

The FIRST UK allotment trial of **E**ffective **M**icro-organisms

5

Good companions

Andrew Seall is using plants to benefit each other on the EM trials plot.



I can't help smiling when I walk onto the plot because I am reminded of the army of bacteria working for me under my feet. Then I feel guilty, because without all the digging I might lose some of the keep-fit benefits an allotment offers. So I am thinking of using more hand tools like a push hoe and a wheeled cultivator if I can find where to buy them.

The cold snap we had back in March has put things back a bit and the EM-treated soil might need to be treated again because the micro-organisms may have died in the cold. So I am going to get a bacteria dip slide tester and, if the population is low, then I will feed with half the quantity I used to start with.

What is it about stinging nettles that makes me want to pull them up and do horrible things to them when really they are very beneficial to the gardener? They are good for composting, make a great plant food when immersed in water, and in many European countries are grown to be eaten in place of spinach. It is this singular view of what is worth a place in the plot and what is not that obscures many planting benefits.

Companion planting is a case in point. Many see it as a waste of space, whereas I firmly believe it deserves its place. I am growing **beetroot** and **onions** together and on the other side I sowed **carrots**. The reason I did this was to improve my onion harvest, because

beetroot seems to help and the carrot scent is masked by the onions and therefore the carrot fly get confused. In between the carrots I sow **radishes** because they grow faster and loosen the soil which, when they are harvested, will be filled with the later-growing carrots. At the top end of the carrot row I am growing **parsley** because they are happy together.

At the bottom end of the rows I grow **tagetes** to keep the nematodes down and attract hoverflies which eat aphids, and also to act as a very effective weedkiller. The 'tagetes effect', as it is known, is the root secretions of five thiophenes – substances containing sulphur. These secretions act very effectively against ground elder, also known as goutweed because the Romans introduced it as a cure for gout; bindweed and to a lesser extent couch grass.

Bindweed is the bane of my life on this plot, as maybe it is on yours, so planting tagetes not only looks colourful but saves me a lot of unnecessary work. So I am going to plant some with EM, and some without, the theory being that those with EM should have more roots, which means more secretions equals less bindweed. We shall see. Mind you, sad to say that tagetes will not kill thistles, horsetail, oxalis or celandine – these have to be weeded out by hand.

Eelworms hate tagetes, which is good for my potatoes, because the secretions from the tagetes seems to shut down the eelworms' detector mechanism that tells them when and where **potatoes** are planted.

Talking of **potatoes**, they are looking good. Ron, my allotment neighbour, let me use his potato planter so I could do a whole row in no time at all. We have planted 'Pentland Javelin' and 'Foremost', both earlies; 'Kestrel', second early; and maincrops 'Pentland Crown' and 'Majestic' for the EM trial on my plot, and the same on his plot without EM. We are going to count the number of tubers as the test result on randomly chosen plants.

After the early potatoes are cleared a crop of white **mustard** will be broadcast, even if the ground is going to be used in a few weeks. I find that the benefits far outweigh the effort. Digging in, or rotovating, the crop when sappy and very green will put back the nitrogen gathered by the soil bacteria in summer, which would otherwise be washed away from bare soil. White mustard is also great for adjusting the ground after potato sickness and worm infestations.

I have planted that lovely **garlic** I had from the overwinter sowing near to some **lavender** because it seems to increase the oil content of the lavender. The lavender was looking a bit



Happy lavender bringing in the bees.

bedraggled a few weeks ago in that spell of bad weather, but look at it now, bringing in the bees to the orchard area by the busload. I don't know whether planting lavender in an orchard area is strictly companion planting, but the variety of bees it attracts, like big bumblebees, red mason bees and honey bees, is I think essential for happy fruit trees.

The other garlic I grew on overwinter I have planted in the **raspberry** row because it improves their growth and health. These are the raspberries I got from my friend Blanche, who has grown beautiful raspberries and made wonderful jam for years. Her belief is that autumn raspberries can't be moved until February, unlike other people who say November, so these were dug and planted in February, and they look OK now, so we will see in September who is right.

Sunflowers growing alongside bush **beans** always look great and do each other a lot of good, because the beans like some shade and the pollinators that are attracted. I let some **nasturtiums** grow up an ornamental tree I have because they hold aphids and some beetles at bay and deter woolly aphids and whiteflies. I also let the ivy at the back of the shed grow on because it attracts beneficial insects like bees.

One thing I don't plant anywhere is **fennel** – it seems to upset everything – but I have planted a **walnut** tree, mad or what I don't know yet.

So the principal behind all this planting is co-existence and that is exactly what drew me towards EM, or effective micro-organisms, and this trial. More of that next month.

Andrew

