



One Planet Matters

Plant Families and Care



This info sheet outlines some of our favourite edible plants to grow in the UK, as well as giving you some information about which families they belong to and the particular requirements of those families.

We focus on growing plants that are:

- Delicious to eat
- Successful crops
- Good for biodiversity
- Low maintenance / easy to grow

Why consider plant families?

When we are planning a growing area, we find that it is effective to think of plants in reference to the families they come from. This is because they generally have similar care requirements to other plants in their family. Plants from the same family often need similar soil acidity and levels of nutrients like nitrogen, and are susceptible to the same pests and diseases. Having an idea of which plants belong to which family can help when deciding where to grow different plants and how to help them thrive.

Family	Plants	Companion planting	Care / qualities / needs
<p>Carrot family (<i>Apiaceae/ Umbelliferae</i>)</p> 	<ul style="list-style-type: none"> -Carrots -Celery -Fennel -Parsnip -Celeriac -Coriander -Dill -Parsley 	<p>Beneficial to:</p> <ul style="list-style-type: none"> -Tomatoes -Onions -Lettuce <p>Benefitted by:</p> <ul style="list-style-type: none"> -Onions (and other alliums) -Rosemary -Sage -Beans -Leeks <p>Don't plant with:</p> <ul style="list-style-type: none"> -Carrots with dill, parsley, or radish - carrots attract lacewings and parasitic wasps, which affect these plants. -Fennel with dill - they will intermarry and become fendill, meaning they will lose their unique flavours. 	<ul style="list-style-type: none"> - These are light-feeders, so can follow any other crop. - These are cool weather crops that can have two seasons in most climates - spring and autumn. Carrots can withstand a light frost and are often sweeter because of it. - Most of the plants in this family prefer to be sown directly into the soil where they will remain for the rest of their life cycle, especially the root crops carrots and parsnips. - The main pests of these plants are aphids, which you can remove with a hard spray of water, and use companion planting to deter. - Harvest seeds to save from the primary umbel (the first to bloom and the largest) after they have dried on the plant.
<p>Lettuce family (<i>Asteraceae</i>)</p> 	<ul style="list-style-type: none"> -Globe artichoke -Jerusalem artichoke -Lettuce -Calendula -Echinacea -Cornflower -Chamomile -Tarragon -Chicory 	<p>Plant with:</p> <ul style="list-style-type: none"> -Lettuces with radishes, kohlrabi, beans and carrots, <p>Don't plant with:</p> <ul style="list-style-type: none"> -Lettuce with celery, cabbage or parsley 	<ul style="list-style-type: none"> -These mostly prefer to be grown in a sunny location, though lettuce can also do well in the shade. -Greens in this family can be harvested young and will keep growing back throughout the season. -Aphids tend to affect these plants the most.

Beetroot family

(*Chenopodiaceae*)



-Beetroot - 'Boltardy' variety is slow to bolt and can be sown early
-Swiss chard
-Spinach

Plant with:

- Lettuce
- Kohlrabi
- Onions
- Cabbage
- Catnip
- Garlic
- Mint
- Radishes

Don't plant with:

-Runner beans - they stunt each other's' growth

-These are heavy-feeders, so it is good to plant nitrogen-fixing plant groups like legumes afterwards.

-They generally prefer cool weather and can be planted in both spring and autumn in most climates. They tend to bolt quickly in the heat and have improved flavor with cooler temperatures.

-Sow these directly into the soil as beets are a root crop and spinach has delicate roots.

-Although these are generally pest-free, aphids and leaf-miners can be an issue. Remove aphids with a hard spray of water.

Mustard family

(*Cruciferae* / *Brassicaceae*)



-Cabbage
-Cauliflower
-Broccoli
-Brussels sprouts
-Turnip
-Swede
-Radish - 'French Breakfast 3' variety - sow small rows every 2 weeks from March-Sept for continuous supply.
-Kale

Plant with:

- Dill
- Onions
- Rosemary
- Nasturtium
- Borage
- Alliums
- Thyme
- Celery
- Mint
- Sage

Don't plant with:

-Mustards
-Nightshades - different soil acidity requirements

-These are cool weather crops that need full sun. In most climates, these can be grown in spring and fall, and many have improved flavor after a frost.

-Lime-loving (prefers alkaline soil with a pH of 6.5-7).

-Heavy-feeders.

-For better success, plant inside around 8 weeks prior to putting them in the garden. Exceptions that prefer to be direct sown include kale, mustard and radish.

-These are susceptible to many pests, so it is advised to use mesh tulle cover over your Brassicas, and check them regularly. Companion planting can massively help to deter pests too.

Nightshade family
(*Solanaceae*)



-Potato - 'Charlotte' variety tolerates potato blight disease, as well as being very tasty and easily grown in rows or containers.

-Pepper

-Tomato - 'Sweet Million' is a sweet and tasty cherry tomato variety, and 'Marmande' is a tasty big beefsteak variety that can be grown in a non-heated greenhouse.

-Aubergine

Plant potatoes with:

- Roses
- Borage
- Onions (alliums)
- Mints
- Basil
- Oregano
- Marigolds
- Celery
- Parsley
- Nasturtiums

Plant tomatoes with:

- Basil
- Borage
- Carrots
- Celery
- Calendula
- French marigold - deters whitefly

Don't plant with:

- Beans
- Mustards
- Fennel
- Dill
- Brassicas (cabbage, cauliflower etc),
- Beetroot
- Rosemary
- Peas
- Tomatoes with potatoes

-Heavy-feeders - they need a fairly high level of nitrogen so it's good to plant soil enrichers like peas and beans before and after nightshades are grown in that spot.

-Nightshades prefer a slightly acidic soil with a pH of around 5.5.

-This family needs full sun and generally likes heat. Potatoes are the exception to this rule as they do best before it gets too hot.

-All members, except potatoes, do very well being transplanted. Most can be started inside around 8-10 weeks before the first frost.

-Tomatoes, tomatillos and peppers can all reach very tall heights and might need a trellis or other support system.

-This family is susceptible to many pests, so keep an eye on them throughout the growing season.

Allium family
(*Alliaceae*)



- Leek
- Garlic
- Shallot
- Onion - 'Sturon' variety never bolts.
- Spring onion
- Chives

Plant with:

- Nightshades
- Brassicas
- Carrots

Don't plant with:

- Beans and legumes
- Peas
- Parsley

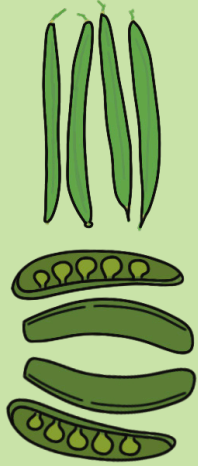
-Full sun and good drainage are needed for all of these plants, and they all prefer to be on the dry side.

-All members of this family prefer well-draining, fertile soil

-Mulch with heavy cover before the first frost.

-Alliums are fairly pest free and can be great companions because of their strong scents, which can deter pests.

Peas, beans, and legumes
(*Fabaceae*)



- Green beans - e.g. runner, climbing.
- Dwarf broad bean - 'The Sutton' variety is most manageable.
- French beans - 'Musica' is the highest-yielding.
- Dwarf French beans - 'Annabel' variety is neat and compact (less wind-affected) and produces early beans.
- Runner beans - 'Red Rum' is one of the heaviest-cropping.
- Peas - 'Sugar Ann' is a triple-use sugar snap pea. You can eat the young leaves and shoots in salads, pick the peas while they are young, or let them mature into larger sweet peas. They are the RHS favourite variety.

Plant with:

- Spinach
- Lettuce
- Rosemary
- Dill
- Carrots
- Beets
- Radish
- Strawberries
- Cucumbers
- Calendula

Don't plant with:

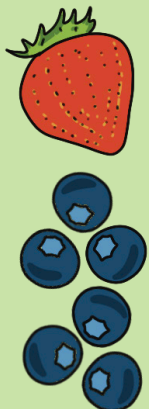
- Tomatoes
- Chillies
- Peppers
- Sunflowers
- Alliums
- Brassicas
- Mexican marigolds (with beans)

-Nitrogen fixers: grab nitrogen from the air and attach it to their roots, which is released into the soil after they have died, if the roots remain in the soil. Therefore these are great to plant after heavy-feeders have been growing in the bed.
Note: do not plant beans after onions.

-Powdery mildew can be an issue, so make sure you use a trellis to aid in air circulation. Check leaves regularly for bugs.

-All of the seeds benefit from being soaked overnight before being planted.

Berries



- Strawberries
- Autumn raspberries - you can get summer-bearing raspberries or an ever-bearing variety (one of each will maximise yield)
- Blueberries
- Gooseberries

Strawberries:

-Plant with:

- Garlic & onions
 - Borage
 - Thyme
 - Lettuce & spinach
 - Strong-smelling herbs like dill, fennel, coriander, sage, and mint
 - Marigolds - especially French
- Keep away from

Raspberries:

- Plant with alliums and turnips.
- Plant marigolds and legumes as cover crop.
- Keep away from nightshades.

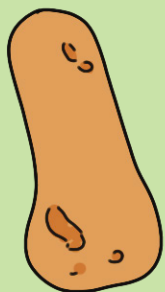
Plant blueberries with:

Raspberries:

-Do not plant raspberry bushes in a bed where potatoes, tomatoes, eggplant or strawberries have grown in the last five years.

-Raspberry bushes are perennial, so instead of rotating them each year, instead grow a cover crop of marigolds or legumes to

Gourds / Cucurbits
(*Cucurbitaceae*)



- Squash - including courgettes
- Pumpkin
- Cucumber
- Watermelon
- Cantaloupe

Plant with:

- Radishes
- Catnip
- Broccoli
- Strong-scented herbs - dill, oregano, lemon balm, parsley, peppermint
- Marigolds
- Calendula - with summer squash & courgettes
- Borage (attracts pollinators)
- Nasturtiums, radishes, marigolds, sunflowers, peas, beets, carrots and dill - with cucumbers

Don't plant with:

- Tomatoes
- Sage

-Full sun, or at least 6 hours a day.

-Fertile soil should be prepared before planting, as these are heavy-feeders.

-Provide lots of water, especially early in the growing season.

-They need a slightly acidic soil. pH of 6. to 6.5 -This family has many pests, including vine borers, squash bugs and cucumber beetles. It is best to observe these plants daily and stay ahead of any potential infestations.

-Another common issue is powdery mildew. Make sure your plants have plenty of air circulation and check the leaves often - you will see the white mildew on the top sides of leaves. Prune the leaves with mildew during the hottest part of the day, so the plant can heal itself faster.

-Most cucurbits are large plants, many of which are vining and can benefit from a trellis or other support system.

- For the best flavour, harvest cucumber, courgette and summer squash young.

Mint family
(*Lamiaceae*)



- Mint - why not try out different varieties, such as peppermint, spearmint, ginger mint, pineapple mint, chocolate mint, lemon mint, or banana mint!
- Rosemary
- Thyme
- Sage
- Oregano
- Lemon balm
- Basil
- Marjoram
- Catmint
- Lavender

Plant with:

- Cabbage family (enhanced yield and flavour & disease resistance.)
- Lavender with leeks and carrots to deter pests like aphids.

Don't plant with:

- Do not plant different mint varieties together, as they will cross-pollinate over the years and eventually lose their individual identities.

-Do not grow these in beds with other plants as they will take over. We definitely recommend planting these into pots instead.

-Don't plant different mint varieties together as they will cross-pollinate and eventually lose their individual flavours.

Edible
flowers



- Nasturtium
- Calendula / Pot Marigold
- Marigolds - French, African, Signet varieties
- Cornflower
- Pansies

Also make sure you use flowers from your vegetables and herbs, such as:

- Courgette / marrow
- Garden pea
- Pumpkin / squashes
- Basil
- Dill
- Chives
- Fennel
- Mint
- Rosemary

Plant with:

-Calendula:

- Tomatoes (repels whitefly)
- Beans (lures away aphids)
- Potatoes (repels potato beetles)
- Cucumbers
- Strawberries
- Peas
- Carrots
- Squash (repels squash beetles)
- Melons
- Basil
- Peppers
- Salad greens

-Marigolds

- Summer squash & courgette
- Potatoes
- Tomatoes
- Basil
- Cucumbers
- Aubergines
- Melons
- Chillies
- Peppers
- Keep away from cabbages.

-Nasturtium

- Summer squash & courgette
- Beetroot
- Broccoli
- Cabbage
- Brussels sprouts
- Dill
- Pumpkin
- Spinach
- Courgette

-If you are growing these as companion plants to deter pests, you can either plant these straight into the veg beds beside plants that need protecting, or you can plant these flowers into pots which you can move around the garden to where they are needed, as needed.

Plants that grow well in containers:

- Beetroot** - sow in March at 10cm spacings. The young leaves can be used as 'spinach'. Follow these with quick growing crops of late summer salads.
- Broad beans** - sow from February at 20cm spacings. The tops can be pinched out to reduce blackfly attacks and also for use as 'greens'. The broad beans can be followed in June or July with beetroot for late summer crops.
- Carrots** - sow Nantes or Amsterdam cultivars from February for June harvesting. Thin seedlings to 8cm between plants. Cover the containers with fleece from April onwards to exclude carrot fly. After the carrots, sow French beans to gather in September.
- Herbs** - parsley, for example, can be sown in March for harvesting from June; coriander is also an attractive and popular crop. Basil is another great herb for pots. Repeat crops can be sown for late summer harvest.
- Lettuces** - mini lettuces such as 'Little Gem' and 'Tom Thumb', spaced at 15cm, can be sown from January for June harvesting. Follow the lettuce with leeks for winter harvesting.
- Peas** - sow 'mange-tout' cultivars with edible pods from March; plant them out at 15cm spacings; harvest in June and follow with salad leaves for late summer.
- Potatoes** - plant early cultivars from March with one tuber for every 30cm of pot diameter.
- Salad leaves** - sow from February aiming for 5cm between plants. Rocket, coriander, lettuce, chicory and spinach are tasty choices. Harvest by pinching off the top few salad leaves, leaving a stump to re-sprout for follow-on crops.
- Salad onions** - sow from February with 3cm between plants. Pull them up when they get big enough. By July, you should be able to re-sow with finger carrots for bunches of baby carrots in October.
- Spinach** - sow from February aiming for 10cm between plants. Spinach quickly runs to seed, so follow it with courgettes in June for late summer fruits.

Plants for indoor growing:

- Alfalfa and other sprouts** - you don't even need a garden to grow sprouts! They are great to grow in a container indoors
- Microgreens** - these are essentially just big sprouts, and can also be grown on your windowsill - they're also super fun to snip off to eat when they're ready.

Learn more:

Plant Families: A Guide for Gardeners and Botanists by Ross Bayton and Simon Maughan (book)

<https://www.allotment-garden.org/crop-rotation/crop-rotation-plant-families-groups/>

<https://www.nourishingpursuits.com/garden/plant-families/>

<https://www.gardenersworld.com/how-to/grow-plants/understanding-plant-families/>

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<https://www.companionplantingchart.com/>

<https://www.gardenersworld.com/plants/10-companion-plants-to-grow/>

<http://www.personal.psu.edu/rdb4/hort131/weekly-lessons/week-3/plant-families.html>

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