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Newsletter 107

5 January 2014

We don't know why, but some emails to Vaughan@GrazingInfo.com bounced from 4 December. If yours to us does, please use support@grazinginfo.com or leon@grazinginfo.com

Gardening

Don't plant seedlings or any plants, even trees, to a deeper depth than they should be (were as a seedling), because they become "strangled" and don't do well, and can die.

Some plants and shrubs when bought have roots going around in circles. They must have them parted in four places by running your finger down, so they break and grow outwards, not round and round.

We don't spray, so the number of insects in our garden has increased. Feeding plants better with LimeMagPlus from Rorisons in one tonne bags dug in deeply, and correct fertilisers based on Gafsa, using the spreadsheet called Phosphorus Nutrient Planner, also in one tonne bags which you can share with neighbours, helps the plants to thrive. If in central Waikato you can get the amount you need of each from Lynda 07-858-2200, near Eureka. Your vegetables grown from the above two and your own made compost, will give high Compatibility vegetables, with almost no heavy metals, whereas superphosphate fertilised vegetables will have high heavy metal levels. Alkaline lime and Gafsa make good minerals available and bad ones unavailable, while acid superphosphate makes bad minerals available and the good ones remain unavailable. Read Elements > Minerals.

The insect that eats young sweet corn leaves became so bad two years ago that our sweetcorn didn't do well. Last year, we grew the seedlings in pots for transplanting on top of a bench 1.2 m above ground level, and none of the insects went up to that height to lay their eggs on them, so our sweet corn did better. We repeated it this year and have very good results without damaged leaves, which stunt the sweetcorn.

Maize that gets side dressed DAP, rather than having it chisel ploughed in before planting, suffers much more in dry weather, and yields only about 12 tonnes per hectare of silage, which is much lower than the possible 30 tonnes, because of shallow rooting. The side-dressed shallow rooted maize plants can be pulled out with one hand, while the deep rooted ones can't be pulled out with two hands and have to be dug out, to see their deep roots.

It is a bit dry now, and the side-dressed maize is already wilting, while deep fertilised ones are thriving. See Forage & Grain Crops.

Our potatoes suffered dreadfully from wireworm in 2011 and 2012. We saw the white 12 mm long wireworms at a dozen per 30 cm by 30 cm and 20 cm deep. This year, Palmers recommended KMNO₄ Potassium Permanganate, as per instructions on the bottle. There was not a single wireworm, no damaged potatoes and the best crop ever. Potatoes need lots of potassium to thrive.

Tomatoes

White flies love tomatoes, potatoes and cabbages, and damage their leaves, but they don't like the smell of marigolds so they move away. White flies spread blight that large leaf smelly marigolds reduce.

Your Health

There are now 20 chapters on Human Health, but some subscribers have not looked at them, and tell me of their health problems, some of which are covered in the Human Health chapters, without the profit influenced advertising in commercial web sites, so ours are more accurate and overall much more

effective.

Exercise

Leg lifting from an upright or office type chair is the best exercise for all people, and takes no time, because it allows reading or computing at the same time. I do it at the computer several times a day. It keeps my blood pressure level where it should be. You'll be surprised how little time it takes to get out of breath and exercise your important muscles, without the friction of joints when walking, and the damaging of them when running.

Sick people

There are dozens of toxins (heavy metals in vegetables, sprays on fruits, fuels, fumes, etc.) adversely affecting many people, because they don't know, or use, muscle testing to avoid toxic - foods, toilet papers, waters, pain killers, supplements and medicines, to which they are allergic. Some people can be badly affected, and be made very unwell.

On 2 November I got shingles, and was prescribed Mylan Paracetamol 500 mg + Codeine phosphate 8 mg as a pain killer. The doctor claimed this to be better than the older pain killers.

The Mylan Paracetamol didn't work as well for me, and I became even less well after I continued taking it. Discomforts were worse than the shingles pains, so I had Chris Rhodes (See > Human Health Specialists) check me. He found that my mercury and manganese levels had risen from the acceptable 2 and 3, to 15 and 20 respectively. I then checked the Mylan Paracetamol tablets with muscle testing, and found that I am highly allergic to Paracetamol and Panadeine, but not at all to Disprin, an original and milder pain killer, which is not as effective as the newer ones, but is not toxic. I'm now having to take Chris's heavy metal drainage drops again, to remove the mercury and manganese from my body, which I had noticed were adversely affecting my memory, and causing boils, stomach and back pains, all of which were worse than the pain saving benefits of Paracetamol and Panadeine.

In Japan, muscle testing is compulsory for doctors to learn and use, to check medicines prescribed, in case the patient is allergic to them. See > Human Health > Muscle Testing. I now muscle test every item in medicines and foods, including new batches, and all vegetables, fruits, etc., before consuming them.

Pastures

Bealey NEA2, is the most palatable and high milk producing ryegrass I know of, provided it is treated correctly.

Bealey NEA2 is a tetraploid, with a mixture of two excellent endophytes that contain very effective insect repellents at low toxic levels, so don't discourage animal consumption. There is a Bealey without endophyte for the insect-free areas of southern New Zealand. Everywhere else, insist on NEA2 for insect protection.

Farmers with paddocks of Bealey have found that milk goes up by two litres per cow per day after grazing them. This is good income.

I've been told that a Taranaki seed company sold no Bealey NEA2 last autumn, possibly because of the bad reports by some farmers, some opposition and some media, most of the latter like being negative. Some claimed that it didn't last, without checking why. The failures I checked were in under-nourished soils, especially suffering low calcium and its synergisms, which meant hard soils, sometimes with high aluminium levels, hard pans and few clovers, low organic matter and low fertility, mostly caused by low Ca. See Pastures > Grasses, and Elements > Minerals > Calcium, and also Aluminium.

Bealey NEA2 suits farmers who are good soil and pasture managers, and understand its requirements, which are no AR ryegrasses with it, and no other unpalatable grasses. Plantain, chicory, Timothy and clovers are fine, because animals like them as much as Bealey NEA2, so graze them equally.

There are many farmers who love it. Read Pastures, Soils, Minerals.

There are other palatable ryegrasses, such as those from Wales, but, because of their cold winters, they don't grow as well as Bealey NEA2 and other New Zealand ryegrasses, which grow more in winter when pasture is worth 40 cents per kg of DM, if they save buying feed at that cost. This is an example of scientists not using pasture value to measure yields.

Bealey NEA2 lasting

I checked and found a paddock of Bealey NEA2 with clovers near Ohaupo. After six years, it was still like new. This is because it didn't suffer from being eaten down to the ground in mixes with AR endophyte ryegrasses, AR37 being the worst and most unpalatable endophyte ever, which cattle hate, so leave 20 cm long, while grazing Bealey NEA2 in the same paddock down to the ground.

The Pastures, Grasses and Legumes chapters are planned to be finished soon, so show palatability.

Our six year old Bealey NEA2 cutting trial, cut every two weeks is like new, while that next to it, cut every four weeks, is all gone. Ryegrass likes being grazed lightly every two to three weeks, and being in high organic matter soils with an optimum calcium level (0.8%), which increases the organic matter content.

If researchers did their research correctly, they'd do them on animal production and profit, not just pasture dry matter yield, i.e., growth of the plants, at which AR37s do well because they are not over-grazed by animals, and, as farmers know, grass grows grass, but high AR's don't make milk.

Forage crops

Growing forage crops for dry weather makes a big difference to the whole farming operation, for example -

- Grows forage for free grazing, when harvested or bought feed costs about 40 cents a kg of DM fed.
- Reduces the overgrazing in dry hot weather of all pastures on the farm, when there is no other feed on the farm.
- Gets modern pasture species and mixes sown after them in autumn which, with correct liming and fertilising, produces twice as much as the old ones, at a growing and grazing cost of about 5 cents per kg of DM.
- Costs a lot less than buying feed, and less than making silage or hay - see the spreadsheet called Costs of Pasture Silage Hay Crops & N.
- For more benefits, read > Forage Crops and how to grow forage crops.

Organic matter

See Soils > Organic matter, our most important asset. The Kyoto agreement, based on organic matter levels, failed to help New Zealand, because of urea and a lack of LimeMagPlus having ruined soils and lowered organic matter levels. I knew this was happening, but MAF and others didn't.

Hard pans

Insufficient LimeMagPlus over long periods is the main cause of hard soils, hard pans, and aluminium, ruining soils. I don't think that anyone can deny that hard pans and ryegrass pulling have increased on most farms since fifty years ago, when New Zealand's total annual agricultural lime application was double what it is now.

I've twice asked farmers at field days if they thought that pastures were better 50 years ago than now, and they agreed.

Interestingly, the total national annual lime application quantity has halved in that period. The pasture and animal yields have increased, so more calcium is being removed.

Most farmers who join GrazingInfo did so because they felt that their fertiliser advice had been wrong, and they are right.

Calcium levels have become so low on many farms, that even 12 tonnes per hectare of LimeMagPlus over a few years has not fixed hard pans, or increased earthworms to 30 per spade spit. See Soils > Earthworms.

Drainage

The photos in the Drainage chapter show how to improve soils which can't be fixed in wet conditions, so the good forward thinking farmers should now be planning when and how to avoid wet soils next winter. Some have recently emailed us, which is good, but all should start by reading Soils > Drainage, from where some of the following comes.

Perfectly drained soils are ones that hold the optimum amount of moisture and the surplus rain runs

off as it falls, which is what we did on both our farms from 1957, by inventing and installing half metre deep spinner drains about 30 metres apart on flat areas. They soon became shallow depressions (not hump and hollows).

Some imagine that subterranean drainage, using field tiles and porous plastic piping, are best, but they are actually the worst, because of being the costliest and most time consuming to install, don't last forever, because pipes silt up and have to be replaced. Also they don't start working until the soil is waterlogged, which can reduce soil fertility by leaching elements (your money) and polluting rivers at the same time.

A spinner drain cleaner is a good investment for flat farms and pastures, especially clovers that don't like wet feet. One can be shared among four or more owners.

Good wishes

We wish you all a very happy, healthy and prosperous New Year.

Vaughan and Auriel Jones and Jane Cullinane
GrazingInfo Ltd