

6th March 2016

DoloZest® News

07 362 7288 or 0800 843 809

www.esi.org.nz

Functional Fertiliser Ltd

peter@dolomite.co.nz or coralie@esi.org.nz



Is doing nothing an option this autumn?

Given the state of dairy farm incomes, and to a lesser degree those reliant largely on sheep, consideration may be given to not applying any nutrient this autumn.

Where adequate fertiliser has been regularly applied each season, not replacing nutrient this autumn will have a negligible effect on the total amount stored in the soil.

But soil nutrient levels are only one third of the soil fertility package. The other two aspects are physical soil structures and biological activity.

At best only 5% of all nutrients, including nitrogen, are available for plant uptake at any point in time, and the speed at which it is made available depends on the activity of fungi, bacteria, and other beneficial soil dwellers.

It is also the activity of these workers that ensure soil that is compressed under treading readily regains its original form with a near ideal 25% air and 25% moisture. When this doesn't happen soil compaction occurs and spring pasture growth declines markedly.

This is where a CalciZest or DoloZest application plays an important role. Containing a wide range of soil friendly fungi and bacteria, they speed pasture recovery by ensuring rapid re-establishment of bacterial activity and fungal feeding systems.

After a dry spell, and the forecasts suggest a dry autumn is still possible, biological activity in the soil is slow, the reason for the time it takes for pasture to recover and grow after rain. The first rain stimulates soil fungi and bacteria to multiply rapidly digesting organic matter, before supplying nutrient for plant growth. Microbes always feed first.

The calcium, or calcium and magnesium, content of the products initially provides a lift in pH on the soil surface, establishing the environment necessary for strong microbe activity, the reason for the rapid greening of pasture often seen soon after application.

Along with the recovery of earthworm numbers and activity, physical soil structures are enhanced which means more total pasture growth prior to the winter slow-growth period.

Vigorous, resilient soil life enhances spring growth, as well-aerated soils warm more rapidly due to lower moisture content, and warmth is one of the drivers of spring pasture growth.

By growing more strongly in late autumn and early spring, the winter slow-growth period can be shortened, and even a few days at either end can have a significant effect.

The exceptional value provided by fungi to growing systems is explained by Paul Stamets.

On our website, www.esi.org.nz is the link to

6 ways mushrooms can save the world

and

Mushroom Magic.

The role of fungi is fascinating and exceptionally well told. Each viewing gives a further insight into the life supporting our farming enterprises.



The New Zealand Herald 5th March contained an article by the economist Shamubeel Eaqub which contains the following. *“New Zealand has got much better at a lot of things. For our large exporters like meat and dairy, the productivity gains on the farm have been spectacular.*

Much of it is related to the application of better science in better management of the land, pasture and animals.

There have been costs, like polluted water, but they remain unregulated and an obvious failure of political leadership.”

From the outside we can see how there may appear to be ‘productivity’ gains. However, our view is the opposite. Gains in productivity mean more from the same resource. Land is our primary resource in farming, and under conventional farming practises, and fertiliser inputs, pasture production is steadily declining, and has been since the late 1980’s.

‘Production’ in that time has increased considerably, but not from pasture. Unsustainably expensive supplements have fuelled the extra, at

* * * * *

Because the input for each farm is tailored to its requirements it’s difficult to provide a single mix, or mixes. However for dairy farms, where magnesium is required, the following is recommended.

per hectare 300kg DoloZest + 17kg prilled elemental sulphur + 3kg ulexite (boron)
\$305/t + GST ex store, that’s \$97.60/ha + GST **28 tonne is sufficient for 90 ha**

N	P	K	S	Ca	Mg	
-	-	-	15	63	21	kg/ha

Benefits

On-going improvement in animal health and performance

A steady increase in total pasture production

Reduction in weed and pest pressure

Less nutrient lost via leaching

Smaller environmental foot-print

A thought for autumn:-

Autumn is the time to plan for spring, and decisions made now dictate the feed situation in 6 months time. September is the month where demand for feed usually outstrips the lift in pasture growth and covers can diminish somewhat alarmingly.

The most productive springs are those where there is a plentiful supply of feed and animals are fully fed. Steadily increasing the interval between grazings to build a ‘larger than required’ wedge over the next six weeks is the best way to meet the demand for extra tucker in September.

I’m unable to recall a situation where ‘excess’ feed in spring has not been readily utilised, and building pasture cover and putting condition on stock is most easily achieved while it’s still warm.

Regards,



&


