## episode 10 show notes and advice

## Episode Description

Companion planting is a win-win situation - you bring even more beautiful flowers into your garden, and they help each other to flourish. There are a number of issues that careful companion planting can address, from pests and weeds to mildew or black spot.

In this episode of 'grow, cook, eat, arrange', Sarah and Arthur offer tips on how to pick plants to protect one another, and Sarah gives us a fish cake recipe with a natural alternative to black pepper - the delicious Nasturtium.

In this episode, discover:

- The 4 main types of companion plant you can sow
- How companion plants work together to help each other to thrive
- Keeping mildew and black spot at bay
- Planting nicotiana tabacum as a natural alternative to a brassica cage
- Including nasturtiums in Sarah's delightful fish cake recipe

Links and references
Order Sarah's new book: http://bit.Iy/3cR0kyh
Order Arthur's new book: http://bit.Iy/3qiBgUs
Shop on the Sarah Raven Website: http://bit.Iy/3ivbaeu
Get in touch: info@sarahraven.com

Products mentioned:
Hardy Annual Cutting Patch Collection: https://bit.Iy/20tSxg2
Perpetual Spinach: https://bit.Iy/3rXav8a
Tomatoes: https://bit.Iy/39KngN8
Tagetes patula 'Linnaeus Burning Embers' : https://bit.Iy/3cTzKEj
Tagetes patula 'Konstance': https://bit.Iy/2PuQbhv
Salvia and Calendula Collection: https://bit.Iy/20nSJxa
Allium Collection: https://bit.ly/39HzCFV
Nasturtium 'Alaska': https://bit.ly/31R1nal
Follow Sarah: https://bit.Iy/3iDTvBp
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## episode 10 advice sheet | Companion planting \& edible flowers

## Companion plants

Most of us love the idea of companion planting; that by uniting one species with another, we'll have some miraculous effect on our garden, increasing the productivity, or freeing a plant from the scourge of some particular pest. There are also plants that have a negative effect on the growth of others. We can use this to our advantage to control perennial weeds and we need to be aware of it in the veg garden, where some things love each other, but others really don't. This means you can garden organically with much less hassle.

We've tried several combinations in the veg patch at Perch Hill and are convinced they're worth repeating. It's good to bear these in mind as you start to plant things out at this time of year.

## Sarah and Arthur's favourites

- Marigolds - English (Calendula officinalis) 'Indian Prince', 'Sunset Buff' and 'Snow Princess'
- Marigolds - African or French (Tagetes species), tall ones, voluptuous and jungly, particularly T. patula 'Linnaeus Burning Embers' ('Konstance' is even better for growing with tomatoes)
- Salvias - particularly the microphylla and greigii (more compact varieties) e.g. 'Nachtvlinder', 'Jezebel' and 'Royal Bumble', as well as the beautiful cut flower variety, Salvia viridis 'Blue'.
- Nasturtiums - all and any really, but 'Empress of India' is Arthur's favourite. Wonderful edible flowers as well as companion plants


## Smoked haddock and nasturtium fish cakes

This looks and tastes delicious. Serve it with a rich tomato sauce and green salad.

For 4:

- 500 g undyed smoked haddock (or smoked pollock)
- About 500ml milk
- A few black peppercorns
- 1 bay leaf
- Some parsley stalks
- 1 onion, finely chopped
- 1 garlic clove, finely chopped
- A little olive oil
- 4 medium-sized potatoes
- Knob of butter
- 1 egg yolk plus 1 other whole egg, beaten
- 100 g Parmesan cheese, grated
- Salt and black pepper
- 15 nasturtium flowers, torn or roughly chopped
- Seasoned flour
- Breadcrumbs

Put the haddock (or pollock) in a shallow heatproof dish and cover with milk. Add the peppercorns, bay leaf and parsley, and poach until just cooked (less than 5 minutes).

Lift the fish out of the milk, reserving this for later, and carefully flake with a fork, keeping the flakes as generous as possible.

Fry the onion and garlic in a little oil until translucent.

Boil the potatoes until tender, drain and add a generous knob of butter and some of the reserved milk in which the fish was cooked. Mash, but keep the mixture quite stiff.

Add the cooked onion, garlic and egg yolk to the potato, together with some of the Parmesan, and season well with salt and pepper.

Very carefully fold in the flaked fish and some of the torn nasturtium petals, without mixing it up too much, and then shape the mixture into small round cakes.

Have three plates ready - one with seasoned flour, a second with beaten egg and a third with breadcrumbs mixed with Parmesan and nasturtium petals. Make sure that the fishcakes are lightly covered first with seasoned flour, then egg and lastly the breadcrumb mixture.

Put into the fridge for a couple of hours and then either shallow-fry or bake in an oven preheated to 190으/gas mark 5 until golden.

There are 4 groups of companion plants that play different roles for us at Perch Hill

1. Camouflaging Scents

Use plants with strong scents to camouflage the smell of precious crops that the pest is after. This works best in a sheltered site, so the wind doesn't carry the strong smell away.

Here are some examples we've had success with (some of the below are mentioned by Arthur and Sarah, but Sarah has added a few more to help you out)

- Broad Beans with summer savory

The aromatic herb, summer savory, prevents black bean aphid being drawn in. Planting this, as well as pinching out the tips of the broad bean plants when they're just starting to form beans at the base, has kept us aphid free for the last five years. Direct sow summer savory all around your broad beans now.

## - Tobacco plants with brassicas

We've also had success here with Nicotiana tabacum, the true smoker's tobacco, protecting our brassicas from Cabbage White butterflies. The tobacco plant grows to a good metre and a half to form a natural brassica cage, masking the cabbages and kales by its strong, acrid smell. This looks much nicer than a netted cage, but you need a whopper garden to fit it in. Tobaccos need sowing now if you want to try this.

## - Hyssop or Artemisia with kale

The advantage of hyssop over tobacco is that it's much smaller and you don't need much of it to have the repellent effect - only three or four plants in a $4 \times 15 \mathrm{ft}$ brassica bed, so this is ideal for a smaller space. Planted now, you then find, come June and July, the Cabbage White butterflies come to land, but with a whiff of hyssop or Artemesia, they have second thoughts and go off somewhere else.

- Tagetes and tomatoes/cucumbers/chillies and peppers in the greenhouse

This is a pairing we swear by. I remember visiting the tomato and chilli company, Simpson's Seeds, at their nursery and seeing all their tunnels of tomatoes packed with tagetes. They had tagetes at ground level and in baskets hanging from the roof, so that both the top and bottom of their plants were protected against white fly. The following year, we did a trial here with our tomatoes inside and have never looked back.

We grow the varieties Tagetes 'Red Gem' and 'Strawberry Blonde' in pots so we can move them around to the best effect and I love the handsome, taller, Tagetes patula 'Linnaeus Burning Embers' and 'Konstance'. They all play the same role. Tagetes need sowing now.

- Basil with fruiting veg, tomatoes, aubergines, chillies

This is the basis of the tradition of having bush basil on the table in almost every Greek taverna. The strong smell of basil acts like citronella and keeps the bugs at bay. We have found swathes of basil seems to help keep our greenhouse tomatoes clean.

## - Carrots and onions

The jury is definitely out on growing carrots with any of the onion family. I have always interplanted spring onions with my carrots, thinking this reduces Carrot Fly maggot damage, but apparently that's rubbish. It hasn't worked reliably here, and Geoff Hamilton did controlled experiments with this duo and found no evidence that the onion gave any protection, backed up more recently by trials in Charles Dowding's Somerset organic veg and salad garden. It's best to use Enviromesh or fleece around the edges of the carrot bed, stretched as a screen three feet high. The carrot fly is a ground flyer and won't make it up and over the screen.

## - Mint and ants

Mint is brilliantly effective if you have an ant infestation, and very successful on benches in the greenhouse. If the ants get bad, just tear up a bunch of mint and scatter it and replace every few days. The ants will disappear.

## 2. Sacrificial Plants

These plants are very attractive to pests, so planted to draw pests towards them and away from your more precious plants.

- Lettuces for slugs

I've seen lettuce gone to flower and seed around veg beds at Chatsworth, a sacrificial crop for slugs who eat these plants rather than more precious things in the middle.

## - Nasturtiums with kale

Nasturtiums secrete a mustard oil which insects love and will seek them out in preference to any brassica. In the same way, nasturtiums in the greenhouse protect tomatoes and cucumbers against whitefly.

## 3. Beneficial Insect attractants

Then there's the type of companion planting, which draws in good insects, rather than repelling the bad.

## - Orange and yellow flowers

These two strong colours draw in hoverflies, lacewings and ladybirds, the best natural predators to aphids. At Perch Hill, we intersow kale with Calendula officinalis 'Indian Prince' for exactly this reason. The female insects feed on the marigold's protein-rich pollen before laying eggs on colonies of aphids, so that the larvae have a readily available food source when they hatch. Successional sow the marigold, or follow them with the poached egg plant (Limnanthes) or tagetes (see varieties above). It's the orange or yellow colour range that hoverflies love best.

## - Grow pollen and nectar-rich flowers for pollinators

## Calendula officinalis (marigolds)

The colour of marigolds also draws in other pollinators, thus increasing your harvest of crops such as Runner Beans, Tomatoes, cucurbits and all your fruit.

## Dandelion

Allow lots of dandelions to flower in your grass, particularly if you have rougher areas. Bees love the combination of pollen and nectar which dandelions provide, flowering in April and May when all the blossom is out, invaluable for fruit pollination.

## Garlic chives

l've noticed that garlic chives in particular are a fantastic attractant to pollinators, so much so that l've wondered whether the honey from our local beehives is tainted with the taste of garlic.

## Salvias

Here's another tip for forcing early greenhouse crops such as courgettes. The early flowering Salvias such as viridis, algeriensis and fruticosa are what you need to attract bumblebees to your glasshouse. Bumblebees are the veg gardener's best friend. They fly out at about 5 or $6^{\circ} \mathrm{C}$, whilst most other bees stay housebound until around $9^{\circ} \mathrm{C}$. And bumblebees are thorough; they pollinate every flower, much more so than other bees if you watch them at work. This is SO much easier than doing it by hand with a paintbrush or traditional tool - a rabbit's tail.

Surprisingly, earwigs are brilliant for controlling aphids too. We love to hate them but the ecologist, Dave Goulson, who is brilliant on wildlife gardening, has told me that they're now proven to help with aphid control.
4. Just good companions

Then there are plants which are just generally good friends and planted together, give you a better crop than each of them in isolation.

## Salvias and roses

The sulphur in the salvia's scent profile helps to keep the roses free from black spot and mildew.
This truly works, and we'll do a whole episode on this as it's been so fantastic for our roses here.

## Aubergines and basil

Every veg patch in Crete is packed with basil and yet they hardly eat it because they're convinced that basil ups the productivity of aubergines and peppers, so they need to leave it where it is.

## Dwarf beans, beetroot and potatoes

Plant these in alternate rows. They will help each other to stay healthy and bring a good yield.

## Cucumbers with sunflowers

Cucumbers are excellent planted with sunflowers supported on the same frame. The cucumbers luxuriate in the shade of the sunflowers (or sweetcorn, but that goes over more quickly and has to come out).

## Parsnips and carrots with kale

Grow plants with tap roots next to brassicas as they bring calcium from deeper in the soil near to the surface for better leaf production.

With planting out now at full tilt, it's the moment to take these symbiotic relationships seriously and introduce more companion plants to our own gardens.

