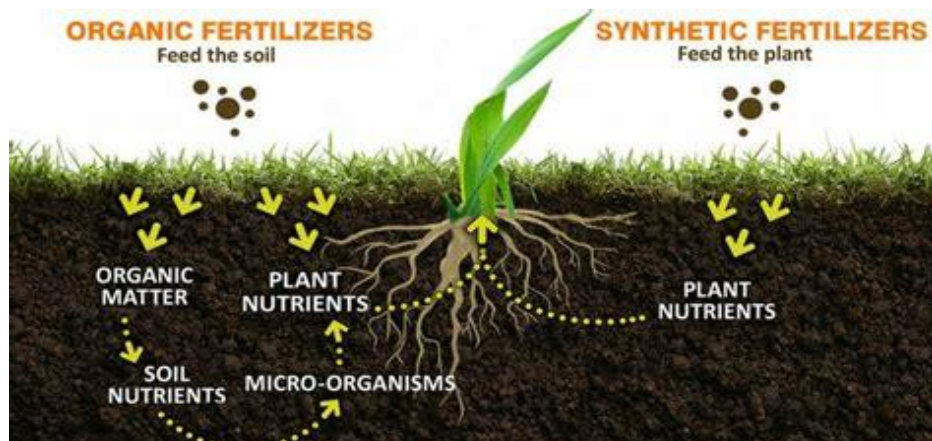




## Shoots, Roots and Fruits. – Demystifying fertilisers.

I've learnt so much over the years about growing food, but up until fairly recently, I didn't know much about fertilisers. In fact, when I looked on the back of boxes of plant foods in garden centres and saw the NPK ratios I just glazed over and felt very overwhelmed. It seemed that I needed a PhD in chemistry to understand it all. So, if you feel the same way read on, as I'm going to make it very simple...

First, I should say that if you are following the 'no-dig' method of vegetable gardening and are putting lots of organic matter onto your beds, there isn't a great need to worry about adding anything to your soil. The worms and microbes will do the job for you. However, for those of you who are starting afresh or don't have much space and have lots of containers and pots on a balcony or patio then this could help you get the maximum out of your gardening.

### Let's start with what is NPK?

The N stands for Nitrogen (N) and this is needed for all your leafy veg such as cabbages, Kales and so on. Anything that needs nice green leaves.

The P stands for Phosphorus/Phosphate (P) and this is needed for root development as well as fruits and flowers. So, Phosphorus is good for plants that you transplant or root veggies such as beetroots, parsnips and potatoes.

The K stands for Potassium (K) (Yes, I know, this is a bit confusing, but stay with me.) Potassium is good for fruits, especially things like tomatoes.

So, you can think of it as  
 Nitrogen (N) – Shoots,  
 Phosphorus (P) – Roots and  
 Potassium (K) – Fruits

## Chemical Vs Organic

Synthetic fertilisers are mostly made from ammonium sulphate or ammonium phosphate and go through a manufacturing process. The NPK ratio is very accurate, but it is easy to overuse them and burn the roots of your plants. Although synthetic fertilisers are readily available to your plants, they tend to reduce the biodiversity in your soil.

Organic fertilisers get made from manures, compost, or bone meals derived from different plant and animal sources. The NPK ratio is a bit hit and miss and because they are slow release it may take a time for your plants to be able to utilise it. Beneficial microbes, insects and worms thrive in soil fed with organic fertilizers. Compost and manures will also continue to improve the texture and composition of your soil.

If you strive to be organic in your gardening practices to feed and improve your soil, then using organic fertilisers and soil amendments is the way to go.

Here's my list of organic products to look out for.

For Nitrogen – Shoots – Leafy veg. Chicken manure pellets or nettle tea\*

For Phosphorous – Roots – Blood, fish and bone. This is in fact a well-balanced fertiliser with a NPK ratio of 5-5-6

For Potassium – Fruits. Comfrey pellets or Comfrey tea is perfect for your tomatoes.

Depending on what veggies you are growing, you might find you want to use a high Nitrogen feed early on in the season for leafy growth and then move onto a high Potassium one when you want flowers and fruits.

I should mention that another good organic product to try is seaweed. All types of plants can benefit from seaweed fertilisers. In fact, seaweed fertilisers have the broadest range of benefits to plants. They also promote bacterial activity in the soil and can improve resistance to disease and pests.

I do hope this has helped your understanding of fertilisers and how to use them. As I've said before, I'm not an expert on this subject and if you know I have made any errors do please let me know.

\*In last month's newsletter there was a video on how to make your own Nettle tea and another one explaining the 'No-dig' method. If you are a new subscriber and would like to be sent last months newsletter just pop me a message and I will send it to you.