

WEED PROBLEMS

Weeds are plants that are growing where you do not want them. Some weeds are the result of plants that we have grown and cultivated for either food or pleasure; then these have gone to seed and their off spring have become a nuisance.

That garden pest oxalis was I believe, introduced by the settlers for its flowers. They also introduced gorse and a number of other plants which were not indigenous to NZ.

Some of the plants we call weeds are very beneficial to your health and are cultivated for their benefits by those that have the knowledge. (Such as Comfrey)

In fact over the years I have come to the conclusion that all health issues that we may have, that there is a remedy or relief in the world of plants, that will fix the condition or give relief from the side effects.

Most of our original medicines are from different plants that we learnt about from folk law or shaman.

I have during my life gone through a weed cycle starting off when I was young where weeds were removed by hand while they were small growing in our vegetable or flower gardens.

Placed into a bucket as one weeded and either emptied into a compost bin or placed as a stack where it was convenient for them to break down into compost. In waste areas, paths and drives where you did not want weeds to grow you treated with boiling water, salt or oil.

When scientists invented herbicides many of us turned to them for convenience, you could spray your lawn to kill broad leaf weeds without killing the grasses which was much quicker than spending most of the day on hands and knees weeding out the lawn.

Then along came glyphosate discovered in 1950 and patented by Monsanto in the early 1970s as the active ingredient in the herbicide Roundup®. In agriculture, glyphosate was first developed for weed control in crops.

Here was a supposed magic bullet against weeds, non-selective it would kill most weeds through its action and was originally considered safe to the environment and our health.

I know I used Roundup a lot in the past around the section and in my nurseries and garden centre, it killed the weeds and as long as one was careful it did not appear to effect other preferred plants.

Then after realising the the health risks of these chemical herbicides I stopped using them about 20years ago and returned back to the old methods.

One of the problems with herbicides is the damage that they do to the soil life which is the beneficial microbes and fungi. If you are still using chemical herbicides you can off set this damage by adding Mycorrcin to the weed killer for less damage.

The chemical knocks back the soil life while the Mycorrcin helps to restore it quickly back to normal.

This is important for the health of our plants and gardens as the length of time that Glyphosate (for instance) stays active in the soil can be a lot longer than previously thought. The following extract from Internet:

The widely used weedkiller glyphosate persists in water and soil longer than previously recognised, and human exposures to glyphosate-based herbicides (GBHs) are rising, experts from various universities as well as environmental health and consumer groups have concluded in a new scientific review.

Field studies cited in the report show the half-life of glyphosate in soil ranges between a few days to several months, or even a year, depending on soil composition.

The authors say the research demonstrates that soil sorption and degradation of glyphosate vary significantly depending on the soil's physical, chemical, and biological properties.

The authors suggest that considerable work is needed to better understand glyphosate and GBH toxicity, mechanisms of action, and exposure levels before the EPA can credibly conclude that GBH uses and exposures are consistent with the US Food Quality Safety Act's basic safety standard, namely that there is

a 'reasonable certainty of no harm' from ongoing, chronic exposures to GBHs across the US population.

This I found interesting as here is a local scientist in the International scene:

Dr Kerry Harrington, a weed science lecturer at Massey University in New Zealand, agrees. 'I don't think there should be knee-jerk banning of the herbicide, but we do need to find out exactly what the issues are, and perhaps we need to go back to using glyphosate for the jobs it was originally designed for:

preparing seed-beds for planting crops and controlling weeds around the streets, and stop applying it over the top of foodstuffs, especially fairly close to harvest time,' he tells Chemistry World. 'But more research is needed before we can be sure of that.'

I totally agree that Glyphosate should never be sprayed over food crops prior to harvest such as carrots, wheat, potatoes and cereals.

Pre-harvest means a far greater concentration of glyphosate in the food you eat when compared to what plants may take up from residues left in the soil after killing weeds before planting.

There is some discussion that gluten problems of wheat is really glyphosate intolerance.

I also looked up Dr Kerry Harrington on the Massey University web site and found a great table of 70 common, troublesome weed database. See

http://www.massey.ac.nz/massey/learning/colleges/college-of-sciences/clinics-and-services/weeds-database/weeds-database_home.cfm

Information about each weed and controls that can be used (most of which are commercial)

Great to help identify many common weeds.

An email this week was: Hi Wally, I've just read your article at <http://www.gardenews.co.nz/oxalis.htm> Last year, for about 12 months, I let my garden go completely... so I had weeds as tall as I am...

This year I want to "reclaim the territory" but have found that the small amount of oxalis I had, has multiplied considerably.

Oxalis is a new arrival in my garden, having only been in it for about 5 years. So I am determined to eradicate it. I grow vegies, so any chemical intervention is out for me.

My strategy, starting in about December 2015 has been to completely clear the garden of all plants except for my Loveridge and Rhubarb plants.

Then to dig out as many oxalis plants as I have found, and where there was evidence of bulblets, I'd pour 2 litres of boiling water into the hole and mix it well. Having done that for a 6 weeks, I dug the patch over to give myself what I call "the gardeners advantage" i.e. Loose soil.

Then watered it well to create ideal "oxalis growing" conditions. Now a further 3 weeks on I monitor the garden every 2 or 3 days and dig out any that pop up. (30 today after a week of little attention to it - plot size 2 x 4m).

It seems to me that this strategy must work, because eventually all of the bulbs will produce a plant and then be dug out. But I am interested in what you say about "Not disturbing the soil" which is advice that I have seen given elsewhere.

To me that doesn't make sense but it is entirely possible that there is something that I don't know. I seem to have about 3 different species present with the longest one having a "stem that was 220mm long" (That is deep...).

Would you care to educate me a bit more on why not disturbing the soil is the advise you have given. Is it possible that the strategy I've taken will backfire?

Your thoughts are welcome...Cheers Frank.

My reply: Hi Frank

The problem with digging out is, the bulbs have bulblets which are very small and fall off the parent then disturbed. These will overtime become large enough to throw up a set of leaves and by that time they have bulblets.

So every disturbance increases the number of future bulbs.

If left alone as you did for a year the bubblets grow attached to the parent and also produce foliage

and more bulblets.. Chickens are the only ones capable of seeing and eating all the bulblets.

By burying the problem such as a layer of card board over area after cutting foliage to ground level and the placing a good layer of clean purchased compost over the cardboard which you can plant into.

Later on oxalis foliage will start to appear and you simply cut the leaves off, weakening the bulb, preventing it to gain energy from the sun. It will send up more foliage which is cut off as soon as it appears. No energy from sun, bulb runs out of puff and rots in soil.