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## **Newsletter 108      28 January 2014**

### **PLEASE**

If you change your email address, ID and/or password, please enter them into GrazingInfo before changing yours, and please also notify us by email, using [support@grazinginfo.com](mailto:support@grazinginfo.com) or [leon@grazinginfo.com](mailto:leon@grazinginfo.com)

To make the update from the GrazingInfo Home page, click 'Update your details' at the top right of a GrazingInfo page. You cannot use 'Contact Us' to do this.

We receive a lot of 'bounced' emails after subscribers make email changes, and don't update their GrazingInfo details, so newsletters to them come back to us with 'Gone no address'. After that we can't email them, because we don't have their new email address, so they don't get our newsletters and they can't enter or use GrazingInfo.

We are spending too much time on the above, and other maintenance jobs, so please help us.

### **No replies to your emails?**

[vaughan@grazinginfo.com](mailto:vaughan@grazinginfo.com) and [support@grazinginfo.com](mailto:support@grazinginfo.com) have sometimes failed to deliver some emails to us. If you sent one and have not had a reply from us, please send it again to us at [leon@grazinginfo.com](mailto:leon@grazinginfo.com)

### **Hill Country Farmers' Profits - or Losses?**

Farming hill country is much harder than farming flats, for many reasons.

Most of hills are slopes, which produce poorly because -

1. Animals don't camp on slopes, so graze them, but don't return much manure to them.
2. Slopes don't get enough lime and/or fertiliser, because falling vertically onto steep land causes them to get less, and most of that gets washed off to flats. See the striking photo on this in Elements > Phosphorus.
3. Superphosphates are water soluble so even in light rain, they dissolve and wash off steep slopes to flats and streams. Using reactive phosphates like Gafsa reduces this.
4. The winners of the Fieldays Hill Country Beef Farms of the Year for years, in the days when the Fieldays Society helped farmers, used reactive phosphates to help them win. Ruakura's Whatawhata Hill Country Research Station used superphosphate, until Waikato Regional Council complained to them about polluting their streams, so they changed to reactive phosphates, which stopped the pollution and also improved their pastures. About 80% of phosphates applied are superphosphates, so P pollution continues to increase. See Elements in Soils, Plants and Animals.
5. Aerial spreading costs twice as much as ground spreading.

### **Evidence -**

Measuring or eye assessing dry matter yields shows typical slopes grazed from 1,500 to 1,000 yielding 500 kg per hectare, while gentle slopes grazed from 3,000 to 1,500 yield 1,500, which is three times as much. This shows that the high cost of aerial spreading for these low yields is highly unprofitable, which hill country farmers can't afford.

Ground spreaders should cover more by travelling close to the tops of hills and up the bottom of slopes. Fertilisers coming down vertically on to slopes apply a lot less than on flats.

### **Slips can be problem on hills**

These occur more on steep faces where there is a lot of land behind them, from which rainfall soaks in, and oozes down and towards the face, causing it to slip. Slips can be reduced by installing contour banks or spinner drains, with a 4% fall on the land above and behind the face, to take rainfall and runoff away gently, without erosion, to the valley where there is often a stream, especially in wet weather.

### **Vegetables**

This is a frequently read chapter, which is good, because it has information on how to grow heavy-metal-free food, especially without mercury, which is so important today, when there is so much of this ubiquitous (in just about everything) poison and other pollutants. Read the Vegetables chapter to see how to grow vegetables free of heavy metals.

### **Updated spreadsheets**

We have improved the names and spreadsheets on Calcium Nutrient Planner and Phosphorus Nutrient Planner, so please use these new ones, and delete any old ones you may have downloaded and not used.

### **Overseer**

MAF and Co are encouraging farmers to use 'Overseer'. If it was any good, it would be used on its merits, but instead some are querying its lack of success, in that the so important trace elements in New Zealand are not catered for at all. Also its recommended levels of P and K are much too high, so have caused animal health problems. The systems used in Nutrient Planners are far superior, because they are based on numbers which we have used since 1990, and are the same as, or close to, those that most laboratories recommend, except that we use the optimum (best), not a variation, as some do, of nearly 100% (from 0.6% to 1% Ca).

Results are what count. Most who join GrazingInfo did so because they were not happy with fertiliser company and consultant recommendations. Most who are happy with Grazinginfo.com say that the results from pasture analyses and CalciumMagPlus work well.

### **Change from metrics**

Most farmers have had difficulty applying enough CalciumMagPlus, because three tonnes per hectare of CalciumMagPlus seems a lot, but is only 1.38 tons per acre. This is only half the amount you need to get the best out of your soils, so more CalciumMagPlus will be needed again soon after, unless five tonnes per hectare is applied in the beginning. Many farms have had no lime for decades.

To convince yourself, get 12 kg of a similar mix from Linda Kamphuis, phone 07-858-2200, and apply it on two metres by 12 metres as a trial, which is five tonnes per hectare, which is only 2.7 tons per acre. Then repeat it on the same area six months later. Most will double the pasture production. Do a budget at double the pasture yield, and you'll see how profitable it is.

The minimum you can buy from Rorisons is a one tonne bag. You can then do several trials, share it with neighbours to do the same, or use it all on your land.

### **New spreadsheets**

Two new spreadsheets have been loaded. The first is Fertiliser Analyses Comparisons, which is very useful to see how much is in, or not in, fertiliser mixes that some try to sell to farmers. The second spreadsheet is Fertiliser Values, which is similar, in that it will show your profits. Check them.

As you know I am very busy, but what made me do these two spreadsheets is that one of my more

successful clients was talked by a consultant into using a fertiliser mix that contained superphosphate, which poisons soils, earthworms and animals, and pollutes milk. His cows became stressed, and his milk quality dropped from close to organic standards to below NZ average. If he had entered the analysis figures into this spreadsheet, he would not have made this unfortunate and costly mistake.

A typical mix of CalciumMagPlus is in the Gardens and Lawns chapter, or you can use Calcium Nutrient Planner to make your own, or Phosphorus Nutrient Planner to make your own.

My letter published in NZ Herald last week.

Fonterra's frequent milk quality problems show an astonishing lack of systems and practical knowledge from million dollar a year managers.

Blaming nitrates in detergents for getting into milk shows the lack of practical skills, because it means that the detergent was not all washed out before the milk entered the system, which is disgraceful.

It is much more likely that nitrates got into milk from cows which have eaten pastures too high in nitrates, from excessive applications of urea, which is increasing, recommended by most farm advisers, and fertiliser companies selling high profit-making urea.

North American and European farmers milks are measured daily for nitrates, because they apply twice as much N as we do.

This bad practice is increasing here, because of bad advice from our government establishments and DairyNZ, which told farmers to apply urea last May, after the drought broke. This is the worst advice they could have given, because nitrogen increases in hot dry soils, so was already in surplus.

Surely Fonterra should have their own milk quality measuring facilities, so that they get to the cause, rather than make wrong, costly decisions, based on another organisation's mistakes, that could now cost Fonterra \$400,000,000, and/or substantial legal costs.

Vaughan Jones

End

Federated Farmers should be monitoring Fonterra in all ways to ensure that they keep to the rails and be more practical. Of the ten Fonterra directors, only four are farmers, despite the original agreement by farmers from north to south when forming Fonterra, to have ten farmer directors. This is fully explained in the new book just released called 'Until the Cows Came Home'.

It is very good and informative of the development of Fonterra.

Vaughan Jones

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