beetles that so often look for collards to eat.



## Cosmos

Cosmos provides food and habitat to parasitoid wasps, tachinid flies, lacewings, hoverflies, minute pirate bugs, spiders, ladybird beetles, bigeyed bugs, damsel bugs, and other predatory insects.





## Cucumber

Plant cucumber beside asparagus, beans, Brassicas, celery, corn, dill, lettuce, onion, peas, radish, and tomatoes. Avoid planting near potatoes and sage. Nasturtiums are said to improve the flavour and growth of cucumbers.



## Dill

Dill improves the health of cabbages and other Brassicas, and is a good companion for corn, cucumbers, lettuce, and onions. Avoid planting near carrots and tomatoes. It attracts a wide range of beneficial insects.



## **Echinacea**

These perennial coneflowers attract hoverflies and parasitoid wasps, so they're useful for pest control in companion plantings.



## Eggplant

Eggplant is a good companion for amaranth, beans, marigolds, peas, peppers, spinach, and thyme. Do not plant eggplants near fennel.



### Fennel

Fennel is not a companion for any garden food plant. It will inhibit growth in bush beans, kohlrabi, tomatoes, and others. Plant it, but keep it out of the veggie garden. Fennel attracts beneficial insects.



## Gaillardia

Gaillardia blooms over a very long period in summer, providing a rich source of nectar for a host of pollinators and other beneficial insects.



## Garlic

Garlic near roses will help deter aphids. Its sulfur compounds repel whiteflies, Japanese beetles, root maggots, carrot rust fly, and other pests. It's a good companion for beets, Brassicas, celery, lettuce, potatoes, strawberries, and tomatoes. Avoid planting it near peas or beans of any kind.



## **Iberis**

Iberis is an early flowering plant that provides nectar for pollinators before many other flowers open. It attracts hoverflies and ground beetles.



## Kohlrabi

Kohlrabi is a worthy companion for beets, Brassicas, cucumbers, and onions. Avoid planting near peppers, pole beans, strawberries, and tomatoes.





Leeks

Grow Leeks with beets, carrot, celery, onions, and spinach. Avoid planting near beans and peas.



Lettuce

Lettuce is a good companion for beets, Brassicas, carrot, celery, chervil, cucumbers, dill, garlic, onions, radish, spinach, squash, and strawberries. It thrives in soil that has previously hosted peas and beans.



Lovage

Use Lovage to attract parasitoid wasps and ground beetles. The large plants can provide afternoon shade to lettuce and spinach, potentially extending the season for those crops.



Marigolds

French marigolds repel whitefly, Mexican bean beetles, and soil nematodes. Avoid planting them near beans. Mexican marigolds have the same effect, and may repel rabbits. At the same time, both attract hoverflies and parasitoid wasps.



## Melons

Melons make great companions for corn, marigolds, nasturtiums, pumpkin, radish, squash, and sunflowers. Avoid planting near potatoes. Melon leaves are full of calcium, so they're good for the compost heap.



### Mint

Mint attracts earthworms, hoverflies, and predatory wasps, and repels cabbage moths, aphids, and flea beetles. Mint can be spready, so restrain it in containers around the vegetable garden. Avoid planting near parsley.



Monarda

This plant (AKA Bergamot) blooms in late summer, and is very attractive to bees, parasitoid wasps, tachinid flies, and hummingbirds.



## **Nasturtiums**

Nasturtiums make a good trap crop for aphids, and they deter whiteflies and several beetle pests. Plant near Brassicas, cucumbers, melons, radishes, and tomatoes. They provide good cover for ground beetles and spiders.



Oats

Oats grow very quickly for tilling to add organic matter to beds, and work well when planted with clover or vetch. Oats are an excellent source of green matter for the compost.





### Onions

Plant onions near chamomile and summer savory to improve their flavour. They also work beside beets, Brassicas, carrots, dill, leeks, lettuce, strawberries, and tomatoes. Don't plant onions near asparagus or peas.



## Oregano & Marjoram

Oregano is particularly good for repelling cabbage moths. It can be planted between rows of Brassicas for this purpose. Both are good around asparagus and basil.



## **Parsley**

Parsley likes asparagus, carrots, chives, corn, onions, and tomatoes. The leaves can be sprinkled on asparagus to repel asparagus beetles, and around roses, to improve their scent. Let parsley bloom to attract hoverflies and predatory wasps.



## **Peas**

Peas make superb companions for beans, carrots, celery, corn, cucumber, eggplant, parsley, peppers, potatoes, radish, spinach, strawberries and turnips. Avoid planting peas near onions.



### Pepper

Pepper plants make good neighbours for asparagus, basil, carrots, cucumbers, eggplant, endive, oregano, parsley, rosemary, squash, Swiss chard, and tomatoes. Never plant them next to beans, Brassicas, or fennel.



PHACELIA IS FAST TO MATURE

## Phacelia

Phacelia is amazingly attractive to pollinators and beneficial insects. Plant Phacelia around any crop showing poor pollination, particularly squash (including zucchini and pumpkin), melons, and cucumbers.



## **Potatoes**

Potatoes benefit bush beans, celery, corn, garlic, marigolds, onions, and peas. Avoid planting them near asparagus, Brassicas, carrots, cucumber, kohlrabi, melons, parsnips, rutabaga, squash, sunflower, and turnips.



## Radish

Plant radishes near beans, beets, celeriac, chervil, cucumber, lettuce, mint, parsnip, peas, spinach, squash, and tomatoes. Avoid planting near agastache or potatoes. Allow some radishes to bloom to prevent most pests of squash and cucumber.



## Rosemary

Rosemary is a good companion for beans, Brassicas, and carrots. Rosemary repels cabbage moths, Mexican bean beetles, and carrot rust flies.



Rudbeckia

All varieties of Rudbeckia are attractive to hoverflies and parasitoid wasps. They bloom over a long time from mid-summer to early autumn.



Fall Rye

Fall rye emits a chemical that inhibits the germination of weed seeds. This is known as allelopathy. It produces masses of useful organic matter for tilling under or adding to the compost.



Sage

Sage repels both the cabbage moth and the carrot rust fly, so it's a great all around companion plant in the vegetable garden. Do not, however, plant it near cucumbers, which are sensitive to aromatic herbs.



Scabiosa

Scabiosa is naturally attractive to hoverflies and predatory tachinid flies, making it very useful for pest control in organic companion planting.



Spinach

Spinach is a good companion for Brassicas, eggplants, leeks, lettuce, peas, radish, and strawberries, particularly. Don't plant spinach near potatoes.



Squash

Companions for squash include corn, lettuce, melons, peas, and radish. Avoid planting near Brassicas or potatoes. Borage is said to improve the growth and flavour of squash. Marigolds and nasturtium repel numerous squash pest insects.



**Strawberries** 

Strawberries respond strongly to nearby plants. Couple them with beans, borage, garlic, lettuce, onions, peas, spinach, and thyme. Avoid Brassicas and fennel.



**Summer Savory** 

Summer Savory attracts honeybees, and repels cabbage moths. Planting it near beans and onions will improve the flavour of both.



Sunflowers

Sunflowers planted near corn are said to increase yields. Use sunflowers to attract pollinators to other crops, particularly squash, and any crop that requires insect pollination. They're attractive to a host of pollinators and beneficial insects.





**Swiss Chard** 

Swiss chard is a good companion for beans, Brassicas, and onions. The greens are very good for the compost.



**Thyme** 

Thyme is an all around beneficial plant for the garden and is particularly worth planting near Brassicas (as it repels cabbage moths), and strawberries, as it enhances flavour.



**Tithonia** 

Plant tithonia to attract parasitoid wasps, tachinid flies, and soldier bugs to the garden. The tall plants will act as a beacon for pollinators and other beneficial insects.



**Tomatoes** 

Tomatoes benefit from asparagus, basil, beans, borage, carrots, celery, chives, cucumber, garlic, lettuce, marigold, mint, nasturtium, onion, parsley, and peppers. Avoid planting alongside Brassicas and dill.



Turnip

Turnips are easygoing, but benefit from mint and pea companions. They work well with beans, other Brassicas, garlic, onions, and squash.



Vetch

Vetch has long roots that fix nitrogen in the soil, and provide masses of organic matter for tilling under. Do not let vetch go to seed, as it will come back strongly. The seeds are toxic to chickens.



Wildflower Blends

The great thing about wildflower blends is that they're already biodiverse. The greater the variety of species, the more varied will be the insects and other pollinators they attract. A wildflower strip along the edge of a garden will improve pollination and reduce pest pressure significantly. Aside from providing pollen and nectar, densely planted areas provide critical habitat for beneficial insects.



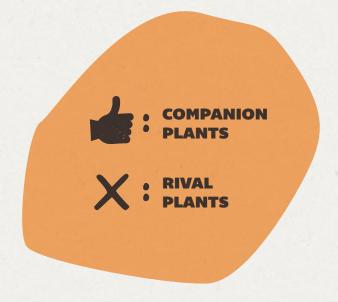
YARROW'S SCENT REPELS APHIDS

## Yarrow

Yarrow's scent attracts hoverflies, lady beetles, and wasps that prey on garden grubs. The leaves and stems of yarrow contain enzymes that break down rapidly, so it can be added to the compost raw or as a tea to accelerate the heap.

## Companion Planting Chart

A quick reference guide to companion planting in the garden. Keep this chart close by the next time you're deciding what seeds to plant close together.



## **Vegetable Families**

One way of understanding the needs of different vegetables is to look at them from a botanical perspective. Many plants within these families share common traits and garden companions.

Brassicas: Broccoli, Brussels sprouts, cabbage, cauliflower, kale, turnips,

kohlrabi and mustards

Solanums: Eggplants, peppers, potatoes, and tomatoes

Alliums: Chives, garlic, leeks, and onions

Legumes: Beans, peas, and soy, and also lupins, clover, and sweet peas

Cucurbits: Cucumbers, melons, and squash

Chenopodiums: Beets, chard, spinach, quinoa, amaranth

AGASTACHE	Brassicas X Radish
AMARANTH	Corn
ASPARAGUS	Aster, Basil, Cilantro, Dill, Marigold, Nasturtiums, Oregano, Parsley, Sage, Solanums, Thyme
BASIL	Asparagus, Oregano, Pepper, Tomato
BROAD BEANS	Leafy Green X Bulb Forming Plants
BEANS	Brassicas, Carrot, Celery, Chard, Corn, Peas, Radish, Strawberry, Solanums X Bulb Forming Plants
SOYA BEANS	Corn
BEET	Alliums, Brassicas, Bush Beans, Corn, Lettuce, Mint Bulb Forming Plants, Pole Beans
BORAGE	Cucurbits, Solanums, Strawberry



BRASSICAS	Chamomile, Dill, Mint, Rosemary, Sage
CALENDULA	Asparagus, Tomato
CARROTS	Alliums, Brassicas, Legumes, Lettuce, Pepper, Pole Beans, Radish, Rosemary, Sage, Tomato X Dill, Parsnips, Potato
CATNIP	Asparagus, Potato, Squash
CELERY	Alliums, Beans, Brassicas, Cucumber, Lettuce, Tomato
CHAMOMILE	Onion
CHERVIL	Brassicas, Lettuce, Radish
CHIVES	Brassicas, Carrots, Tomato X Legumes
CILANTRO	Potato
CLOVER	Cabbage, Leafy Greens
COLLARDS	Solanums
CORN	Beet, Cucurbits, Dill, Legumes, Parsley, Potato, Sunflower X Celery, Tomato
CUCUMBER	Asparagus, Brassicas, Celery, Corn, Dill, Legumes, Lettuce, Nasturtiums, Onion, Radish, Tomato X Potato, Sage
DILL	Brassicas, Corn, Cucumber, Lettuce, Onion X Carrot, Tomato
EGGPLANT	Amaranth, Legumes, Marigold, Pepper, Spinach, Thyme
FENNEL	X Any Food Plant
GARLIC	Brassicas, Celery, Lettuce, Potato, Strawberry, Tomato X Legumes

# Companion Planting Chart

KOHLRABI	Beet, Brassicas, Cucumber, Onion X Pole Beans, Solanums, Strawberry
LEEKS	Beet, Carrot, Celery, Onion, Spinach X Legumes
LETTUCE	Beet, Brassicas, Carrot, Celery, Chervil, Dill, Garlic, Onion, Radish, Spinach, Strawberry
LOVAGE	Lettuce, Spinach
MELONS	Corn, Marigold, Nasturtiums, Pumpkin, Radish, Squash, Sunflower
MINT	X Parsley
NASTURTIUMS	Brassicas, Cucurbits, Radish, Tomato
OATS	Clover, Vetch
ONIONS	Beet, Brassicas, Carrot, Chamomile, Dill, Leek, Lettuce, Strawberry, Summer Savory, Tomato X Asparagus, Peas
OREGANO & MARJORAM	Asparagus, Basil, Brassicas, Marjoram
PARSLEY	Asparagus, Carrot, Chives, Corn, Onion, Roses, Tomato
PEAS	Beans, Carrot, Celery, Corn, Cucumber, Parsley, Radish, Solanums, Spinach, Strawberry, Turnip X Onion
PEPPER	Asparagus, Basil, Carrot, Cucurbits, Eggplant, Endive, Oregano, Parsley, Rosemary, Swiss Chard, Tomato X Beans, Brassicas, Fennel
PHACELIA	Cucurbits
POTATOES	Alliums, Celery, Corn, Marigold, Legumes X Asparagus, Brassicas, Carrot, Cucurbits, Parsnip, Rutabaga
RADISH	Alliums, Celeriac, Chenopodiums, Chervil, Cucurbits, Lettuce, Mint, Parsnip, Tomato X Agastache, Potato



Beans, Brassicas, Carrot
Cabbage, Carrot X Cucumber
Brassicas, Eggplant, Leek, Lettuce, Peas, Radish, Strawberry
Corn, Lettuce, Melon, Peas, Radish X Brassicas
Beans, Borage, Garlic, Lettuce, Onion, Peas, Spinach, Thyme Rassicas, Fennel
Beans, Cabbage, Onion
Corn, Squash
Beans, Brassicas, Onion
Brassicas, Strawberry
Alliums, Asparagus, Basil, Beans, Borage, Carrot, Collards, Cucumber, Lettuce, Marigold, Mint, Nasturtiums, Parsley, Pepper
Alliums, Brassicas, Mint, Peas, Squash

## Companion Planting Benefits

Three Sisters: Considered gifts to mankind by some Indigenous peoples, corn, pole beans, and squash have been grown together for centuries in the Americas. Corn provides a trellis for the beans, which fix nitrogen in the soil. The broad leaves of squash plants, which benefit from the nitrogen, shade the soil, conserving moisture for all three crops. This is the very essence of companion planting.



## Negative Relationships

Ultimately, garden plants can be grown together in any combination that is desired or convenient. When we recommend against pairing certain plants, it is with the end result in mind. For instance, root crops (eg, beets) planted beside nitrogen-fixing crops (eg, beans) may end up producing lush tops with minimal roots. This is simply a result from excess nitrogen in the soil.

## **IS IT WORKING?**

Many of the outcomes in companion planting are subtle and difficult to observe or measure. Are marigolds really repelling microscopic nematodes in the soil? Did basil really improve the flavour of my tomatoes?

Other outcomes are much easier to observe, and some become self-evident during the gardening season. When umbelliferous plants bloom, the beneficial insects they attract are easy to see. When cilantro and dill are in bloom, look for tiny flies that appear to hover and dart from flower to flower. Look for ladybird beetles (ladybugs) and their larvae on the stems of dill.

When broad beans are finished at the end of the season, dig some up and look for pinkish lumps along the roots. These are the "nodules" formed by nitrogen-fixing bacteria colonies in the soil. They may not be present in 100% of cases, but in our experience they should be expected.

There is no "correct" way to garden, but we hope this gardening wisdom will help to improve your gardening success.

## **Beneficial Plants**

Some plants offer general benefits to the garden, for example repelling unwanted pests or attracting pollinators. Consider planting any of our recommendations:

- Alyssum
- Lovage
- Ammi
- Monarda
- Buckwheat
- Rudbeckia
- Chrysanthemums
- Fall Rye
- Coreopsis
- Scabiosa
- Cosmos
- Tithonia
- Echinacea
- Vetch
- Gaillardia
- Wildflower Blends
- Iberis
- Yarrow

## Providing Quality Seeds from Coast to Coast.

