

Wally's Weekly News 13<sup>th</sup> FEBRUARY 2010  
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### IMPROVING YOUR CROPS AND GARDENS

Many gardeners are always looking for ways to improve their gardens whether it be vegetables, roses, ornamentals or fruit trees.

Their goal is to have very healthy plants, wonderful roses, great lawns and excellent crops.

There are a number of things that you can do to improve your gardens by improving your soils.

The optimum is to have a soil that is teeming with microbes which make up what we call the soil food web. This creates humus from the trillions of their dead bodies and gives the plants the ultimate growing medium.

A good indication of how good your garden soils are is by the number of earthworms present in a square foot of soil. If there are none you have a problem, if there are about 25 that is good and if there are about 100 that is excellent.

Earthworms will only be found if the soil is kept moist. That is moist not soaking wet. The same applies to your soil food web; it needs ample moisture to keep growing and thriving.

When the soil becomes too dry or too wet then activity stops.

Chemicals kill the soil food web and badly affect your worm populations.

This not only includes chemical (man made) fertilisers but also chemical sprays including chemical weed killers and chlorinated water from your tap.

It is not difficult to overcome all of the above by just not using them on your gardens, especially where your food crops and preferred plants such as roses are growing.

If you are in an area where chlorinated water is in your tap then you need to place a 10 micron carbon bonded filter onto your hose line to remove the chemical. This will remove the chlorine from about 16000 litres of water before it needs to be replaced.

If you have silty (sediment) water then your carbon filter will block up quickly and to overcome this problem you place a paper filter in line, prior to the carbon filter. (The paper filter can be cleaned and reused for many years with care)

Calcium is the fuel that microbes need so dependant on what plants are growing in an area, soft garden lime is applied (not to acid loving plants) and dolomite and gypsum are also applied.

Dolomite is calcium and magnesium where gypsum is calcium and sulphur. These are two more valuable and needed elements for good gardens. Calcium can also be supplied by applying crushed egg shells and sea shells.

For a natural food one can not better animal manures from chickens, horses, cattle, sheep and pigs.

These can be applied directly to bare soil in a solid form or made into liquid manures.

Potash and **BioPhos** should also be applied every few months or more frequently as needed with the potash.

Lack of some elements can cause other elements not to be taken up by plants, even though there are ample of them in the growing medium. One of these is Boron which most of our soils are deficient in.

The product **OrganiBOR** is a natural slow release boron which is only applied about once

every 3 years.

It can make a big difference to gardens as a number of gardeners have noticed after applying it.

Especially good for fruit trees and vegetable gardens.

Microbes play a very important role in the garden and are vital to the health of plants.

The plants supply carbohydrates (sugars) at their roots for the microbes and in turn the microbes supply the plant with nutrients, moisture, plus small organic compounds such as growth regulators which form a primary defense against pathogens. (Diseases)

Take away the microbial activity by watering with chlorinated water and your plants suffer and are more susceptible to diseases (black spot, rust, rots etc)

With the use of **Mycorrcin** we can build up the microbe populations in the soil and on the plants.

**Mycorrcin** is primary a food for the soil life and secondly for the plants.

Used at 1 mil per litre of non-chlorinated water as a soil drench say every 3 months and at 5mils per litre of non chlorinated water as a spray every 2 weeks.

The results can be seen for yourself as an improvement in your gardens.

This is especially so with strawberries where your crops will increase by between 200 to 400%

Minerals and elements are very important for the health and production of your gardens.

There are 114 known natural minerals and elements and if they are all available in the soil your plants grow in, then the plants themselves can choose which ones they require.

For instance I am told that a tomato plant requires 56 different elements.

At the very best you would get about 16 minerals in a man made fertiliser.

To obtain all the minerals, we need to look to the ocean, rocks and prehistoric mineral resources.

(In prehistoric times the earth was mineral rich)

**Ocean Solids** brings us the minerals from the seas. **Rok Solid** the minerals from various rocks along with natural silica which is also vital to the soil life.

**Magic Botanic Liquid (MBL)** which is minerals from prehistoric times.

**Ocean Solids** is applied sparingly to gardens once a year.

**Rok Solid** twice a year and placed into the planting hole when planting out. Great help in root development.

**MBL** is a liquid and is used at 20 mils per litre as a soil drench and at 10 mils per litre as a foliage spray.

It can be added to your **Mycorrcin** drench and sprays and normally applied at the same frequency.

If you like to use man made fertilisers to give plants a boost then a little applied to the root zone and watered in with **Mycorrcin** and **MBL** will reduce the damage done by the fertilisers.

This reminds me back in the days (many years ago) when I had plant nurseries and we used to regularly spray out the glasshouses with all sorts of chemical sprays to control pests and disease.

Within a day or so of spraying the plants, they would look poorly and it would take a week or more for the plants to rid the chemicals out of themselves. To help overcome this problem and get them back growing again we would add a good liquid plant food to the chemical sprays.

Taking care of the soil is a major key to having great gardens.  
Problems ring me at 0800 466464 (Palmerston North 3570606)